



## SAFETY STATEMENT

It is Custom Drywall's policy to provide a safe and healthful work environment for everyone. A safe environment does not occur by chance. It requires everyone's attention and open communication between management and employees. Worker's who notice hazards or other safety concerns, or who believe that they need additional training, must notify their supervisor immediately. Supervisors and management must address the concerns of workers and make certain that all are addressed immediately.

Everyone is obligated to know and abide by the safety requirements and standards for their work area and job duties. Through their own "pro-safety" attitudes and practices, supervisors must in turn, instill a positive attitude in workers. In return, employees must give training exercises and safety meetings their utmost attention and follow all safety regulations. Compliance with all safety policies and procedures is a condition of employment and must be taken very seriously. Failure to comply will result in disciplinary actions, up to and including termination of employment for serious and/or repeated violations.

Accidents can be prevented, and it is up to us to share this responsibility. With teamwork and ongoing communication, a good safety record will be maintained.

This policy illustrates our concern for safety and our commitment to it.

A handwritten signature in black ink, appearing to read "Kyle M. B. #", written over a horizontal line.

Custom Drywall, Inc.  
Safety Director

"Equal Opportunity Employer-Contractor"

## Field Safety Data Sheet Index

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# SAFETY DATA SHEET

## THE DOW CHEMICAL COMPANY

**Product name:** THERMAX™ 2.00 Inch Insulation Sheathing

**Issue Date:** 05/04/2015

**Print Date:** 06/19/2015

THE DOW CHEMICAL COMPANY encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

### 1. IDENTIFICATION

**Product name:** THERMAX™ 2.00 Inch Insulation Sheathing

**Recommended use of the chemical and restrictions on use**

**Identified uses:** Thermal insulation. For industrial use. We recommend that you use this product in a manner consistent with the listed use. If your intended use is not consistent with the stated use, please contact your sales or technical service representative.

**COMPANY IDENTIFICATION**

THE DOW CHEMICAL COMPANY  
2030 WILLARD H DOW CENTER  
MIDLAND MI 48674-0000  
UNITED STATES

**Customer Information Number:**

800-258-2436  
SDSQuestion@dow.com

**EMERGENCY TELEPHONE NUMBER**

**24-Hour Emergency Contact:** 800-424-9300

**Local Emergency Contact:** 800-424-9300

### 2. HAZARDS IDENTIFICATION

**Hazard classification**

This material is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

**Other hazards**

no data available

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture.

Component	CASRN	Concentration
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Modified Polyisocyanurate Rigid Cellular Polymer	Not applicable	> 55.0 %
Aluminum	7429-90-5	> 25.0 - < 35.0 %
Tris(1-chloro-2-propyl) phosphate	13674-84-5	< 10.0 %
Cyclopentane (8Cl, 9Cl)	287-92-3	< 10.0 %
Isopentane	78-78-4	< 5.0 %
Continuous Filament Glass Fiber	Not applicable	< 5.0 %
1-Bromopropane	106-94-5	< 5.0 %
2,2-Dimethylbutane	75-83-2	< 5.0 %

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#### 4. FIRST AID MEASURES

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##### Description of first aid measures

**General advice:** If potential for exposure exists refer to Section 8 for specific personal protective equipment.

**Inhalation:** Move person to fresh air; if effects occur, consult a physician.

**Skin contact:** Wash off with plenty of water.

**Eye contact:** Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

**Ingestion:** If swallowed, seek medical attention. May cause gastrointestinal blockage. Do not give laxatives. Do not induce vomiting unless directed to do so by medical personnel.

**Most important symptoms and effects, both acute and delayed:** Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

##### Indication of any immediate medical attention and special treatment needed

**Notes to physician:** If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. May cause asthma-like (reactive airways) symptoms. Bronchodilators, expectorants, antitussives and corticosteroids may be of help. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

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#### 5. FIREFIGHTING MEASURES

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**Suitable extinguishing media:** Water. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers.

**Unsuitable extinguishing media:** no data available

**Special hazards arising from the substance or mixture**

**Hazardous combustion products:** During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. In smoldering or flaming conditions, carbon monoxide, carbon dioxide and carbon are generated. Combustion products may include and are not limited to: Nitrogen oxides. Combustion products may include trace amounts of: Hydrogen cyanide. Hydrogen halides.

**Unusual Fire and Explosion Hazards:** Container may vent and/or rupture due to fire. When product is stored in closed containers, a flammable atmosphere can develop. Mechanical cutting, grinding, crushing or sawing can cause formation of dusts. To reduce the potential for dust explosion, do not permit dust to accumulate. This product contains a flame retardant to inhibit accidental ignition from small fire sources. This plastic foam product is combustible and should be protected from flames and other high heat sources. For more information, contact Dow. Dense smoke is emitted when burned without sufficient oxygen.

**Advice for firefighters**

**Fire Fighting Procedures:** Keep people away. Isolate fire and deny unnecessary entry. Soak thoroughly with water to cool and prevent re-ignition. Cool surroundings with water to localize fire zone.

**Special protective equipment for firefighters:** Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

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## 6. ACCIDENTAL RELEASE MEASURES

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**Personal precautions, protective equipment and emergency procedures:** There are no special required instructions. Isolate area. Keep upwind of spill. Ventilate area of leak or spill. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

**Environmental precautions:** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

**Methods and materials for containment and cleaning up:** Contain spilled material if possible. Recover spilled material if possible. See Section 13, Disposal Considerations, for additional information.

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## 7. HANDLING AND STORAGE

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**Precautions for safe handling:** This material is combustible and should not be exposed to flame or other ignition sources. No smoking, open flames or sources of ignition in handling and storage area. Fabrication methods which involve cutting into this product may release the blowing agent(s) remaining in the cells. Provide adequate ventilation to assure localized concentrations in release areas are maintained below the lower flammable limit. Refer to Exposure Controls and Personal Protection, Section 8 of the MSDS. Avoid breathing vapor. Use with adequate ventilation. Keep container closed. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

Good housekeeping and controlling of dusts are necessary for safe handling of product.

**Conditions for safe storage:** Minimize sources of ignition, such as static build-up, heat, spark or flame. Flammable vapors may accumulate in some storage situations. During shipment, storage, installation and use, this material should not be exposed to flame or other ignition sources.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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### Control parameters

Exposure limits are listed below, if they exist.

Component	Regulation	Type of listing	Value/Notation
Aluminum	OSHA Z-1	TWA total dust	15 mg/m3 , Aluminium
	OSHA Z-1	TWA respirable fraction	5 mg/m3 , Aluminium
	ACGIH	TWA Respirable fraction	1 mg/m3 , Aluminium
Cyclopentane (8Cl, 9Cl)	ACGIH	TWA	600 ppm
Isopentane	ACGIH	TWA	1,000 ppm
1-Bromopropane	Dow IHG	TWA	5 ppm
	ACGIH	TWA	0.1 ppm
2,2-Dimethylbutane	ACGIH	TWA	500 ppm
	ACGIH	STEL	1,000 ppm

Concentrations of the blowing agents anticipated incidental to proper handling are expected to be well below those which cause acute inhalation effects and below exposure guidelines.

### Exposure controls

**Engineering controls:** Use engineering controls to maintain airborne level below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use only with adequate ventilation. Local exhaust ventilation may be necessary for some operations.

### Individual protection measures

**Eye/face protection:** Eye protection should not be necessary. For fabrication operations safety glasses (with side shields) are recommended. If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.

#### Skin protection

**Hand protection:** Use gloves to protect from mechanical injury. Selection of gloves will depend on the task.

**Other protection:** Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

**Respiratory protection:** Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. If respiratory irritation is experienced, use an approved air-purifying respirator.

The following should be effective types of air-purifying respirators: Particulate filter.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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### Appearance

Physical state	Board
Color	Tan
Odor	Mild
Odor Threshold	No test data available
pH	Not applicable
Melting point/range	Not applicable
Freezing point	Not applicable
Boiling point (760 mmHg)	Not applicable
Flash point	<b>closed cup</b> Not applicable
Evaporation Rate (Butyl Acetate = 1)	No test data available
Flammability (solid, gas)	no data available
Lower explosion limit	Not applicable
Upper explosion limit	Not applicable
Vapor Pressure	Not applicable
Relative Vapor Density (air = 1)	Not applicable
Relative Density (water = 1)	0.02 - 0.05 <i>Literature</i>
Water solubility	<i>Literature</i> Insoluble in water
Partition coefficient: n-octanol/water	no data available
Auto-ignition temperature	490 °C (914 °F) <i>ASTM D1929</i>
Decomposition temperature	No test data available
Kinematic Viscosity	Not applicable
Explosive properties	no data available
Oxidizing properties	no data available
Molecular weight	No test data available

NOTE: The physical data presented above are typical values and should not be construed as a specification.

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## 10. STABILITY AND REACTIVITY

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**Reactivity:** No dangerous reaction known under conditions of normal use.

**Chemical stability:** Thermally stable at typical use temperatures.

**Possibility of hazardous reactions:** Polymerization will not occur.

**Conditions to avoid:** Avoid temperatures above 150°C (302°F) Exposure to elevated temperatures can cause product to decompose. Avoid direct sunlight.

**Incompatible materials:** Avoid contact with: Strong oxidizers.

**Hazardous decomposition products:** Decomposition products depend upon temperature, air supply and the presence of other materials. Toxic gases are released during decomposition.

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## 11. TOXICOLOGICAL INFORMATION

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*Toxicological information on this product or its components appear in this section when such data is available.*

### **Acute toxicity**

#### **Acute oral toxicity**

Swallowing is unlikely because of the physical state. Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts. May cause choking if swallowed.

As product: Single dose oral LD50 has not been determined.

Based on information for component(s):  
LD50, Rat, > 5,000 mg/kg

#### **Acute dermal toxicity**

Skin absorption is unlikely due to physical properties.

As product: The dermal LD50 has not been determined.

For the minor component(s):  
LD50, Rabbit, > 5,000 mg/kg

#### **Acute inhalation toxicity**

Dusts or fibers generated in processing may cause irritation of the upper respiratory tract (nose and throat). Fumes or dusts generated from cutting or grinding operations may cause irritation of the upper respiratory tract and lungs. Concentrations of the blowing agents anticipated incidental to proper handling are expected to be well below those which cause acute inhalation effects and below exposure guidelines.

As product: The LC50 has not been determined.

For the minor component(s):  
LC50, Rat, 4 Hour, Aerosol, > 4.6 mg/l

### **Skin corrosion/irritation**

May cause itching.

May cause skin irritation due to mechanical abrasion.

**Serious eye damage/eye irritation**

Solid or dust may cause irritation or corneal injury due to mechanical action.

Fumes or dust generated from cutting or grinding operations may cause eye irritation.

**Sensitization**

For skin sensitization:

Relevant data not available.

For respiratory sensitization:

Relevant data not available.

**Specific Target Organ Systemic Toxicity (Single Exposure)**

Product test data not available.

**Specific Target Organ Systemic Toxicity (Repeated Exposure)**

Repeated exposures to dusts of this material are not anticipated to result in systemic toxicity or permanent lung injury; however, excessive exposures may cause less severe respiratory effects.

The data presented are for the following material:

The fiberglass in this product is continuous filament fiberglass.

Repeated exposure to particles generated by grinding may result in implantation of particles in the skin.

Contains a component(s) that is/are encapsulated in the product and are not expected to be released under normal processing conditions or foreseeable emergency

**Carcinogenicity**

The fiberglass in this product is continuous filament fiberglass. IARC's evaluation of data on continuous filament fiberglass is that there is inadequate evidence of carcinogenicity in animals and in humans. IARC's classification was based primarily on animal studies involving routes of administration (intratracheal, intrapleural, and intraperitoneal) which have limited relevance to typical exposures anticipated in industrial settings. Contains a component(s) that is/are encapsulated in the product and are not expected to be released under normal processing conditions or foreseeable emergency

**Teratogenicity**

Contains a component(s) that is/are encapsulated in the product and are not expected to be released under normal processing conditions or foreseeable emergency

**Reproductive toxicity**

Contains a component(s) that is/are encapsulated in the product and are not expected to be released under normal processing conditions or foreseeable emergency

**Mutagenicity**

The data presented are for the following material: The fiberglass in this product is continuous filament fiberglass. In vitro genetic toxicity studies were inconclusive. Contains a component(s) that is/are encapsulated in the product and are not expected to be released under normal processing conditions or foreseeable emergency

**Aspiration Hazard**

Based on physical properties, not likely to be an aspiration hazard.

**COMPONENTS INFLUENCING TOXICOLOGY:****Aluminum****Specific Target Organ Systemic Toxicity (Single Exposure)**



Available data are inadequate to determine single exposure specific target organ toxicity.

**Tris(1-chloro-2-propyl) phosphate****Specific Target Organ Systemic Toxicity (Single Exposure)**

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

**Cyclopentane (8Cl, 9Cl)****Specific Target Organ Systemic Toxicity (Single Exposure)**

May cause drowsiness or dizziness.

Route of Exposure: Inhalation

Target Organs: Central nervous system

**Isopentane****Specific Target Organ Systemic Toxicity (Single Exposure)**

May cause drowsiness or dizziness.

Route of Exposure: Inhalation

Target Organs: Central nervous system

**Continuous Filament Glass Fiber****Specific Target Organ Systemic Toxicity (Single Exposure)**

Available data are inadequate to determine single exposure specific target organ toxicity.

**1-Bromopropane****Specific Target Organ Systemic Toxicity (Single Exposure)**

May cause respiratory irritation.

Route of Exposure: Inhalation

Target Organs: Lungs

May cause drowsiness or dizziness.

Route of Exposure: Inhalation

Target Organs: Central nervous system

**2,2-Dimethylbutane****Specific Target Organ Systemic Toxicity (Single Exposure)**

May cause drowsiness or dizziness.

Target Organs: Central nervous system

**Carcinogenicity****Component****1-Bromopropane****List**

ACGIH

**Classification**

A3: Confirmed animal carcinogen with unknown relevance to humans.

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**12. ECOLOGICAL INFORMATION**

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*Ecotoxicological information on this product or its components appear in this section when such data is available.*

**Toxicity****Acute toxicity to fish**

Not expected to be acutely toxic to aquatic organisms.

**Persistence and degradability**

**Biodegradability:** Surface photodegradation is expected with exposure to sunlight. No appreciable biodegradation is expected.

**Bioaccumulative potential**

**Bioaccumulation:** No bioconcentration is expected because of the relatively high molecular weight (MW greater than 1000).

**Mobility in soil**

In the terrestrial environment, material is expected to remain in the soil.

In the aquatic environment, material is expected to float.

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## 13. DISPOSAL CONSIDERATIONS

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**Disposal methods:** DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. AS YOUR SUPPLIER, WE HAVE NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION: Composition Information. FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: Landfill. Incinerator or other thermal destruction device.

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## 14. TRANSPORT INFORMATION

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**DOT**

Not regulated for transport

**Classification for SEA transport (IMO-IMDG):**

**Transport in bulk  
according to Annex I or II  
of MARPOL 73/78 and the  
IBC or IGC Code**

Not regulated for transport  
Consult IMO regulations before transporting ocean bulk

**Classification for AIR transport (IATA/ICAO):**

Not regulated for transport

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

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## 15. REGULATORY INFORMATION

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### OSHA Hazard Communication Standard

This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312

This product is not a hazardous chemical under 29CFR 1910.1200, and therefore is not covered by Title III of SARA.

### Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313

This product contains the following substances which are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and which are listed in 40 CFR 372.

#### Components

Aluminum

#### CASRN

7429-90-5

### Pennsylvania Worker and Community Right-To-Know Act:

The following chemicals are listed because of the additional requirements of Pennsylvania law:

#### Components

Aluminum

1-Bromopropane

Cyclopentane (8CI, 9CI)

Isopentane

2,2-Dimethylbutane

#### CASRN

7429-90-5

106-94-5

287-92-3

78-78-4

75-83-2

### California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)

WARNING: This product contains a chemical(s) known to the State of California to cause birth defects or other reproductive harm.

#### Components

1-Bromopropane

#### CASRN

106-94-5

### United States TSCA Inventory (TSCA)

The product meets the definition of an article and is exempt from inventory requirements.

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## 16. OTHER INFORMATION

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### Product Literature

Additional information on this product may be obtained by calling your sales or customer service contact. Ask for a product handling guide.

### Revision

Identification Number: 101195906 / A001 / Issue Date: 05/04/2015 / Version: 15.0

Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

**Legend**

ACGIH	USA. ACGIH Threshold Limit Values (TLV)
Dow IHG	Dow Industrial Hygiene Guideline
OSHA Z-1	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
STEL	Short-term exposure limit
TWA	8-hour, time-weighted average

**Information Source and References**

This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

THE DOW CHEMICAL COMPANY urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.



# SAFETY DATA SHEET

## THE DOW CHEMICAL COMPANY

**Product name:** STYROFOAM™ 1.00 X 48 Inch Scoreboard  
Extruded Foam Insulation

**Issue Date:** 09/04/2015

**Print Date:** 06/16/2016

THE DOW CHEMICAL COMPANY encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

### 1. IDENTIFICATION

**Product name:** STYROFOAM™ 1.00 X 48 Inch Scoreboard Extruded Foam Insulation

**Recommended use of the chemical and restrictions on use**

**Identified uses:** Thermal insulation.

#### COMPANY IDENTIFICATION

THE DOW CHEMICAL COMPANY  
2030 WILLARD H DOW CENTER  
MIDLAND MI 48674-0000  
UNITED STATES

**Customer Information Number:**

800-258-2436  
SDSQuestion@dow.com

#### EMERGENCY TELEPHONE NUMBER

**24-Hour Emergency Contact:** CHEMTREC +1 800-424-9300

**Local Emergency Contact:** 800-424-9300

### 2. HAZARDS IDENTIFICATION

#### Hazard classification

This material is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

#### Other hazards

No data available

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical nature:** Construction and composite applications

This product is an article.

**Component**

**CASRN**

**Concentration**

2-Propenenitrile, polymer with ethenylbenzene	9003-54-7	> 60.0 - < 100.0 %
Styrene, polymers	9003-53-6	<= 10.0 %
1,1,1,2-Tetrafluoroethane	811-97-2	>= 5.0 - <= 10.0 %

*Note*

Extruded polystyrene foam containing a halogenated flame retardant system.

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## **4. FIRST AID MEASURES**

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### **Description of first aid measures**

**General advice:** If potential for exposure exists refer to Section 8 for specific personal protective equipment.

**Inhalation:** Move person to fresh air; if effects occur, consult a physician.

**Skin contact:** Wash off with plenty of water.

**Eye contact:** Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

**Ingestion:** No emergency medical treatment necessary.

**Most important symptoms and effects, both acute and delayed:** Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

### **Indication of any immediate medical attention and special treatment needed**

**Notes to physician:** No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

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## **5. FIREFIGHTING MEASURES**

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**Suitable extinguishing media:** Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam.

**Unsuitable extinguishing media:** No data available

### **Special hazards arising from the substance or mixture**

**Hazardous combustion products:** During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. In smoldering or flaming conditions, carbon monoxide, carbon dioxide and carbon are generated. Combustion products may include and are not limited to: Hydrogen halides. Based on combustion toxicity testing, the effects of combustion from this foam are not more acutely toxic than the effects of combustion from common building materials such as wood.

**Unusual Fire and Explosion Hazards:** Mechanical cutting, grinding or sawing can cause formation of dusts. To reduce the potential for dust explosion, do not permit dust to accumulate. This product contains a flame retardant to inhibit accidental ignition from small fire sources. This plastic foam product is combustible and should be protected from flames and other high heat sources. For more information, contact Dow. Dense smoke is produced when product burns.

**Advice for firefighters**

**Fire Fighting Procedures:** Keep people away. Isolate fire and deny unnecessary entry. Soak thoroughly with water to cool and prevent re-ignition. If material is molten, do not apply direct waterstream. Use fine water spray or foam. Cool surroundings with water to localize fire zone.

**Special protective equipment for firefighters:** Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

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## **6. ACCIDENTAL RELEASE MEASURES**

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**Personal precautions, protective equipment and emergency procedures:** Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

**Environmental precautions:** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

**Methods and materials for containment and cleaning up:** Contain spilled material if possible. Collect in suitable and properly labeled containers. See Section 13, Disposal Considerations, for additional information.

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## **7. HANDLING AND STORAGE**

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**Precautions for safe handling:** Fabrication methods which involve cutting into this product may release the blowing agent(s) remaining in the cells. Use ventilation adequate to keep exposures below recommended exposure limits. See the safety datasheet. Do not enter confined spaces unless adequately ventilated. Mechanical cutting, grinding or sawing can cause formation of dusts. To reduce the potential for dust explosion, do not permit dust to accumulate. This product is combustible and may constitute a fire hazard if improperly used or installed. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

**Conditions for safe storage:** When large quantities of this product are stored or fabricated, blowing agents may be released. Released blowing agents may thermally decompose to form gases which may accelerate corrosion or rust formation of heaters, boilers, gas fired recirculating air furnaces or heaters, or gas water heaters.

**Storage stability**

**Shelf life: Use within** 360 Month

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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### Control parameters

Exposure limits are listed below, if they exist.

Component	Regulation	Type of listing	Value/Notation
1,1,1,2-Tetrafluoroethane	US WEEL	TWA	1,000 ppm

Concentrations of the blowing agents anticipated incidental to proper handling are expected to be well below those which cause acute inhalation effects and below exposure guidelines.

### Exposure controls

**Engineering controls:** Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

### Individual protection measures

**Eye/face protection:** Eye protection should not be necessary. For fabrication operations safety glasses (with side shields) are recommended. If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.

#### Skin protection

**Hand protection:** Use gloves to protect from mechanical injury. Selection of gloves will depend on the task.

**Other protection:** No precautions other than clean body-covering clothing should be needed.

**Respiratory protection:** Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. In dusty or misty atmospheres, use an approved particulate respirator. When respiratory protection is required for certain operations, including but not limited to saw, router or hot-wire cutting, use an approved air-purifying respirator.

The following should be effective types of air-purifying respirators: Organic vapor cartridge with a particulate pre-filter.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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### Appearance

Physical state	Board
Color	Blue
Odor	None
Odor Threshold	Odorless
pH	Not applicable
Melting point/range	90 - 130 °C ( 194 - 266 °F) <i>Estimated.</i>
Freezing point	Not applicable
Boiling point (760 mmHg)	Not applicable
Flash point	<b>closed cup</b> Not applicable



Evaporation Rate (Butyl Acetate = 1)	Not applicable
Flammability (solid, gas)	Not expected to form explosive dust-air mixtures.
Lower explosion limit	Not applicable
Upper explosion limit	Not applicable
Vapor Pressure	Not applicable
Relative Vapor Density (air = 1)	Not applicable
Relative Density (water = 1)	0.027 - 0.064 <i>Estimated.</i>
Water solubility	Insoluble in water
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	354 °C (669 °F) <i>ASTM D1929</i>
Decomposition temperature	No test data available
Kinematic Viscosity	Not applicable
Explosive properties	No
Oxidizing properties	No
Molecular weight	No test data available

NOTE: The physical data presented above are typical values and should not be construed as a specification.

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## 10. STABILITY AND REACTIVITY

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**Reactivity:** No dangerous reaction known under conditions of normal use.

**Chemical stability:** Thermally stable at typical use temperatures.

**Possibility of hazardous reactions:** Polymerization will not occur.

**Conditions to avoid:** Avoid temperatures above 300°C (572°F) Exposure to elevated temperatures can cause product to decompose. Avoid direct sunlight.

**Incompatible materials:** Avoid contact with oxidizing materials. Avoid contact with: Aldehydes. Amines. Esters. Liquid fuels. Organic solvents.

**Hazardous decomposition products:** Does not normally decompose. Evolution of small amounts of hydrogen halides occur when heated over 250°C (482°F). Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Aromatic compounds. Aldehydes. Ethylbenzene. Hydrogen halides. Polymer fragments. Styrene. Under high heat, non-flaming conditions, small amounts of aromatic hydrocarbons such as styrene and ethylbenzene are generated.

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## 11. TOXICOLOGICAL INFORMATION

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*Toxicological information appears in this section when such data is available.*

**Acute toxicity**

**Acute oral toxicity**

Swallowing is unlikely because of the physical state. Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.

As product: Single dose oral LD50 has not been determined.

**Acute dermal toxicity**

Skin absorption is unlikely due to physical properties.

As product: The dermal LD50 has not been determined.

**Acute inhalation toxicity**

Dust may cause irritation to upper respiratory tract (nose and throat). Fumes/vapors released during thermal operations such as hot wire cutting may cause respiratory irritation.

Concentrations of the blowing agents anticipated incidental to proper handling are expected to be well below those which cause acute inhalation effects and below exposure guidelines.

The LC50 has not been determined.,

**Skin corrosion/irritation**

Essentially nonirritating to skin.

Mechanical injury only.

**Serious eye damage/eye irritation**

Solid or dust may cause irritation or corneal injury due to mechanical action.

Fumes/vapor released during thermal operations such as hot-wire cutting may cause eye irritation.

**Sensitization**

Relevant data not available.

For respiratory sensitization:

Relevant data not available.

**Specific Target Organ Systemic Toxicity (Single Exposure)**

Available data are inadequate to determine single exposure specific target organ toxicity.

**Specific Target Organ Systemic Toxicity (Repeated Exposure)**

Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

Additives are encapsulated in the product and are not expected to be released under normal processing conditions or foreseeable emergency.

**Carcinogenicity**

Relevant data not available.

**Teratogenicity**

Contains a component(s) that is/are encapsulated in the product and are not expected to be released under normal processing conditions or foreseeable emergency

**Reproductive toxicity**

Contains a component(s) that is/are encapsulated in the product and are not expected to be released under normal processing conditions or foreseeable emergency

**Mutagenicity**

Relevant data not available.

#### **Aspiration Hazard**

Based on physical properties, not likely to be an aspiration hazard.

#### **COMPONENTS INFLUENCING TOXICOLOGY:**

##### **2-Propenenitrile, polymer with ethenylbenzene**

###### **Acute oral toxicity**

LD50, Rat, > 5,000 mg/kg Estimated.

###### **Acute dermal toxicity**

The dermal LD50 has not been determined.

For similar material(s): LD50, Rabbit, > 2,000 mg/kg Estimated.

##### **Styrene, polymers**

###### **Acute oral toxicity**

Single dose oral LD50 has not been determined.

###### **Acute dermal toxicity**

The dermal LD50 has not been determined.

##### **1,1,1,2-Tetrafluoroethane**

###### **Acute oral toxicity**

Single dose oral LD50 has not been determined.

###### **Acute dermal toxicity**

The dermal LD50 has not been determined.

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## **12. ECOLOGICAL INFORMATION**

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*Ecotoxicological information appears in this section when such data is available.*

#### **Toxicity**

##### **Acute toxicity to fish**

Not expected to be acutely toxic to aquatic organisms.

#### **Persistence and degradability**

**Biodegradability:** Surface photodegradation is expected with exposure to sunlight. No appreciable biodegradation is expected. 1,1,1,2-tetrafluoroethane (HFC-134a) remains in the foam and diffuses out slowly, most of it degrading in the troposphere to CO<sub>2</sub> and HF. 1,1,1,2-Tetrafluoroethane (HFC-134a) has a stratospheric ozone depletion potential (ODP) of zero, relative to CFC 12 (ODP=1).

#### **Bioaccumulative potential**

**Bioaccumulation:** No bioconcentration is expected because of the relatively high molecular weight (MW greater than 1000).

#### **Mobility in soil**

In the terrestrial environment, material is expected to remain in the soil.

In the aquatic environment, material is expected to float.

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### **13. DISPOSAL CONSIDERATIONS**

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**Disposal methods:** DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. AS YOUR SUPPLIER, WE HAVE NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION: Composition Information. FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: Recycler. Reclaimer. Landfill. Incinerator or other thermal destruction device.

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### **14. TRANSPORT INFORMATION**

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**DOT**

Not regulated for transport

**Classification for SEA transport (IMO-IMDG):**

Not regulated for transport

**Transport in bulk  
according to Annex I or II  
of MARPOL 73/78 and the  
IBC or IGC Code**

Consult IMO regulations before transporting ocean bulk

**Classification for AIR transport (IATA/ICAO):**

Not regulated for transport

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

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### **15. REGULATORY INFORMATION**

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**OSHA Hazard Communication Standard**

This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312**

This product is not a hazardous chemical under 29CFR 1910.1200, and therefore is not covered by Title III of SARA.

**Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**Pennsylvania Worker and Community Right-To-Know Act:**

To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

**California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)**

This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

**United States TSCA Inventory (TSCA)**

The product meets the definition of an article and is exempt from inventory requirements.

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## **16. OTHER INFORMATION**

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**Revision**

Identification Number: 101195574 / A001 / Issue Date: 09/04/2015 / Version: 11.0

Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

**Legend**

TWA	8-hr TWA
US WEEL	USA. Workplace Environmental Exposure Levels (WEEL)

**Information Source and References**

This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

THE DOW CHEMICAL COMPANY urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other

than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.

## Section 1 - Product and Company Identification

**Hazard Label** WARNING label**Company Information**Johns Manville  
Insulation Systems  
P.O. Box 5108  
Denver, CO 80127 USATelephone: 303-978-2000 8:00AM-5:00PM M-F  
Internet Address: <http://www.jm.com>  
Emergency: 800-424-9300 (Chemtrec, In English)**Trade Names:**

Basement Wall Insulation®, Unfaced;  
ComfortTherm®;  
EasyFit™;  
EasyFit®;  
Engineered Wood® Formaldehyde-free Thermal and Acoustical Fiber Glass Insulation;  
Flex-Glas® PC;  
Foil-Faced Batts;  
High-Density Blowing Wool;  
Kraft-Faced Fiber Glass Insulation;  
MR™-Faced;  
Microlite® "L", Formaldehyde-free;  
Micro-Pak®;

Manufactured Housing Insulation, Formaldehyde-free;  
Multi-Purpose Fiber Glass;  
Pan-Insul®, Formaldehyde-free;  
PEBS Blanket™, Formaldehyde-free;  
Pour and Rake Attic Insulation;  
Rich-R® Blowing Wool, Formaldehyde-free;  
Sound Control Batts;  
Sound-SHIELD®;  
UMBI®, Formaldehyde-free;  
Unfaced Sound Control Batts;  
Unfaced Thermal and Acoustical Fiber Glass Insulation;  
Wood Frame Formaldehyde-free Thermal and Acoustical Fiber Glass Insulation

**Use:** For use in commercial, residential, manufactured housing, and metal buildings.

## Section 2 - Hazards Identification

**Emergency Overview**

Inhalation of excessive amounts of dust from the product may cause temporary upper respiratory irritation and/or congestion--remove individual to fresh air.

**Inhalation**

Irritation of the upper respiratory tract (scratchy throat), coughing, and congestion may occur in extreme exposures.

**Skin**

Temporary irritation (itching) or redness may occur.

**Ingestion**

This product is not intended to be ingested (eaten). If ingested, it may cause temporary irritation to the gastrointestinal (digestive) tract.

**Eyes**

Temporary irritation (itching) or redness may occur.

**Ears**

Temporary irritation (itching) or redness may occur.

**Primary Routes of Entry (Exposure)**

Inhalation, skin, and eye contact.

**Target Organs**

Nose (nasal passages), throat, lungs, skin, eyes

**Medical Conditions Aggravated by Exposure**

Pre-existing chronic respiratory, skin, or eye diseases or conditions.

## Section 3 - Composition/Information on Ingredients

CAS #	Component	Percent
Not Applicable	Fiber glass wool	80-98
Not Available	Acrylic thermoset resin	2-15
Not Available	Foil/kraft, kraft, FSK, polyethylene, PSK, and various metal building facings	0-15

**General Product Description**

White fibrous glass board, batt, blanket, or loose-fill insulation with or without tan kraft, blue kraft, FSK, or other facings. No significant odor.

## **Section 4 - First Aid Measures**

### **First Aid: Inhalation**

If dust is inhaled in excess of exposure limits referenced in section 8 of this safety data sheet, remove individual to fresh air. Drink water to clear throat, and blow nose to remove dust. A saline spray in the nose may help clear any fibers.

### **First Aid: Skin**

Wash gently with soap and water to remove dust and fibers. Alternatively, fibers can be removed from the skin by use of ordinary masking or wrapping tape. Should irritation persist, seek medical attention.

### **First Aid: Ingestion**

Rinse mouth with water to remove dust and fibers and drink plenty of water to help reduce irritation. If irritation persists, seek medical attention.

### **First Aid: Eyes**

Do not rub or scratch eyes. Dust particles may cause the eye to be scratched. Flush eyes with large amounts of water until irritation subsides. If irritation persists, seek medical attention.

### **First Aid: Ears**

Wash exposed skin with soap and water. If irritation develops in the inner ear, seek medical attention.

### **First Aid: Notes to Physician**

Dust from the product may cause mechanical irritation of the eyes, skin, and upper respiratory tract. Treat symptomatically.

## **Section 5 - Fire Fighting Measures**

**Flash Point:** Not applicable

**Upper Flammable Limit (UFL):** Not applicable

**Auto Ignition:** Not determined

**Rate of Burning:** Not determined

### **General Fire Hazards**

There is no potential for spontaneous fire or explosion. Inorganic glass fibers are naturally non-combustible and non-flammable.

### **Extinguishing Media**

Carbon dioxide (CO<sub>2</sub>), water, water fog, dry chemical.

### **Fire Fighting Equipment/Instructions**

No special procedures are expected to be necessary for this product. Normal fire fighting procedures should be followed to avoid inhalation of smoke and gases.

**Method Used:** Not applicable

**Lower Flammable Limit (LFL):** Not applicable

**Flammability Classification:** Not determined

## **Section 6 - Accidental Release Measures**

### **Clean-Up Procedures**

Pick up large pieces. Vacuum dusts. If sweeping is necessary, use a dust suppressant such as water. Do not dry sweep dust accumulation. These procedures will help to minimize potential exposures.

## **Section 7 - Handling and Storage**

### **Handling Procedures**

Use protective equipment as described in Section 8 of this safety data sheet when handling uncontained material. Handle in accordance with good industrial hygiene and safety practices.

### **Storage Procedures**

Warehouse storage should be in accordance with package directions, if any. Material should be kept clean, dry, and in original packaging.

## **Section 8 - Exposure Controls / Personal Protection**

The Occupational Safety and Health Administration (OSHA) has not adopted specific occupational exposure standards for fiber glass. Fiber glass is treated as a nuisance dust and is regulated by OSHA as a particulate not otherwise regulated (total dust) shown in CFR 1910.1000 Table Z-3.

Respirable fraction 5 mg/m<sup>3</sup>

Total dust 15 mg/m<sup>3</sup>

JM has adopted the fiber glass industry voluntary Product Stewardship Program (PSP), formerly the NAIMA-OSHA Health and Safety Partnership Program (HSPP). Under the PSP, JM recommends that exposures be limited to the voluntary concentration of 1 f/cc TWA for fibers longer than 5 microns with a diameter less than 3 microns. This will help minimize potential irritation effects. The PSP also includes the PPE recommendations described below.



**Material Name: Fiber Glass Building and Flexible Duct Insulation Formaldehyde-free,  
Antimony trioxide-free**

**Safety Data Sheet  
ID: 1071**

## **PERSONAL PROTECTIVE EQUIPMENT**

### **Personal Protective Equipment: Eyes/Face**

Safety glasses with side shields are recommended to keep dust out of the eyes.

### **Personal Protective Equipment: Ears**

Use ear protection (earplugs, hood, or earmuffs) to prevent airborne dust or fibers from entering the ear, if necessary.

### **Personal Protective Equipment: Skin**

Leather or cotton gloves should be worn to protect against mechanical abrasion. See also Personal Protective Equipment: General, below.

### **Personal Protective Equipment: Respiratory**

A respirator should be used if ventilation is unavailable, or is inadequate for keeping dust and fiber levels below the applicable exposure limits referenced in Section 8 of this SDS. Wear a NIOSH-certified disposable or reusable particulate respirator with an efficiency rating of N95 or higher (per 42 CFR 84) when dust or fiber concentrations exceed the applicable exposure limits. Operations such as sawing, blowing, tear out, and spraying may generate airborne fiber concentrations requiring a higher level of respiratory protection. For exposures up to 50 times the established exposure limits use a full-face respirator, rated N99 or higher.

### **Ventilation**

In fixed manufacturing settings, local exhaust ventilation should be provided at areas of cutting, milling or other processing to remove airborne dust and fibers.

### **Personal Protective Equipment: General**

Wear a cap, a loose-fitting, long-sleeved shirt and long pants to protect skin from irritation. Exposed skin areas should be washed with soap and water after handling or working with fiber glass. Clothing should be washed separately from other clothes, and the washer should be rinsed thoroughly (run empty for a complete wash cycle). This will reduce the chances of fiber glass being transferred to other clothing.

## **Section 9 - Physical & Chemical Properties**

<b>Appearance:</b>	White fibrous glass board, batt, blanket, or loose fiber, with or without various facings	<b>Odor:</b>	No significant odor
<b>Physical State:</b>	Solid	<b>pH:</b>	Not applicable
<b>Vapor Pressure:</b>	Not applicable	<b>Vapor Density:</b>	Not applicable
<b>Boiling Point:</b>	Not applicable	<b>Melting Point:</b>	>704°C/1300°F
<b>Solubility (H<sub>2</sub>O):</b>	Nil	<b>Specific Gravity:</b>	Variable
<b>Freezing Point:</b>	Not applicable	<b>Evaporation Rate:</b>	Not applicable
<b>Percent Volatile:</b>	0	<b>VOC:</b>	Not determined

## **Section 10 - Stability & Reactivity Information**

### **Stability**

These products are not reactive.

### **Hazardous Decomposition**

May form carbon dioxide and carbon monoxide.

### **Hazardous Polymerization**

Will not occur.

## **Section 11 - Toxicological Information**

### **Acute Toxicity**

#### **A: General Product Information**

Dust from this product is a mechanical irritant, which means that it may cause temporary irritation or scratchiness of the throat, and/or itching of the eyes and skin.

#### **B: Component Analysis - LD50/LC50**

No LD50/LC50's are available for this product's components.

**Material Name: Fiber Glass Building and Flexible Duct Insulation Formaldehyde-free,  
Antimony trioxide-free**

**Safety Data Sheet  
ID: 1071**

### **Component Carcinogenicity**

#### **Fiber glass wool**

ACGIH: A3 - Confirmed animal carcinogen with unknown relevance to humans  
NTP: Reasonably Anticipated To Be A Carcinogen (respirable size)  
IARC: Group 3 - Not Classifiable (IARC Monograph 81 [2002] (listed under Man-made mineral fibres),  
Monograph 43 [1988])

### **Chronic Toxicity**

The U.S. Department of Health and Human Services, National Toxicology Program (NTP 1998, 2000, 2002) classified glass wool (respirable size) as reasonably anticipated to be a human carcinogen, based on sufficient evidence of carcinogenicity in animals. This assessment was originally prepared in 1993-1994 for the 7th Report on Carcinogens (NTP 1994), but has not been updated since then in the 8th, 9th, or 10th Reports on Carcinogens (NTP 1998, 2000, 2002).

## **Section 12 - Ecological Information**

### **Ecotoxicity**

#### **A: General Product Information**

No data available for this product.

#### **B: Component Analysis - Ecotoxicity - Aquatic Toxicity**

No ecotoxicity data are available for this product's components.

## **Section 13 - Disposal Considerations**

### **US EPA Waste Number & Descriptions**

#### **A: General Product Information**

This product is not expected to be a hazardous waste when it is disposed of according to the U.S. Environmental Protection Agency (EPA) under Resource Conservation and Recovery Act (RCRA) regulations. Product characterization after use is recommended to ensure proper disposal under federal and/or state requirements.

#### **B: Component Waste Numbers**

No EPA Waste Numbers are applicable for this product's components.

### **Disposal Instructions**

Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

## **Section 14 - Transport Information**

### **International Transport Regulations**

These products are not classified as dangerous goods according to international transport regulations.

## **Section 15 - Regulatory Information**

### **US Federal Regulations**

#### **A: General Product Information**

SARA 311/312: This product is not classified as hazardous under SARA 311/312.

#### **B: Component Analysis**

None of this products components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).

### **State Regulations**

#### **A: General Product Information**

The glass fibers in this product are not known to be regulated.  
Other state regulations may apply. Check individual state requirements.

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):  
**WARNING!** This product contains a chemical known to the state of California to cause cancer.

<b>Component</b>	<b>CAS #</b>
Fiber glass wool	Not Applicable

### **TSCA Status**

This product and its components are listed on the TSCA 8(b) inventory.

None of the components listed in this product are listed on the TSCA Export Notification 12(b) list.

**Material Name: Fiber Glass Building and Flexible Duct Insulation Formaldehyde-free,  
Antimony trioxide-free**

**Safety Data Sheet  
ID: 1071**

## **International Regulations**

### **A: General Product Information**

These products are considered articles under both U.S. and international product regulations and as such, these products do not require registration or notification on the various country-specific inventories.

### **B: Component Analysis - WHMIS IDL**

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

<b>Component</b>	<b>CAS #</b>	<b>Minimum Concentration</b>
Fiber glass wool	Not Applicable	1 % (related to Fibrous glass)

## **WHMIS Classification**

Controlled Product Classification: D2A

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations. This SDS contains all the information required by the Controlled Products Regulations.

## **Section 16 - Other Information**

### **Other Information**

Prepared for:  
Johns Manville  
Insulation Systems  
P. O. Box 5108  
Denver, CO USA 80217-5108

Prepared by:  
Johns Manville Technical Center  
P.O. Box 625005  
Littleton, CO USA 80162-5005

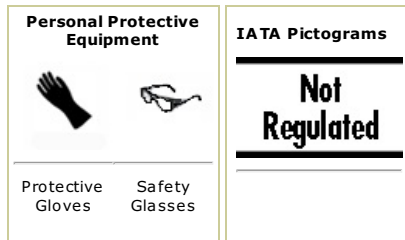
The information herein is presented in good faith and believed to be accurate as of the effective date given. However, no warranty, expressed or implied, is given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

<b>Date</b>	<b>MSDS #</b>	<b>Reason</b>
03/22/05	1071-1.0000	New MSDS for antimony free BI products.
06/06/05	1071-1.0001	Addition of Unfaced Sound Control Batts to Sect. 1 trade names.
06/29/06	1071-1.0002	Removed Insul-SHIELD® Unfaced Boards, Formaldehyde-free from trade names.
07/16/07	1071-1.0003	Regulatory update. Minor edits.
02/29/08	1071-1.0004	Removed Spin-Glas®; Steel Frame Formaldehyde-free Thermal and Acoustical Fiber Glass Insulation from trade names. Added 'Antimony Trioxide-free' to material name. Edited WHMIS classification to D2A for fiber glass wool.
03/03/09	1071-1.0005	Addition of Pour and Rake Attic Insulation to trade names.
06/02/09	1071-1.0006	Addition of FlexGlas PC to trade names.

End of Sheet 1071



## SAFETY DATA SHEET

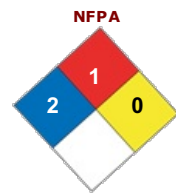


### SECTION 1 : IDENTIFICATION

**Product Name:** Low Density Fiber Glass Insulation/Insulation Board - Unfaced Products  
**SDS Manufacturer Number:** 13614-SAM-EN  
**Synonyms:** Acoustical Backing Board, Advanced ThermaCube Plus®, Batts in Bags, Blended Blowing Wool, Cathedral Batt Insulation, Cavity Wall, Cold Storage Wall, Curtain Wall 225, FDM ARP100, FDM ARP125, Flexible Marine, Flexible Type 75 AF-FDM, HV-24, HV-26, H2V-1000, H2V-2000, Insulation Batts, Manufactured Housing Insulation, Masonry Wall Insulation, Metal Building (all types), Metal Framing Batts, Metal Framing Insulation, Multi-purpose Insulation, Noise Stop Board, Pink® Insulation, Pink Pak, QuietZone® Acoustic Batt, RA Series, Shaft Wall, Sill Sealer, Sonobatts®, Sound Attenuation Batts, Standard Blend, Super Pink R, Blowing Wool, ThermaGlas®, Marine Board, Unfaced Duct Wrap, Warm-N-Dri®, Aislhogar, Aislacustic™, MBI, MBI Certified R, RW 4300 & RW 4600 Colchoneta, Termoaislante, AT 075, AT 075 PINK

**Product Use/Restriction:** Insulation..  
**Manufacturer Name:** Owens Corning Insulating Systems, LLC  
**Address:** One Owens Corning Parkway  
Toledo, OH 43659

**Customer Service Phone Number:** 1-800-GET-PINK or 1-800-438-7465  
**Health Issues Information:** 1-800-GET-PINK or 1-800-438-7465  
**Technical Product Information:** 1-800-GET-PINK or 1-800-438-7465  
**Emergency Phone Number:** 1-419-248-5330 (after 5pm ET and weekends)  
**CHEMTREC:** 800-424-9300 (24 hours everyday).  
**Website:** www.owenscorning.com  
**SDS Creation Date:** December 16, 1997  
**SDS Revision Date:** June 03, 2014



### SECTION 2 : HAZARD(S) IDENTIFICATION

#### Applies to Product

**Emergency Overview:** Exposure to dust may be irritating to eyes, nose, and throat.

**Route of Exposure:** Eye contact  
Skin contact  
Inhalation

**Potential Health Effects:**

**Eye:** May cause slight irritation.

**Skin:** May cause slight skin irritation.

**Inhalation:** May cause irritation of respiratory tract.

**Ingestion:** Ingestion of this product is unlikely.

**Chronic Health Effects:** There is no known chronic health effect connected with long-term use or contact with this product.

**Potential Environmental Effects:** There is no known ecological information for this material.

**Aggravation of Pre-Existing Conditions:** Chronic respiratory or skin conditions may temporarily worsen from exposure to this product.

### SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Ingredient Percent
---------------	------	--------------------

Fiber Glass (Wool)	65997-17-3	85 - 100 by weight
Cured Binder	N/A	0 - 15 by weight
<b>Non-Hazardous Statement:</b>	The remaining components of this product are non-hazardous or are in a small enough quantity as to not meet regulatory thresholds for disclosure. These components contain no substances or impurities which would influence the classification of this product.	

## SECTION 4 : FIRST AID MEASURES

<b>Eye Contact:</b>	Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Do not rub or scratch eyes. If eye irritation persists, consult a specialist.
<b>Skin Contact:</b>	Wash off immediately with soap and cold water. DO NOT use warm water because this will open up the pores of the skin, which will cause further penetration of the fibers. Use a wash cloth to help remove fibers. DO NOT rub or scratch affected areas. Remove contaminated clothing. If irritation persists get medical attention. Never use compressed air to remove fibers from the skin. If fibers are seen penetrating from the skin, the fibers can be removed by applying and removing adhesive tape so that the fibers adhere to the tape and are pulled out of the skin.
<b>Inhalation:</b>	Move to fresh air. If symptoms persist, call a physician.
<b>Ingestion:</b>	Accidental ingestion of this material is unlikely. If this does occur, watch person for several days to make sure intestinal blockage does not occur. Rinse mouth with water and drink water to remove fibers from the throat. If symptoms persist, call a physician.
<b>Note to Physicians:</b>	Treat symptomatically.

## SECTION 5 : FIRE FIGHTING MEASURES

<b>Flammable Properties:</b>	Non Flammable.
<b>Flash Point:</b>	None.
<b>Flash Point Method:</b>	Not applicable.
<b>Lower Flammable/Explosive Limit:</b>	Not applicable.
<b>Upper Flammable/Explosive Limit:</b>	Not applicable.
<b>Extinguishing Media:</b>	dry chemical foam. carbon dioxide (CO2). water fog
<b>Protective Equipment:</b>	Wear self-contained breathing apparatus (SCBA) and full fire fighting protective gear.
<b>Unusual Fire Hazards:</b>	Hydrogen chloride to be released from the PVC barrier and vinyl facings during a fire.
<b>Hazardous Combustion Byproducts:</b>	Carbon monoxide. Carbon dioxide. Ammonia. Other undetermined compounds could be released in small quantities.
<b>Universal Fire And Explosion Hazards:</b>	Not available.
<b><u>NFPA Ratings:</u></b>	
NFPA Health:	2
NFPA Flammability:	1
NFPA Reactivity:	0

## SECTION 6 : ACCIDENTAL RELEASE MEASURES

<b>Personnel Precautions:</b>	Avoid contact with skin and eyes.
<b>Environmental Precautions:</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for containment:</b>	This material will settle out of the air. Prevent from spreading by covering, diking or other means.
<b>Methods for cleanup:</b>	Use an industrial vacuum cleaner with a high efficiency filter to clean up dust and fiber contamination. Avoid dry sweeping. Pick up and transfer to properly labeled containers.
<b>Other Precautions:</b>	Does not apply.

## SECTION 7 : HANDLING and STORAGE

<b>Handling:</b>	Avoid dust formation.
------------------	-----------------------

Do not breathe dust.  
Wear personal protective equipment.

**Storage:** Keep product in its packaging until use to minimize potential dust generation.  
Product should be kept dry and undercover.

**Hygiene Practices:** Wash hands before breaks and immediately after handling the product.  
Remove and wash contaminated clothing before re-use.

## SECTION 8 : EXPOSURE CONTROLS, PERSONAL PROTECTION - EXPOSURE GUIDELINES

**Engineering Controls:** Provide local exhaust and/or general ventilation to maintain exposure below regulatory and recommended limits.  
Dust collection system must be used in transferring operations, cutting or machining or other dust generating processes, such as using power tools.  
Vacuum or wet clean-up methods should be used.

**Eye/Face Protection:** Safety glasses with side-shields.

**Skin Protection Description:** Protective gloves.  
Long sleeved shirt and long pants.

**Respiratory Protection:** When workers are facing airborne particulate/dust concentrations above the exposure limit they must use appropriate certified respirators.  
A properly fitted NIOSH approved disposable N 95 type dust respirator or better is recommended.

**Other Protective:** When the temperature of the surface being insulated exceeds 250°F (121°C), including initial startup, the binder in these products may undergo various degrees of decomposition depending on the temperature in the application.  
The need for respiratory protection will vary according to the airborne concentration of the decomposition products released and accumulated in the area.  
Wear the appropriate respiratory protection according to the conditions and exposure levels in the area.

### EXPOSURE GUIDELINES

Ingredient	Guideline OSHA	Guideline ACGIH	Ontario Canada	Mexico	
Fiber Glass (Wool)	None	TLV-TWA: 1 f/cc (Respirable.)	TWAEV-TWA: 0.05 mg/m3 or 1 f/cc STEL: 0.6 mg/m3	TWA: 0.15 mg/m3	

## SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

**Physical State Appearance:** Fibrous.

**Odor:** organic.

**Boiling Point:** No Data

**Melting Point:** No Data

**Specific Gravity:** No Data

**Solubility:** Insoluble. in water.

**Vapor Density:** No Data

**Vapor Pressure:** No Data

**Evaporation Rate:** No Data

**pH:** No Data

**Viscosity:** Not applicable.

**Flash Point:** None.

**Flash Point Method:** Not applicable.

## SECTION 10 : STABILITY and REACTIVITY

**Chemical Stability:** Stable under normal conditions.

**Hazardous Polymerization:** Hazardous polymerization does not occur.

**Conditions to Avoid:** None expected

**Incompatible Materials:** No materials to be especially mentioned.

**Special Decomposition Products:** See Section 5 of MSDS for hazardous decomposition products during a fire.

## SECTION 11 : TOXICOLOGICAL INFORMATION

### Applies to Product :

**Acute Toxicity:** Dusts may cause mechanical irritation to eyes and skin. Ingestion may cause transient irritation of throat, stomach and gastrointestinal tract. Inhalation may cause coughing, nose and throat irritation, and sneezing. High exposures may cause difficulty breathing, congestion, and chest tightness.

Carcinogens:							
	ACGIH			IARC		Canada	MEXICO
Fiber Glass (Wool)	A3 Animal			Group 3 - Not			A3 Animal

	Carcinogen			Classifiable as to its Carcinogenicity to Humans.			Carcinogen
Cured Binder	No Data			No Data			No Data

**Applies to Product :**

**Sensitization:** No information available.

**Mutagenicity:** No information available.

**Reproductive Toxicity:** No information available.

**Teratogenicity:** No information available.

**Neurological Effects:** No information available.

**Fiber Glass (Wool) :**

**Chronic Effects:** In June 2011, The National Toxicology Program (NTP) removed biosoluble glass wool fibers from its list of possible carcinogens used for home and building insulation. In October 2001, the International Agency for Research on Cancer (IARC) classified fiber glass wool as Group 3, "not classifiable as to its carcinogenicity to humans". The 2001 decision was based on human studies and animal research that have not shown an association between inhalation exposure to dust from fiber glass wool and the development of respiratory disease.

## SECTION 12 : ECOLOGICAL INFORMATION

**Applies to Product :**

**Ecotoxicity:** This material is not expected to cause harm to animals, plants or fish.

**Bioaccumulation:** Not available.

**Biodegradation:** Not available.

**Mobility In Environmental Media:** Not available.

## SECTION 13 : DISPOSAL CONSIDERATIONS

**Applies to Product :**

**Waste Disposal:** Dispose of in accordance with Local, State, Federal and Provincial regulations.

## SECTION 14 : TRANSPORT INFORMATION

**IATA Shipping Name:** Not Regulated.

**MEX Shipping Name :** Not Regulated.

## SECTION 15 : REGULATORY INFORMATION

### Inventory Status

	Japan ENCS	Philippines PICCS	China	South Korea KECL	Australia AICS
Fiber Glass (Wool)	Not listed	Listed	Listed	KE-17630	Listed
Cured Binder	Not listed		Listed	KE-35185	Listed

	TSCA Inventory Status				
Fiber Glass (Wool)	Listed				
Cured Binder	Listed				

## SECTION 16 : ADDITIONAL INFORMATION

**SDS Creation Date:** December 16, 1997

**SDS Revision Date:** June 03, 2014

**MSDS Revision Notes:** Add product names AT 075 and AT 075 PINK

**Disclaimer:** Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use.





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## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### Product identifier

Product name: Glass Mineral Wool with ECOSE® Technology

Synonyms, trade names: EcoBatt® (Unfaced and Faced) Building Insulation, EcoBatt® QuietTherm® (Unfaced and Faced) Building Insulation, Acoustical/IB Board, Acoustical Board Smooth, Air Duct Board (Atmosphere®Eclipse®), KB Blanket, Black Acoustical Board, Black Diffuser Board, Condensation Control Blanket, Duct Liner (Atmosphere®and Sonic XP®), Duct Wrap Faced and Unfaced (Atmosphere® Friendly Feel®), Earthwool® 1000° Pipe Insulation\*, ET Batt\*, ET Blanket\*, ET Board\*, ET Panel\*, Equipment Liner M, Everbilt (Unfaced and Faced) Building Insulation, Fabrication Board\*, Flexible Duct Material, Guardian (Unfaced and Faced) Building Insulation, Hullboard\*, Insulation Board (Faced and Unfaced)\*, KF-110\*, KFR/ET Range Insulation\*, KN Series\*, Manufactured Housing Duct Board, Manufactured Housing Insulation, Metal Building Insulation, Metal Building Filler Insulation, Pipe & Tank Insulation\*, Earthwool® Redi-Klad® 1000° Pipe Insulation\*, Rigid Plenum Liner, Sill Sealer, Wall & Ceiling Liner M, Guardian by Knauf Insulation  
(\* See section 2., 8, 10)

Revision: Date: 2016-06-01

### Relevant identified uses of the substance or mixture and uses advised against

Identified use(s): Thermal and/or acoustic insulation for use in technical applications, industrial applications and in building construction.

Uses advised against: None known.

### Details of the supplier of the safety data sheet

Head Office Knauf Insulation LLC  
One Knauf Drive  
Shelbyville  
IN 46176-1496  
Tel: 800 825 4434  
sds@knaufinsulation.com  
www.knaufinsulation.us

Region: United States, Central & South America's

### Emergency telephone number

Emergency telephone: 24hrs Chemtrec Tel: Tel: 800 424 9300

## SECTION 2: HAZARDS IDENTIFICATION

### Classification of the substance or mixture

Classification according to the OSHA Hazard Communication Standard (29 CFR 1910.1200)  
: The product is not classified.

### Label elements

Contains: None.

Hazard pictogram: None.

Signal word: None.

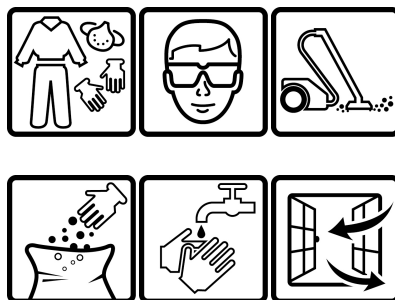
Hazard statements: None.

Precautionary statements:

- Prevention: None.
- Response None.
- Storage None.
- Disposal None.

Supplemental label information: None.

The following sentences and pictograms are printed on packaging: The mechanical effect of fibers in contact with skin may cause temporary itching.



[www.knaufinsulation.com/comfort-and-handling](http://www.knaufinsulation.com/comfort-and-handling)

### Other hazards

None.

Hazard summary

Physical Hazards: None.

Health Hazards: Mechanical irritation of the skin, eyes and upper respiratory system.

Environmental Hazards: None.

Main symptoms: Contact with skin, eyes and upper respiratory system may cause mechanical irritation.

Biosoluble glass mineral wool is classified as a nuisance dust by OSHA.

\* Heat-Up Precautions: When heated to temperatures above 400°F for the first time, release of binder components and binder decomposition products can occur which, in high concentrations, may irritate eyes and the respiratory system. - See section 8. & 10

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### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### Substances

<u>%:</u>	<u>CAS-No.:</u>	<u>Chemical name:</u>	<u>Hazard classification:</u>	<u>Notes:</u>
87-100	-	Biosoluble glass mineral wool	-	(1), (2), (3)
0-13	-	Thermo set, inert polymer bonding agent derived from plant starches	-	(1)

Notes:

- (1) Specific chemical identity and/or exact percent concentration is withheld as trade secret.
- (2) Man made vitreous (silicate) fibers with random orientation with alkaline oxide and alkali earth oxide (Na<sub>2</sub>O+K<sub>2</sub>O+CaO+MgO+BaO) content greater than 18% by weight meeting the requirements of Note Q of regulation n° 1272/2008 and therefore not classified carcinogenicity.
- (3) All Knauf Insulation products covered by this SDS are independently certified by EUCEB to be manufactured using biosoluble glass formulations and thus exempt from labeling under NTP or California Prop 65 requirements.

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## SECTION 4: FIRST AID MEASURES

### Description of first aid measures

#### General Information:

Show this Safety Data Sheet to the medical professional in attendance. If symptoms occur, follow first aid measures as appropriate.

Notes to Physician: None specific.

Inhalation: Remove from exposure. Rinse the throat and clear dust from airways.

Skin contact: If mechanical irritation occurs, remove contaminated clothing and wash skin gently with cold water and soap.

Eye contact: Rinse abundantly with water for at least 15 minutes.

Ingestion: Drink plenty of water if accidentally ingested.

### Most important symptoms and effects, both acute and delayed

Contact with skin, eyes and upper respiratory system may cause mechanical irritation. Biosoluble glass mineral wool is classified as a nuisance dust by OSHA.

### Indication of any immediate medical attention and special treatment needed

If any adverse reaction or discomfort continues from any of the above exposures, seek professional medical advice.

Medical attention/treatments: None specific.

## SECTION 5: FIREFIGHTING MEASURES

### Extinguishing media

Water, foam, carbon dioxide (CO<sub>2</sub>), and dry powder.

### Special hazards arising from the substance or mixture

Products do not pose a fire hazard in use; however, some packaging materials or facings may be combustible. Products of combustion from product and packaging - carbon dioxide, carbon monoxide and some trace gases such as ammonia, nitrogen oxides and volatile organic substances.

### Advice for firefighters

In large fires in poorly ventilated areas involving packaging materials respiratory protection / breathing apparatus may be required.

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## SECTION 6: ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

Personal precautions: Minimize direct contact with skin in order to prevent mechanical itching. In dusty environments, use suitable respiratory protection such as 3M 8210, N95 or equivalent. Use glasses or goggles when working with mineral wool insulation above shoulder height or in dusty environments. Where possible, use natural ventilation during installation in order to minimize dust levels.

After contact with the product, rinse skin in cold water to reduce potential effects of mechanical itching. Dispose of surplus product in accordance with local regulations.

Emergency procedures: Use personal protection recommended in Section 8 of the SDS.

### Environmental precautions

Not relevant.

### Methods and material for containment and cleaning up

In dusty environments, use vacuum equipment where possible to minimize dust levels.

### Reference to other sections

For personal protection, see section 8. For waste disposal, see section 13.

## SECTION 7: HANDLING AND STORAGE

### Precautions for safe handling

Assure proper respiratory protection if dust potential exceeds PEL/TLV.

### Conditions for safe storage, including any incompatibilities

To ensure optimum product performance; when packaging is removed or opened; products should be stored inside or covered to protect them from ingress of rain water or snow.

Storage arrangements should ensure stability of stacked products and use on a first in first out basis (FIFO) is recommended.

### Specific end use(s)

Thermal and/or acoustic insulation for use in technical applications, industrial applications and in building construction.

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## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

United States

Occupational exposure limits:

<u>CAS- No.:</u>	<u>Chemical name:</u>	<u>As:</u>	<u>Exposure limits:</u>	<u>Type:</u>	<u>Notes:</u>	<u>References:</u>
-	Glass wool fibers	-	1 fiber/ml	TWA	A3	ACGIH
-	Mineral wool fiber, total particulate	-	5 mg/m3	TWA	-	NIOSH
-	Particulates not otherwise regulated (PNOR), respirable fraction	-	5 mg/m3	TWA	-	OSHA
-	Particulates not otherwise regulated (PNOR), total dust	-	15 mg/m3	TWA	-	OSHA

Notes: (A3) - Fibers longer than 5 µm; diameter less than 3 µm; aspect ratio greater than 5:1 as determined by the membrane filter method at 400-450X magnification (4-mm objective) phase contrast illumination.  
- Biosoluble glass mineral wool - See section 3.

### Exposure controls

Engineering measures: Maintain sufficient mechanical or natural ventilation to assure fiber concentrations remain below PEL/TLV Use local exhaust if necessary. Power equipment should be equipped with properly designed dust collection devices.

Eye/face protection: Use glasses or goggles when working with mineral wool insulation above shoulder height or in dusty environments.

Skin protection: Minimize direct contact with skin in order to prevent mechanical itching.

Respiratory equipment: In dusty environments, use suitable respiratory protection.

Hygiene measures: After contact with the product, rinse skin in cold water to reduce potential effects of mechanical itching.

Environmental Exposure Controls: Not relevant.

\* Heat-Up Precautions: When heated to temperatures above 400°F for the first time, release of binder components and binder decomposition products can occur which, in high concentrations, may irritate eyes and the respiratory system. The duration of release is dependant upon the thickness of the insulation, binder content and the temperature applied. Adequate ventilation should be provided. In confined spaces or where ventilation is not possible, occupants should wear appropriate self-contained breathing apparatus.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<u>Appearance:</u>	Solid.
<u>Form:</u>	Rolls, loose fiber, Panel.
<u>Color:</u>	Brown.
<u>Odor:</u>	Not relevant.
<u>Odor threshold:</u>	Not relevant.
<u>pH:</u>	Not relevant.
<u>Melting point / freezing point:</u>	Not relevant.
<u>Initial boiling point and boiling range:</u>	Not relevant.
<u>Flash point:</u>	Not relevant.
<u>Auto Ignition Temperature (°F)</u>	Not relevant.
<u>Flammability (solid, gas):</u>	Not relevant.
<u>Flammability limit - lower (%):</u>	Not relevant.
<u>Flammability limit - upper (%):</u>	Not relevant.
<u>Vapor pressure:</u>	Not relevant.
<u>Vapor density:</u>	Not relevant.
<u>Evaporation rate:</u>	Not relevant.
<u>Relative density:</u>	7 – 96 kg/m <sup>3</sup>
<u>Partition coefficient (n-octanol/water):</u>	Not relevant.
<u>Solubility:</u>	Generally chemically inert and insoluble in water.
<u>Decomposition temperature (°F):</u>	Not relevant.
<u>Viscosity:</u>	Not relevant.
—	
<u>Other data:</u>	Nominal diameter of fibers 3 - 8µm
	Length weight geometric mean diameter less 2 standard errors: < 6 µm
	Orientation of fibers: Random

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## SECTION 10: STABILITY AND REACTIVITY

### Reactivity

None.

### Chemical stability

Binder will decompose above 400°F

### Possibility of hazardous reactions

None.

### Conditions to avoid

Heating above 400°F

### Incompatible materials

Hydrofluoric acid will react with and dissolve glass.

### Hazardous decomposition products

None in normal conditions of use.

When heated to temperatures above 400°F for the first time, release of binder components and binder decomposition products can occur which, in high concentrations, may irritate eyes and the respiratory system. The duration of release is dependant upon the thickness of the insulation, binder content and the temperature applied Adequate ventilation should be provided. In confined spaces or where ventilation is not possible, occupants should wear appropriate self-contained breathing apparatus.

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## SECTION 11: TOXICOLOGICAL INFORMATION

### Information on toxicological effects

Ingestion: Non-hazardous when ingested.  
Inhalation: Mechanical irritation to upper respiratory tract.  
Skin contact: Mechanical irritation to skin.  
Eye contact: Mechanical irritation to eyes.  
Symptoms: Contact with skin, eyes and upper respiratory system may cause mechanical irritation.  
Biosoluble glass mineral wool is classified as a nuisance dust by OSHA.

#### Information on toxicological effects:

Acute toxicity: No data were identified for the product as a whole.

Data are for constituents:

Product name: Biosoluble glass mineral wool

Result - LD50

Species - N/A.

Dose - N/A.

Exposure - N/A.

Product name: Thermo set, inert polymer bonding agent derived from plant starches.

Result -

Species - N/A.

Dose - N/A.

Exposure - N/A.

Serious eye damage/irritation:	May cause mechanical irritation to eyes.
Skin Corrosion/Irritation:	May cause mechanical irritation to skin.
Respiratory or skin sensitization:	No data were identified for this product or its constituents.
Germ cell mutagenicity:	No data were identified for this product or its constituents.

Carcinogenicity: Results from a biopersistence test by intratracheal instillation has shown that fibers in this product longer than 20 µm have a weighted half-life less than 40 days, thus this product is not classified as a carcinogen. None of the components of this product are listed as a carcinogen by OSHA, IARC or NTP.

Reproductive Toxicity:	No data available for this product or its constituents.
Developmental Effects:	No data were identified for this product or its constituents.
STOT - Single exposure::	No data were identified for this product or its constituents.
STOT - Repeated exposure::	No data were identified for this product or its constituents.
Aspiration hazard:	Not relevant.

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## SECTION 12: ECOLOGICAL INFORMATION

### Toxicity

This product is not ecotoxic to air, water or soil, by composition.

### Persistence and degradability

Inert inorganic product with Thermo set, inert polymer bonding agent derived from plant starches; 0 - 13%

### Bioaccumulative potential

Will not bio-accumulate.

### Mobility in soil

Not considered mobile. Less than 1% leachable organic carbon if landfilled.

### Results of PBT and vPvB assessment

Not relevant.

### Other adverse effects

None known.

## SECTION 13: DISPOSAL CONSIDERATIONS

### Waste treatment methods

Waste from residues: Dispose of in accordance with all applicable regulations.

Contaminated packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal.

Disposal methods: This product is not regulated under RCRA Hazardous Waste Regulations. May be disposed in landfill. If unsure, contact the local office of the USEPA, your local public health department or the local landfill regulators.

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## **SECTION 14: TRANSPORT INFORMATION**

### **UN number**

Not regulated.

### **UN proper shipping name**

Not regulated.

### **Transport hazard class(es)**

Not regulated.

### **Packing group**

Not regulated.

### **Environmental hazards**

Not regulated.

### **Special precautions for user**

Not regulated.

### **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not regulated.

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## SECTION 15: REGULATORY INFORMATION

### **Safety, health and environmental regulations/legislation specific for the substance or mixture**

OSHA Status: Labeling: This product is regulated as a nuisance dust under OSHA criteria.

TSCA listed: All components of this product are listed or exempt from listing on the TSCA inventory.

CERCLA Reportable Quantity: Not regulated.

SARA Title III:

Section 302 Extremely Hazardous: Not regulated.

Section 311/312 Hazard Categories: Not regulated.

Section 313 Toxic Chemicals: Not listed.

California Safe Drinking Water and Toxic Enforcement Act (Prop. 65): This product is exempt from labeling requirements under this Act.

In accordance with industry practice, Knauf Insulation has decided to continue to provide its customers with the appropriate information for the purpose of assuring safe handling and use of mineral wool throughout the product life.

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## SECTION 16: OTHER INFORMATION

Label in accordance with OSHA HCS (2012): This product is not classified as hazardous.

Abbreviations and acronyms used in the safety data sheet:

CAS: Chemical Abstract Service  
CFR: Code of Federal Regulations  
EUCEB: European Certification Board for Mineral Wool Products  
IARC: International Agency for Research on Cancer  
NTP: National Toxicology Program  
OSHA: Occupational Safety and Health Administration (United States)  
PEL: Permissible Exposure Limit  
PBT: Persistent, Bioaccumulative and Toxic  
SARA: Superfund Amendments and Reauthorization Act  
SDS: Safety Data Sheet  
STEL: Short Term Exposure Limit  
TLV: Threshold Limit Value  
TSCA: Toxic Substances Control Act  
USEPA: United States Environmental Protection Agency

All products manufactured by Knauf Insulation are made of non-classified fibers and are certified by EUCEB.

Products meeting EUCEB certification requirements can be recognised by the EUCEB logo printed on the packaging.

Further information can be obtained from:

[www.euceb.org](http://www.euceb.org)  
[www.knaufinsulation.com](http://www.knaufinsulation.com)



Additional information:

Change to Sections: 1, 16  
New document format Date: 2016-06-01  
Date of previous revisions: 2015-10-26, 2015-08-21, 2015-04-30

Moreover, in 2001, the IARC, reclassified glass mineral wool fibers from Group 2B (possibly carcinogenic) to «not classifiable as to their carcinogenicity to humans (Group 3)». (See Monograph Vol 81, <http://monographs.iarc.fr/>).

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The information on this data sheet represents our current data and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.

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# Thermafiber® Safing Mineral Wool Insulation



## Description

Thermafiber® Safing mineral wool insulation products are designed to provide enhanced fire protection in perimeter fire containment systems, floor and wall penetrations, construction joints, and other firestopping applications. These products are non-combustible, moisture-resistant, non-corrosive, non-deteriorating, mildew-resistant and vermin-resistant. Thermafiber® Safing provides thermal insulation, fire containment, and enhanced acoustical performance in many different UL and Intertek (formerly OPL) listed fire containment assemblies of 1, 2, and 3-hr ratings.

## Standards, Codes Compliance

<b>ASTM C 665</b>	Non-corrosive, Type I, III
<b>ASTM C 612</b>	Type IA, IB, II
<b>ASTM E 136</b>	Non-combustible as defined per NFPA Standard 220
<b>CAN/ULC S114</b>	Complies
<b>ASTM E 96</b>	Unfaced, 50 Perms as tested
<b>ASTM E 96</b>	Foil Faced, 0.02 Perms as tested
<b>ASTM C 1104</b>	Absorbs less than 1% by volume
<b>CAN/ULC S102</b>	Flame Spread 0, Smoke Developed 0, unfaced
<b>ASTM E 814 or UL 1479</b>	Safing Insulation used in conjunction with an approved fill, void, or cavity material sealant or other approved material in through – penetration firestop systems Complies
<b>UL 2079</b>	Safing Insulation used in conjunction with an approved fill, void or cavity material in construction joint systems Complies
<b>CAN/ULC S115</b>	Complies

Safing products are approved by: New York City Board of Standards & Appeals – (under BSA 39-74-SM & accepted by MEA-209-82-M, Vol. 4).

## Product Options

Safing 4.0, 2" or greater thickness, is available with a vapor retarding foil facing.

Safing 6.0, 1.5" or greater thickness, is available with a vapor retarding foil facing.

Recycled Content Options<sup>1,2</sup>:

EPA Choice Fiber  
(US Government Buildings) ..... Minimum 75%  
Standard Fiber ..... 70%

1. Recycled content options other than standard must be specified at time of order.

## Technical Data

Actual Density	Tested to ASTM C 518		Tested to ASTM E 84			
	"k" @ 75° [24°C] BTU.in/hr.sq.ft. °F	"R" value per inch of thickness***	Unfaced	Foil Faced	Unfaced	Foil Faced
4.0 pcf	0.23	4.3	Flame Spread 0, Smoke Developed 0	Flame Spread 25, Smoke Developed 0	Flame Spread 0, Smoke Developed 0	Flame Spread 25, Smoke Developed 0
6.0 pcf	0.23	4.3	Flame Spread 0, Smoke Developed 0	Flame Spread 25, Smoke Developed 0	Flame Spread 0, Smoke Developed 0	Flame Spread 25, Smoke Developed 0

\*\*\*R = thickness divided by 'k'

## Perimeter Fire Containment Tests Per ASTM E 2307

Safing insulation is a critical component of any perimeter fire containment system. Thermafiber, Inc. has performed decades of testing in all of the containment systems listed below.

- Aluminum Spandrel Curtain Wall Fire Containment
- Steel Stud-Framed/Gypsum Sheathing Curtain Wall Fire Containment
- Glass Spandrel Curtain Wall Fire Containment
- Granite Spandrel Curtain Wall Fire Containment
- Precast Concrete Spandrel

For more complete test information, see UL® and Intertek® (formerly OPL) Directories. For a full listing of containment systems visit [www.thermafiber.com](http://www.thermafiber.com) and click on Fire Rated Assemblies. UL Reference = TYPE SAF.

For additional job specific details and accessory materials necessary to complete the Perimeter Fire Containment System, please refer to UL® design listing.<sup>3</sup>

<sup>3</sup>Underwriters Laboratories (UL) Designs, Fire Resistance Directory, UL, 333 Pfingsten Road, Northbrook, IL 60062.

See Owens Corning publication "Enclosure Solutions Perimeter Fire Containment System E2307 Curtain Wall Technical Bulletin" (Pub. No. 10020920) for more information.

## Installation

All firestopping insulation should be installed per the architectural specification or system specific test description. All compressed Safing insulation should be installed per the listed assembly.

- Perimeter Installation:** Safing insulation should be compression fitted between the slab edge and the FireSpan® curtain wall insulation, leaving no voids.
- Penetration Application:** Safing insulation should be cut slightly larger than the opening and compression fitted into the opening, leaving no voids.
- Construction Joint Application:** Safing insulation should be compression fitted into the joint opening, leaving no voids.

## Availability

	Thickness*	Widths**	Lengths**
Safing 4.0 pcf	1" - 7"	16", 24", 36"	48", 60"
Safing 6.0 pcf	1" - 7"	16", 24", 36"	48", 60"
Tolerances	+1/4", - 1/8"	± 1/8"	± 1/2"

\*Thicknesses are available in 1/2" increments. \*\*Custom sizes are available upon request.

## Thermafiber Insolutions®

Thermafiber Insolutions® offers industry leading technical and engineering assistance to architects, specifiers, and contractors. These services include CAD drawings, engineering judgments, LEED® Credit Information, and product recommendations. Contact our technical services department at 1-888-834-2371 or email [ThermafiberInsolutions@owenscorning.com](mailto:ThermafiberInsolutions@owenscorning.com).



**Thermafiber**

## Features

- Exceptional performance in Perimeter Fire Containment Systems
- Provides fire containment in rated assemblies
- Fire resistant to temperatures above 2,000°F (1,093°C)
- Helps conserve energy, reduce greenhouse gas emissions
- Mold-resistant
- Enhances acoustical performance
- Natural dark color provides shadowing in glass spandrels
- Minimum 70% recycled content<sup>2</sup>
- Contributes to credits in several green building programs such as LEED® and Green Globes®

## Environmental and Sustainability

Owens Corning is a worldwide leader in building material systems, insulation and composite solutions, delivering a broad range of high quality products and services. Owens Corning is committed to driving sustainability by delivering solutions, transforming markets and enhancing lives. More information can be found at [www.owenscorning.com](http://www.owenscorning.com).

## Notes

For additional information refer to the Safe Use Instruction Sheet (SUIS) found in the SDS Database via <http://sds.owenscorning.com>.

## Submittal Approvals

Job Name \_\_\_\_\_

Contractor \_\_\_\_\_

Date \_\_\_\_\_



Thermafiber® Safing and FireSpan® mineral wool products provide the critical components of the perimeter fire containment system in the 111 South Wacker Building in Chicago, IL. Thermafiber® mineral wool insulation also contributed to the building's LEED® Gold Rating.



Made in the USA

## Certifications and Sustainable Features

- <sup>2</sup>Verified by ICC-ES to contain a minimum of 70% recycled content. See ICC-ES Evaluation Report VAR-1025 at [icc-es.org](http://icc-es.org).
- Environmental Product Declaration (EPD) has been certified by UL Environment. For more information visit [ul.com/epd](http://ul.com/epd).
- Material Health Certificate from Cradle to Cradle Products Innovation Institute. For more information visit [c2ccertified.org](http://c2ccertified.org).



## Disclaimer of Liability

Thermafiber, Inc. shall not be liable for incidental and consequential damages, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instructions or for other than the intended use.

Thermafiber, Inc. liability is expressly limited to replacement of defective goods. Any claim shall be deemed waived unless made in writing within thirty (30) days from date it was or reasonably should have been discovered.

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# Thermafiber®

**THERMAFIBER, INC.**  
ONE OWENS CORNING PARKWAY  
TOLEDO, OHIO, USA 43659

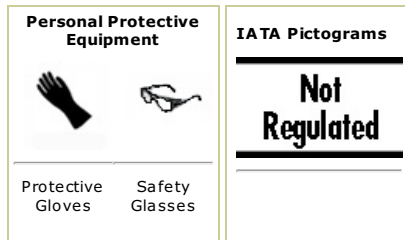
**888-TFIBER1 [834-2371]**  
**[www.thermafiber.com](http://www.thermafiber.com)**

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## SAFETY DATA SHEET



### SECTION 1 : IDENTIFICATION

**Product Name:** **Foamular® Extruded Polystyrene Insulation**  
**SDS Manufacturer Number:** 21528-SAM-EN  
**Synonyms:** Foamular® 150, Foamular® 250, Foamular® 350, Foamular® 400, Foamular® 404, Foamular® 600, Foamular® 604, Foamular® 1000, Foamular® CW15, Foamular® CW25, Foamular® LT30, Foamular® LT40, Foamular® 404RB, Foamular® 604RB, Foamular® AgTek, Foamular® PROPINK®, Foamular® DURAPINK®, Foamular® PINKCORE®, Foamular® PINKCORE® TT, Foamular® Half-Inch, Foamular® INSULPINK®, Foamular® THERMAPINK®, Foamular® DURAPINK® FA, Foamular® DURAPINK® Plus, Foamular® INSULPINK® - Z, Foamular® THERMAPINK® 18, Foamular® THERMAPINK® 25, Foamular® THERMAPINK® 40, Foamular® THERMAPINK® 60, Foamular® Extruded Polystyrene, Foamular® Insulating Sheathing, Foamular® INSUL-DRAIN®, Foamular® PinkForm-Xtra ; Foamular® OC LiteForm  
**Manufacturer Name:** Owens Corning Foam Insulation, LLC  
**Address:** One Owens Corning Parkway  
Toledo, OH 43659  
**Website:** www.owenscorning.com  
**Customer Service Phone Number:** 1-800-438-7465  
**Health Issues Information:** 1-800-438-7465  
**Technical Product Information:** 1-800-438-7465  
**CHEMTREC:** 800-424-9300 (24 hours everyday).  
**SDS Creation Date:** March 05, 1997  
**SDS Revision Date:** August 12, 2010

### SECTION 2 : HAZARD(S) IDENTIFICATION

#### Applies to Product

**Emergency Overview:** Dense Black Smoke will be produced during a fire. Grinding, sawing or fabrication activities can produce dust particles which under certain conditions may ignite or form explosive dust atmospheres.

**Route of Exposure:** Eye contact  
Inhalation

**Potential Health Effects:**

**Eye:** Dust may cause slight irritation.

**Skin:** No effects expected.

**Inhalation:** Dust may cause irritation of respiratory tract.

**Ingestion:** Ingestion of this product is unlikely.

**Chronic Health Effects:** There is no known chronic health effect connected with long-term use or contact with this product.

**Potential Environmental Effects:** There is no known ecological information for this material.

**Aggravation of Pre-Existing Conditions:** Chronic respiratory or skin conditions may temporarily worsen from exposure to this product.

**Appearance and Odor:** Pink, white or green closed-cell foam board with no odor.

### SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Ingredient Percent
---------------	------	--------------------



Polystyrene	9003-53-6	80 - 90 by weight
1-Chloro-1, 1-difluoroethane (HCFC-142B)	75-68-3	7 - 12 by weight
Talc	14807-96-6	0 - 2 by weight
Hexabromocyclododecane	3194-55-6	0.5 - 1.5 by weight

**Non-Hazardous Statement:**

The remaining components of this product are non-hazardous or are in a small enough quantity as to not meet regulatory thresholds for disclosure. These components contain no substances or impurities which would influence the classification of this product.

## SECTION 4 : FIRST AID MEASURES

<b>Eye Contact:</b>	Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Do not rub or scratch eyes. If eye irritation persists, consult a specialist.
<b>Skin Contact:</b>	Immediately wash skin with soap and plenty of water. Get medical attention if irritation develops or persists.
<b>Inhalation:</b>	Move to fresh air. If symptoms persist, call a physician.
<b>Ingestion:</b>	Accidental ingestion of this material is unlikely. If this does occur, watch person for several days to make sure intestinal blockage does not occur. If symptoms persist, call a physician.

## SECTION 5 : FIRE FIGHTING MEASURES

<b>Flammable Properties:</b>	Non Flammable.
<b>Flash Point:</b>	> 615 °F (324 °C)
<b>Flash Point Method:</b>	ASTM D 1929
<b>Auto Ignition Temperature:</b>	Not applicable.
<b>Lower Flammable/Explosive Limit:</b>	Not applicable.
<b>Upper Flammable/Explosive Limit:</b>	Not applicable.
<b>Extinguishing Media:</b>	dry chemical foam. carbon dioxide (CO2). water fog
<b>Unsuitable Media:</b>	None.
<b>Protective Equipment:</b>	Wear self-contained breathing apparatus (SCBA) and full fire fighting protective gear.
<b>Unusual Fire Hazards:</b>	Grinding, sawing or fabrication activities can produce dust particles which under certain conditions may ignite or form explosive dust atmospheres.
<b>Hazardous Combustion Byproducts:</b>	Carbon monoxide. Carbon dioxide. styrene. Small quantities of hydrogen fluoride, hydrogen chloride, fluorine and chlorine could be released. Other undetermined compounds could be released in small quantities.  HCFC-142b thermally decomposes at > 430°C (850°F). Decomposition products include: Hydrogen fluoride, hydrogen chloride, fluorine, and chlorine.
<b>Universal Fire And Explosion Hazards:</b>	Not available.

**NFPA Ratings:**

NFPA Health:	0
NFPA Flammability:	1
NFPA Reactivity:	0
NFPA Other:	

## SECTION 6 : ACCIDENTAL RELEASE MEASURES

<b>Personnel Precautions:</b>	Avoid contact with skin and eyes.
<b>Methods for containment:</b>	This material will settle out of the air. Prevent from spreading by covering, diking or other means.
<b>Methods for cleanup:</b>	Use an industrial vacuum cleaner with a high efficiency filter to clean up dust. Avoid dry sweeping. Pick up and transfer to properly labeled containers. After cleaning, flush away traces with water.
<b>Other Precautions:</b>	Does not apply.

## SECTION 7 : HANDLING and STORAGE

<b>Handling:</b>	Avoid dust formation. Do not breathe dust. Wear personal protective equipment.
<b>Storage:</b>	Keep product in its packaging until use to minimize potential dust generation. Product should be kept dry and undercover.

## SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

<b>Engineering Controls:</b>	Provide local exhaust and/or general ventilation to maintain exposure below regulatory and recommended limits. Dust collection system must be used in transferring operations, cutting or machining or other dust generating processes, such as using power tools. Vacuum or wet clean-up methods should be used. Grinding, cutting, sawing or fabrication activities that cut large numbers of interior foam cells can release localized amounts of flammable residual blowing agent or release dust particles that under certain conditions may ignite or form explosive dust atmospheres.
<b>Eye/Face Protection:</b>	Safety glasses with side-shields.
<b>Skin Protection Description:</b>	Protective gloves. Long sleeved shirt and long pants.
<b>Respiratory Protection:</b>	When workers are facing airborne particulate/dust concentrations above the exposure limit they must use appropriate certified respirators.

### EXPOSURE GUIDELINES

Ingredient	Guideline OSHA	Guideline NIOSH	Guideline ACGIH	Ontario Canada	Mexico
Polystyrene	5 mg/m3, Respirable fraction (R), 10 mg/m3, Total Particulates. (PNOC)		3 mg/m3, Respirable fraction (R), 10 mg/m3, Inhalable fraction (I) (NOS)	3 mg/m3, Respirable., 10 mg/m3, inhalable Particulates (Insoluble) Not Otherwise Classified.	
Talc		REL-TWA: 2 mg/m3 Respirable fraction (R)	TLV-TWA: 2 mg/m3 (Respirable.)	TWAEV-TWA: 2 f/cc (Respirable)	VEMP-TWA: 3 mg/m3 Respirable fraction (R)

## SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

<b>Physical State:</b>	Solid.
<b>Physical State Appearance:</b>	Foam.
<b>Color:</b>	Pink, white or green
<b>Odor:</b>	No detectable odor.
<b>Boiling Point:</b>	Decomposes over 600 °F (316 °C)
<b>Melting Point:</b>	Softens @ 220 °F (104 °C)
<b>Specific Gravity:</b>	0.021-0.064 (Ref: water = 1).
<b>Solubility:</b>	Insoluble. in water.
<b>Vapor Density:</b>	No Data
<b>Vapor Pressure:</b>	No Data
<b>Evaporation Rate:</b>	No Data
<b>pH:</b>	No Data
<b>Flash Point:</b>	> 615 °F (324 °C)
<b>Flash Point Method:</b>	ASTM D 1929
<b>Auto Ignition Temperature:</b>	Not applicable.

## SECTION 10 : STABILITY and REACTIVITY

<b>Chemical Stability:</b>	Stable under normal conditions.
<b>Hazardous Polymerization:</b>	Hazardous polymerization does not occur.
<b>Conditions to Avoid:</b>	Dust dispersion in air.
<b>Incompatible Materials:</b>	Hydrocarbons. Esters Amines.
<b>Special Decomposition Products:</b>	See Section 5 of MSDS for hazardous decomposition products during a fire.

## SECTION 11 : TOXICOLOGICAL INFORMATION

### Applies to Product :

<b>Acute Toxicity:</b>	Dusts may cause mechanical irritation to eyes and skin. Ingestion may cause transient irritation of throat, stomach and gastrointestinal tract. Inhalation may cause coughing, nose and throat irritation,
------------------------	--

and sneezing. High exposures may cause difficulty breathing, congestion, and chest tightness.

Carcinogens:							
	ACGIH			IARC		Canada	MEXICO
Polystyrene	No Data			Group 3 - Not Classifiable as to its Carcinogenicity to Humans.			No Data
1-Chloro-1, 1-difluoroethane (HCFC-142B)	No Data			No Data			No Data
Talc	A4 Not Classifiable as a Human Carcinogen			Group 2A - Probably carcinogenic to humans.			A4 Not Classifiable as a Human Carcinogen
Hexabromocyclododecane	No Data			No Data			No Data

#### Applies to Product :

Sensitization: No information available.

Mutagenicity: No information available.

Reproductive Toxicity: No information available.

Teratogenicity: No information available.

Neurological Effects: No information available.

#### 1-Chloro-1, 1-difluoroethane (HCFC-142B) :

Inhalation: Inhalation - Mouse LC50: 1758000 mg/m3/2H [Details of toxic effects not reported other than lethal dose value  
Inhalation - Rat LC50: 2050000 mg/m3/4H [Details of toxic effects not reported other than lethal dose value](RTECS)

#### Talc :

Skin: Skin - Human Standard Draize test. : 300 ug/3D-I - [mild](RTECS)

Inhalation: Inhalation - Rat TCLo: 17 mg/m3/6H/26D (Intermittent) [Lungs, Thorax, or Respiration - Other changes]  
Inhalation - Mouse TCLo: 20400 ug/m3/6H/26D (Intermittent) [Lungs, Thorax, or Respiration - Other changes]  
Inhalation - Rat TCLo: 18 mg/m3/6H/2Y (Intermittent) [Tumorigenic - carcinogenic by RTECS criteria; Lungs, Thorax, or Respiration - Bronchiogenic carcinoma; Endocrine - Tumors]  
Inhalation - Rat TC: 11 mg/m3/1Y (Intermittent) [Tumorigenic - equivocal Tumorigenic agent by RTECS criteria; Lungs, Thorax, or Respiration - Tumors](RTECS)

#### Hexabromocyclododecane :

Skin: Skin - Rabbit LD50: >8 gm/kg [Details of toxic effects not reported other than lethal dose value](RTECS)

Ingestion: Inhalation - Rat LD50: >10 gm/kg [Details of toxic effects not reported other than lethal dose value](RTECS)

## SECTION 12 : ECOLOGICAL INFORMATION

#### Applies to Product :

Ecotoxicity: This material is not expected to cause harm to animals, plants or fish.

Environmental Fate: No data available for this product.

Biodegradation: Not available.

Bioaccumulation: Not available.

Mobility In Environmental Media: Not available.

## SECTION 13 : DISPOSAL CONSIDERATIONS

#### Applies to Product :

Waste Disposal: Dispose of in accordance with Local, State, Federal and Provincial regulations.

## SECTION 14 : TRANSPORT INFORMATION

IATA Shipping Name: Not Regulated.

MEX Shipping Name : Not Regulated.

## SECTION 15 : REGULATORY INFORMATION

### Inventory Status

	Japan ENCS	Philippines PICCS	South Korea KECL	Australia AICS	EINECS Inventory Status

Polystyrene	(6)-120		KE-13257	Listed	No.
1-Chloro-1, 1-difluoroethane (HCFC-142B)		Listed	KE-05597	Listed	Yes.
Talc		Listed	KE-32773	Listed	Yes.
Hexabromocyclododecane		Listed	KE-18398	Listed	Yes.

	TSCA Inventory Status				
Polystyrene	Listed				
1-Chloro-1, 1-difluoroethane (HCFC-142B)	Listed				
Talc	Listed				
Hexabromocyclododecane	Listed				

## SECTION 16 : ADDITIONAL INFORMATION

**MSDS Creation Date:** March 05, 1997

**MSDS Revision Date:** August 12, 2010

**Disclaimer:** Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use.

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**DuPont™ Tyvek® Spunbond Polyethylene**

Version 2.1

Revision Date 11.06.2009

Ref. 150000002811

This SDS adheres to the standards and regulatory requirements of Great Britain and may not meet the regulatory requirements in other countries.

**1. IDENTIFICATION OF THE ARTICLE AND THE COMPANY/UNDERTAKING****Product information**

Product name : DuPont™ Tyvek® Spunbond Polyethylene

Company : Du Pont de Nemours (Luxembourg) S.à r.l.  
Rue du General Patton / Contern  
L-2984 Luxembourg

Telephone : +352-3666.1000

Emergency telephone : +44-(0)8456-006.640

E-mail address : sds-support@che.dupont.com

**2. HAZARDS IDENTIFICATION**

This product has no known adverse effect on human health.  
Additives in this product do not present a respiration hazard unless the product is ground to a powder of respirable size and the dust is inhaled. All dusts are potentially injurious to the respiratory tract if respirable particles are generated and inhaled.  
Dust may form explosive mixture in air.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS-No.	EC-No.	Classification	Concentration [%]
Polyethylene	9002-88-4			> 97
Additives				< 3

**4. FIRST AID MEASURES**

General advice : No hazards which require special first aid measures.

**5. FIRE-FIGHTING MEASURES**

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.,

Specific hazards during fire fighting : Burning is accompanied by melting and dripping which may cause the fire to spread.  
Hazardous combustion products Carbon monoxide Carbon dioxide (CO2)

Special protective equipment for fire-fighters : Wear self-contained breathing apparatus and protective suit.

**DuPont™ Tyvek® Spunbond Polyethylene**

Version 2.1

Revision Date 11.06.2009

Ref. 150000002811

**6. ACCIDENTAL RELEASE MEASURES**

Methods for cleaning up : not applicable

**7. HANDLING AND STORAGE****Handling**

Advice on safe handling : Material can create slippery conditions. Take precautionary measures against static discharges.

**Storage**

Requirements for storage areas and containers : No special storage conditions required.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Components with workplace control parameters**

Components	CAS-No.	Type Form of exposure	Control parameters	Update	Basis
Dust (inhalable and respirable fraction)		TWA Inhalable dust.	10 mg/m3	2007	EH40 WEL
		TWA Respirable dust.	4 mg/m3	2007	EH40 WEL

**Personal protective equipment**

Respiratory protection : Respiratory protection should not be required for normal use and handling. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Form : sheets,

Colour : white,

Odour : none,

Melting point/range : 135 °C

Flash point : not applicable

Ignition temperature : 330 - 350 °C

**DuPont™ Tyvek® Spunbond Polyethylene**

Version 2.1

Revision Date 11.06.2009

Ref. 150000002811

Thermal decomposition : &gt; 200 °C,

**10. STABILITY AND REACTIVITY**Hazardous decomposition : Carbon monoxide  
products Carbon dioxide**11. TOXICOLOGICAL INFORMATION**

Further information : This product has no known adverse effect on human health.

**12. ECOLOGICAL INFORMATION****Further information on ecology**Additional ecological : This product has no known eco-toxicological effects.  
information**13. DISPOSAL CONSIDERATIONS**

Product : Where possible recycling is preferred to disposal or incineration.

**14. TRANSPORT INFORMATION**

Further information : Not classified as dangerous in the meaning of transport regulations.

**15. REGULATORY INFORMATION****Labelling according to EC Directives**

As an article the product does not need to be labelled in accordance with EC-directives or respective national laws.

**16. OTHER INFORMATION****Restrictions on use**

Do not use DuPont materials in medical applications involving implantation in the human body or contact with internal body fluids or tissues unless the material has been provided from DuPont under a written contract that is consistent with DuPont policy regarding medical applications and expressly acknowledges the contemplated use. For further information, please contact your DuPont representative. You may also request a copy of the DuPont POLICY Regarding Medical Applications H-50103-3 and DuPont CAUTION Regarding Medical Applications H-50102-3.

**Further information**



**DuPont™ Tyvek® Spunbond Polyethylene**

Version 2.1

Revision Date 11.06.2009

Ref. 150000002811

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Significant change from previous version is denoted with a double bar.

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## **MATERIAL SAFETY DATA SHEET**

Revised: March 29, 2012  
Issued: April 23, 2003

### ***I. IDENTIFICATION***

**Product:** 203-\*\* White Tyvek brand BOPP Sheathing Tape

### ***II. PHYSICAL DATA***

**Solubility in water:** Negligible  
**Volatility at 100°C:** Less than 0.1%

### ***III. HAZARDOUS INGREDIENTS***

None

### ***IV. FIRE AND EXPLOSION HAZARD DATA***

**Flashpoint:** Not applicable  
**Flammable limits:** Not applicable  
**Extinguishing media:** Water, dry chemicals, foam, CO<sub>2</sub>  
**Unusual fire hazards:** Produces dense black smoke if burned

### ***V. HEALTH HAZARD DATA***

**Skin Contact:** May cause skin irritation after prolonged exposure with adhesive side to skin

No other effect on health is known.

### ***VI. REACTIVITY DATA***

Not Reactive  
Exposure to temperatures in excess of 200°C (392°F) cause decompositions

### ***VII. SPILL OR LEAK PROCEDURES***

Not Applicable

### ***VII. SPECIAL PROTECTION INFORMATION***

Not Applicable

*Date of Issue: August 2, 2012*

*Prepared by: Ronald M. Jacobs  
Ronald M. Jacobs, Director Marketing & Sales*

#### **CANTECH INDUSTRIES, INC.**

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2222 EDDIE WILLIAMS ROAD JOHNSON CITY, TN 37601-2871

TEL: 423-928-8331    WAT: 800-654-3947    FAX: 423-928-0311  
WEBSITE: [www.cantechtape.com](http://www.cantechtape.com)    E-MAIL: [cii@cttgroup.com](mailto:cii@cttgroup.com)



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**Volatility at 100°C:** Less than 0.1%

### ***III. HAZARDOUS INGREDIENTS***

None

### ***IV. FIRE AND EXPLOSION HAZARD DATA***

**Flashpoint:** Not applicable  
**Flammable limits:** Not applicable  
**Extinguishing media:** Water, dry chemicals, foam, CO<sub>2</sub>  
**Unusual fire hazards:** Produces dense black smoke if burned

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No other effect on health is known.

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Exposure to temperatures in excess of 200°C (392°F) cause decompositions

### ***VII. SPILL OR LEAK PROCEDURES***

Not Applicable

### ***VII. SPECIAL PROTECTION INFORMATION***

Not Applicable

*Date of Issue: August 2, 2012*

*Prepared by: Ronald M. Jacobs  
Ronald M. Jacobs, Director Marketing & Sales*

#### **CANTECH INDUSTRIES, INC.**

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2222 EDDIE WILLIAMS ROAD JOHNSON CITY, TN 37601-2871

TEL: 423-928-8331    WAT: 800-654-3947    FAX: 423-928-0311  
WEBSITE: [www.cantechtape.com](http://www.cantechtape.com)    E-MAIL: [cii@cttgroup.com](mailto:cii@cttgroup.com)

# DIVERSIFOAM PRODUCTS

## Safety Data Sheet CertiFoam

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### SECTION 1: Identification

#### 1.1 Product identifier

Product name	CertiFoam
Substance name	Extruded Polystyrene Foam-XPS
CAS no.	9003-53-6

#### 1.2 Other means of identification

CertiFoam 15, CertiFoam 25, CertiFoam 40, CertiSteath, CretiStud, CertiFoam, Drainage Board and CertiFoam Tapered

#### 1.4 Supplier's details

Name	DiversiFoam Products
Address	9091 County Road 50 Rockford, MN 55373 United States

Telephone	736 477 5854
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#### 1.5 Emergency phone number(s)

763 477 5854

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### SECTION 2: Hazard identification

#### 2.1 Classification of the substance or mixture

**GHS classification in accordance with OSHA (29 CFR 1910.1200)**

Not a hazardous substance or mixture.

#### 2.2 GHS label elements, including precautionary statements

Not a hazardous substance or mixture.

#### 2.3 Other hazards which do not result in classification

Not a hazardous substance or mixture.

---

### SECTION 3: Composition/information on ingredients

#### 3.1 Substances

Substance name	Extruded Polystyrene Foam-XPS
CAS no.	9003-53-6

## Safety Data Sheet CertiFoam

Other names / synonyms                      Extruded Polystyrene Foam Insulation

Impurities and stabilizing additives        None

### Hazardous components

#### 1. POLYSTYRENE

Concentration                                      > 90 %

Other names / synonyms                      Styrene, polymers  
CAS no.    9003-53-6

#### 2. 1,1,1,2-Tetrafluoroethane

Concentration                                      < 10 %

Other names / synonyms                      Ethane, 1,1,1,2-tetrafluoro-; HFC-134a; Tetrafluoroethane,1,1,1,2-  
CAS no.    811-97-2

#### 3. ecomate

Concentration                                      < 10 %

Other names / synonyms                      Methyl Formate  
CAS no.    107-31-3

#### 4. HEXABROMOCYCLODODECANE

Concentration                                      < 2 %

Other names / synonyms                      Cyclododecane, hexabromo, HBCD  
CAS no.    25637-99-4

---

## SECTION 4: First-aid measures

### 4.1 Description of necessary first-aid measures

General advice                                      No Hazards Expected

If inhaled    No Hazards Expected

In case of skin contact                              No Hazards Expected

In case of eye contact                              Solid particals or dust produced when when cutting sanding sawing may cause mechanical injury to the eyes. Use of safety glasses is recommended. Black smoke generated during cutting may cause eye irritation. Rinse eyes with water to remove dust or particals

If swallowed    No Hazards Expected

Personal protective equipment for first-aid responders  
No data available.

### 4.2 Most important symptoms/effects, acute and delayed

No data available.

### 4.3 Indication of immediate medical attention and special treatment needed, if necessary

No data available.

# Safety Data Sheet

## CertiFoam

---

### SECTION 5: Fire-fighting measures

#### 5.1 Suitable extinguishing media

Dry Chemical, CO 2, Water Fog, or Foam

#### 5.2 Specific hazards arising from the chemical

Heat from fire will melt foam and produce a dense black smoke consisting mostly of carbon and carbon dioxide. Dense smoke may obstruct vision

#### 5.3 Special protective actions for fire-fighters

Do not enter fire without proper protection such as turn out gear and supplied air respirators

#### Further information

No data available.

---

### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

None Required

#### 6.2 Environmental precautions

None Required

#### 6.3 Methods and materials for containment and cleaning up

Sweep/Shovel into suitable disposal container

#### Reference to other sections

No data available.

---

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

This material is combustible and should not be exposed to flame or other ignition sources. No smoking, open flames or sources of ignition in handling and storage area. Fabrication methods which involve cutting into this product may release the blowing agent(s) remaining in the cells. Provide adequate ventilation to assure localized concentrations in release areas are maintained below the lower flammable limit.

#### 7.2 Conditions for safe storage, including any incompatibilities

Keep in a cool, well-ventilated place. Minimize sources of ignition, such as static build-up, heat, spark or flame. During shipment, storage, installation, and use, this material should not be exposed to flame or other ignition sources.

#### Specific end use(s)

No data available.

---

### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

##### 1. Pentane (CAS: 109-66-0)

PEL (Inhalation): 1000 ppm (Cal/OSHA)

# Safety Data Sheet

## CertiFoam

OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

### 8.2 Appropriate engineering controls

No data available.

### 8.3 Individual protection measures, such as personal protective equipment (PPE)

#### Eye/face protection

Safety glasses or goggles are recommended when using this product.

#### Skin protection

Wear appropriate gloves. Suitable gloves can be recommended by the glove supplier.

#### Body protection

Impervious protective clothing and gloves recommended to prevent irritation of skin.

#### Respiratory protection

None Required

#### Thermal hazards

No data available.

#### Environmental exposure controls

None Required

---

## SECTION 9: Physical and chemical properties

### Information on basic physical and chemical properties

Appearance/form	Solid White
Odor	Slight hydrocarbon odor
Odor threshold	No data available.
pH	Not Applicable
Melting point/freezing point	NA/400
Initial boiling point and boiling range	Not Applicable
Flash point	No data available.
Evaporation rate	Not Applicable
Flammability (solid, gas)	1
Upper/lower flammability limits	Not Applicable
Upper/lower explosive limits	Not Applicable
Vapor pressure	Not Applicable
Vapor density	Not Applicable
Relative density	1.05 to 1.18
Solubility(ies)	Not Applicable
Partition coefficient: n-octanol/water	Not Applicable
Auto-ignition temperature	Not Applicable
Decomposition temperature	Not Applicable
Viscosity	Not Applicable
Explosive properties	Not Applicable
Oxidizing properties	Not Applicable

---

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

## Safety Data Sheet CertiFoam

No data available.

### 10.2 Chemical stability

Stable

### 10.3 Possibility of hazardous reactions

May be incompatible with some organic solvents

### 10.4 Conditions to avoid

Sparks and open flames

### 10.5 Incompatible materials

organic solvents

### 10.6 Hazardous decomposition products

No data available.

---

## SECTION 11: Toxicological information

### Information on toxicological effects

#### Acute toxicity

None

#### Skin corrosion/irritation

None

#### Serious eye damage/irritation

None

#### Respiratory or skin sensitization

None

#### Germ cell mutagenicity

No data available.

#### Carcinogenicity

No data available.

#### Reproductive toxicity

No data available.

#### Summary of evaluation of the CMR properties

No data available.

#### STOT-single exposure

No data available.

#### STOT-repeated exposure

No data available.

#### Aspiration hazard

No data available.

#### Additional information

# Safety Data Sheet CertiFoam

No data available.

---

## SECTION 12: Ecological information

### Toxicity

No data available.

### Persistence and degradability

No data available.

### Bioaccumulative potential

No data available.

### Mobility in soil

No data available.

### Results of PBT and vPvB assessment

No data available.

### Other adverse effects

No data available.

---

## SECTION 13: Disposal considerations

### Disposal of the product

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

### Disposal of contaminated packaging

All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations.

### Waste treatment

No data available.

### Sewage disposal

No data available.

### Other disposal recommendations

No data available.

---

## SECTION 14: Transport information

### DOT (US)

Not dangerous goods

### IMDG

Not dangerous goods

### IATA

Not dangerous goods



## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations specific for the product in question

#### New Jersey Right To Know Components

Common name: PENTANE

CAS number: 109-66-0

#### Pennsylvania Right To Know Components

Chemical name: Pentane

CAS number: 109-66-0

### 15.2 Chemical Safety Assessment

No data available.

---

## SECTION 16: Other information

No data available.

### 16.1 Further information/disclaimer

No data available.

### 16.2 Preparation information

No data available.



## **Safety Data Sheet**

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### **Foam-Control EPS, Foam-Control EPS with Perform Guard, Foam-Control EPS with Perform Guard<sup>2</sup>, and Foam-Control Climate**

---

#### **Section 1 - CHEMICAL PRODUCT/COMPANY IDENTIFICATION**

---

##### **Material Identification**

CAS Number : 9003-53-6  
CAS Name : POLYSTYRENE  
Product Use : FOAMED POLYSTYRENE with or without Polyester or  
Polypropylene film

##### **Company Identification**

###### **MANUFACTURER**

ACH Foam Technologies, LLC  
8700 Turnpike Drive  
Suite 400  
Westminster, CO 80031

###### **PHONE NUMBER**

855-597-4427

---

#### **Section 2 - HAZARDS IDENTIFICATION**

---

Hazard Classification None.  
Label Elements None.  
Signal Word None  
Hazard Statement(s) None.  
Other Hazards Low toxicity under normal conditions of handling and  
use.

---

#### **Section 3 - COMPOSITION/INFORMATION ON INGREDIENTS**

---

##### **Components**

Material	CAS Number	Percent
----------	------------	---------

Polystyrene	9003-53-6	95-100
Pentane*	109-66-0	<2.0
(n-pentane, isopentane, cyclopentane)	78-78-4/287-92-3	

Ingredients not precisely identified are proprietary or nonhazardous.

\*Flammable blowing agent that off-gases from product. Most of the pentane off-gases prior to shipment.

---

## **Section 4 - FIRST AID MEASURES**

---

### First Aid

**Inhalation:** Remove patient from exposure. Obtain medical attention if ill effects occur.

**Skin Contact:** Wash skin with soap and water.

**Eye Contact:** Remove particles by irrigating with eye wash solution or clean water, holding the eyelids apart. Obtain medical attention.

**Ingestion:** Ingestion of small quantities of this material under normal circumstances would not cause harmful effects.

**Further Medical Treatment:** Symptomatic treatment and supportive therapy as indicated.

---

## **Section 5 - FIRE FIGHTING MEASURES**

---

**Flash point:** Not applicable

Auto ignition temperature: 850 deg F

Flash point: 610 deg F (ASTM D 1929)

**Extinguishing media:** Water fog, foam, carbon dioxide, dry chemical.

**Special firefighting protective equipment:** Self-contained breathing apparatus with full face piece and protective clothing.

**Unusual fire and explosion hazards:** Burning product may emit dense black smoke. Dust generated by fabrication, e.g. sanding, may present a fire hazard and should be handled accordingly.

---

## **Section 6 - ACCIDENTAL RELEASE MEASURES**

---

**Steps to be taken in case material is released or spilled:** Sweep up and recover or shovel into a chemical waste container.

---

## **Section 7 - HANDLING AND STORAGE**

---

### STORAGE

Keep containers in a clean, cool and dry area away from heat sources.

Natural ventilation is adequate.

Storage Temperature: Ambient.

### HANDLING

#### Process Hazards

All polymers degrade to some extent at their processing temperature, an effect which increases with increasing temperature. It is therefore impossible to be precise about which substances may be evolved. However, it is only the minor components which vary substantially. The major components are given in the "STABILITY AND REACTIVITY" section.

---

### **Section 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION**

---

#### Engineering Controls

##### Ventilation:

Use ventilation adequate to maintain safe levels if overheating or dust occurs during processing.

Respiratory protection: Use MSHA-NIOSH approved respirator for organic vapors, dusts and mists.

Protective clothing: Impervious gloves and apron.

Eye protection: Safety glasses with side shields.

Other protective equipment: Eyewash station in work area.

Special precautions or other comments: Follow procedures specified in the National Fire Protection Association Codes and Standards for handling combustible dusts. Maintain good housekeeping to avoid dust buildup

#### Exposure Guidelines

##### Exposure Limits

PEL(OSHA) : Particulates (Not Otherwise Classified) 15 mg/m<sup>3</sup>, 8 Hr. TWA, total dust 5 mg/m<sup>3</sup>, 8 Hr. TWA, respirable dust  
TLV ACGIH): None Established

##### Other Applicable Exposure Limits

#### STYRENE

PEL (OSHA): 100 ppm, 8 Hr. TWA 200 ppm, Ceiling 600 ppm - 5 Min. Max  
TLV(ACGIH): 50 ppm, 213 mg/m<sup>3</sup>, 8 Hr. TWA, Skin STEL 100 ppm, 426 mg/m<sup>3</sup>

#### PENTANE

PEL (OSHA): 1,000 ppm  
TLV (ACGIH): 600 ppm

---

### **Section 9 - PHYSICAL AND CHEMICAL PROPERTIES**

---

Appearance and color: White, rigid cellular foam blocks, boards and shapes.

Melting point: Softens at 175 to 220 deg. F.

Solubility in water: Insoluble

Odor: Very slight hydrocarbon.

Density: 0.6 to 3.0 pounds per cubic foot

## Section 10 - STABILITY AND REACTIVITY

---

Stability: Stable under normal conditions.

Decomposition occurs at temperatures above 500 deg F (260 deg C).

Incompatibility: Oxidizing agents, organic solvents.

Hazardous decomposition products:

Combustion products: Carbon dioxide, carbon monoxide, styrene and other organic vapors.

Hazardous polymerization: Will not occur.

## Section 11 - TOXICOLOGICAL INFORMATION

---

General: No toxicity information is available on this specific preparation; this health hazard assessment is based on information that is available on the properties of its components.

Ingestion: The acute oral LD50 in rat is probably above 15,000 mg/kg. Relative to other materials, this material is classified as "relatively harmless" by ingestion.

Eye contact: Irritation may develop following contact with human eyes. Dusts may cause mechanical irritation.

Skin contact: No irritation is likely to develop following contact with human skin.

Skin absorption: This product will probably not be absorbed through human skin.

Inhalation: No toxic effects are known to be associated with inhalation of dust from this material. Mechanical irritation may result from inhalation of dust from this material.

Other effects of overexposure: No other adverse clinical effects have been associated with exposures to this material.

### Carcinogenicity Information

The following degradation component is listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

Material	IARC	NTP	OSHA	ACGIH
STYRENE				X

## Section 12 - ECOLOGICAL INFORMATION

---

Solid with low volatility. The product is essentially insoluble in water. The product has low potential for bioaccumulation. The product is predicted to have low mobility in soil.

Persistence and Degradation: The product is non-biodegradable in soil. There is no evidence of degradation in soil and water.

Toxicity: The product is predicted to have low toxicity to aquatic organisms.

Effect on Effluent Treatment: The product is anticipated to be poorly removed in effluent treatment.

---

### **Section 13 - DISPOSAL CONSIDERATIONS**

---

Waste Disposal

Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Incinerate material in accordance with Federal, State/Provincial and Local requirements. Do not incinerate in closed containers.

Discarded product is not a RCRA hazardous waste.

---

### **Section 14 - TRANSPORTATION INFORMATION**

---

DOT: Not regulated

---

### **Section 15 - REGULATORY INFORMATION**

---

Not classified as hazardous to users or for transport. U.S. Federal Regulations

TSCA Inventory Status: Article but chemicals are all Reported/Included.

#### SECTION 313 SUPPLIER NOTIFICATION

This product contains no known toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

Canadian Regulations:  
DSL regulatory status: Included.

European Regulations:  
EINECS: Included.

---

### **Section 16 - OTHER INFORMATION**

---

HMIS Rating

Health	: 0
Flammability	: 2
Reactivity	: 0

Personal Protection rating to be supplied by user depending on use conditions.

#### STATE RIGHT-TO-KNOW LAWS

No substances on the state hazardous substances list, for the states indicated below, are used in the manufacture of products on this Safety Data Sheet, with the exceptions indicated. While we do not specifically analyze these products, or the raw materials used in their manufacture, for substances on various state hazardous substances lists, to the best of our

knowledge the products on this Safety Data Sheet contain no such substances except for those specifically listed below:

California Prop. 65: This product contains a chemical(s) known to the state of California to cause cancer and birth defects or other reproductive harm.

-----  
The information herein is given in good faith but no warranty, expressed or implied, is made. The manufacturer assumes no responsibility for personal injury or property damage that may arise from use of this material. Vendees or users assume all risks associated with the use of this material.

# DIVERSIFOAM PRODUCTS

## Safety Data Sheet RayLite

---

### SECTION 1: Identification

#### 1.1 Product identifier

Product name	RayLite
Substance name	Expandable Polystyrene
CAS no.	9003-53-6

#### 1.2 Other means of identification

A-One Concrete Forms, Styrostud, Backerboard, Masonary Fill, Styropour Pac, Styro Lite, R-Flex and EIFS Grade

#### 1.4 Supplier's details

Name	DiversiFoam Products
Address	9091 County Road 50 Rockford, MN 55373 United States

Telephone	736 477 5854
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#### 1.5 Emergency phone number(s)

763 477 5854

---

### SECTION 2: Hazard identification

#### 2.1 Classification of the substance or mixture

**GHS classification in accordance with OSHA (29 CFR 1910.1200)**

Not a hazardous substance or mixture.

#### 2.2 GHS label elements, including precautionary statements

Not a hazardous substance or mixture.

#### 2.3 Other hazards which do not result in classification

Not a hazardous substance or mixture.

---

### SECTION 3: Composition/information on ingredients

#### 3.1 Substances

Substance name	Expandable Polystyrene
CAS no.	9003-53-6
Other names / synonyms	Expanded Polystyrene Foam Insulation



# Safety Data Sheet

## RayLite

Impurities and stabilizing additives      None

### Hazardous components

#### 1. POLYSTYRENE

Concentration      > 99 %

Other names / synonyms      EPS Beads

CAS no.      9003-53-6

#### 2. PENTANE

Concentration      < 1 %

Other names / synonyms      N-PENTANE; NORMAL PENTANE; UN 1265

EC no.      203-692-4

CAS no.      109-66-0

Index no.      601-006-00-1

---

## SECTION 4: First-aid measures

### 4.1 Description of necessary first-aid measures

General advice      No Hazards Expected

If inhaled      No Hazards Expected

In case of skin contact      No Hazards Expected

In case of eye contact      Solid particals or dust produced when when cutting sanding sawing may cause mechanical injury to the eyes. Use of safety glasses is recommended. Black smoke generated during cutting may cause eye irritation. Rinse eyes with water to remove dust or particals

If swallowed      No Hazards Expected

Personal protective equipment for first-aid responders  
No data available.

### 4.2 Most important symptoms/effects, acute and delayed

No data available.

### 4.3 Indication of immediate medical attention and special treatment needed, if necessary

No data available.

---

## SECTION 5: Fire-fighting measures

### 5.1 Suitable extinguishing media

Dry Chemical, CO 2, Water Fog, or Foam

### 5.2 Specific hazards arising from the chemical

Heat form fire will melt foam and produce a dense black smoke consisting mostly of carbon and carbon dioxide. Dense smoke may obstruct vision

# Safety Data Sheet

## RayLite

### 5.3 Special protective actions for fire-fighters

Do not enter fire without proper protection such as turn out gear and supplied air respirators

#### Further information

No data available.

---

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

None Required

### 6.2 Environmental precautions

None Required

### 6.3 Methods and materials for containment and cleaning up

Sweep/Shovel into suitable disposal container

#### Reference to other sections

No data available.

---

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

This material is combustible and should not be exposed to flame or other ignition sources. No smoking, open flames or sources of ignition in handling and storage area. Fabrication methods which involve cutting into this product may release the blowing agent(s) remaining in the cells. Provide adequate ventilation to assure localized concentrations in release areas are maintained below the lower flammable limit.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep in a cool, well-ventilated place. Minimize sources of ignition, such as static build-up, heat, spark or flame. During shipment, storage, installation, and use, this material should not be exposed to flame or other ignition sources.

#### Specific end use(s)

No data available.

---

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### 1. Pentane (CAS: 109-66-0)

PEL (Inhalation): 1000 ppm (Cal/OSHA)

OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

### 8.2 Appropriate engineering controls

No data available.

### 8.3 Individual protection measures, such as personal protective equipment (PPE)

#### Eye/face protection

Safety glasses or goggles are recommended when using this product.

#### Skin protection

# Safety Data Sheet

## RayLite

Wear appropriate gloves. Suitable gloves can be recommended by the glove supplier.

### Body protection

Impervious protective clothing and gloves recommended to prevent irritation of skin.

### Respiratory protection

None Required

### Thermal hazards

No data available.

### Environmental exposure controls

None Required

---

## SECTION 9: Physical and chemical properties

### Information on basic physical and chemical properties

Appearance/form	Solid White
Odor	Slight hydrocarbon odor
Odor threshold	No data available.
pH	Not Applicable
Melting point/freezing point	NA/400
Initial boiling point and boiling range	Not Applicable
Flash point	No data available.
Evaporation rate	Not Applicable
Flammability (solid, gas)	1
Upper/lower flammability limits	Not Applicable
Upper/lower explosive limits	Not Applicable
Vapor pressure	Not Applicable
Vapor density	Not Applicable
Relative density	1.05 to 1.18
Solubility(ies)	Not Applicable
Partition coefficient: n-octanol/water	Not Applicable
Auto-ignition temperature	Not Applicable
Decomposition temperature	Not Applicable
Viscosity	Not Applicable
Explosive properties	Not Applicable
Oxidizing properties	Not Applicable

---

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No data available.

### 10.2 Chemical stability

Stable

### 10.3 Possibility of hazardous reactions

May be incompatible with some organic solvents

### 10.4 Conditions to avoid

Sparks and open flames

# Safety Data Sheet

## RayLite

### 10.5 Incompatible materials

organic solvents

### 10.6 Hazardous decomposition products

No data available.

---

## SECTION 11: Toxicological information

### Information on toxicological effects

#### Acute toxicity

None

#### Skin corrosion/irritation

None

#### Serious eye damage/irritation

None

#### Respiratory or skin sensitization

None

#### Germ cell mutagenicity

No data available.

#### Carcinogenicity

No data available.

#### Reproductive toxicity

No data available.

#### Summary of evaluation of the CMR properties

No data available.

#### STOT-single exposure

No data available.

#### STOT-repeated exposure

No data available.

#### Aspiration hazard

No data available.

#### Additional information

No data available.

---

## SECTION 12: Ecological information

### Toxicity

No data available.

### Persistence and degradability

No data available.

# Safety Data Sheet

## RayLite

### Bioaccumulative potential

No data available.

### Mobility in soil

No data available.

### Results of PBT and vPvB assessment

No data available.

### Other adverse effects

No data available.

---

## SECTION 13: Disposal considerations

### Disposal of the product

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

### Disposal of contaminated packaging

All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations.

### Waste treatment

No data available.

### Sewage disposal

No data available.

### Other disposal recommendations

No data available.

---

## SECTION 14: Transport information

### DOT (US)

Not dangerous goods

### IMDG

Not dangerous goods

### IATA

Not dangerous goods

---

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations specific for the product in question

#### New Jersey Right To Know Components

Common name: PENTANE

CAS number: 109-66-0

#### Pennsylvania Right To Know Components

Chemical name: Pentane

# Safety Data Sheet

## RayLite

CAS number: 109-66-0

### 15.2 Chemical Safety Assessment

No data available.

---

## SECTION 16: Other information

No data available.

### 16.1 Further information/disclaimer

No data available.

### 16.2 Preparation information

No data available.



**MATERIAL SAFETY DATA SHEET  
EXPANDED POLYSTYRENE FOAM PRODUCTS**

**Plymouth Foam Inc.  
1800 Sunset Drive  
Plymouth, WI 53073  
920-893-0535  
Updated: March, 2011**

**Section 1**

Chemical Name Expanded Polystyrene Foam (EPS)  
Chemical Family & Formula Polystyrene (C<sub>8</sub>H<sub>8</sub>)<sub>n</sub> with flame retardant additive

	<b>Health</b>	<b>Fire</b>	<b>Reactivity</b>	<b>Degree of Hazard</b>
NFPA Rating:	1	2*	0	0 – Minimal (Insignificant)
HMIS Rating:	1	2*	0	1 – Slight (Minor) 2 – Moderate 3 – Serious (High) 4 – Severe (Extreme)

**Section 2-Ingredients**

Polystyrene CAS# 9003-53-6  
Pentane TLV 600ppm: CAS# 109-66-0 <1.5%, <0.1% after 30 days  
Brominated Flame Retardant CAS# 3194-55-6 <1.0%  
When requested, insect and fungus additive:  
Disodium Octaborate Tetrahydrate CAS# 12008-41-2 <0.4%

**Section 3-Physical Data**

Boiling Point: Not applicable, softens at 160F.  
Solubility in Water: None  
Volatiles by Volume: 0-3.0% after molding  
Appearance: Rigid cellular foam block or board  
Odor: Slight hydrocarbon odor

**Section 4-Fire and Explosion Hazard Data**

Flash Point 675F (ASTM D 1929)  
Extinguishing Media: Water fog, CO<sub>2</sub>, dry chemical, foam  
Unusual Fire & Explosion Hazard: Will emit large volumes of dense, black smoke. Firefighters should be equipped with self-contained breathing devices and turn out gear. Dust generated from sanding, sawing, grinding, etc. will increase the fire hazard and should be handled according to regulatory guidelines.

**Section 5-Health Hazard Data**

Eye: Dust or pieces may cause mechanical eye injury.  
Skin: Mechanical injury only. Usually non-irritating.  
Ingestion: May act as an obstruction and cause choking  
Inhalation: Dust may cause irritation to the upper respiratory tract.  
Excessive exposure to high concentrations of the pentane blowing agent or fumes from hot wire cutting or melting may cause irritation to the upper respiratory tract.  
Emergency First Aid: Wash with water, get to fresh air, consult physician.

*We bring value to our customers by providing innovative foam solutions.*



Page 2 of 2

#### **Section 6-Handling and Storage**

Stability:

Conditions to Avoid:

Incompatibility:

Hazardous Decomposition:

The product is stable

Open flames, sparks and high temperatures over 160F

Organic solvents, hydrocarbons, esters, amines, etc.

Will not dissolve under normal conditions. In a fire condition, carbon monoxide, carbon dioxide, acid gases, and small amounts of hydrogen halide are generated.

#### **Section 7-Disposition of Material**

Normal good housekeeping should be observed in properly disposing of scrap material. Material Should be swept or picked up and placed in suitable containers for disposal. Material is inert and will not be harmful to landfills, check with your local regulations. Material may be recycled, contact the Alliance of Foam Packaging Recyclers, 401-451-8340, website: <http://www.epspackaging.org/index.html>.

#### **Section 8-Exposure and Personal Protection**

Respiratory Protection:

Ventilation:

Protective Clothing:

Eye Protection:

Use approved dust masks if sawed or sanded

Provide proper ventilation when fabricating material

None required

Safety goggles or glasses recommended when fabricating material to avoid irritation from dust.

#### **Section 9-Special Precautions**

Expanded Polystyrene sold for construction contains a flame retardant additive to inhibit ignition from small fire sources, however the product will burn and should not be exposed to open flames, sparks, high temperatures, cutting torches, welders or other ignition sources. Installation should always be in compliance with local building codes.

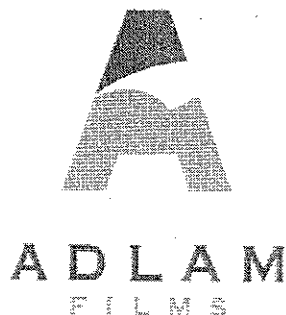
If the material is to receive further fabrication such as sawing, sanding, grinding, etc; normal precautions should be taken to handle the dust and avoid sparks or ignition of dust sources.

The material contains small amounts of a flammable blowing agent and should not be stored or used in a confined, virtually airtight area to prevent a buildup of combustible vapors. If the material is to be cut with hot wires or heat applied in any fashion, work areas should be well ventilated to avoid buildup of processing fumes.

The information herein is given in good faith without warranty, express or implied, regarding its correctness. Information provided was obtained from sources which we believe are reliable. Plymouth Foam Inc. does not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.

*We bring value to our customers by providing innovative foam solutions.*





# 93

ADLAM FILMS, LLC  
62 County Road 520  
Shannon, Mississippi 38868  
Phone: (662) 823-1345  
Emergency Phone: (662) 823-1345

## Material Safety Data Sheet (Polyester Laminating Film)

### SECTION I (PRODUCT IDENTIFICATION)

Product Name	1.0 CLP
Product Description	Polypropylene Laminating Film
Product Category	Film
MSDS Identification No.	TFF-0002
MSDS Date	January 2009

### SECTION II (COMPOSITION: HAZARDOUS COMPONENTS)

This product is not hazardous as defined under the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard 29 CFR § 1910.1200 nor is it a controlled product under Canada's Workplace Hazardous Material Information System

Chemical Name	CAS Number	Concentration (wt%)
NA	—	—

### SECTION III (PRODUCT HAZARDS IDENTIFICATION)

#### Emergency Overview

No significant effects expected.

#### Potential Health Effects

##### Eye

This product is not likely to irritate the eyes under normal use.

##### Skin

None.

**Inhalation**

During elevated heat processing, irritating fumes may be released.

**Ingestion**

None.

**Chronic Health Effects**

No chronic health effects are associated with the use of this product.

**Carcinogen Status**

OSHA: No

NTP: No

IARC: No

**Medical Conditions Aggravated By Exposure**

None.

<b>SECTION IV ( FIRST AID MEASURES )</b>
--

**Eye Contact**

Flush with water. If irritation occurs, seek medical assistance.

**Skin Contact**

Not expected to produce any results requiring treatment.

**Inhalation**

If adversely affected by irritating fumes released in processing, get to fresh air. Get medical attention if necessary.

**Ingestion**

Not expected to occur or produce any effects requiring treatment.

<b>SECTION V ( FIRE FIGHTING MEASURES )</b>
---

**Flash Point (degree F)**

600°F and above (estimated)

**Flammability Class (OSHA/NFPA)**

None.

**NOTE:** Auto ignition may occur at 600 °F and above. During processing of film, film may pick up static charge. Avoid discharge into dust or solvent laden air as a flash fire may result.

**Extinguishing Media**

Dry chemical, carbon dioxide, water spray or regular foam.

**Fire Fighting Instructions**

For fighting fires in buildings and confined spaces, firefighters must use self-contained breathing apparatus. Prevent runoff from fire control or dilution from entering streams, sewers or drinking water supplies.

**POLYESTER FILM WILL BURN IN A FIRE.**

## **SECTION VI ( ACCIDENTAL RELEASE MEASURES )**

Not applicable. Product is not a liquid or a flow able powder.

## **SECTION VII ( HANDLING AND STORAGE )**

Observe all applicable regulations when storing this product. Keep in a cool, dry, ventilated area.

## **SECTION VIII ( EXPOSURE CONTROLS / PERSONAL PROTECTION )**

### **Engineering Controls**

Ventilation is not normally required in handling film. Heat processing (e.g. sealing, thermal cutting) may require local exhaust ventilation to capture fumes and vapors emitted.

#### **Eye/Face Protection**

Not normally required. Provide eye protection against irritating gases, if ventilation is inadequate in heat processing.

#### **Skin Protection**

Not normally required. Suitable gloves may be used in heat processing.

#### **Respiratory Protection**

Not normally required. Suitable NIOSH respirators may be required if irritating gases are produced and local exhaust ventilation is inadequate. For Firefighting, see Section 5.

### **Established Exposure Guidelines**

**Chemical Name**

**OSHA-PEL**

NA

## **SECTION IX ( PHYSICAL AND CHEMICAL PROPERTIES )**

<b>Boiling Point / Range (degree F)</b>	NA
<b>Specific Gravity (Water = 1)</b>	0.92-0.98
<b>Vapor Density</b>	NA
<b>Vapor Pressure</b>	NA
<b>Appearance</b>	Clear
<b>Odor</b>	Slight bitter odor, non-toxic

## **SECTION X ( STABILITY AND REACTIVITY )**

#### **Stability**

Stable. Hazardous polymerization will not occur.

**Condition to Avoid**

Keep product away from fire.

**Incompatibility**

NA

**Hazardous Decomposition Products**

Thermal decomposition products from incomplete combustion (pyrolysis) include carbon monoxide, carbon dioxide, nitrogen oxides and small quantities of irritating substances such as trace hydrocarbons, aldehydes, ketones, alcohols and organic acids.

**SECTION XI ( TOXICOLOGY OF COMPONENTS )**

No known toxicological components contained in this product.

**SECTION XII ( ECOLOGICAL INFORMATION )**

<b>Acute Aquatic Toxicity</b>	Data not available.
<b>Degradability</b>	Data not available.
<b>Bioconcentration Factor (BCF)</b>	Data not available.
<b>Octanol/Water Partition Coefficient</b>	Data not available.

**SECTION XIII ( DISPOSAL CONSIDERATIONS )**

Dispose of this product in accordance with local, county, state and federal environmental regulations (contact local or state environmental agency for specific rules).

**SECTION XIV ( TRANSPORTATION INFORMATION )**

<b>D.O.T. Classification</b>	Not Hazardous
<b>UN Number</b>	NA

**SECTION VX ( REGULATORY INFORMATION )**

<b>US Federal Regulations</b>	None
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**Clean Air Act (ODS)**

This product neither contains, nor was manufactured with a Class I or Class II ozone depleting substance (ODS). We have relied on our suppliers' labeling of their products in making this determination.

<b>CERCLA Section 103 (40 CFR § 302.4)</b>	No
<b>SARA Section 302 (40 CFR § 355.30)</b>	No
<b>SARA Section 304 (40 CFR § 355.40)</b>	No
<b>SARA (EPCRA) Section 313 (40 CFR § 372.65)</b>	No
<b>OSHA Process Safety (29 CFR § 1910.119)</b>	No
<b>SARA Hazard Categories, SARA Sections 311/312 (40 CFR § 370.21)</b>	
Acute Hazard	No
Chronic Hazard	No
Fire Hazard	No
Reactivity Hazard	No
Sudden Release Hazard	No

## Coalition of Northeastern Governors (CONEG)

This product fully complies with all CONEG legislation restricting lead, mercury, cadmium and hexavalent chromium.

### State Reporting Requirements

California Proposition 65: The California Safe Drinking Water and Toxic Enforcement Act of 1986. This product, as supplied for intended use, contains no substances present at any level that are, under the Statute, characterized as known to the State of California to cause cancer or to be a reproductive toxicant.

New Jersey: Not Hazardous

## SECTION XVI ( OTHER )

### Hazard Rating Systems

#### Key

4 = Severe  
3 = Serious  
2 = Moderate  
1 = Slight  
0 = Minimal

Hazard	HMIS	NFPA
Health	1	1
Flammability	1	1
Reactivity	0	0

CAUTION: HMIS ratings are based on a 0-4 rating scale with 1 representing minimal hazards or risks and 4 representing significant hazards or risks. Recommended HMIS ratings should not be used in the absence of a fully implemented HMIS Hazard Communication Program. These ratings are intended only for the immediate and general identification of acute hazards. ADLAM FILMS, LLC is providing this information on a voluntary basis as a guide for our customers. The use and interpretation of this information may vary from company to company.

### DISCLAIMER OF WARRANTY

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#### 1. Identification:

- 1.1 Product Generic Name: Mineral Wool Insulation
- 1.2 Product Use: Commercial, Industrial, Residential, and Marine Insulation
- 1.3 Products:  
AFB<sup>®</sup>, CAVITYROCK<sup>®</sup>, COMFORTBATT<sup>®</sup>, COMFORTBOARD<sup>™</sup>, CONROCK<sup>®</sup>, CURTAINROCK<sup>®</sup>, DRAINBOARD<sup>®</sup>,  
ENERWRAP<sup>®</sup>, FABROCK<sup>™</sup>, FIREWALL<sup>®</sup>, MONOBOARD<sup>®</sup>, ProRox<sup>®</sup>, RHM<sup>®</sup>, RHT<sup>®</sup>, ROCKBOARD<sup>®</sup>, ROCKFILL<sup>™</sup>,  
ROXUL Plus<sup>®</sup>, SAFE<sup>®</sup>, SAFE'n'SOUND<sup>®</sup>1, SeaRox<sup>®</sup>, STURDIROCK<sup>®</sup>, TECHTON 1200<sup>®</sup>, TECHTON 1200<sup>®</sup> MARINE,  
TOPROCK<sup>®</sup>
- 1.4 Company Address:  
ROXUL Inc.  
420 Bronte St. S.  
Suite 105  
Milton, Ontario  
Canada  
L9T 0H9
- 1.5 Web Site: [www.roxul.com](http://www.roxul.com)
- 1.6 If further information is required, please call or fax ROXUL Inc.  
Telephone: 1-800-265-6878 or 905-878-8474 Fax: 905-878-8077

1. SAFE'n'SOUND<sup>®</sup> is a registered Trademark used under license by ROXUL Inc.

#### 2. Information on Ingredients:

<u>Ingredient Name</u>	<u>CAS Number</u>	<u>%</u>
Mineral Fiber	RN 65997-17-3	94-99
Cured Urea Extended Phenolic Formaldehyde Binder	25104-55-6	1-6

#### 3. Hazards Identification:

- 3.1 Appearance and Odor: Grey, green, brown fibrous batt, blanket, preformed pipe or board.
- 3.2 Emergency Overview:  
Acrid smoke may be generated during a fire.  
Exposure to dust may be irritating to the eyes, nose and throat.
- 3.3 Potential Health Effects:
- 3.3.1 Inhalation: Temporary mechanical irritation of the upper respiratory tract (scratchy throat, coughing, congestion) may result from exposures to dusts and fibers in excess of applicable exposure limits.
- 3.3.2 Skin Contact: Dusts and fibers may cause temporary mechanical irritation (itching) or redness to the skin.
- 3.3.3 Eye Contact: Dusts and fibers may cause temporary mechanical irritation (itching) or redness to the eyes.
- 3.3.4 Ingestion: Ingestion of this product is unlikely and not intended under normal conditions of use. Ingestion of this product may cause gastrointestinal irritation.
- 3.3.5 Existing Medical Conditions: Pre-existing chronic eye, skin and respiratory conditions may temporarily worsen due to exposure to dusts and fibers.

#### 4. First-Aid Measures:

- 4.1 Inhalation: If irritation occurs, remove the affected person to fresh air. Drink water, and blow nose, to clear dusts and fibers from throat and nose. If irritation persists, consult a physician.
- 4.2 Skin: If irritation occurs, do not rub or scratch. Rinse under running water prior to washing with mild soap and water. Use a washcloth to help remove fibers. If irritation persists, consult a physician.
- 4.3 Eyes: If irritation occurs, flush eyes with plenty of water for at least 15 minutes. Do not rub the eyes. Consult a physician if irritation persists.
- 4.4 Ingestion: Ingestion of this product is unlikely and not intended under normal conditions of use. If it does occur, rinse mouth with plenty of water to help remove dust and fibers, and drink plenty of water to help reduce potential gastrointestinal irritation. Do not induce vomiting unless directed to do so by a physician.

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#### 5. Fire-Fighting Measures:

The products are non-combustible and do not pose a fire hazard. However, packaging material may burn.

- 5.1 Suitable extinguishing media: Water, foam, carbon dioxide or dry powder
- 5.2 Extinguishing media which must not be used for safety reasons: None
- 5.3 Combustion products: Carbon dioxide, carbon monoxide and trace gases
- 5.4 Special protective equipment for fire-fighters: Observe normal fire fighting procedures
- 5.5 Flash point: None Flash Point Method Used: Not Applicable
- Upper Flammable Limit (UFL): Not Applicable Lower Flammable Limit: Not Applicable
- Autoignition: Not Applicable Explosive Properties: Not Applicable

---

#### 6. Accidental Release Measures:

- 6.1 Containment Procedures: Pick up large pieces and scoop up dusts and fibers after they have settled out of air. These materials will disperse and settle along the bottom of waterways and ponds. It cannot easily be removed once it is waterborne, but is considered non-hazardous in water.
- 6.2 Cleanup Procedures: Use OSHA-recommended work practices and protective equipment as described in Section 8 of this Material Safety Data Sheet. Avoid generating airborne dusts and fibers during cleanup. Do not use compressed air. Vacuum dusts and fibers. Place material in an appropriate container for disposal as non-hazardous waste.
- 6.3 Response Procedures: Isolate area. Keep unnecessary personnel away. If dry methods or compressed air are used to collect dusts and fibers, all personnel in the area should wear OSHA-approved protective equipment (see Section 8 of this Material Safety Data Sheet).
-

#### 7. Handling and Storage:

##### 7.1 General Precautions:

- Utilize OSHA-recommended work practices and protective equipment when using the products (see Section 8 of this Material Safety Data Sheet).

##### 7.2 Handling:

- Unpack material at application site to avoid unnecessary handling of product.
- Keep work areas clean. Avoid unnecessary handling of scrap material and debris by placing such materials in suitable containers, which should be kept as close to the work area as possible.
- Ensure good ventilation. Local exhaust ventilation may be required if the method of use produces dust levels which exceed applicable exposure limits (see Section 8 of this Material Safety Data Sheet).
- Avoid excessive eye and skin contact with dusts and fibers.
- Use recommended cleanup procedures to avoid buildup of dusts and fibers in the work area.

##### 7.3 Storage:

- Keep material in original packaging until it is to be used.
- Store material to protect against adverse conditions including precipitation.

#### 8. Exposure Controls/Personal Protection:

##### 8.1 Exposure Guidelines:

8.1.1 General Product Information: Follow all applicable exposure limits. Local regulations may apply. Roxul recommends that users of the products adhere to the OSHA-recommended PEL of 1 f/cc TWA (fibers longer than 5 µm with diameters less than 3 µm). This recommended PEL, together with recommended work practices and personal protective equipment, were adopted in a Health and Safety Partnership Program (HSPP) agreement in 1999 between OSHA and the North American Insulation Manufacturers Association (NAIMA), of which Roxul is a member. Adherence to the OSHA-recommended PEL, work practices and protective equipment in the HSPP is expected to provide appropriate protection against all inhalation-related health risks that may be associated with exposures to mineral wool fibers (ACGIH 1997; NAIMA 1999; OSHA 1999; National Research Council 2000, IARC 2001), and to minimize eye and skin irritation.

##### 8.1.2 Component Exposure Limits:

<u>Source</u>	<u>Legal or Recommended Exposure Limit</u>	<u>Exposure</u>
OSHA	1 f/cc TWA (recommended)	Synthetic Vitreous Fibers, > 5 µm length, < 3 µm diameter
ACGIH	1 f/cc TWA (threshold limit value – TLV)	Synthetic Vitreous Fibers, > 5 µm length, < 3 µm diameter
OSHA	15 mg/m <sup>3</sup> TWA-PEL (total particulate) 5 mg/m <sup>3</sup> TWA-PEL (respirable particulate)	Inert dust and particulates not otherwise regulated
ACGIH	10 mg/m <sup>3</sup> TWA-TLV (inhalable particulate) 3 mg/m <sup>3</sup> TWA-TLV (respirable particulate)	Particulates not otherwise classified, containing no asbestos and <1% crystalline silica



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- 8.2 Equipment and Work Practices: Follow OSHA-recommended equipment and work practices. A complete copy of these practices can be obtained from Roxul Inc. (see Section 1 of this Material Safety Data Sheet), and is available on the OSHA website (<http://www.osha.gov/SLTC/syntheticmineralfibers>).
- 8.2.1 Follow OSHA-recommended safe handling practices listed in Section 7.2 above.
- 8.2.2 Where feasible, general dilution ventilation or local exhaust ventilation should be used as necessary to maintain exposures below applicable exposure limits. Dust collection systems should be used in cutting or machining operations and may be needed when using power tools.
- 8.2.3 Follow OSHA-recommended work practices when fabricating, installing or removing product.
- 8.3 Personal Protective Equipment::
- 8.3.1 Respiratory:
- 8.3.1.1 General:  
In poorly ventilated areas when dusty conditions exist and/or dust levels exceed applicable exposure limits, wear a NIOSH certified dust respirator with an efficiency rating of N95 or higher. Use disposable face masks complying with NIOSH respirator standards, such as a 3M Model 8210 (or 8710) (3M Model 9900 in high humidity environments) or equivalent. For exposures up to five times the established exposure limits use a quarter-mask respirator, rated N95 or higher; and for exposures up to ten times the established exposure limits use a half-mask respirator (e.g. MSA's DM-11, Racal's Delta N95, 3M's 8210), rated N95 or higher. For exposures up to 50 times the established exposure limits use a full-face respirator, rated N99 or higher.
- 8.3.1.2 Specific Operations:  
In poorly ventilated areas when dusty conditions exist and/or dust levels exceed applicable exposure limits, wear a NIOSH certified dust respirator with an efficiency rating of N95 or higher, such as a 3M Model 8210 (or 8710) (3M Model 9900 in high humidity environments) or equivalent, when fabricating, installing or removing product.
- 8.3.2 Skin:  
Wear loose fitting, long sleeved and long-legged clothing to prevent irritation. A head cover is also recommended, especially when working with material overhead. The use of suitable gloves is also recommended. Skin irritation cannot occur if there is no contact with the skin. Do not tape sleeves or pants at wrists or ankles. Remove fibers from the work clothes, before leaving work to reduce potential skin irritation. If working in a very dusty environment it is advisable to shower and change clothes
- 8.3.3 Eyes/Face:  
Wear safety goggles or safety glasses with side shields.

## 9. Physical and Chemical Properties:

- |                                    |                                   |
|------------------------------------|-----------------------------------|
| 9.1 <u>Appearance:</u>             | Grey, green fibrous batt or board |
| 9.2 <u>State:</u>                  | Solid                             |
| 9.3 <u>Odor:</u>                   | May have slight resin odour       |
| 9.4 <u>Boiling point::</u>         | n.a.                              |
| 9.5 <u>Melting point:</u>          | Approximately 2150 °F (1177 °C)   |
| 9.6 <u>Vapour pressure:</u>        | n.a.                              |
| 9.7 <u>Vapour Density:</u>         | n.a.                              |
| 9.8 <u>Specific Gravity:</u>       | n.a.                              |
| 9.9 <u>Evaporation Rate:</u>       | n.a.                              |
| 9.10 <u>Freezing Point:</u>        | n.a.                              |
| 9.11 <u>Viscosity:</u>             | n.a.                              |
| 9.12 <u>Solubility:</u>            | Insoluble (H <sub>2</sub> O)      |
| 9.13 <u>Partition coefficient:</u> | n.a.                              |

n.a. = not applicable

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**Material Name: Mineral Wool Insulation**

### 10. Stability and Reactivity:

- 10.1 Stability: Stable
- 10.2 Reactivity: Not reactive
- 10.3 Thermal decomposition products:  
Primary combustion products of the cured urea extended phenolic formaldehyde binder, when heated above 390 °F (200 °C), are carbon monoxide, carbon dioxide, ammonia, water and trace amounts of formaldehyde. Other undetermined compounds could be released in trace quantities. Emission usually only occurs during the first heating. The released gases may be irritating to the eyes, nose and throat during initial heat-up. Use appropriate respirators (air supplied) particularly in tightly confined or poorly ventilated areas during initial heat-up.
- 10.4 Hazardous Polymerization: Will not occur
- 10.5 Incompatible Materials: This product reacts with hydrofluoric acid.
- 

### 11. Toxicological Information:

- 11.1 Acute Toxicity:  
Coarse fibers and dust from mineral wool products can cause temporary mechanical irritation (itching, redness) of the skin, and of the mucous membranes in the eyes and in the upper respiratory tract (nose and throat). The itching and possible inflammation are a mechanical reaction to dust and coarse fibers (of more than about 5 µm in diameter), and are not damaging in the way chemical irritants may be. They generally abate within a short time after the end of exposure. When products are handled continually, the skin itching generally diminishes.
- 11.2 Chronic Toxicity:
- 11.2.1 Summary: In October 2001, IARC completed a re-evaluation of respirable mineral wool fibers and classified them in Group 3 (not classifiable as to their carcinogenicity to humans). A summary of the most important scientific studies appears below:
- 11.2.2 Human Data:
- 11.2.2.1 The possible carcinogenic effects of exposure to mineral wool fibers has been evaluated in a number of epidemiological (human) studies. Most of this research, including large long-term studies of mineral wool production workers in the U.S. and Europe, has been sponsored or supported by the North American and International thermal insulation industries, including Roxul Inc. Published reports of the early results of these studies identified significantly elevated rates of respiratory cancer in several subcohorts of the worker populations under evaluation (e.g., Simonato et al. 1987; Enterline et al. 1987). However, the studies had several methodological limitations, including failure to control for confounding exposures to other possible causes of the elevated cancer risk, including tobacco use and occupational exposures to recognized carcinogens such as asbestos. For these reasons, the authors of these reports did not interpret the results as establishing an association between exposure to mineral wool fibers and an increased risk of cancer. Several of these earlier reports formed part of the basis for IARC's previous classification of mineral wool fibers in Group 2B (possibly carcinogenic to humans) (IARC 1987).
- 11.2.2.2 Follow-up studies, including case-control studies designed to exclude the contribution of confounding exposures to the cancer experience of the study populations, found no evidence that mineral wool fibers are associated with an increased cancer risk (Marsh et al. 1996; Wong, et al. 1991; Kjaerheim et al. 2001). In announcing the new Group 3 classification for mineral wool fibers, IARC stated: "Epidemiologic studies published during the 15 years since the previous IARC Monographs review of these fibers in 1988 provide no evidence of increased risks of lung cancer or of mesothelioma (cancer of the lining of the body cavities) from occupational exposures during manufacture of these materials" (IARC 2001).
- 11.2.3 Animal Data:
- 11.2.3.1 Several studies of intraperitoneal injection of high doses of mineral wool fibers have produced significant increases in the incidence of mesothelioma (IARC 2002). The intraperitoneal injection studies formed part of the basis for IARC's previous (IARC 1987) Group 2B classification for mineral wool fibers. Leading scientists agree that intraperitoneal injection studies (i.e., surgical implantation or injection into the chest or abdomen) are the least relevant type of animal study for evaluating

### Material Name: Mineral Wool Insulation

potential human risk for fiber exposures, because such studies bypass the animals' natural defense mechanisms and involve a type and pattern of exposure (implantation of a high dose early in life) that does not mimic human patterns of exposure (inhalation of much lower doses over a lifetime) (National Research Council 2000).

- 11.2.3.2 A well-designed long-term inhalation study in rats exposed to mineral wool fibers found no significant increase in lung tumor incidence, and no mesotheliomas (IARC 2002). Likewise, in two intratracheal instillation studies of mineral wool fibers, no significant increase in the incidence of lung tumors or mesotheliomas was found (IARC 2002). Inhalation studies are regarded as the most relevant type of animal data for evaluating potential human risk, and intratracheal instillation studies, while less relevant, are considered valuable for the initial screening of fibrous compounds (National Research Council 2000). Thus, evaluating all the available animal studies in conjunction with the human data, IARC's most recent review finds "inadequate evidence overall for any cancer risk" from mineral wool fibers (IARC 2001).

#### 11.3 Evaluations of Potential Carcinogenicity:

<u>Source</u>	<u>Classification</u>	<u>Description</u>
IARC	Group 3	Not Classifiable as a Human Carcinogen
ACGIH	Group A3	Confirmed Animal Carcinogen with Unknown Relevance to Humans

---

### 12. **Ecological Information:**

- 12.1 Ecotoxicity: No data available for the products. The products are stable, are not expected to cause harm to animals, plants or fish, and have no other known adverse environmental effects.
- 12.2 Environmental Fate: No data available for the products.

---

### 13. **Disposal Considerations:**

#### 13.1 US EPA Waste Number & Descriptions:

13.1.1 General Product Information: The products, as supplied, are not expected to be a characteristic hazardous waste under RCRA if discarded.

13.1.2 EPA Waste Numbers: No EPA Waste Numbers are applicable for this product's components.

- 13.2 Disposal Instructions: Product is not considered a hazardous waste. Dispose of waste material according to Federal, State, Provincial, and Local environmental regulations.

---

### 14. **Transport Information:**

- 14.1 General: No special precautions.
- 14.2 US DOT Information: This product is not classified as a hazardous material for transport.

---

### 15. **Regulatory Information:**

#### 15.1 U.S. Regulations:

15.1.1 Toxic Substances Control Act (TSCA): All components in this product are listed, as required, on the US EPA TSCA inventory, or are not required to be listed

15.1.2 CERCLA: Includes mineral fiber emissions from facilities manufacturing or processing glass rock or slag fibers (or other mineral derived fibers) of average diameter 1 micrometer or less; Statutory RQ = 1 pound (.454 kg); no final RQ is being assigned to the generic or broad class (related to Fine mineral fibers).

15.1.3 Clean Air Act: Mineral wool fiber appears on the Clean Air Act-1990 Hazardous Air Pollutants List.

15.2 State and Local Regulations: State, Provincial, and Local regulations not identified in this Material Safety Data Sheet may apply.

15.3 WHMIS: The products have been classified in accordance with the hazard criteria of the Controlled Product Regulations and this Material Safety Data Sheet contains all the information required by the Controlled Product Regulations

15.3.1: WHMIS IDL: No components are listed on the IDL

15.3.2: WHMIS Classification: No components are classified as controlled products.

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## 16. Further Information:

### 16.1 Potential Health Effects:

IARC Monograph Man-made Vitreous Fibres, press release October 2001

Safety in the Use of Mineral and Synthetic Fibers, Occupational Safety and Health Series. International Labor Office (ILO).

Information about "Health and Safety Research on Rock- and Slag-wool" can be obtained from the North American Insulation Manufacturers Association (NAIMA), 44 Canal Center Plaza, Suite 310, Alexandria, VA 22314, USA). Home-page: <http://www.naima.org>

### 16.2 Key/Legend:

ACGIH = American Conference of Governmental Industrial Hygienists; CAA = Clean Air Act; CAS = Chemical Abstracts Service; CERCLA = Comprehensive Environmental Response, Compensation and Liability Act; DOT = Department of Transportation; EPA = Environmental Protection Agency; HMIS = Hazardous Material Identification System; HSPP = Health and Safety Partnership Program; IARC = International Agency for Research on Cancer; MSDS = Material Safety Data Sheet; NAIMA = North American Insulation Manufacturers Association; NFPA = National Fire Protection Association; NIOSH = National Institute for Occupational Safety and Health; OSHA = Occupational Safety and Health Administration; PEL = Permissible Exposure Limit; RCRA = Resource Conservation and Recovery Act; RQ = Reportable Quantity; SVF = synthetic vitreous fibers; TSCA = Toxic Substances Control Act; TWA = time-weighted average; WHMIS = Workplace Hazardous Materials Information System.

16.3 References: Complete citations, or copies, of all references cited in this Material Safety Data Sheet can be obtained from Roxul Inc. (see Section 1).

16.4 Accuracy: The information contained herein is based upon data considered to be accurate. However, no warranty is expressed or implied regarding the accuracy of these data, the results to be obtained from the use thereof, or that any such use will not infringe upon any patent. This information is furnished as a guide only and upon the condition that the person receiving it shall make tests to determine the accuracy and suitability for his or her own purpose.

---

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- 1.1 Product Generic Name: Mineral Wool Insulation
- 1.2 Product Use: Commercial, Industrial, Residential, and Marine Insulation
- 1.3 Products:  
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TOPROCK<sup>®</sup>
- 1.4 Company Address:  
ROXUL Inc.  
420 Bronte St. S.  
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- 1.5 Web Site: [www.roxul.com](http://www.roxul.com)
- 1.6 If further information is required, please call or fax ROXUL Inc.  
Telephone: 1-800-265-6878 or 905-878-8474 Fax: 905-878-8077

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- 3.3.1 Inhalation: Temporary mechanical irritation of the upper respiratory tract (scratchy throat, coughing, congestion) may result from exposures to dusts and fibers in excess of applicable exposure limits.
- 3.3.2 Skin Contact: Dusts and fibers may cause temporary mechanical irritation (itching) or redness to the skin.
- 3.3.3 Eye Contact: Dusts and fibers may cause temporary mechanical irritation (itching) or redness to the eyes.
- 3.3.4 Ingestion: Ingestion of this product is unlikely and not intended under normal conditions of use. Ingestion of this product may cause gastrointestinal irritation.
- 3.3.5 Existing Medical Conditions: Pre-existing chronic eye, skin and respiratory conditions may temporarily worsen due to exposure to dusts and fibers.

#### 4. First-Aid Measures:

- 4.1 Inhalation: If irritation occurs, remove the affected person to fresh air. Drink water, and blow nose, to clear dusts and fibers from throat and nose. If irritation persists, consult a physician.
- 4.2 Skin: If irritation occurs, do not rub or scratch. Rinse under running water prior to washing with mild soap and water. Use a washcloth to help remove fibers. If irritation persists, consult a physician.
- 4.3 Eyes: If irritation occurs, flush eyes with plenty of water for at least 15 minutes. Do not rub the eyes. Consult a physician if irritation persists.
- 4.4 Ingestion: Ingestion of this product is unlikely and not intended under normal conditions of use. If it does occur, rinse mouth with plenty of water to help remove dust and fibers, and drink plenty of water to help reduce potential gastrointestinal irritation. Do not induce vomiting unless directed to do so by a physician.

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#### 5. Fire-Fighting Measures:

The products are non-combustible and do not pose a fire hazard. However, packaging material may burn.

- 5.1 Suitable extinguishing media: Water, foam, carbon dioxide or dry powder
- 5.2 Extinguishing media which must not be used for safety reasons: None
- 5.3 Combustion products: Carbon dioxide, carbon monoxide and trace gases
- 5.4 Special protective equipment for fire-fighters: Observe normal fire fighting procedures
- 5.5 Flash point: None Flash Point Method Used: Not Applicable
- Upper Flammable Limit (UFL): Not Applicable Lower Flammable Limit: Not Applicable
- Autoignition: Not Applicable Explosive Properties: Not Applicable

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#### 6. Accidental Release Measures:

- 6.1 Containment Procedures: Pick up large pieces and scoop up dusts and fibers after they have settled out of air. These materials will disperse and settle along the bottom of waterways and ponds. It cannot easily be removed once it is waterborne, but is considered non-hazardous in water.
- 6.2 Cleanup Procedures: Use OSHA-recommended work practices and protective equipment as described in Section 8 of this Material Safety Data Sheet. Avoid generating airborne dusts and fibers during cleanup. Do not use compressed air. Vacuum dusts and fibers. Place material in an appropriate container for disposal as non-hazardous waste.
- 6.3 Response Procedures: Isolate area. Keep unnecessary personnel away. If dry methods or compressed air are used to collect dusts and fibers, all personnel in the area should wear OSHA-approved protective equipment (see Section 8 of this Material Safety Data Sheet).
-

#### 7. Handling and Storage:

##### 7.1 General Precautions:

- Utilize OSHA-recommended work practices and protective equipment when using the products (see Section 8 of this Material Safety Data Sheet).

##### 7.2 Handling:

- Unpack material at application site to avoid unnecessary handling of product.
- Keep work areas clean. Avoid unnecessary handling of scrap material and debris by placing such materials in suitable containers, which should be kept as close to the work area as possible.
- Ensure good ventilation. Local exhaust ventilation may be required if the method of use produces dust levels which exceed applicable exposure limits (see Section 8 of this Material Safety Data Sheet).
- Avoid excessive eye and skin contact with dusts and fibers.
- Use recommended cleanup procedures to avoid buildup of dusts and fibers in the work area.

##### 7.3 Storage:

- Keep material in original packaging until it is to be used.
- Store material to protect against adverse conditions including precipitation.

#### 8. Exposure Controls/Personal Protection:

##### 8.1 Exposure Guidelines:

8.1.1 General Product Information: Follow all applicable exposure limits. Local regulations may apply. Roxul recommends that users of the products adhere to the OSHA-recommended PEL of 1 f/cc TWA (fibers longer than 5 µm with diameters less than 3 µm). This recommended PEL, together with recommended work practices and personal protective equipment, were adopted in a Health and Safety Partnership Program (HSPP) agreement in 1999 between OSHA and the North American Insulation Manufacturers Association (NAIMA), of which Roxul is a member. Adherence to the OSHA-recommended PEL, work practices and protective equipment in the HSPP is expected to provide appropriate protection against all inhalation-related health risks that may be associated with exposures to mineral wool fibers (ACGIH 1997; NAIMA 1999; OSHA 1999; National Research Council 2000, IARC 2001), and to minimize eye and skin irritation.

##### 8.1.2 Component Exposure Limits:

Source	Legal or Recommended Exposure Limit	Exposure
OSHA	1 f/cc TWA (recommended)	Synthetic Vitreous Fibers, > 5 µm length, < 3 µm diameter
ACGIH	1 f/cc TWA (threshold limit value – TLV)	Synthetic Vitreous Fibers, > 5 µm length, < 3 µm diameter
OSHA	15 mg/m <sup>3</sup> TWA-PEL (total particulate) 5 mg/m <sup>3</sup> TWA-PEL (respirable particulate)	Inert dust and particulates not otherwise regulated
ACGIH	10 mg/m <sup>3</sup> TWA-TLV (inhalable particulate) 3 mg/m <sup>3</sup> TWA-TLV (respirable particulate)	Particulates not otherwise classified, containing no asbestos and <1% crystalline silica

### Material Name: Mineral Wool Insulation

- 8.2 Equipment and Work Practices: Follow OSHA-recommended equipment and work practices. A complete copy of these practices can be obtained from Roxul Inc. (see Section 1 of this Material Safety Data Sheet), and is available on the OSHA website (<http://www.osha.gov/SLTC/syntheticmineralfibers>).
- 8.2.1 Follow OSHA-recommended safe handling practices listed in Section 7.2 above.
- 8.2.2 Where feasible, general dilution ventilation or local exhaust ventilation should be used as necessary to maintain exposures below applicable exposure limits. Dust collection systems should be used in cutting or machining operations and may be needed when using power tools.
- 8.2.3 Follow OSHA-recommended work practices when fabricating, installing or removing product.
- 8.3 Personal Protective Equipment::
- 8.3.1 Respiratory:
- 8.3.1.1 General:  
In poorly ventilated areas when dusty conditions exist and/or dust levels exceed applicable exposure limits, wear a NIOSH certified dust respirator with an efficiency rating of N95 or higher. Use disposable face masks complying with NIOSH respirator standards, such as a 3M Model 8210 (or 8710) (3M Model 9900 in high humidity environments) or equivalent. For exposures up to five times the established exposure limits use a quarter-mask respirator, rated N95 or higher; and for exposures up to ten times the established exposure limits use a half-mask respirator (e.g. MSA's DM-11, Racal's Delta N95, 3M's 8210), rated N95 or higher. For exposures up to 50 times the established exposure limits use a full-face respirator, rated N99 or higher.
- 8.3.1.2 Specific Operations:  
In poorly ventilated areas when dusty conditions exist and/or dust levels exceed applicable exposure limits, wear a NIOSH certified dust respirator with an efficiency rating of N95 or higher, such as a 3M Model 8210 (or 8710) (3M Model 9900 in high humidity environments) or equivalent, when fabricating, installing or removing product.
- 8.3.2 Skin:  
Wear loose fitting, long sleeved and long-legged clothing to prevent irritation. A head cover is also recommended, especially when working with material overhead. The use of suitable gloves is also recommended. Skin irritation cannot occur if there is no contact with the skin. Do not tape sleeves or pants at wrists or ankles. Remove fibers from the work clothes, before leaving work to reduce potential skin irritation. If working in a very dusty environment it is advisable to shower and change clothes
- 8.3.3 Eyes/Face:  
Wear safety goggles or safety glasses with side shields.

## 9. Physical and Chemical Properties:

- |                                    |                                   |
|------------------------------------|-----------------------------------|
| 9.1 <u>Appearance:</u>             | Grey, green fibrous batt or board |
| 9.2 <u>State:</u>                  | Solid                             |
| 9.3 <u>Odor:</u>                   | May have slight resin odour       |
| 9.4 <u>Boiling point::</u>         | n.a.                              |
| 9.5 <u>Melting point:</u>          | Approximately 2150 °F (1177 °C)   |
| 9.6 <u>Vapour pressure:</u>        | n.a.                              |
| 9.7 <u>Vapour Density:</u>         | n.a.                              |
| 9.8 <u>Specific Gravity:</u>       | n.a.                              |
| 9.9 <u>Evaporation Rate:</u>       | n.a.                              |
| 9.10 <u>Freezing Point:</u>        | n.a.                              |
| 9.11 <u>Viscosity:</u>             | n.a.                              |
| 9.12 <u>Solubility:</u>            | Insoluble (H <sub>2</sub> O)      |
| 9.13 <u>Partition coefficient:</u> | n.a.                              |

n.a. = not applicable

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**Material Name: Mineral Wool Insulation**

### 10. Stability and Reactivity:

- 10.1 Stability: Stable
- 10.2 Reactivity: Not reactive
- 10.3 Thermal decomposition products:  
Primary combustion products of the cured urea extended phenolic formaldehyde binder, when heated above 390 °F (200 °C), are carbon monoxide, carbon dioxide, ammonia, water and trace amounts of formaldehyde. Other undetermined compounds could be released in trace quantities. Emission usually only occurs during the first heating. The released gases may be irritating to the eyes, nose and throat during initial heat-up. Use appropriate respirators (air supplied) particularly in tightly confined or poorly ventilated areas during initial heat-up.
- 10.4 Hazardous Polymerization: Will not occur
- 10.5 Incompatible Materials: This product reacts with hydrofluoric acid.
- 

### 11. Toxicological Information:

- 11.1 Acute Toxicity:  
Coarse fibers and dust from mineral wool products can cause temporary mechanical irritation (itching, redness) of the skin, and of the mucous membranes in the eyes and in the upper respiratory tract (nose and throat). The itching and possible inflammation are a mechanical reaction to dust and coarse fibers (of more than about 5 µm in diameter), and are not damaging in the way chemical irritants may be. They generally abate within a short time after the end of exposure. When products are handled continually, the skin itching generally diminishes.
- 11.2 Chronic Toxicity:
- 11.2.1 Summary: In October 2001, IARC completed a re-evaluation of respirable mineral wool fibers and classified them in Group 3 (not classifiable as to their carcinogenicity to humans). A summary of the most important scientific studies appears below:
- 11.2.2 Human Data:
- 11.2.2.1 The possible carcinogenic effects of exposure to mineral wool fibers has been evaluated in a number of epidemiological (human) studies. Most of this research, including large long-term studies of mineral wool production workers in the U.S. and Europe, has been sponsored or supported by the North American and International thermal insulation industries, including Roxul Inc. Published reports of the early results of these studies identified significantly elevated rates of respiratory cancer in several subcohorts of the worker populations under evaluation (e.g., Simonato et al. 1987; Enterline et al. 1987). However, the studies had several methodological limitations, including failure to control for confounding exposures to other possible causes of the elevated cancer risk, including tobacco use and occupational exposures to recognized carcinogens such as asbestos. For these reasons, the authors of these reports did not interpret the results as establishing an association between exposure to mineral wool fibers and an increased risk of cancer. Several of these earlier reports formed part of the basis for IARC's previous classification of mineral wool fibers in Group 2B (possibly carcinogenic to humans) (IARC 1987).
- 11.2.2.2 Follow-up studies, including case-control studies designed to exclude the contribution of confounding exposures to the cancer experience of the study populations, found no evidence that mineral wool fibers are associated with an increased cancer risk (Marsh et al. 1996; Wong, et al. 1991; Kjaerheim et al. 2001). In announcing the new Group 3 classification for mineral wool fibers, IARC stated: "Epidemiologic studies published during the 15 years since the previous IARC Monographs review of these fibers in 1988 provide no evidence of increased risks of lung cancer or of mesothelioma (cancer of the lining of the body cavities) from occupational exposures during manufacture of these materials" (IARC 2001).
- 11.2.3 Animal Data:
- 11.2.3.1 Several studies of intraperitoneal injection of high doses of mineral wool fibers have produced significant increases in the incidence of mesothelioma (IARC 2002). The intraperitoneal injection studies formed part of the basis for IARC's previous (IARC 1987) Group 2B classification for mineral wool fibers. Leading scientists agree that intraperitoneal injection studies (i.e., surgical implantation or injection into the chest or abdomen) are the least relevant type of animal study for evaluating

### Material Name: Mineral Wool Insulation

potential human risk for fiber exposures, because such studies bypass the animals' natural defense mechanisms and involve a type and pattern of exposure (implantation of a high dose early in life) that does not mimic human patterns of exposure (inhalation of much lower doses over a lifetime) (National Research Council 2000).

- 11.2.3.2 A well-designed long-term inhalation study in rats exposed to mineral wool fibers found no significant increase in lung tumor incidence, and no mesotheliomas (IARC 2002). Likewise, in two intratracheal instillation studies of mineral wool fibers, no significant increase in the incidence of lung tumors or mesotheliomas was found (IARC 2002). Inhalation studies are regarded as the most relevant type of animal data for evaluating potential human risk, and intratracheal instillation studies, while less relevant, are considered valuable for the initial screening of fibrous compounds (National Research Council 2000). Thus, evaluating all the available animal studies in conjunction with the human data, IARC's most recent review finds "inadequate evidence overall for any cancer risk" from mineral wool fibers (IARC 2001).

#### 11.3 Evaluations of Potential Carcinogenicity:

<u>Source</u>	<u>Classification</u>	<u>Description</u>
IARC	Group 3	Not Classifiable as a Human Carcinogen
ACGIH	Group A3	Confirmed Animal Carcinogen with Unknown Relevance to Humans

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### 12. **Ecological Information:**

- 12.1 Ecotoxicity: No data available for the products. The products are stable, are not expected to cause harm to animals, plants or fish, and have no other known adverse environmental effects.
- 12.2 Environmental Fate: No data available for the products.

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### 13. **Disposal Considerations:**

#### 13.1 US EPA Waste Number & Descriptions:

13.1.1 General Product Information: The products, as supplied, are not expected to be a characteristic hazardous waste under RCRA if discarded.

13.1.2 EPA Waste Numbers: No EPA Waste Numbers are applicable for this product's components.

- 13.2 Disposal Instructions: Product is not considered a hazardous waste. Dispose of waste material according to Federal, State, Provincial, and Local environmental regulations.

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### 14. **Transport Information:**

- 14.1 General: No special precautions.
- 14.2 US DOT Information: This product is not classified as a hazardous material for transport.

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### 15. **Regulatory Information:**

#### 15.1 U.S. Regulations:

15.1.1 Toxic Substances Control Act (TSCA): All components in this product are listed, as required, on the US EPA TSCA inventory, or are not required to be listed

15.1.2 CERCLA: Includes mineral fiber emissions from facilities manufacturing or processing glass rock or slag fibers (or other mineral derived fibers) of average diameter 1 micrometer or less; Statutory RQ = 1 pound (.454 kg); no final RQ is being assigned to the generic or broad class (related to Fine mineral fibers).

- 15.1.3 Clean Air Act: Mineral wool fiber appears on the Clean Air Act-1990 Hazardous Air Pollutants List.
- 15.2 State and Local Regulations: State, Provincial, and Local regulations not identified in this Material Safety Data Sheet may apply.
- 15.3 WHMIS: The products have been classified in accordance with the hazard criteria of the Controlled Product Regulations and this Material Safety Data Sheet contains all the information required by the Controlled Product Regulations
- 15.3.1: WHMIS IDL: No components are listed on the IDL
- 15.3.2: WHMIS Classification: No components are classified as controlled products.
- 

## 16. Further Information:

### 16.1 Potential Health Effects:

IARC Monograph Man-made Vitreous Fibres, press release October 2001

Safety in the Use of Mineral and Synthetic Fibers, Occupational Safety and Health Series. International Labor Office (ILO).

Information about "Health and Safety Research on Rock- and Slag-wool" can be obtained from the North American Insulation Manufacturers Association (NAIMA), 44 Canal Center Plaza, Suite 310, Alexandria, VA 22314, USA). Home-page: <http://www.naima.org>

### 16.2 Key/Legend:

ACGIH = American Conference of Governmental Industrial Hygienists; CAA = Clean Air Act; CAS = Chemical Abstracts Service; CERCLA = Comprehensive Environmental Response, Compensation and Liability Act; DOT = Department of Transportation; EPA = Environmental Protection Agency; HMIS = Hazardous Material Identification System; HSPP = Health and Safety Partnership Program; IARC = International Agency for Research on Cancer; MSDS = Material Safety Data Sheet; NAIMA = North American Insulation Manufacturers Association; NFPA = National Fire Protection Association; NIOSH = National Institute for Occupational Safety and Health; OSHA = Occupational Safety and Health Administration; PEL = Permissible Exposure Limit; RCRA = Resource Conservation and Recovery Act; RQ = Reportable Quantity; SVF = synthetic vitreous fibers; TSCA = Toxic Substances Control Act; TWA = time-weighted average; WHMIS = Workplace Hazardous Materials Information System.

- 16.3 References: Complete citations, or copies, of all references cited in this Material Safety Data Sheet can be obtained from Roxul Inc. (see Section 1).
- 16.4 Accuracy: The information contained herein is based upon data considered to be accurate. However, no warranty is expressed or implied regarding the accuracy of these data, the results to be obtained from the use thereof, or that any such use will not infringe upon any patent. This information is furnished as a guide only and upon the condition that the person receiving it shall make tests to determine the accuracy and suitability for his or her own purpose.
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## Regulatory Data Sheet

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### Regulations and Industry Standards

#### SDS (US OSHA)

This product is an article and therefore is not subject to the requirements of the US Occupational Safety and Health Administration's (OSHA) Hazardous Communications Standard 29 CFR 1910.1200(b)(6)(v) to provide a Safety Data Sheet (SDS).

#### CONEG

This product complies with the US CONEG (Coalition of Northeastern Governors) Model Toxics in Packaging Legislation as there is no intentionally added lead, cadmium, hexavalent chromium or mercury, and the sum total concentration of these substances in the product does not exceed 100 ppm by weight.

#### EU REACH

This product is an article, without intended release of a chemical substance, under the Regulation No 1907/2006 of the European Parliament and the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (refer to REACH, Article 3(3)). It is not a chemical preparation. Therefore, it is not subject to the (pre)-registration or the registration process. It does not require a safety data sheet.

#### EU REACH

This product, including any article that the product is composed of, does not contain at greater than 0.1% by weight a Substance of Very High Concern (SVHC) substance identified according to Article 59 of REACH. This declaration reflects the substances on the candidate SVHC list, effective January 2017.

#### EU RoHS Phthalates

This product does not exceed the maximum concentration values (MCVs) for phthalates set under EU Directive 2011/65/EU (RoHS recast/RoHS 2), as amended by EU 2015/863, which applies to finished EEE after July 22, 2019 for Category 1-7, 10-11 products and after July 22, 2021 for Category 8 and 9 products. This means that each of the homogeneous materials within this product does not exceed the MCV of 0.1% (by weight) for each of the following phthalates: DEHP, BBP, DBP, and DIBP.

#### EU RoHS

This product does not exceed the maximum concentration values (MCVs) set under EU Directive 2011/65/EU (RoHS recast/RoHS 2), as stated in Annex II to that directive. This means that each of the homogenous materials within this product does not exceed the following MCVs: (a) 0.1% (by weight) for lead, mercury, hexavalent chromium, polybrominated

biphenyls or polybrominated diphenyl ethers; and (b) 0.01% (by weight) for cadmium.

**Conflict Minerals**

Conflict Minerals, which the U.S. Securities and Exchange Commission (“SEC”) has defined as gold, columbite-tantalite (coltan), cassiterite, wolframite, or their derivatives (tin, tantalum, or tungsten), are not contained in or are not “necessary to the functionality or necessary to the production” of the above-listed product, as the term “necessary to the functionality or the production” is defined under the SEC’s Conflict Minerals Rule. 77 Fed. Reg. 56274 (Sept. 12, 2012).

**Fluorinated Greenhouse Gas**

A Fluorinated Greenhouse Gas (or F-Gas) listed under Annex I and II of Regulation (EU) No 517/2014 of the European Parliament and of the Council of 16 April 2014 is not intentionally added to the product, nor is it intentionally used in the manufacture of this 3M product.

**Sustainability Advantage: Recycled content**

This product does not contain recycled content.

**Chemicals and/or Compounds of Interest**

**Asbestos** : This chemical or chemical compound is not intentionally added.

**Bisphenol A (BPA)** : This chemical or chemical compound is not intentionally added.

**Butyl Benzyl Phthalate (BBP)** : This chemical or chemical compound is not intentionally added.

**Decabromodiphenyl Ether (Deca-BDE)** : This chemical or chemical compound is not intentionally added.

**Dibutyl Phthalate (DBP)** : This chemical or chemical compound is not intentionally added.

**Di(2-Ethylhexyl) Phthalate (DEHP)** : This chemical or chemical compound is not intentionally added.

**Diisodecyl Phthalate (DIDP)** : This chemical or chemical compound is not intentionally added.

**Diisononyl Phthalate (DINP)** : This chemical or chemical compound is not intentionally added.

**Di-n-Octyl Phthalate (DNOP)** : This chemical or chemical compound is not intentionally added.

**Flame Retardants (not PBB or PBDE)** : This chemical or chemical compound is not intentionally added.

**Halogenated Compounds** : Bromine, chlorine, fluorine, iodine or chemical compounds containing them are not intentionally added.

**Lead and (Pb) Compounds** : This chemical or chemical compound is not intentionally added.

**Natural Rubber Latex** : This chemical or chemical compound is not intentionally added.

**Nonylphenol (NP)** : This chemical or chemical compound is not intentionally added.

**Nonylphenol Ethoxylates (NPE)** : This chemical or chemical compound is not intentionally added.

**Organotin Compounds** : This chemical or chemical compound is not intentionally added.

**Perfluorooctane Sulfonate (PFOS)** : This chemical or chemical compound is not intentionally added.

**Perfluorooctanoic Acid (PFOA)** : This chemical or chemical compound is not intentionally added.

**Phthalates** : This chemical or chemical compound is not intentionally added.

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## Safety Data Sheet

### 1. IDENTIFICATION

**Product Identifier:** R-3035, R-3035 Black, R-3035 HD, R-3035 HD Black, R-3035 4x4, R-3050, R-3050 Black

**Recommended use:** Vapor Retarder for Thermal Insulation

**Manufacturer Name:** Lamtec Corporation  
5010 River Road  
Mt. Bethel, Pennsylvania 18343-5610

**Telephone number:** 570-897-8200

**Emergency phone number:** 570-897-8200 (M-F 8:30 to 5:00)

**Date of Preparation:** July 8, 2015

### 2. HAZARD(S) IDENTIFICATION

**Classification:**

This product is a manufactured article as defined in the OSHA Hazard Communication Standard. During normal use no exposure to the hazardous ingredients occurs. A SDS is not required. This SDS is provided for informational purposes.

Physical	Health
Not Hazardous	Not Hazardous

**Labeling:**

None required

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Concentration
Cellulose	9004-34-6	35 - 55
Yarn	Proprietary	5 - 20
Aluminum	7429-90-5	15 - 30
Coating	Proprietary	0 - 10

The specific identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

#### 4. FIRST-AID MEASURES

**Inhalation:** First aid is not normally required.

**Skin contact:** No first aid required.

**Eye contact:** Flush with water. Seek medical attention if irritation persists.

**Ingestion:** No first aid required.

**Most important symptoms/effects, acute and delayed:** No adverse effects expected.

**Indication of immediate medical attention and special treatment, if necessary:** No immediate medical attention is normally required

#### 5. FIRE-FIGHTING MEASURES

**Suitable (and unsuitable) extinguishing media:** Use any media that is suitable for the surrounding fire.

**Specific hazards arising from the chemical:** Combustion may yield oxides of carbon and aluminum.

**Special protective equipment and precautions for fire-fighters:** Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing.

#### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment, and emergency procedures:** No special precautions required.

**Methods and materials for containment and cleaning up:** Pick up or sweep up and place in a container for disposal.

#### 7. HANDLING AND STORAGE

**Precautions for safe handling:** Wash thoroughly after handling.

**Conditions for safe storage, including any incompatibilities:** Store in a dry location. Protect from physical damage.

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Exposure guidelines:**

Cellulose	10 mg/m <sup>3</sup> TWA ACGIH TLV, 15 mg/m <sup>3</sup> TWA OSHA PEL (total dust), 5 mg/m <sup>3</sup> TWA (respirable fraction)
Yarn	None Established
Aluminum	1 mg/me TWA ACGIH TLV (respirable), 15 mg/m <sup>3</sup> TWA OSHA PEL
Coating	None Established

**Appropriate engineering controls:** None normally required.

**Personal Protective Equipment:**

**Respiratory protection:** No respiratory protection is normally needed.

**Skin protection:** Wear appropriate gloves when handling to prevent cuts and abrasions.

**Eye protection:** Safety glasses recommended for cutting and other operations where particles may be generated.

**Other:** None required.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance (physical state, color, etc.):** Solid laminated material

**Odor:** None

<b>Odor threshold:</b> Not applicable	<b>pH:</b> Not applicable
<b>Melting Point/Freezing Point:</b> Not applicable	<b>Boiling Point:</b> Not applicable
<b>Flash point:</b> None	<b>Evaporation rate:</b> Not applicable
<b>Flammability (solid, gas):</b> Not applicable	
<b>Flammable limits: LEL:</b> Not applicable	<b>UEL:</b> Not applicable
<b>Vapor pressure:</b> Not applicable	<b>Vapor density:</b> Not applicable
<b>Relative density:</b> Not available	<b>Solubility(is):</b> Insoluble
<b>Partition coefficient: n-Octanol/water:</b> Not applicable	<b>Auto-ignition temperature:</b> Not available
<b>Decomposition temperature:</b> Not available	<b>Viscosity:</b> Not applicable

## 10. STABILITY AND REACTIVITY

**Reactivity:** None known.

**Chemical stability:** Stable

**Possibility of hazardous reactions:** None known.

**Conditions to avoid:** Avoid direct heat and open flames.

**Incompatible materials:** None known.

**Hazardous decomposition products:** Thermal decomposition may produce oxides of carbon and aluminum and other organic vapors.

## 11. TOXICOLOGICAL INFORMATION

**Inhalation:** No adverse effects are expected

**Ingestion:** Ingestion is unlikely.

**Skin contact:** No adverse effects are expected

**Eye contact:** Eye contact may cause abrasions.

**Chronic effects from short- and long-term exposure:** No adverse effects are expected.

**Reproductive Toxicity:** No adverse effects are expected.

**Sensitization:** None of the components are sensitizers.

**Mutagenicity:** No evidence of mutagenic effects.

**Carcinogenicity:** None of the components are listed as carcinogens or suspected carcinogens by IARC, NTP, ACGIH or OSHA.

**Acute Toxicity Values:**

Aluminum: Oral rat LD50 > 15900 mg/kg, inhalation rat LC50 > 0.888 mg/L.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity:**

Aluminum: *Lepomis cyanellus* NOEC > 50 mg/L/96hr

This product is not expected to present an environmental hazard.

**Persistence and degradability:** No data available.

**Bioaccumulative potential:** No data available.

**Mobility in soil:** No data available.

**Other adverse effects:** None known.



**13. DISPOSAL CONSIDERATIONS**

Dispose in accordance with all local, state and federal regulations.

**14. TRANSPORT INFORMATION**

	UN Number	Proper shipping name	Hazard Class	Packing Group	Environmental Hazard
DOT	None	Not Regulated	None	None	None
TDG	None	Not Regulated	None	None	None
IMDG	None	Not Regulated	None	None	None
IATA	None	Not Regulated	None	None	None

**Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code):** Not applicable – product is transported only in packaged form.

**Special precautions:** None known

**15. REGULATORY INFORMATION**

**CERCLA:** This product is not subject to CERCLA reporting requirements. Many states have more stringent release reporting requirements. Report spills required under applicable federal, state and local regulations.

**SARA Hazard Category (311/312):** Not Applicable (manufactured articles)

**SARA 313 Information:** This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372):

Components	C.A.S. #	WT %		
Aluminum (reportable as dust or fume only)	7429-90-5	15	-	30

**California Proposition 65**

This product contains the following chemicals known to the State of California to cause cancer or reproductive toxicity (birth defects):

Components	C.A.S. #	WT %
None		

**EPA TSCA Inventory:** This is a manufactured article and not subject to TSCA.

**16. OTHER INFORMATION**

**NFPA Rating:** Health = 0                      Flammability = 1                      Instability = 0  
**HMIS Rating:** Health = 0                      Flammability = 1                      Physical Hazard = 0

**SDS Revision History:** Rev. 1  
**Date of preparation:** July 8, 2015  
**Date of last revision:** May 22, 2015

**NOTICE:**

This above information is believed to be correct but does not propose to be all inclusive and shall be used only as a guide. Lamtec Corporation shall not be held liable for any damage resulting from handling or from contact with the above product. This information relates only to the product designated herein and does not relate to its use in combination with any other material or process.

# Safety Data Sheet

## Section 1: Identification

### Product identifier:

Product Name TSP-3

### Relevant identified uses of the substance or mixture and uses advised against

Recommended use Insulation Board

### Details of the supplier of the safety data sheet Manufacturer

Rmax Operating, LLC  
13524 Welch Road  
Dallas, TX 75244  
United States  
www.rmax.com  
Rmax@rmax.com  
Telephone (General) 972-387-4500

Emergency telephone number only:  
Call CHEMTREC  
Day or Night within USA and Canada:  
1-800-424-9300

## Section 2: Hazard Identification

### United States (US)

#### Classification of the substance or mixture

OSHA HCS 2012 Not classified

#### Label elements

OSHA HCS 2012  
Hazard statements No label element(s) required

#### Other hazards

OSHA HCS 2012 This product is not considered hazardous under the U.S. OSHA 29 CFR 1910.1200 Hazard Communication Standard.

## Section 3 - Composition/Information on Ingredients

**Substances** Material does not meet the criteria of a substance.

### Mixtures

Composition (varies with product thickness)				
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/ Directive
Polyisocyanurate Foam	None	99%	No data available	OSHA HCS 2012: Not Classified
Pentane	CAS:109-66-0	0% to 5%	Inhalation-Rat LC50 364 g/m <sup>3</sup> 4 Hour(s); Ingestion/Oral-Rat LD50 >2000 mg/kg	OSHA HCS 2012: Flam. Liq. 1; STOT SE 3: Narc.; Asp. Tox. 1
Aluminum Foil Laminations	None	1%	No data available	OSHA HCS 2012: Not Classified
Aluminum [ $< 1\%$ ]	CAS:7429-90-5	<0.01%	NDA No data available	OSHA HCS 2012: Exposure limits
Glass, oxide, chemicals	CAS:65997-17-3	0.01%	No data available	OSHA HCS 2012: Exposure limits

## Section 4: First-Aid Measures

### Description of first aid measures

Inhalation	First aid is not expected to be necessary if materials used under ordinary conditions and as recommended. If signs/symptoms develop, get medical attention.
Skin	First aid is not expected to be necessary if materials used under ordinary conditions and as recommended. If signs/symptoms develop, get medical attention.
Eye	In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If signs/symptoms develop, get medical attention.
Ingestion	First aid is not expected to be necessary if materials used under ordinary conditions and as recommended.

### Most important symptoms and effects, both acute and delayed

Refer to Section 11 - Toxicological Information.

### Indication of any immediate medical attention and special treatment needed

Notes to Physician	Immediate medical attention after exposure to this material not expected to be necessary. No special treatment indicated related to exposure to this material.
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## Section 5: Fire-Fighting Measures

### Extinguishing media

Suitable Extinguishing Media	LARGE FIRE: Water spray, fog or regular foam. SMALL FIRES: Dry chemical, CO2, water spray or regular foam.
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Unsuitable Extinguishing Media	None known
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### Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards	Polyisocyanurate foam is combustible.
------------------------------------	---------------------------------------

Hazardous Combustion Products	Carbon dioxide and carbon monoxide
-------------------------------	------------------------------------

Advice for fire fighters	Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Structural fire fighters' protective clothing will only provide limited protection.
--------------------------	--

## Section 6 - Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures

Personal Precautions	No special precautions expected to be necessary if materials used under ordinary conditions and as recommended.
----------------------	---

Emergency Procedures	No emergency procedures are expected to be necessary if materials used under ordinary conditions as recommended.
----------------------	--

Environmental precautions	No special environmental precautions necessary.
---------------------------	---

### Methods and material for containment and cleaning up

Containment/Clean-up Measures	Pick up pieces and vacuum clean dusts. If sweeping is necessary, use a dust suppressant.
-------------------------------	--

## Section 7 - Handling and Storage

### Precautions for safe handling

#### Handling

Use only with adequate ventilation. Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Avoid breathing dusts generated during use of this material. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

### Conditions for safe storage, including any incompatibilities

#### Storage

Keep away from heat, sparks, and flame. Keep away from incompatible materials. Store in a cool, dry place.

## Section 8 - Exposure Controls/Personal Protection

### Control parameters

	Result	ACGIH	NIOSH	OSHA
Pentane (109-66-0)	TWAs	1000 ppm TWA (listed under Pentane, all isomers)	120 ppm TWA; 350 mg/m <sup>3</sup> TWA	1000 ppm TWA; 2950 mg/m <sup>3</sup> TWA
	Ceilings		610 ppm Ceiling (15 min); 1800 mg/m <sup>3</sup> Ceiling (15 min)	Not established
Aluminum (7429-90-5)	TWAs	1 mg/m <sup>3</sup> TWA (respirable fraction)	10 mg/m <sup>3</sup> TWA (total dust); 5 mg/m <sup>3</sup> TWA (respirable dust)	15 mg/m <sup>3</sup> TWA (total dust); 5 mg/m <sup>3</sup> TWA respirable fraction)
Glass, oxide, chemicals as Glass wool fiber	TWAs	1 fiber/cm <sup>3</sup> TWA (respirable fibers: length >5 µm, aspect ratio ≥3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination, listed under Synthetic vitreous fibers), as Glass wool fiber	3 fiber/cm <sup>3</sup> TWA (fibers ≤ 3.5 µm in diameter and ≥ 10 µm in length); 5 mg/m <sup>3</sup> TWA (total), as Glass wool fiber	Not established

### Exposure controls

#### Engineering Measures/Controls

Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.

### Personal Protective Equipment

#### Respiratory

In case of insufficient ventilation, wear suitable respiratory equipment.

#### Eye/Face

Wear safety glasses or goggles

#### Skin/Body

No skin protection is ordinarily required under normal conditions of use. Protective puncture-resistant gloves and/or sleeves for handling rough-cut edges.

**Environmental Exposure Controls** Follow best practice for site management and disposal of waste.

#### Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

NIOSH = National Institute of Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

## Section 9 - Physical and Chemical Properties

### Information on Physical and Chemical Properties

		Material Description	
Physical Form	Solid	Appearance/ Description	Rigid foam board with foil facers - various thicknesses.
Color	White/cream foam	Odor	Odorless
General Properties			
Boiling Point	Not relevant	Melting Point	No data available
Decomposition Temperature	No data available	pH	Not relevant
Specific Gravity/Relative Density	= 0.03 Water=1	Water Solubility	Not relevant

## Safety Data Sheet

Volatility			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	No data available		
Flammability			
Flash Point	Not relevant	UEL	Not relevant
LEL	Not relevant	Auto ignition	No data available
Flammability (solid, gas)	No data available		

## Section 10: Stability and Reactivity

<b>Reactivity</b>	No dangerous reaction known under conditions of normal use.
<b>Chemical stability</b>	Stable under normal temperatures and pressures.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization will not occur.
<b>Conditions to avoid</b>	Sources of flame and ignition.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Under normal conditions, hazardous decomposition will not occur. Thermal decomposition may emit fumes or gases, such as carbon monoxide, carbon dioxide.

## Section 11 - Toxicological Information

### Information on toxicological effects

Components		
Pentane (0% TO 5%)	109-66-0	Acute Toxicity: Ingestion/ Oral-Rat LD50 >2000 mg/kg; Inhalation-Rat LC50 364 g/m <sup>3</sup> 4 Hour(s)

### Potential Health Effects

#### Inhalation

Acute (Immediate) Exposure to dust may cause irritation.

#### Skin

Acute (Immediate) Causes mild skin irritation.

#### Eye

Acute (Immediate) Exposure to dust may cause mechanical irritation.

#### Ingestion

Acute (Immediate) Excessive concentrations of nuisance dust in the workplace may cause mechanical irritation to mucous membranes.

### Carcinogenic Effects

Glass, oxide, chemicals as Glass wool fiber

National Toxicology Program (NTP): reasonably anticipated to be Human Carcinogen

**Key to abbreviations**  
TD = Toxic Dose

## Section 12 - Ecological Information

<b>Toxicity and ecological data</b>	No information available.
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## Section 13 - Disposal Considerations

### Waste treatment methods

#### Product waste

Dispose of content and/or container in accordance with local, regional, national, and/ or international regulations.

#### Packaging waste

Dispose of content and/or container in accordance with local, regional, national, and/ or international regulations.

## Section 14 - Transport Information

DOT, TDG, IMO/IMDG, IATA/ICAO Not regulated.

Special precautions for user None specified.

Transport in bulk according to Annex II of MARPO73/78 and the IBC Code No data available

## Section 15 - Regulatory Information

### Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications None

State Right To Know					Inventory
Component	CAS	MA	NJ	PA	TSCA
Polyisocyanurate Foam	None	No	No	No	Yes
Pentane	109-66-0	Yes	Yes	Yes	Yes
Aluminum	7429-90-5	Yes	Yes	Yes	Yes
Glass oxide, chemicals	65997-17-3	No	No	No	Yes

OSHA - Process Safety Management, Highly Hazardous Chemicals

Not Listed

OSHA - Specifically Regulated Chemicals

Not Listed

Clean Air Act (CAA) - 1990 Hazardous Air Pollutants

Not Listed

CERCLA/SARA - Section 313 - Emission Reporting

Aluminum 7429-90-5 1.0 % de minimis concentration (dust or fume only)

California - Proposition 65 Not Listed

## Section 16 - Other Information

Preparation Date: 05/29/2015

Last Revision Date: 11/29/2016

### Disclaimer/ Statement of Liability

The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any representation or warranty, express or implied, regarding its accuracy or correctness. The conditions or methods of handling, storage, use, and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with the handling, storage, use, or disposal of the product.



# MATERIAL SAFETY DATA SHEET

No.: TSP3101-MSDS

Date: 03/2012

## I. PRODUCT IDENTIFICATION

Trade Name: Thermasheath® Plus-3  
Generic Name: Insulation Board  
Chemical Name: Polyisocyanurate Foam

CAS #: None Assigned  
Formula: Polyisocyanurate

Manufacturer: Rmax Operating, LLC  
13524 Welch Road  
Dallas, Texas 75244

Telephone: 972-387-4500  
Email: Rmax@rmax.com  
Web Site: www.rmax.com

## II. PRODUCT INGREDIENTS

INGREDIENT NAME	CAS NUMBER	PERCENT*	PERMISSABLE EXPOSURE LIMIT
Polyisocyanurate Foam	9063-78-9	99	5 mg/m <sup>3</sup> nuisance (respirable dust)
Foil/Glass Fiber Mat Facer	None	< 1	
Foil/Kraft Paper Facer	None	< 1	

\* % varies with thickness of core material

## III. PHYSICAL DATA

Appearance and Odor: Rigid foam board with foil facers. Various thicknesses. No odor.

Boiling Point: N/A  
Vapor Pressure: N/A  
Water Solubility: N/A  
Vapor Density (air = 1): N/A

Evaporation Rate: N/A  
Specific Gravity: 0.03  
Melting Point: N/A  
% Volatile by Volume: N/A

## IV. FIRE AND EXPLOSION DATA

Flash Point: N/A  
Flammable Limits: LEL: N/A UEL: N/A  
Extinguishing Media: CO<sub>2</sub>, foam, water fog, dry chemical  
Unusual Fire or Explosion Hazards: Polyisocyanurate foam is combustible.  
Special Fire-Fighting Procedures: Wear self-contained breathing apparatus.  
NFPA Flammable/Comb.Liquid Class: N/A  
Auto-Ignition Temperature: N/A

## V. HEALTH HAZARDS A. SUMMARY / RISKS

Summary: No known acute or chronic health hazards. Dusts generated from product are considered nuisance dusts. This product is not considered to be a carcinogen.

Medical Conditions Which May Be Aggravated: Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema, and asthma.

Target Organ(s): Respiratory System.

Acute Health Effects: Transitory irritation or inflammation of upper respiratory system.

Chronic Health Effects: No permanent effects have been reported.

Primary Entry Route(s): Inhalation

**V. HEALTH HAZARDS B. SIGNS / SYMPTOMS OF OVEREXPOSURE**

Inhalation: Congestion, irritation or tickle in throat or nose.

Skin Contact: Transient mechanical irritation or rash.

Skin Absorption: None.

Ingestion: None.

Eyes: Transient mechanical irritation or inflammation.

**V. HEALTH HAZARDS C. FIRST AID / EMERGENCY PROCEDURES**

Inhalation: Remove to fresh air.

Skin Contact: Wash affected areas with soap and warm water.

Skin Absorption: N/A

Ingestion: N/A

Eyes: Flush with copious quantities of water. If irritation persists, consult a physician.

**VI. REACTIVITY DATA**

Material is stable. Hazardous polymerization cannot occur.

Chemical Incompatibilities: Strong oxidizing agents.

Conditions to Avoid: Sources of flame and ignition.

Hazardous Decomposition Products: CO, CO<sub>2</sub>, HCN.

**VII. SPILL OR LEAK PROCEDURES**

Procedures for Spill/Leak: Pick up pieces and vacuum clean dusts. If sweeping is necessary, use a dust suppressant.

Waste management: Non-hazardous wastes as defined by RCRA (40 CFR 261). Method of disposal - Landfill. RQ - N/A

**VIII. SPECIAL PROTECTION INFORMATION**

Eyes: Goggles or safety glasses are recommended when using power cutting tools.

Hands: Gloves are not normally required.

Respirator: Use a respirator suitable for nuisance dusts.

Ventilation: Recommended at source of any mechanical cutting.

Other: N/A

Special Conditions For Repair/Maintenance of Equipment: Use proper respiratory protection when possibility of exposure to product dusts exists.

**IX. SPECIAL PRECAUTIONS**

Storage Segregation: N/A

Hazard Classes: N/A

Special Handling/Storage: Store in cool, dry area away from sources of heat, flame, ignition and strong oxidizing agents.

Other: N/A

The information in this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any representation or warranty, express or implied, regarding its accuracy or correctness.

The conditions or methods of handling, storage, use, and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with the handling, storage, use, or disposal of the product.



## Section 1: Identification

### Product identifier:

Product Name  
ECOMAXci

### Relevant identified uses of the substance or mixture and uses advised against

Recommended use  
Insulation Board

### Details of the supplier of the safety data sheet Manufacturer

Rmax Operating, LLC  
13524 Welch Road  
Dallas, TX 75244  
United States  
www.rmax.com  
Rmax@rmax.com  
Telephone (General) 972-387-4500

Emergency telephone number only:  
Call CHEMTREC  
Day or Night within USA and Canada:  
1-800-424-9300

## Section 2: Hazard Identification

### United States (US)

#### Classification of the substance or mixture

OSHA HCS 2012  
Not classified

#### Label elements

OSHA HCS 2012  
Hazard statements  
No label element(s) required

#### Other hazards

OSHA HCS 2012  
This product is not considered hazardous under the U.S. OSHA 29 CFR 1910.1200 Hazard Communication Standard.

## Section 3 - Composition/Information on Ingredients

**Substances**  
Material does not meet the criteria of a substance.

### Mixtures

Composition (varies with product thickness)				
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/ Directive
Polyisocyanurate Foam	None	99%	No data available	OSHA HCS 2012: Not Classified
Pentane	CAS:109-66-0	0% to 5%	Inhalation-Rat LC50 364 g/m <sup>3</sup> 4 Hour(s); Ingestion/Oral-Rat LD50 >2000 mg/kg	OSHA HCS 2012: Flam. Liq. 1; STOT SE 3: Narc.; Asp. Tox. 1
Aluminum Foil Laminations	None	1%	No data available	OSHA HCS 2012: Not Classified
Aluminum [ $< 1\%$ ]	CAS:7429-90-5	<0.01%	NDA No data available	OSHA HCS 2012: Exposure limits
Glass, oxide, chemicals	CAS:65997-17-3	0.01%	No data available	OSHA HCS 2012: Exposure limits

## Section 4: First-Aid Measures

### Description of first aid measures

Inhalation	First aid is not expected to be necessary if materials used under ordinary conditions and as recommended. If signs/symptoms develop, get medical attention.
Skin	First aid is not expected to be necessary if materials used under ordinary conditions and as recommended. If signs/symptoms develop, get medical attention.
Eye	In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If signs/symptoms develop, get medical attention.
Ingestion	First aid is not expected to be necessary if materials used under ordinary conditions and as recommended.

### Most important symptoms and effects, both acute and delayed

Refer to Section 11 - Toxicological Information.

### Indication of any immediate medical attention and special treatment needed

Notes to Physician	Immediate medical attention after exposure to this material not expected to be necessary. No special treatment indicated related to exposure to this material.
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## Section 5: Fire-Fighting Measures

### Extinguishing media

Suitable Extinguishing Media	LARGE FIRE: Water spray, fog or regular foam. SMALL FIRES: Dry chemical, CO2, water spray or regular foam.
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Unsuitable Extinguishing Media	None known
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### Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards	Polyisocyanurate foam is combustible.
------------------------------------	---------------------------------------

Hazardous Combustion Products	Carbon dioxide and carbon monoxide
-------------------------------	------------------------------------

Advice for fire fighters	Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Structural fire fighters' protective clothing will only provide limited protection.
--------------------------	--

## Section 6 - Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures

Personal Precautions	No special precautions expected to be necessary if materials used under ordinary conditions and as recommended.
----------------------	---

Emergency Procedures	No emergency procedures are expected to be necessary if materials used under ordinary conditions as recommended.
----------------------	--

Environmental precautions	No special environmental precautions necessary.
---------------------------	---

### Methods and material for containment and cleaning up

Containment/Clean-up Measures	Pick up pieces and vacuum clean dusts. If sweeping is necessary, use a dust suppressant.
-------------------------------	--

## Section 7 - Handling and Storage

### Precautions for safe handling

#### Handling

Use only with adequate ventilation. Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Avoid breathing dusts generated during use of this material. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

### Conditions for safe storage, including any incompatibilities

#### Storage

Keep away from heat, sparks, and flame. Keep away from incompatible materials. Store in a cool, dry place.

## Section 8 - Exposure Controls/Personal Protection

### Control parameters

	Result	ACGIH	NIOSH	OSHA
Pentane (109-66-0)	TWAs	1000 ppm TWA (listed under Pentane, all isomers)	120 ppm TWA; 350 mg/m <sup>3</sup> TWA	1000 ppm TWA; 2950 mg/m <sup>3</sup> TWA
	Ceilings		610 ppm Ceiling (15 min); 1800 mg/m <sup>3</sup> Ceiling (15 min)	Not established
Aluminum (7429-90-5)	TWAs	1 mg/m <sup>3</sup> TWA (respirable fraction)	10 mg/m <sup>3</sup> TWA (total dust); 5 mg/m <sup>3</sup> TWA (respirable dust)	15 mg/m <sup>3</sup> TWA (total dust); 5 mg/m <sup>3</sup> TWA respirable fraction)
Glass, oxide, chemicals as Glass wool fiber	TWAs	1 fiber/cm <sup>3</sup> TWA (respirable fibers: length >5 µm, aspect ratio ≥3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination, listed under Synthetic vitreous fibers), as Glass wool fiber	3 fiber/cm <sup>3</sup> TWA (fibers ≤ 3.5 µm in diameter and ≥ 10 µm in length); 5 mg/m <sup>3</sup> TWA (total), as Glass wool fiber	Not established

### Exposure controls

#### Engineering Measures/Controls

Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.

### Personal Protective Equipment

#### Respiratory

In case of insufficient ventilation, wear suitable respiratory equipment.

#### Eye/Face

Wear safety glasses or goggles

#### Skin/Body

No skin protection is ordinarily required under normal conditions of use. Protective puncture-resistant gloves and/or sleeves for handling rough-cut edges.

**Environmental Exposure Controls** Follow best practice for site management and disposal of waste.

#### Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

NIOSH = National Institute of Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

## Section 9 - Physical and Chemical Properties

### Information on Physical and Chemical Properties

		Material Description	
Physical Form	Solid	Appearance/ Description	Rigid foam board with foil facers - various thicknesses.
Color	White/cream foam	Odor	Odorless
General Properties			
Boiling Point	Not relevant	Melting Point	No data available
Decomposition Temperature	No data available	pH	Not relevant
Specific Gravity/Relative Density	= 0.03 Water=1	Water Solubility	Not relevant

## Safety Data Sheet

Volatility			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	No data available		
Flammability			
Flash Point	Not relevant	UEL	Not relevant
LEL	Not relevant	Auto ignition	No data available
Flammability (solid, gas)	No data available		

## Section 10: Stability and Reactivity

<b>Reactivity</b>	No dangerous reaction known under conditions of normal use.
<b>Chemical stability</b>	Stable under normal temperatures and pressures.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization will not occur.
<b>Conditions to avoid</b>	Sources of flame and ignition.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Under normal conditions, hazardous decomposition will not occur. Thermal decomposition may emit fumes or gases, such as carbon monoxide, carbon dioxide.

## Section 11 - Toxicological Information

### Information on toxicological effects

Components		
Pentane (0% TO 5%)	109-66-0	Acute Toxicity: Ingestion/ Oral-Rat LD50 >2000 mg/kg; Inhalation-Rat LC50 364 g/m <sup>3</sup> 4 Hour(s)

### Potential Health Effects

#### Inhalation

Acute (Immediate) Exposure to dust may cause irritation.

#### Skin

Acute (Immediate) Causes mild skin irritation.

#### Eye

Acute (Immediate) Exposure to dust may cause mechanical irritation.

#### Ingestion

Acute (Immediate) Excessive concentrations of nuisance dust in the workplace may cause mechanical irritation to mucous membranes.

### Carcinogenic Effects

Glass, oxide, chemicals as Glass wool fiber

National Toxicology Program (NTP): reasonably anticipated to be Human Carcinogen

**Key to abbreviations**  
TD = Toxic Dose

## Section 12 - Ecological Information

<b>Toxicity and ecological data</b>	No information available.
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## Section 13 - Disposal Considerations

### Waste treatment methods

#### Product waste

Dispose of content and/or container in accordance with local, regional, national, and/ or international regulations.

#### Packaging waste

Dispose of content and/or container in accordance with local, regional, national, and/ or international regulations.

## Section 14 - Transport Information

DOT, TDG, IMO/IMDG, IATA/ICAO Not regulated.

Special precautions for user None specified.

Transport in bulk according to Annex II of MARPO73/78 and the IBC Code No data available

## Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications None

State Right To Know					Inventory
Component	CAS	MA	NJ	PA	TSCA
Aluminum	7429-90-5	Yes	Yes	Yes	Yes
Pentane	109-66-0	Yes	Yes	Yes	Yes
Glass oxide, chemicals	65997-17-3	No	No	No	Yes
Polyisocyanurate Foam	None	No	No	No	Yes

OSHA - Process Safety Management, Highly Hazardous Chemicals

Not Listed

OSHA - Specifically Regulated Chemicals

Not Listed

Clean Air Act (CAA) - 1990 Hazardous Air Pollutants

Not Listed

CERCLA/SARA - Section 313 - Emission Reporting

Aluminum 7429-90-5 1.0 % de minimis concentration (dust or fume only)

California - Proposition 65 Not Listed

## Section 16 - Other Information

Preparation Date: 05/29/2015

Last Revision Date: 11/29/2016

### Disclaimer/ Statement of Liability

The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any representation or warranty, express or implied, regarding its accuracy or correctness. The conditions or methods of handling, storage, use, and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with the handling, storage, use, or disposal of the product.

## Section 1: Identification

### Product identifier:

Product Name R-Matte® Plus-3

### Relevant identified uses of the substance or mixture and uses advised against

Recommended use Insulation Board

### Details of the supplier of the safety data sheet Manufacturer

Rmax Operating, LLC  
13524 Welch Road  
Dallas, TX 75244  
United States  
www.rmax.com  
Rmax@rmax.com  
Telephone (General) 972-387-4500

Emergency telephone number only:  
Call CHEMTREC  
Day or Night within USA and Canada:  
1-800-424-9300

## Section 2: Hazard Identification

### United States (US)

#### Classification of the substance or mixture

OSHA HCS 2012 Not classified

#### Label elements

OSHA HCS 2012  
Hazard statements No label element(s) required

#### Other hazards

OSHA HCS 2012 This product is not considered hazardous under the U.S. OSHA 29 CFR 1910.1200 Hazard Communication Standard.

## Section 3 - Composition/Information on Ingredients

**Substances** Material does not meet the criteria of a substance.

### Mixtures

Composition (varies with product thickness)				
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/ Directive
Polyisocyanurate Foam	None	99%	No data available	OSHA HCS 2012: Not Classified
Pentane	CAS:109-66-0	0% to 5%	Inhalation-Rat LC50 364 g/m <sup>3</sup> 4 Hour(s); Ingestion/Oral-Rat LD50 >2000 mg/kg	OSHA HCS 2012: Flam. Liq. 1; STOT SE 3: Narc.; Asp. Tox. 1
Aluminum Foil Laminations	None	1%	No data available	OSHA HCS 2012: Not Classified
Aluminum [ < 1%]	CAS:7429-90-5	<0.01%	NDA No data available	OSHA HCS 2012: Exposure limits

## Section 4: First-Aid Measures

### Description of first aid measures

Inhalation First aid is not expected to be necessary if materials used under ordinary conditions and as

## Safety Data Sheet

recommended. If signs/symptoms develop, get medical attention.

**Skin** First aid is not expected to be necessary if materials used under ordinary conditions and as recommended. If signs/symptoms develop, get medical attention.

**Eye** In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If signs/symptoms develop, get medical attention.

**Ingestion** First aid is not expected to be necessary if materials used under ordinary conditions and as recommended.

### Most important symptoms and effects, both acute and delayed

Refer to Section 11 - Toxicological Information.

### Indication of any immediate medical attention and special treatment needed

**Notes to Physician** Immediate medical attention after exposure to this material not expected to be necessary. No special treatment indicated related to exposure to this material.

## Section 5: Fire-Fighting Measures

### Extinguishing media

**Suitable Extinguishing Media** LARGE FIRE: Water spray, fog or regular foam.  
SMALL FIRES: Dry chemical, CO2, water spray or regular foam.

**Unsuitable Extinguishing Media** None known

### Special hazards arising from the substance or mixture

**Unusual Fire and Explosion Hazards** Polyisocyanurate foam is combustible.

**Hazardous Combustion Products** Carbon dioxide and carbon monoxide

**Advice for fire fighters** Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Structural fire fighters' protective clothing will only provide limited protection.

## Section 6 - Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures

**Personal Precautions** No special precautions expected to be necessary if materials used under ordinary conditions and as recommended.

**Emergency Procedures** No emergency procedures are expected to be necessary if materials used under ordinary conditions as recommended.

**Environmental precautions** No special environmental precautions necessary.

### Methods and material for containment and cleaning up

**Containment/Clean-up Measures** Pick up pieces and vacuum clean dusts. If sweeping is necessary, use a dust suppressant.

## Section 7 - Handling and Storage

### Precautions for safe handling

## Safety Data Sheet

**Handling** Use only with adequate ventilation. Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Avoid breathing dusts generated during use of this material. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

### Conditions for safe storage, including any incompatibilities

**Storage** Keep away from heat, sparks, and flame. Keep away from incompatible materials. Store in a cool, dry place.

## Section 8 - Exposure Controls/Personal Protection

### Control parameters

	Result	ACGIH	NIOSH	OSHA
Pentane (109-66-0)	TWAs	1000 ppm TWA (listed under Pentane, all isomers)	120 ppm TWA; 350 mg/m <sup>3</sup> TWA	1000 ppm TWA; 2950 mg/m <sup>3</sup> TWA
	Ceilings		610 ppm Ceiling (15 min); 1800 mg/m <sup>3</sup> Ceiling (15 min)	Not established
Aluminum (7429-90-5)	TWAs	1 mg/m <sup>3</sup> TWA (respirable fraction)	10 mg/m <sup>3</sup> TWA (total dust); 5 mg/m <sup>3</sup> TWA (respirable dust)	15 mg/m <sup>3</sup> TWA (total dust); 5 mg/m <sup>3</sup> TWA respirable fraction)

### Exposure controls

**Engineering Measures/Controls** Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.

### Personal Protective Equipment

**Respiratory** In case of insufficient ventilation, wear suitable respiratory equipment.  
**Eye/Face** Wear safety glasses or goggles  
**Skin/Body** No skin protection is ordinarily required under normal conditions of use. Protective puncture-resistant gloves and/or sleeves for handling rough-cut edges.

**Environmental Exposure Controls** Follow best practice for site management and disposal of waste.

#### Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

NIOSH = National Institute of Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

## Section 9 - Physical and Chemical Properties

### Information on Physical and Chemical Properties

Material Description			
Physical Form	Solid	Appearance/ Description	Rigid foam board with foil facers - various thicknesses.
Color	White/cream foam	Odor	Odorless
General Properties			
Boiling Point	Not relevant	Melting Point	No data available
Decomposition Temperature	No data available	pH	Not relevant
Specific Gravity/Relative Density	= 0.03 Water=1	Water Solubility	Not relevant
Volatility			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	No data available		
Flammability			
Flash Point	Not relevant	UEL	Not relevant
LEL	Not relevant	Auto ignition	No data available
Flammability (solid, gas)	No data available		

## Section 10: Stability and Reactivity



## Safety Data Sheet

<b>Reactivity</b>	No dangerous reaction known under conditions of normal use.
<b>Chemical stability</b>	Stable under normal temperatures and pressures.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization will not occur.
<b>Conditions to avoid</b>	Sources of flame and ignition.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Under normal conditions, hazardous decomposition will not occur. Thermal decomposition may emit fumes or gases, such as carbon monoxide, carbon dioxide.

## Section 11 - Toxicological Information

### Information on toxicological effects

Components		
Pentane (0% TO 5%)	109-66-0	Acute Toxicity: Ingestion/ Oral-Rat LD50 >2000 mg/kg; Inhalation-Rat LC50 364 g/m <sup>3</sup> 4 Hour(s)

### Potential Health Effects

#### Inhalation

Acute (Immediate) Exposure to dust may cause irritation.

#### Skin

Acute (Immediate) Causes mild skin irritation.

#### Eye

Acute (Immediate) Exposure to dust may cause mechanical irritation.

#### Ingestion

Acute (Immediate) Excessive concentrations of nuisance dust in the workplace may cause mechanical irritation to mucous membranes.

### Carcinogenic Effects

Glass, oxide, chemicals as Glass wool fiber

National Toxicology Program (NTP): reasonably anticipated to be Human Carcinogen

**Key to abbreviations**  
TD = Toxic Dose

## Section 12 - Ecological Information

**Toxicity and ecological data** No information available.

## Section 13 - Disposal Considerations

### Waste treatment methods

#### Product waste

Dispose of content and/or container in accordance with local, regional, national, and/ or international regulations.

#### Packaging waste

Dispose of content and/or container in accordance with local, regional, national, and/ or international regulations.

## Section 14 - Transport Information

DOT, TDG, IMO/IMDG, IATA/ICAO Not regulated.

Special precautions for user None specified.

Transport in bulk according to Annex II of MARPO73/78 and the IBC Code No data available

## Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications None

State Right To Know					Inventory
Component	CAS	MA	NJ	PA	TSCA
Aluminum	7429-90-5	Yes	Yes	Yes	Yes
Pentane	109-66-0	Yes	Yes	Yes	Yes
Polyisocyanurate Foam	None	No	No	No	Yes

OSHA - Process Safety Management, Highly Hazardous Chemicals Not Listed

OSHA - Specifically Regulated Chemicals Not Listed

Clean Air Act (CAA) - 1990 Hazardous Air Pollutants Not Listed

CERCLA/SARA - Section 313 - Emission Reporting

Aluminum 7429-90-5 1.0 % de minimis concentration (dust or fume only)

California - Proposition 65 Not Listed

## Section 16 - Other Information

Preparation Date: 05/29/2015

Last Revision Date: 11/29/2016

### Disclaimer/ Statement of Liability

The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any representation or warranty, express or implied, regarding its accuracy or correctness. The conditions or methods of handling, storage, use, and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with the handling, storage, use, or disposal of the product.

## Section 1: Identification

### Product identifier:

Product Name Durasheath®-3

### Relevant identified uses of the substance or mixture and uses advised against

Recommended use Insulation Board

### Details of the supplier of the safety data sheet Manufacturer

Rmax Operating, LLC  
13524 Welch Road  
Dallas, TX 75244  
United States  
www.rmax.com  
Rmax@rmax.com  
Telephone (General) 972-387-4500

Emergency telephone number only:  
Call CHEMTREC  
Day or Night within USA and Canada:  
1-800-424-9300

## Section 2: Hazard Identification

### United States (US)

#### Classification of the substance or mixture

OSHA HCS 2012 Not classified

#### Label elements

OSHA HCS 2012

Hazard statements No label element(s)

#### Other hazards

OSHA HCS 2012 This product is not considered hazardous under U.S. OSHA 29 CFR 1910.1200 - Hazard Communication Standard.

Substances Material does not meet the criteria of a substance.

## Section 3 - Composition/Information on Ingredients

### Mixtures

Composition (varies with product thickness)				
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/ Directive
Polyisocyanurate Foam	None	99%	No data available	OSHA HCS 2012: Not Classified
Pentane	CAS:109-66-0	0% to 5%	Inhalation-Rat LC50 364 g/m <sup>3</sup> 4 Hour(s); Ingestion/Oral-Rat LD50 > 2000 mg/kg	OSHA HCS 2012: Flam. Liq. 1; STOT SE 3: Narc.; Asp. Tox. 1
Glass, oxide, chemicals	CAS:65997-17-3	0.01%	No data available	OSHA HCS 2012: Exposure limits

## Section 4: First-Aid Measures

### Description of first aid measures

Inhalation First aid is not expected to be necessary if materials used under ordinary conditions and as recommended. If signs/symptoms develop, get medical attention.

## Safety Data Sheet

Skin	First aid is not expected to be necessary if materials used under ordinary conditions and as recommended. If signs/symptoms develop, get medical attention.
Eye	In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If signs/symptoms develop, get medical attention.
Ingestion	First aid is not expected to be necessary if materials used under ordinary conditions and as recommended.

### Most important symptoms and effects, both acute and delayed

Refer to Section 11 - Toxicological Information.

### Indication of any immediate medical attention and special treatment needed

Notes to Physician	Immediate medical attention after exposure to this material not expected to be necessary. No special treatment indicated related to exposure to this material.
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## Section 5: Fire-Fighting Measures

### Extinguishing media

Suitable Extinguishing Media	LARGE FIRE: Water spray, fog or regular foam. SMALL FIRES: Dry chemical, CO <sub>2</sub> , water spray or regular foam.
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Unsuitable Extinguishing Media	None known
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### Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards	Polyisocyanurate foam is combustible
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Hazardous Combustion Products	No data available.
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Advice for fire fighters	Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Structural fire fighters' protective clothing will only provide limited protection.
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## Section 6 - Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures

Personal Precautions	No special precautions expected to be necessary if materials used under ordinary conditions and as recommended.
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Emergency Procedures	No emergency procedures are expected to be necessary if materials used under ordinary conditions as recommended.
----------------------	--

Environmental precautions	No special environmental precautions necessary.
---------------------------	---

## Section 7 - Handling and Storage

### Methods and material for containment and cleaning up

Containment/Clean-up Measures	Pick up pieces and vacuum clean dusts. If sweeping is necessary, use a dust suppressant.
-------------------------------	--

### Precautions for safe handling

Handling	Use only with adequate ventilation. Minimize dust generation and accumulation.
----------	--

Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Avoid breathing dusts generated during use of this material. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

#### Conditions for safe storage, including any incompatibilities

##### Storage

Keep away from heat, sparks, and flame. Keep away from incompatible materials. Store in a cool, dry place.

## Section 8 - Exposure Controls/Personal Protection

#### Control parameters

	Result	ACGIH	NIOSH	OSHA
Pentane (109-66-0)	TWAs	1000 ppm TWA (listed under Pentane, all isomers)	120 ppm TWA; 350 mg/m <sup>3</sup> TWA	1000 ppm TWA; 2950 mg/m <sup>3</sup> TWA
	Ceilings		610 ppm Ceiling (15 min); 1800 mg/m <sup>3</sup> Ceiling (15 min)	Not established
Glass, oxide, chemicals as Glass wool fiber	TWAs	1 fiber/cm <sup>3</sup> TWA (respirable fibers: length >5 µm, aspect ratio ≥3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination, listed under Synthetic vitreous fibers), as Glass wool fiber	3 fiber/cm <sup>3</sup> TWA (fibers ≤ 3.5 µm in diameter and ≥ 10 µm in length); 5 mg/m <sup>3</sup> TWA (total), as Glass wool fiber	Not established

#### Exposure controls

##### Engineering Measures/Controls

Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.

#### Personal Protective Equipment

##### Respiratory

In case of insufficient ventilation, wear suitable respiratory equipment.

##### Eye/Face

Wear safety glasses or goggles

##### Skin/Body

No skin protection is ordinarily required under normal conditions of use. Protective puncture-resistant gloves and/or sleeves for handling rough-cut edges.

**Environmental Exposure Controls** Follow best practice for site management and disposal of waste.

#### Key to abbreviations

NIOSH = National Institute of Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

TWAEV = Time-Weighted Average Exposure Value

## Section 9 - Physical and Chemical Properties

#### Information on Physical and Chemical Properties

		Material Description	
Physical Form	Solid	Appearance/ Description	Rigid foam board with foil facers - various thicknesses.
Color	White/cream foam	Odor	Odorless
General Properties			
Boiling Point	Not relevant	Melting Point	No data available
Decomposition Temperature	No data available	pH	Not relevant
Specific Gravity/Relative Density	= 0.03 Water=1	Water Solubility	Not relevant
Volatility			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	No data available		
Flammability			
Flash Point	Not relevant	UEL	Not relevant
LEL	Not relevant	Auto ignition	No data available
Flammability (solid, gas)	No data available		

## Section 10: Stability and Reactivity

<b>Reactivity</b>	No dangerous reaction known under conditions of normal use.
<b>Chemical stability</b>	Stable under normal temperatures and pressures.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization will not occur.
<b>Conditions to avoid</b>	Sources of flame and ignition.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Under normal conditions, hazardous decomposition will not occur. Thermal decomposition may emit fumes or gases, such as carbon monoxide, carbon dioxide.

## Section 11 - Toxicological Information

### Information on toxicological effects

Components		
Pentane (0% to 5%)	109-66-0	Acute Toxicity: Ingestion/ Oral-Rat LD50 >2000 mg/kg; Inhalation-Rat LC50 364 g/m <sup>3</sup> 4 Hour(s)

### Potential Health Effects

#### Inhalation

Acute (Immediate) Exposure to dust may cause irritation.

#### Skin

Acute (Immediate) Causes mild skin irritation.

#### Eye

Acute (Immediate) Exposure to dust may cause mechanical irritation.

#### Ingestion

Acute (Immediate) Excessive concentrations of nuisance dust in the workplace may cause mechanical irritation to mucous membranes.

### Carcinogenic Effects

Carcinogenic Effects			
	CAS	IARC	NTP
Glass, oxide, chemicals as Glass wool fiber	None	Not Listed	Reasonably Anticipated to be Human Carcinogen

**Key to abbreviations**  
LC = Lethal Concentration  
LD = Lethal Dose

## Section 12 - Ecological Information

<b>Toxicity and ecological data</b>	No information available.
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## Section 13 - Disposal Considerations

### Waste treatment methods

#### Product waste

Dispose of content and/or container in accordance with local, regional, national, and/ or international regulations.

## Safety Data Sheet

### Packaging waste

Dispose of content and/or container in accordance with local, regional, national, and/ or international regulations.

## Section 14 - Transport Information

DOT, TDG, IMO/IMDG, IATA/ICAO Not regulated.

Special precautions for user None specified.

Transport in bulk according to Annex II of MARPO73/78 and the IBC Code No data available

## Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications None

Component	CAS	State Right To Know			Inventory
		MA	NJ	PA	TSCA
Polyisocyanurate Foam	None	No	No	No	Yes
Pentane	109-66-0	Yes	Yes	Yes	Yes
Glass, oxide, chemicals	65997-17-3	No	No	No	Yes

OSHA - Process Safety Management, Highly Hazardous Chemicals

Not Listed

OSHA - Specifically Regulated Chemicals

Not Listed

Clean Air Act (CAA) - 1990 Hazardous Air Pollutants

Not Listed

CERCLA/SARA

Not Listed

California - Proposition 65

Not Listed

## Section 16 - Other Information

Preparation Date: 05/29/2015

Last Revision Date: 11/29/2016

### Disclaimer/ Statement of Liability

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## Section 1: Identification

### Product identifier:

Product Name  
Thermasheath®-SI

### Relevant identified uses of the substance or mixture and uses advised against

Recommended use  
Insulation Board

### Details of the supplier of the safety data sheet Manufacturer

Rmax Operating, LLC  
13524 Welch Road  
Dallas, TX 75244  
United States  
www.rmax.com  
Rmax@rmax.com  
Telephone (General) 972-387-4500

Emergency telephone number only:  
Call CHEMTREC  
Day or Night within USA and Canada:  
1-800-424-9300

## Section 2: Hazard Identification

### United States (US)

#### Classification of the substance or mixture

OSHA HCS 2012  
Not classified

#### Label elements

OSHA HCS 2012  
Hazard statements  
No label element(s) required

#### Other hazards

OSHA HCS 2012  
This product is not considered hazardous under the U.S. OSHA 29 CFR 1910.1200 Hazard Communication Standard.

## Section 3 - Composition/Information on Ingredients

**Substances**  
Material does not meet the criteria of a substance.

### Mixtures

Composition (varies with product thickness)				
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/ Directive
Polyisocyanurate Foam	None	99%	No data available	OSHA HCS 2012: Not Classified
Pentane	CAS:109-66-0	0% to 5%	Inhalation-Rat LC50 364 g/m <sup>3</sup> 4 Hour(s); Ingestion/Oral-Rat LD50 >2000 mg/kg	OSHA HCS 2012: Flam. Liq. 1; STOT SE 3: Narc.; Asp. Tox. 1
Aluminum Foil Laminations	None	1%	No data available	OSHA HCS 2012: Not Classified
Aluminum [ [< 1%]	CAS:7429-90-5	<0.01%	NDA No data available	OSHA HCS 2012: Exposure limits

## Section 4: First-Aid Measures

### Description of first aid measures

Inhalation  
First aid is not expected to be necessary if materials used under ordinary conditions and as



## Safety Data Sheet

recommended. If signs/symptoms develop, get medical attention.

**Skin** First aid is not expected to be necessary if materials used under ordinary conditions and as recommended. If signs/symptoms develop, get medical attention.

**Eye** In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If signs/symptoms develop, get medical attention.

**Ingestion** First aid is not expected to be necessary if materials used under ordinary conditions and as recommended.

### Most important symptoms and effects, both acute and delayed

Refer to Section 11 - Toxicological Information.

### Indication of any immediate medical attention and special treatment needed

**Notes to Physician** Immediate medical attention after exposure to this material not expected to be necessary. No special treatment indicated related to exposure to this material.

## Section 5: Fire-Fighting Measures

### Extinguishing media

**Suitable Extinguishing Media** LARGE FIRE: Water spray, fog or regular foam.  
SMALL FIRES: Dry chemical, CO2, water spray or regular foam.

**Unsuitable Extinguishing Media** None known

### Special hazards arising from the substance or mixture

**Unusual Fire and Explosion Hazards** Polyisocyanurate foam is combustible.

**Hazardous Combustion Products** Carbon dioxide and carbon monoxide

**Advice for fire fighters** Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Structural fire fighters' protective clothing will only provide limited protection.

## Section 6 - Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures

**Personal Precautions** No special precautions expected to be necessary if materials used under ordinary conditions and as recommended.

**Emergency Procedures** No emergency procedures are expected to be necessary if materials used under ordinary conditions as recommended.

**Environmental precautions** No special environmental precautions necessary.

### Methods and material for containment and cleaning up

**Containment/Clean-up Measures** Pick up pieces and vacuum clean dusts. If sweeping is necessary, use a dust suppressant.

## Section 7 - Handling and Storage

### Precautions for safe handling

## Safety Data Sheet

### Handling

Use only with adequate ventilation. Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Avoid breathing dusts generated during use of this material. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

### Conditions for safe storage, including any incompatibilities

#### Storage

Keep away from heat, sparks, and flame. Keep away from incompatible materials. Store in a cool, dry place.

## Section 8 - Exposure Controls/Personal Protection

### Control parameters

	Result	ACGIH	NIOSH	OSHA
Pentane (109-66-0)	TWAs	1000 ppm TWA (listed under Pentane, all isomers)	120 ppm TWA; 350 mg/m <sup>3</sup> TWA	1000 ppm TWA; 2950 mg/m <sup>3</sup> TWA
	Ceilings		610 ppm Ceiling (15 min); 1800 mg/m <sup>3</sup> Ceiling (15 min)	Not established
Aluminum (7429-90-5)	TWAs	1 mg/m <sup>3</sup> TWA (respirable fraction)	10 mg/m <sup>3</sup> TWA (total dust); 5 mg/m <sup>3</sup> TWA (respirable dust)	15 mg/m <sup>3</sup> TWA (total dust); 5 mg/m <sup>3</sup> TWA respirable fraction)

### Exposure controls

#### Engineering Measures/Controls

Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.

### Personal Protective Equipment

#### Respiratory

In case of insufficient ventilation, wear suitable respiratory equipment.

#### Eye/Face

Wear safety glasses or goggles

#### Skin/Body

No skin protection is ordinarily required under normal conditions of use. Protective puncture-resistant gloves and/or sleeves for handling rough-cut edges.

**Environmental Exposure Controls** Follow best practice for site management and disposal of waste.

#### Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

NIOSH = National Institute of Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

## Section 9 - Physical and Chemical Properties

### Information on Physical and Chemical Properties

Material Description			
Physical Form	Solid	Appearance/ Description	Rigid foam board with foil facers - various thicknesses.
Color	White/cream foam	Odor	Odorless
General Properties			
Boiling Point	Not relevant	Melting Point	No data available
Decomposition Temperature	No data available	pH	Not relevant
Specific Gravity/Relative Density	= 0.03 Water=1	Water Solubility	Not relevant
Volatility			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	No data available		
Flammability			
Flash Point	Not relevant	UEL	Not relevant
LEL	Not relevant	Auto ignition	No data available
Flammability (solid, gas)	No data available		

## Section 10: Stability and Reactivity

## Safety Data Sheet

<b>Reactivity</b>	No dangerous reaction known under conditions of normal use.
<b>Chemical stability</b>	Stable under normal temperatures and pressures.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization will not occur.
<b>Conditions to avoid</b>	Sources of flame and ignition.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Under normal conditions, hazardous decomposition will not occur. Thermal decomposition may emit fumes or gases, such as carbon monoxide, carbon dioxide.

## Section 11 - Toxicological Information

### Information on toxicological effects

Components		
Pentane (0% TO 5%)	109-66-0	Acute Toxicity: Ingestion/ Oral-Rat LD50 >2000 mg/kg; Inhalation-Rat LC50 364 g/m <sup>3</sup> 4 Hour(s)

### Potential Health Effects

#### Inhalation

Acute (Immediate) Exposure to dust may cause irritation.

#### Skin

Acute (Immediate) Causes mild skin irritation.

#### Eye

Acute (Immediate) Exposure to dust may cause mechanical irritation.

#### Ingestion

Acute (Immediate) Excessive concentrations of nuisance dust in the workplace may cause mechanical irritation to mucous membranes.

### Carcinogenic Effects

Glass, oxide, chemicals as Glass wool fiber

National Toxicology Program (NTP): reasonably anticipated to be Human Carcinogen

**Key to abbreviations**  
TD = Toxic Dose

## Section 12 - Ecological Information

**Toxicity and ecological data** No information available.

## Section 13 - Disposal Considerations

### Waste treatment methods

#### Product waste

Dispose of content and/or container in accordance with local, regional, national, and/ or international regulations.

#### Packaging waste

Dispose of content and/or container in accordance with local, regional, national, and/ or international regulations.

## Section 14 - Transport Information

DOT, TDG, IMO/IMDG, IATA/ICAO Not regulated.

Special precautions for user None specified.

Transport in bulk according to Annex II of MARPO73/78 and the IBC Code No data available

## Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications None

State Right To Know					Inventory
Component	CAS	MA	NJ	PA	TSCA
Aluminum	7429-90-5	Yes	Yes	Yes	Yes
Pentane	109-66-0	Yes	Yes	Yes	Yes
Polyisocyanurate Foam	None	No	No	No	Yes

OSHA - Process Safety Management, Highly Hazardous Chemicals Not Listed

OSHA - Specifically Regulated Chemicals Not Listed

Clean Air Act (CAA) - 1990 Hazardous Air Pollutants Not Listed

CERCLA/SARA - Section 313 - Emission Reporting

Aluminum 7429-90-5 1.0 % de minimis concentration (dust or fume only)

California - Proposition 65 Not Listed

## Section 16 - Other Information

Preparation Date: 05/29/2015

Last Revision Date: 11/29/2016

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## Section 1: Identification

### Product identifier:

Product Name  
Thermasheath®-3

**Relevant identified uses of the substance or mixture and uses advised against**  
Recommended use  
Insulation Board

### Details of the supplier of the safety data sheet Manufacturer

Rmax Operating, LLC  
13524 Welch Road  
Dallas, TX 75244  
United States  
www.rmax.com  
Rmax@rmax.com  
Telephone (General) 972-387-4500

Emergency telephone number only:  
Call CHEMTREC  
Day or Night within USA and Canada:  
1-800-424-9300

## Section 2: Hazard Identification

### United States (US)

#### Classification of the substance or mixture

OSHA HCS 2012  
Not classified

#### Label elements

OSHA HCS 2012  
Hazard statements  
No label element(s) required

#### Other hazards

OSHA HCS 2012  
This product is not considered hazardous under the U.S. OSHA 29 CFR 1910.1200 Hazard Communication Standard.

## Section 3 - Composition/Information on Ingredients

**Substances**  
Material does not meet the criteria of a substance.

### Mixtures

Composition (varies with product thickness)				
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/ Directive
Polyisocyanurate Foam	None	99%	No data available	OSHA HCS 2012: Not Classified
Pentane	CAS:109-66-0	0% to 5%	Inhalation-Rat LC50 364 g/m <sup>3</sup> 4 Hour(s); Ingestion/Oral-Rat LD50 >2000 mg/kg	OSHA HCS 2012: Flam. Liq. 1; STOT SE 3: Narc.; Asp. Tox. 1
Aluminum Foil Laminations	None	1%	No data available	OSHA HCS 2012: Not Classified
Aluminum [ [< 1%]	CAS:7429-90-5	<0.01%	NDA No data available	OSHA HCS 2012: Exposure limits

## Section 4: First-Aid Measures

### Description of first aid measures

Inhalation  
First aid is not expected to be necessary if materials used under ordinary conditions and as

## Safety Data Sheet

recommended. If signs/symptoms develop, get medical attention.

**Skin** First aid is not expected to be necessary if materials used under ordinary conditions and as recommended. If signs/symptoms develop, get medical attention.

**Eye** In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If signs/symptoms develop, get medical attention.

**Ingestion** First aid is not expected to be necessary if materials used under ordinary conditions and as recommended.

### Most important symptoms and effects, both acute and delayed

Refer to Section 11 - Toxicological Information.

### Indication of any immediate medical attention and special treatment needed

**Notes to Physician** Immediate medical attention after exposure to this material not expected to be necessary. No special treatment indicated related to exposure to this material.

## Section 5: Fire-Fighting Measures

### Extinguishing media

**Suitable Extinguishing Media** LARGE FIRE: Water spray, fog or regular foam.  
SMALL FIRES: Dry chemical, CO2, water spray or regular foam.

**Unsuitable Extinguishing Media** None known

### Special hazards arising from the substance or mixture

**Unusual Fire and Explosion Hazards** Polyisocyanurate foam is combustible.

**Hazardous Combustion Products** Carbon dioxide and carbon monoxide

**Advice for fire fighters** Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Structural fire fighters' protective clothing will only provide limited protection.

## Section 6 - Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures

**Personal Precautions** No special precautions expected to be necessary if materials used under ordinary conditions and as recommended.

**Emergency Procedures** No emergency procedures are expected to be necessary if materials used under ordinary conditions as recommended.

**Environmental precautions** No special environmental precautions necessary.

### Methods and material for containment and cleaning up

**Containment/Clean-up Measures** Pick up pieces and vacuum clean dusts. If sweeping is necessary, use a dust suppressant.

## Section 7 - Handling and Storage

### Precautions for safe handling

## Safety Data Sheet

### Handling

Use only with adequate ventilation. Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Avoid breathing dusts generated during use of this material. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

### Conditions for safe storage, including any incompatibilities

#### Storage

Keep away from heat, sparks, and flame. Keep away from incompatible materials. Store in a cool, dry place.

## Section 8 - Exposure Controls/Personal Protection

### Control parameters

	Result	ACGIH	NIOSH	OSHA
Pentane (109-66-0)	TWAs	1000 ppm TWA (listed under Pentane, all isomers)	120 ppm TWA; 350 mg/m <sup>3</sup> TWA	1000 ppm TWA; 2950 mg/m <sup>3</sup> TWA
	Ceilings		610 ppm Ceiling (15 min); 1800 mg/m <sup>3</sup> Ceiling (15 min)	Not established
Aluminum (7429-90-5)	TWAs	1 mg/m <sup>3</sup> TWA (respirable fraction)	10 mg/m <sup>3</sup> TWA (total dust); 5 mg/m <sup>3</sup> TWA (respirable dust)	15 mg/m <sup>3</sup> TWA (total dust); 5 mg/m <sup>3</sup> TWA respirable fraction)

### Exposure controls

#### Engineering Measures/Controls

Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.

### Personal Protective Equipment

#### Respiratory

In case of insufficient ventilation, wear suitable respiratory equipment.

#### Eye/Face

Wear safety glasses or goggles

#### Skin/Body

No skin protection is ordinarily required under normal conditions of use. Protective puncture-resistant gloves and/or sleeves for handling rough-cut edges.

**Environmental Exposure Controls** Follow best practice for site management and disposal of waste.

#### Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

NIOSH = National Institute of Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

## Section 9 - Physical and Chemical Properties

### Information on Physical and Chemical Properties

Material Description			
Physical Form	Solid	Appearance/ Description	Rigid foam board with foil facers - various thicknesses.
Color	White/cream foam	Odor	Odorless
General Properties			
Boiling Point	Not relevant	Melting Point	No data available
Decomposition Temperature	No data available	pH	Not relevant
Specific Gravity/Relative Density	= 0.03 Water=1	Water Solubility	Not relevant
Volatility			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	No data available		
Flammability			
Flash Point	Not relevant	UEL	Not relevant
LEL	Not relevant	Auto ignition	No data available
Flammability (solid, gas)	No data available		

## Section 10: Stability and Reactivity

## Safety Data Sheet

<b>Reactivity</b>	No dangerous reaction known under conditions of normal use.
<b>Chemical stability</b>	Stable under normal temperatures and pressures.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization will not occur.
<b>Conditions to avoid</b>	Sources of flame and ignition.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Under normal conditions, hazardous decomposition will not occur. Thermal decomposition may emit fumes or gases, such as carbon monoxide, carbon dioxide.

## Section 11 - Toxicological Information

### Information on toxicological effects

Components		
Pentane (0% TO 5%)	109-66-0	Acute Toxicity: Ingestion/ Oral-Rat LD50 >2000 mg/kg; Inhalation-Rat LC50 364 g/m <sup>3</sup> 4 Hour(s)

### Potential Health Effects

#### Inhalation

Acute (Immediate) Exposure to dust may cause irritation.

#### Skin

Acute (Immediate) Causes mild skin irritation.

#### Eye

Acute (Immediate) Exposure to dust may cause mechanical irritation.

#### Ingestion

Acute (Immediate) Excessive concentrations of nuisance dust in the workplace may cause mechanical irritation to mucous membranes.

### Carcinogenic Effects

Glass, oxide, chemicals as Glass wool fiber

National Toxicology Program (NTP): reasonably anticipated to be Human Carcinogen

**Key to abbreviations**  
TD = Toxic Dose

## Section 12 - Ecological Information

**Toxicity and ecological data** No information available.

## Section 13 - Disposal Considerations

### Waste treatment methods

#### Product waste

Dispose of content and/or container in accordance with local, regional, national, and/ or international regulations.

#### Packaging waste

Dispose of content and/or container in accordance with local, regional, national, and/ or international regulations.



## Section 14 - Transport Information

DOT, TDG, IMO/IMDG, IATA/ICAO Not regulated.

Special precautions for user None specified.

Transport in bulk according to Annex II of MARPO73/78 and the IBC Code No data available

## Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications None

State Right To Know					Inventory
Component	CAS	MA	NJ	PA	TSCA
Aluminum	7429-90-5	Yes	Yes	Yes	Yes
Pentane	109-66-0	Yes	Yes	Yes	Yes
Polyisocyanurate Foam	None	No	No	No	Yes

OSHA - Process Safety Management, Highly Hazardous Chemicals Not Listed

OSHA - Specifically Regulated Chemicals Not Listed

Clean Air Act (CAA) - 1990 Hazardous Air Pollutants Not Listed

CERCLA/SARA - Section 313 - Emission Reporting

Aluminum 7429-90-5 1.0 % de minimis concentration (dust or fume only)

California - Proposition 65 Not Listed

## Section 16 - Other Information

Preparation Date: 05/29/2015

Last Revision Date: 11/29/2016

### Disclaimer/ Statement of Liability

The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any representation or warranty, express or implied, regarding its accuracy or correctness. The conditions or methods of handling, storage, use, and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with the handling, storage, use, or disposal of the product.

**I. PRODUCT IDENTIFICATION**

Trade Name: R-SEAL 3000  
Generic Name: Aluminum Tape

Manufacturer: Rmax Operating, LLC  
13524 Welch Road  
Dallas, Texas 75244

Telephone: 972-387-4500  
Email: Rmax@rmax.com  
Web Site: [www.rmax.com](http://www.rmax.com)

**II. HAZARDOUS COMPONENTS**

The above listed products may contain one or more hazardous chemical components. However, due to their incorporation into the structure of the products, exposure to such components is not anticipated under normal conditions of use. See section XVI for further discussion.

**III. DESCRIPTION OF HAZARDS**

Exposure to hazards of chemical components is not anticipated in normal use.  
MSDS for individual components are available from Rmax upon request by contacting Technical Service at the above number.

**IV. FIRST AID MEASURES**

Clean and dress wound if cut by product edge. There are no known acute, immediate effects requiring treatment as a result of the use of this product as supplied.

**V. FIRE-FIGHTING MEASURES**

All extinguishing chemicals and methods are applicable. Self-contained, positive pressure breathing apparatus should be used if available in fire conditions. Fire or very high temperatures (not normal conditions of use) can cause release of toxic smoke and fumes.

**VI. ACCIDENTAL RELEASE MEASURES**

Not applicable.

**VII. HANDLING AND STORAGE GUIDELINES**

Use care to avoid paper cuts from sheet edges. No other special handling or storage precautions apply in respect to potential hazards.

**VIII. EXPOSURE CONTROLS AND PERSONAL PROTECTION**

None required in normal use. Exercise care to avoid paper cuts from sheet edges.

**IX. PHYSICAL AND CHEMICAL PROPERTIES**

Product is a manufactured article in the form of a flexible sheet or strip.  
Contains some combination of two or more of the following major material components: paper, plastic film, aluminum foil, reinforcing yarn, adhesive.

**X. STABILITY AND REACTIVITY**

Hazardous decomposition will occur only under fire conditions. Various harmful compounds could be formed during combustion. No hazards associated with normal use.

**XI. TOXICOLOGICAL INFORMATION**

Although hazardous chemicals may be used in this product, exposure to those chemicals and possible hazardous effects will not occur with the product in this form, in normal use. MSDS for individual hazardous chemicals can be supplied upon request by contacting Technical Service at 972-387-4500.

**XII. ECOLOGICAL INFORMATION**

Although hazardous chemicals may be used in this product, exposure to those chemicals and possible hazardous effects will not occur with the product in this form, in normal use. MSDS for individual hazardous chemicals can be supplied upon request by contacting Technical Service at 972-387-4500.

**XIII. DISPOSAL CONSIDERATIONS**

Dispose of per appropriate local regulations. Product is not recyclable.

**XIV. TRANSPORT INFORMATION**

No special procedures required.

**XV. REGULATORY INFORMATION**

No known regulations apply.

**XVI. OTHER INFORMATION**

Per the Code of Federal Regulations 1910.1200, this product is considered by Rmax to be an *article*, defined in the regulation as “a manufactured item other than a fluid or particle: (i) which is formed to a specific shape or design during manufacture; (ii) has end use function(s) dependent in whole or in part upon its shape or design during end use; and (iii) which does not release more than very small quantities, e.g., minute or trace amounts of a hazardous chemical, and does not pose a physical hazard or health risk to employees.”

Although this product may contain hazardous components, we do not believe those hazards are present as manufactured or when used. Since the product meets the definition of an article, it is technically not subject to this regulation or MSDS reporting. This document is provided for informational purposes, and is not meant to imply that this product is hazardous.

**1. IDENTIFICATION OF PRODUCT AND OF THE COMPANY**

Trade Name: R-SEAL 6000-9, R-SEAL 6000-12  
Generic Name: Flashing Tape

Manufacturer: Rmax Operating, LLC  
13524 Welch Road  
Dallas, Texas 75244

Telephone: 972-387-4500  
Email: Rmax@rmax.com  
Web Site: [www.rmax.com](http://www.rmax.com)

**2. HAZARDS IDENTIFICATION**

**EU Main Hazards** Not classified as hazardous.

**Routes of Entry** Skin contact.

**Carcinogenic Status** See Section 11 for information.

**Target Organs** Skin.

**Health Effects**

**Eyes** Contact may cause irritation due to mechanical abrasion.

**Skin** Prolonged, repeated contact with adhesive may cause skin irritation.

**Ingestion** Not an expected route of entry during normal handling and use.

**Inhalation** Not an expected route of entry during normal handling and use.

**3. COMPOSITION/ INFORMATION ON INGREDIENTS**

Component Name	CAS#/ Codes	Concentration	R Phrases	Classification
Polymers & Resins	N.A.	<50%	None	None
Distillates (petroleum) Hydrotreated Light Naphthenic	64742-53-6 265-156-6	<10%	None	None
Distillates (petroleum) Hydrotreated Heavy Naphthenic	64742-52-5 265-155-0	<20%	R45	T, Carc. Cat. 2
Kaolin Clay	1332-58-7	<15%	None	None
Quartz	14808-60-7 238-878-4	<1%	None	None
Carbon Black	1333-86-4 215-609-9	<10%	None	None

**4. FIRST AID MEASURES**

**Eyes** Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention if soreness or redness persists.

**Skin** Wash skin thoroughly with soap and water. Obtain medical attention if blistering occurs or redness persists.

**Ingestion** Obtain medical attention immediately.

**Inhalation** Remove person to fresh air. Seek medical attention if symptoms persist.

**Advice to Physicians** Treat symptomatically.

**5. FIRE-FIGHTING MEASURES**

<b>Extinguishing Media</b>	Water spray, carbon dioxide and dry chemical.
<b>Unusual Fire and Explosion Hazards</b>	May release hazardous vapors during a fire.
<b>Protective Equipment for Fire-Fighting</b>	Wear full protective clothing and self-contained breathing apparatus.

**6. ACCIDENTAL RELEASE MEASURES**

No specific measures necessary. Prevent the material from entering drains or watercourses.

**7. HANDLING AND STORAGE**

Keep away from heat and sources of ignition. Storage area should be cool, dry, well ventilated, and away from incompatible materials.

**8. EXPOSURE CONTROLS/ PERSONAL PROTECTION**

<b>Occupational Exposure Standards</b>	Exposure limits are listed below, if they exist.
<b>Polymers &amp; Resins</b>	None established.
<b>Distillates (petroleum) Hydro-treated Light Naphthenic as Oil mist, mineral</b>	ACGIH TLV: 5 mg/m <sup>3</sup> , STEL: 10 mg/m <sup>3</sup>
<b>Distillates (petroleum) Hydro-treated Heavy Naphthenic as Oil mist, mineral</b>	ACGIH TLV: 5 mg/m <sup>3</sup> , STEL: 10 mg/m <sup>3</sup>
<b>Kaolin Clay</b>	8hr TWA: 2mg/m <sup>3</sup> , measured as respirable fraction of aerosol OSHA PEL: 15mg/m <sup>3</sup> total dust, 5mg/m <sup>3</sup> respirable fraction
<b>Carbon Black</b>	OSHA and ACGIH TLV: 3.5 mg/m <sup>3</sup>
<b>Quartz</b>	ACGIH TLV for Quartz (silica-crystalline) is 0.025 mg/m <sup>3</sup> measured as respirable fraction of the aerosol.
<b>Engineering Control Measures</b>	No specific measures necessary. Good general room ventilation is expected to be adequate to control airborne levels.
<b>Respiratory Protection</b>	Respiratory protection not normally required.
<b>Hand Protection</b>	Not required under normal conditions of use. However, care should be taken to avoid contact with the adhesive.
<b>Eye Protection</b>	Safety glasses.
<b>Body Protection</b>	Normal work wear.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical State</b>	Pressure sensitive adhesive coated on polymer backing with a disposable release coated liner.
<b>Color</b>	Black adhesive and light blue liner.
<b>Odor</b>	Slight.
<b>pH</b>	Not applicable.
<b>Specific Gravity</b>	No data available.
<b>Boiling Range/Point (°C/F)</b>	Not applicable.
<b>Melting Point (°C/F)</b>	Not applicable.
<b>Flash Point (PMCC) (°C/F)</b>	Not known.
<b>Explosion Limits (%)</b>	No data available.
<b>Vapor Pressure</b>	Not applicable.
<b>Density</b>	No data.
<b>Solubility in Water</b>	Not known.
<b>Vapor Density (Air = 1)</b>	Not applicable.

**10. STABILITY AND REACTIVITY**

<b>Stability</b>	Stable under normal conditions.
<b>Conditions to Avoid</b>	Heat; High temperatures.
<b>Materials to Avoid</b>	Acids; bases; oxidizers.
<b>Hazardous Polymerization</b>	Will not occur.
<b>Hazardous Decomposition Products</b>	Oxides of carbon; aromatic and aliphatic carbons; partially oxidized hydrocarbons; toxic gases and smoke; oxides of nitrogen; aldehydes; oligomers; waxes; oxygenated hydrocarbons; acrolein.

**11. TOXICOLOGICAL INFORMATION**

<b>Acute Toxicity</b>	Low order of acute toxicity.
<b>Chronic Toxicity/ Carcinogenicity</b>	<p>Carbon Black is classified by IARC: Group 2B possible human carcinogen. When encapsulated in the adhesive matrix, the risk of exposure is reduced.</p> <p>For "inhalable" crystalline silica (quartz): IARC Overall Evaluation is 1 (carcinogenic to humans), the quartz in this formulation is in an adhesive matrix and is not expected to be "inhalable".</p>
<b>Genotoxicity</b>	This product is not expected to cause any mutagenic effects.
<b>Reproductive/ Developmental Toxicity</b>	This product is not expected to cause adverse reproductive effects.

**12. ECOLOGICAL INFORMATION**

<b>Mobility</b>	No relevant studies identified.
<b>Persistence/ Degradability</b>	No relevant studies identified.
<b>Bio-accumulation</b>	No relevant studies identified.
<b>Ecotoxicity</b>	The product may be harmful to aquatic organisms.

**13. DISPOSAL CONSIDERATIONS**

Dispose of in accordance with all applicable local and national regulations.

**14. TRANSPORT INFORMATION**

<b>DOT CFR 172.101 Data</b>	Not Regulated
<b>UN Proper Shipping Name</b>	Not Regulated
<b>UN Class</b>	None.
<b>UN Number</b>	None.
<b>UN Packaging Group</b>	None.
<b>Classification for Air Transportation</b>	Consult current International Air Transport Association (IATA) Regulations prior to shipping.

**15. REGULATORY INFORMATION**

**EU Label Information:** Classification and labeling have been performed according to EU directives 67/548/EEC and 99/45/EC including amendments (2001/60/EC and 2006/8/EC).

<b>EC Annex I Classification</b>	According to EC Commission Directive 67/548/EEC this product is not Classified.
<b>R phrases</b>	None.
<b>S phrases</b>	None.

**US Regulations (Federal, State) and International Chemical Registration Laws**

<b>TSCA Listing</b>	This product contains ingredients that are listed on or exempt from listing on the EPA Toxic Substance Control Act Chemical (TSCA) Inventory.
<b>EINECS Listing</b>	All ingredients in this product are listed on the European Inventory of Existing Commercial Chemical Substances (EINECS) or are exempt from listing.
<b>DSL (Canadian) Listing</b>	All ingredients in this product are listed on the Domestic Substance List (DSL).
<b>California Proposition 65</b>	This product contains the following materials which the State of California has found to cause cancer, birth defects or other reproductive harm: Quartz (14808-60-7); Carbon Black (1333-86-4).
<b>SARA Title III Sect. 311/312 Categorization</b>	Immediate (acute).
<b>SARA Title III Sect. 313</b>	This product contains the following chemicals that are listed in Section 313 at or above de minimis concentrations: None.

**16. OTHER INFORMATION****NFPA Ratings**

Flammability - 0

Health - 1

Reactivity - 0

Special Hazards - 0

**HMIS Ratings**

Flammability - 0

Health - 1

Reactivity - 0

Personal Protection - See  
Section 8**Abbreviations****ACGIH** American Conference of Governmental  
Industrial Hygienists**NTP** National Toxicology Program**BOD** Biological Oxygen Demand**OSHA** Occupational Safety and Health  
Administration**CAS#** Chemical Abstracts Service Number**PEL** Permissible Exposure Limit**HMIS** Hazardous Materials Identification System**R** Risk**IARC** International Agency for Research on  
Cancer**R45** May cause cancer.**KoC** Soil Organic Carbon Partition Coefficient**S** Safety**LC50** Lethal Concentration 50%**STEL** Short Term Exposure Limit**LD50** Lethal Dose 50%**T** Toxic**NFPA** National Fire Protection Association**TLV** Threshold Limit Value**For further information email:** [rmax@rmax.com](mailto:rmax@rmax.com)**Prepared By:** Rmax Operating, LLC

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# SAFETY DATA SHEET

## THE DOW CHEMICAL COMPANY

**Product name:** STYROFOAM™ CAVITYMATE™ Plus 3.00 x 16  
Inch Premium Cavity Wall Extruded Foam Insulation

**Issue Date:** 09/04/2015

**Print Date:** 09/07/2015

THE DOW CHEMICAL COMPANY encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

### 1. IDENTIFICATION

**Product name:** STYROFOAM™ CAVITYMATE™ Plus 3.00 x 16 Inch Premium Cavity Wall Extruded Foam Insulation

**Recommended use of the chemical and restrictions on use**

**Identified uses:** Thermal insulation.

#### COMPANY IDENTIFICATION

THE DOW CHEMICAL COMPANY  
2030 WILLARD H DOW CENTER  
MIDLAND MI 48674-0000  
UNITED STATES

**Customer Information Number:**

800-258-2436  
SDSQuestion@dow.com

#### EMERGENCY TELEPHONE NUMBER

**24-Hour Emergency Contact:** 800-424-9300

**Local Emergency Contact:** 800-424-9300

### 2. HAZARDS IDENTIFICATION

#### Hazard classification

This material is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

#### Other hazards

No data available

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical nature:** Construction and composite applications

This product is an article.

**Component**

**CASRN**

**Concentration**

2-Propenenitrile, polymer with ethenylbenzene	9003-54-7	> 60.0 - < 100.0 %
Styrene, polymers	9003-53-6	<= 10.0 %
1,1,1,2-Tetrafluoroethane	811-97-2	>= 5.0 - <= 10.0 %

*Note*

Extruded polystyrene foam containing a halogenated flame retardant system.

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## **4. FIRST AID MEASURES**

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### **Description of first aid measures**

**General advice:** If potential for exposure exists refer to Section 8 for specific personal protective equipment.

**Inhalation:** Move person to fresh air; if effects occur, consult a physician.

**Skin contact:** Wash off with plenty of water.

**Eye contact:** Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

**Ingestion:** No emergency medical treatment necessary.

**Most important symptoms and effects, both acute and delayed:** Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

### **Indication of any immediate medical attention and special treatment needed**

**Notes to physician:** No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

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## **5. FIREFIGHTING MEASURES**

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**Suitable extinguishing media:** Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam.

**Unsuitable extinguishing media:** No data available

### **Special hazards arising from the substance or mixture**

**Hazardous combustion products:** During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. In smoldering or flaming conditions, carbon monoxide, carbon dioxide and carbon are generated. Combustion products may include and are not limited to: Hydrogen halides. Based on combustion toxicity testing, the effects of combustion from this foam are not more acutely toxic than the effects of combustion from common building materials such as wood.

**Unusual Fire and Explosion Hazards:** Mechanical cutting, grinding or sawing can cause formation of dusts. To reduce the potential for dust explosion, do not permit dust to accumulate. This product contains a flame retardant to inhibit accidental ignition from small fire sources. This plastic foam product is combustible and should be protected from flames and other high heat sources. For more information, contact Dow. Dense smoke is produced when product burns.

**Advice for firefighters**

**Fire Fighting Procedures:** Keep people away. Isolate fire and deny unnecessary entry. Soak thoroughly with water to cool and prevent re-ignition. If material is molten, do not apply direct waterstream. Use fine water spray or foam. Cool surroundings with water to localize fire zone.

**Special protective equipment for firefighters:** Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

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## **6. ACCIDENTAL RELEASE MEASURES**

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**Personal precautions, protective equipment and emergency procedures:** Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

**Environmental precautions:** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

**Methods and materials for containment and cleaning up:** Contain spilled material if possible. Collect in suitable and properly labeled containers. See Section 13, Disposal Considerations, for additional information.

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## **7. HANDLING AND STORAGE**

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**Precautions for safe handling:** Fabrication methods which involve cutting into this product may release the blowing agent(s) remaining in the cells. Use ventilation adequate to keep exposures below recommended exposure limits. See the safety datasheet. Do not enter confined spaces unless adequately ventilated. Mechanical cutting, grinding or sawing can cause formation of dusts. To reduce the potential for dust explosion, do not permit dust to accumulate. This product is combustible and may constitute a fire hazard if improperly used or installed. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

**Conditions for safe storage:** When large quantities of this product are stored or fabricated, blowing agents may be released. Released blowing agents may thermally decompose to form gases which may accelerate corrosion or rust formation of heaters, boilers, gas fired recirculating air furnaces or heaters, or gas water heaters.

**Storage stability**

**Shelf life: Use within** 360 Month

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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### Control parameters

Exposure limits are listed below, if they exist.

Component	Regulation	Type of listing	Value/Notation
1,1,1,2-Tetrafluoroethane	US WEEL	TWA	1,000 ppm

Concentrations of the blowing agents anticipated incidental to proper handling are expected to be well below those which cause acute inhalation effects and below exposure guidelines.

### Exposure controls

**Engineering controls:** Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

### Individual protection measures

**Eye/face protection:** Eye protection should not be necessary. For fabrication operations safety glasses (with side shields) are recommended. If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.

#### Skin protection

**Hand protection:** Use gloves to protect from mechanical injury. Selection of gloves will depend on the task.

**Other protection:** No precautions other than clean body-covering clothing should be needed.

**Respiratory protection:** Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. In dusty or misty atmospheres, use an approved particulate respirator. When respiratory protection is required for certain operations, including but not limited to saw, router or hot-wire cutting, use an approved air-purifying respirator.

The following should be effective types of air-purifying respirators: Organic vapor cartridge with a particulate pre-filter.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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### Appearance

Physical state	Board
Color	Blue
Odor	None
Odor Threshold	Odorless
pH	Not applicable
Melting point/range	90 - 130 °C ( 194 - 266 °F) <i>Estimated.</i>
Freezing point	Not applicable
Boiling point (760 mmHg)	Not applicable
Flash point	<b>closed cup</b> Not applicable

Evaporation Rate (Butyl Acetate = 1)	Not applicable
Flammability (solid, gas)	Not expected to form explosive dust-air mixtures.
Lower explosion limit	Not applicable
Upper explosion limit	Not applicable
Vapor Pressure	Not applicable
Relative Vapor Density (air = 1)	Not applicable
Relative Density (water = 1)	0.027 - 0.064 <i>Estimated.</i>
Water solubility	Insoluble in water
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	354 °C (669 °F) <i>ASTM D1929</i>
Decomposition temperature	No test data available
Kinematic Viscosity	Not applicable
Explosive properties	No
Oxidizing properties	No
Molecular weight	No test data available

NOTE: The physical data presented above are typical values and should not be construed as a specification.

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## 10. STABILITY AND REACTIVITY

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**Reactivity:** No dangerous reaction known under conditions of normal use.

**Chemical stability:** Thermally stable at typical use temperatures.

**Possibility of hazardous reactions:** Polymerization will not occur.

**Conditions to avoid:** Avoid temperatures above 300°C (572°F) Exposure to elevated temperatures can cause product to decompose. Avoid direct sunlight.

**Incompatible materials:** Avoid contact with oxidizing materials. Avoid contact with: Aldehydes. Amines. Esters. Liquid fuels. Organic solvents.

**Hazardous decomposition products:** Does not normally decompose. Evolution of small amounts of hydrogen halides occur when heated over 250°C (482°F). Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Aromatic compounds. Aldehydes. Ethylbenzene. Hydrogen halides. Polymer fragments. Styrene. Under high heat, non-flaming conditions, small amounts of aromatic hydrocarbons such as styrene and ethylbenzene are generated.

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## 11. TOXICOLOGICAL INFORMATION

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*Toxicological information appears in this section when such data is available.*

**Acute toxicity**

**Acute oral toxicity**

Swallowing is unlikely because of the physical state. Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.

As product: Single dose oral LD50 has not been determined.

**Acute dermal toxicity**

Skin absorption is unlikely due to physical properties.

As product: The dermal LD50 has not been determined.

**Acute inhalation toxicity**

Dust may cause irritation to upper respiratory tract (nose and throat). Fumes/vapors released during thermal operations such as hot wire cutting may cause respiratory irritation.

Concentrations of the blowing agents anticipated incidental to proper handling are expected to be well below those which cause acute inhalation effects and below exposure guidelines.

The LC50 has not been determined.,

**Skin corrosion/irritation**

Essentially nonirritating to skin.

Mechanical injury only.

**Serious eye damage/eye irritation**

Solid or dust may cause irritation or corneal injury due to mechanical action.

Fumes/vapor released during thermal operations such as hot-wire cutting may cause eye irritation.

**Sensitization**

Relevant data not available.

For respiratory sensitization:

Relevant data not available.

**Specific Target Organ Systemic Toxicity (Single Exposure)**

Available data are inadequate to determine single exposure specific target organ toxicity.

**Specific Target Organ Systemic Toxicity (Repeated Exposure)**

Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

Additives are encapsulated in the product and are not expected to be released under normal processing conditions or foreseeable emergency.

**Carcinogenicity**

Relevant data not available.

**Teratogenicity**

Contains a component(s) that is/are encapsulated in the product and are not expected to be released under normal processing conditions or foreseeable emergency

**Reproductive toxicity**

Contains a component(s) that is/are encapsulated in the product and are not expected to be released under normal processing conditions or foreseeable emergency

**Mutagenicity**

Relevant data not available.

**Aspiration Hazard**

Based on physical properties, not likely to be an aspiration hazard.

**COMPONENTS INFLUENCING TOXICOLOGY:**

**2-Propenenitrile, polymer with ethenylbenzene**

**Acute oral toxicity**

LD50, Rat, > 5,000 mg/kg Estimated.

**Acute dermal toxicity**

The dermal LD50 has not been determined.

For similar material(s): LD50, Rabbit, > 2,000 mg/kg Estimated.

**Styrene, polymers**

**Acute oral toxicity**

Single dose oral LD50 has not been determined.

**Acute dermal toxicity**

The dermal LD50 has not been determined.

**1,1,1,2-Tetrafluoroethane**

**Acute oral toxicity**

Single dose oral LD50 has not been determined.

**Acute dermal toxicity**

The dermal LD50 has not been determined.

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## **12. ECOLOGICAL INFORMATION**

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*Ecotoxicological information appears in this section when such data is available.*

**Toxicity**

**Acute toxicity to fish**

Not expected to be acutely toxic to aquatic organisms.

**Persistence and degradability**

**Biodegradability:** Surface photodegradation is expected with exposure to sunlight. No appreciable biodegradation is expected. 1,1,1,2-tetrafluoroethane (HFC-134a) remains in the foam and diffuses out slowly, most of it degrading in the troposphere to CO<sub>2</sub> and HF. 1,1,1,2-Tetrafluoroethane (HFC-134a) has a stratospheric ozone depletion potential (ODP) of zero, relative to CFC 12 (ODP=1).

**Bioaccumulative potential**

**Bioaccumulation:** No bioconcentration is expected because of the relatively high molecular weight (MW greater than 1000).

**Mobility in soil**

In the terrestrial environment, material is expected to remain in the soil.

In the aquatic environment, material is expected to float.

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### **13. DISPOSAL CONSIDERATIONS**

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**Disposal methods:** DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. AS YOUR SUPPLIER, WE HAVE NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION: Composition Information. FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: Recycler. Reclaimer. Landfill. Incinerator or other thermal destruction device.

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### **14. TRANSPORT INFORMATION**

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**DOT**

Not regulated for transport

**Classification for SEA transport (IMO-IMDG):**

**Transport in bulk  
according to Annex I or II  
of MARPOL 73/78 and the  
IBC or IGC Code**

Not regulated for transport

Consult IMO regulations before transporting ocean bulk

**Classification for AIR transport (IATA/ICAO):**

Not regulated for transport

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

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### **15. REGULATORY INFORMATION**

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**OSHA Hazard Communication Standard**

This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.



**Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312**

This product is not a hazardous chemical under 29CFR 1910.1200, and therefore is not covered by Title III of SARA.

**Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**Pennsylvania Worker and Community Right-To-Know Act:**

To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

**California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)**

This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

**United States TSCA Inventory (TSCA)**

The product meets the definition of an article and is exempt from inventory requirements.

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## **16. OTHER INFORMATION**

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**Revision**

Identification Number: 101195574 / A001 / Issue Date: 09/04/2015 / Version: 11.0

Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

**Legend**

TWA	8-hr TWA
US WEEL	USA. Workplace Environmental Exposure Levels (WEEL)

**Information Source and References**

This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

THE DOW CHEMICAL COMPANY urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other

than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.

## **Field Material Safety Data Sheet Index**

### **Spray Texture, Joint Compounds, Taping & Sanding**

1. National Joint Tape
2. National Multi-Flex Tape
3. National Fiberglass Tape
4. National Fast Setting Joint Compounds
5. National Ready Mix Joint Compounds
6. National Spray Texture Products
7. National E2XP Abuse & Impact Resistant
8. USG Fiberglass Tape
9. USG Joint Tape
10. USG Flex Tape
11. USG Metal Corner Bead
12. USG Metal Beads & Trim
13. USG Lightweight Setting Compound
14. USG Durabond Regular Setting Compound
15. USG Plus 3 All Purpose
16. USG All Purpose
17. USG Topping
18. USG Spray Texture
19. USG Acoustical Sealant
20. USG Ceiling Spray Texture
21. USG Tuff-Hide Primer
22. GP ToughRock All Purpose Powder Compound
23. GP Ceiling Spray Texture

- 24. GP Ready-Mix All Purpose
- 25. GP ToughRock Lightweight Ready-Mix Compound
- 26. GP Sandable Setting Compound
- 27. GP Regular Setting Compound
- 28. Trim-Tex (Tear Away Bead)

**Section 1: Product and Company Identification****Product Name**

Gypsum Board Paper and Joint Tape

**Product Identifiers**

*Gypsum Board Paper*

*75' Joint Tape*

*250' Joint Tape*

*500' Joint Tape*

**Other means of identification**

Wallboard/drywall paper, Drywall tape

**Recommended Use**

Gypsum Board paper is used for face and back of gypsum board to encase various gypsum cores. Joint tape is used to reinforce gypsum board joints. Use per manufacturer's recommendations

**Restrictions on Use**

None

**Manufacturer/Supplier Details**

National Gypsum Company

2001 Rexford Road

Charlotte, NC 28211

**Emergency Telephone Number**

Director Quality Services

(704) 551-5820 - 24 Hour Emergency Response

Website: [www.nationalgypsum.com](http://www.nationalgypsum.com)

**Section 2: Hazards Identification****United States (US)**

According to OSHA 29CFR 1910.1200 (HCS)

**GHS Classification of the substance or mixture**

Not classified

**GHS Label Elements**

**Pictogram** None

**Signal Word** None

**Hazard Statements** None

**Precautionary Statements****Prevention**

Use engineering controls and wet methods to minimize dust.

**Response**

If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if exposed or concerned.

**Storage**

Keep dry to preserve usefulness.

**Disposal**

Dispose of material in accordance with federal, state, and local regulations.

### Section 3: Composition/Information on Ingredients

Chemical Name	Common name/ Synonym	Identifiers CAS Number	% (weight)	Impurities
Cellulose	Paper fiber	9004-34-6	<95	

### Section 4: First-Aid Measures

**Inhalation** Inhalation exposure is unlikely.

**Eye contact** Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes.  
Remove contact lenses (if applicable). Seek medical attention if irritation persists.

**Skin contact** Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present. Seek medical attention if irritation persists.

**Ingestion** Not expected to occur. Seek medical attention if ingested.

**Medical Conditions aggravated by exposure**

Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

### Section 5: Fire-Fighting Measures

**Extinguishing Media**

Dry chemical, foam, water, or extinguishing media appropriate for surrounding fire.

**Unusual Fire and Explosion Hazards**

Material poses no fire-related hazard.

**Special hazards arising from the mixture**

None known

**Special Protective Equipment and Precautions for Firefighters**

A SCBA is recommended to limit exposures to combustion products when fighting any fire.

### Section 6: Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures**

No special precautions required.

General recommendations:

Wear appropriate Personal Protective Equipment. (See Section 8)

**Environmental precautions**

This product does not present an ecological hazard to the environment.

Dispose of in accordance with applicable federal, state, and local regulations.

**Methods and materials for containment and cleaning up**

No specific clean-up procedures necessary. Pick up unused product to prevent tripping hazard.

### Section 7: Handling and Storage

**Precautions for safe handling**

Minimize generation of dust.

Provide appropriate exhaust ventilation at places where dust is formed.

Avoid contact with eyes, skin and clothing.

Wear recommended personal protective equipment when handling. (See Section 8)

**Conditions for safe storage, including any incompatibilities**

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

## Section 8: Exposure Controls/Personal Protection

### Control Parameters

Component	Exposure Limits	
	OSHA PEL (mg/m3)	ACGIH TLV (mg/m3)
Cellulose	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>

T- Total Dust

R- Respirable Dust

### Exposure Controls

#### Appropriate Engineering Controls

Work/Hygiene Practices: Utilize methods to minimize dust production.

Ventilation: Not required

#### Personal Protective Equipment

##### Respiratory Protection

None required

##### Eye Protection

Safety glasses or goggles.

##### Skin

Gloves, protective clothing and/or barrier creams may be utilized if conditions warrant.

## Section 9: Physical and Chemical Properties

- (a) **Appearance:** White/gray solid paper
- (b) **Odor:** None
- (c) **Odor threshold:** Not available
- (d) **pH :** Not available
- (e) **Melting point/freezing point:** Not Available
- (f) **Initial boiling point and boiling range:** Not Available
- (g) **Flash point:** Not available
- (h) **Evaporation rate:** Not available
- (i) **Flammability (solid, gas):** Not flammable
- (j) **Upper/lower flammability or explosive limits:** Not available
- (k) **Vapor pressure:** Not available
- (l) **Vapor density:** Not available
- (m) **Relative density:** Not available
- (n) **Solubility(ies):** Not available
- (o) **Partition coefficient: n-octanol/water:** Not available
- (p) **Auto-ignition temperature:** Not available
- (q) **Decomposition temperature:** Not available
- (r) **Viscosity:** Not available
- (s) **Volatile organic compound (VOC) content:** None

## Section 10: Stability and Reactivity

- (a) **Reactivity:** No data available
- (b) **Chemical stability:** Stable in dry environments
- (c) **Possibility of hazardous reactions:** None known
- (d) **Conditions to avoid (e.g., static discharge, shock, or vibration):** None known
- (e) **Incompatible materials:** None known.
- (f) **Hazardous decomposition products:** None known.

## Section 11: Toxicological Information

### Information on Toxicological effects

#### Information on likely routes of exposure

<b>Ingestion</b>	Not a likely route of exposure.
<b>Inhalation</b>	Not a likely route of exposure.
<b>Skin contact</b>	Possible temporary irritation.
<b>Eye contact</b>	Possible mechanical irritation.

### Symptoms related to the physical, chemical and toxicological characteristics

Prolonged skin contact may result in temporary irritation.

#### Toxicological data

No toxicological data is available for this product. Toxicological information for components of this product listed below.

<b>Acute toxicity</b>	Not available
<b>Skin corrosion/irritation</b>	Not available
<b>Serious eye damage/eye irritation</b>	Not available
<b>Skin sensitization</b>	Not available
<b>Respiratory sensitization</b>	Not available
<b>Sensitization</b>	Not available
<b>Mutagenicity</b>	Not available
<b>Carcinogenicity</b>	Not available
<b>Reproductive effects</b>	Not available
<b>Specific target organ toxicity – single exposure</b>	Not available
<b>Aspiration toxicity</b>	Not available

## Section 12: Ecological Information

**(a) Ecotoxicity (aquatic and terrestrial, where available):** This product does not present an ecological hazard to the environment.

**(b) Persistence and degradability:** Unknown

**(c) Bioaccumulative potential:** None known

**(d) Mobility in soil:** Unknown

**(e) Other adverse effects (such as hazardous to the ozone layer):** None known

## Section 13: Disposal Considerations

This material is not considered a hazardous waste. Dispose of according to Local, State, Federal, and Provincial Environmental Regulations.

## Section 14: Transport Information

This product is not a DOT hazardous material

Shipping Name: Same as product name

ICAO/IATA/IMO: Not applicable

## Section 15: Regulatory Information

All ingredients are included on the TSCA inventory.

### Federal Regulations

**SARA Title III:** Not listed under Sections 302, 304, and 313

**CERCLA:** Not listed

**RCRA:** Not listed

**OSHA:** Not listed



## Section 15: Regulatory Information (Continued)

### State Regulations

California Prop 65: Not listed

### Canada WHMIS

All components of this product are included in the Canadian Domestic Substances List (DSL).

## Section 16: Other Information

**SDS Prepared by:** National Gypsum Company  
2001 Rexford Road  
Charlotte, NC 28211

**Phone Number:** (704) 551-5820

**Date of Preparation:** March 6, 2015

### Revision indicators and Date

Effective Date Change: 6/1/2015

Supersedes: July 1, 2009

Format Changes: Conforms to OSHA 29CFR 1910.1200 (HCS)

### Key to Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Services Number
CFR	Code of Federal Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
HEPA	High Efficiency Particulate Air
HCS	Hazard Communications Standard
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This safety data sheet was prepared to comply with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

### Disclaimer of Liability:

As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of the material. Information contained herein is believed to be true and accurate, but all statements or suggestions are made without any warranty, express or implied, regarding accuracy of the information, the hazards connected with the use of the material, or the results to be obtained for the use thereof.

**Section 1: Product and Company Identification****Product Name**

Multi-Flex Tape

**Product Identifiers**

*Proform Multi-Flex Tape*

**Other means of identification**

Drywall tape

**Recommended Use**

A combination of paper joint tape with laminated metal strips used to form an outside or inside corner for gypsum board finishing. Use per manufacturer's recommendations

**Restrictions on Use**

None

**Manufacturer/Supplier Details**

National Gypsum Company  
2001 Rexford Road  
Charlotte, NC 28211

**Emergency Telephone Number**

Director Quality Services  
(704) 551-5820 - 24 Hour Emergency Response  
Website: [www.nationalgypsum.com](http://www.nationalgypsum.com)

**Section 2: Hazards Identification****United States (US)**

According to OSHA 29CFR 1910.1200 (HCS)

**GHS Classification of the substance or mixture**

Not classified

**GHS Label Elements**

<b>Pictogram</b>	None
<b>Signal Word</b>	None
<b>Hazard Statements</b>	None

**Precautionary Statements****Prevention**

Use engineering controls and wet methods to minimize dust.

**Response**

If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if exposed or concerned.

**Storage**

Keep dry to preserve usefulness.

**Disposal**

Dispose of material in accordance with federal, state, and local regulations.

### Section 3: Composition/Information on Ingredients

Chemical Name	Common name/ Synonym	Identifiers CAS Number	% (weight)	Impurities
Cellulose	Paper fiber	9004-34-6	<95	

### Section 4: First-Aid Measures

**Inhalation** Inhalation exposure is unlikely.

**Eye contact** Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes.  
Remove contact lenses (if applicable). Seek medical attention if irritation persists.

**Skin contact** Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present. Seek medical attention if irritation persists.

**Ingestion** Not expected to occur. Seek medical attention if ingested.

**Medical Conditions aggravated by exposure**  
Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

### Section 5: Fire-Fighting Measures

**Extinguishing Media**  
Dry chemical, foam, water, or extinguishing media appropriate for surrounding fire.

**Unusual Fire and Explosion Hazards**  
Material poses no fire-related hazard.

**Special hazards arising from the mixture**  
None known

**Special Protective Equipment and Precautions for Firefighters**  
A SCBA is recommended to limit exposures to combustion products when fighting any fire.

### Section 6: Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures**  
No special precautions required.  
General recommendations:  
Wear appropriate Personal Protective Equipment. (See Section 8)

**Environmental precautions**  
This product does not present an ecological hazard to the environment.  
Dispose of in accordance with applicable federal, state, and local regulations.

**Methods and materials for containment and cleaning up**  
No specific clean-up procedures necessary. Pick up unused product to prevent tripping hazard.

### Section 7: Handling and Storage

**Precautions for safe handling**  
Minimize generation of dust.  
Provide appropriate exhaust ventilation at places where dust is formed.  
Avoid contact with eyes, skin and clothing.  
Wear recommended personal protective equipment when handling. (See Section 8)

**Conditions for safe storage, including any incompatibilities**  
Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

## Section 8: Exposure Controls/Personal Protection

### Control Parameters

Component	Exposure Limits	
	OSHA PEL (mg/m3)	ACGIH TLV (mg/m3)
Cellulose	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>

T- Total Dust

R- Respirable Dust

### Exposure Controls

#### Appropriate Engineering Controls

Work/Hygiene Practices: Utilize methods to minimize dust production.

Ventilation: Not required

#### Personal Protective Equipment

##### Respiratory Protection

None required

##### Eye Protection

Safety glasses or goggles.

##### Skin

Gloves, protective clothing and/or barrier creams may be utilized if conditions warrant.

## Section 9: Physical and Chemical Properties

- (a) **Appearance:** White/gray solid paper
- (b) **Odor:** None
- (c) **Odor threshold:** Not available
- (d) **pH :** Not available
- (e) **Melting point/freezing point:** Not Available
- (f) **Initial boiling point and boiling range:** Not Available
- (g) **Flash point:** Not available
- (h) **Evaporation rate:** Not available
- (i) **Flammability (solid, gas):** Not flammable
- (j) **Upper/lower flammability or explosive limits:** Not available
- (k) **Vapor pressure:** Not available
- (l) **Vapor density:** Not available
- (m) **Relative density:** Not available
- (n) **Solubility(ies):** Not available
- (o) **Partition coefficient: n-octanol/water:** Not available
- (p) **Auto-ignition temperature:** Not available
- (q) **Decomposition temperature:** Not available
- (r) **Viscosity:** Not available
- (s) **Volatile organic compound (VOC) content:** None

## Section 10: Stability and Reactivity

- (a) **Reactivity:** No data available
- (b) **Chemical stability:** Stable in dry environments
- (c) **Possibility of hazardous reactions:** None known
- (d) **Conditions to avoid (e.g., static discharge, shock, or vibration):** None known
- (e) **Incompatible materials:** None known.
- (f) **Hazardous decomposition products:** None known.

## Section 11: Toxicological Information

### Information on Toxicological effects

#### Information on likely routes of exposure

<b>Ingestion</b>	Not a likely route of exposure.
<b>Inhalation</b>	Not a likely route of exposure.
<b>Skin contact</b>	Possible temporary irritation.
<b>Eye contact</b>	Possible mechanical irritation.

#### Symptoms related to the physical, chemical and toxicological characteristics

Prolonged skin contact may result in temporary irritation.

#### Toxicological data

No toxicological data is available for this product. Toxicological information for components of this product listed below.

<b>Acute toxicity</b>	Not available
<b>Skin corrosion/irritation</b>	Not available
<b>Serious eye damage/eye irritation</b>	Not available
<b>Skin sensitization</b>	Not available
<b>Respiratory sensitization</b>	Not available
<b>Sensitization</b>	Not available
<b>Mutagenicity</b>	Not available
<b>Carcinogenicity</b>	Not available
<b>Reproductive effects</b>	Not available
<b>Specific target organ toxicity – single exposure</b>	Not available
<b>Aspiration toxicity</b>	Not available

## Section 12: Ecological Information

**(a) Ecotoxicity (aquatic and terrestrial, where available):** This product does not present an ecological hazard to the environment.

**(b) Persistence and degradability:** Unknown

**(c) Bioaccumulative potential:** None known

**(d) Mobility in soil:** Unknown

**(e) Other adverse effects (such as hazardous to the ozone layer):** None known

## Section 13: Disposal Considerations

This material is not considered a hazardous waste. Dispose of according to Local, State, Federal, and Provincial Environmental Regulations.

## Section 14: Transport Information

This product is not a DOT hazardous material

Shipping Name: Same as product name

ICAO/IATA/IMO: Not applicable

## Section 15: Regulatory Information

All ingredients are included on the TSCA inventory.

#### Federal Regulations

**SARA Title III:** Not listed under Sections 302, 304, and 313

**CERCLA:** Not listed

**RCRA:** Not listed

**OSHA:** Not listed

**State Regulations**

California Prop 65: Not listed

**Canada WHMIS**

All components of this product are included in the Canadian Domestic Substances List (DSL).

**Section 16: Other Information**

**SDS Prepared by:** National Gypsum Company  
2001 Rexford Road  
Charlotte, NC 28211

**Phone Number:** (704) 551-5820

**Date of Preparation:** March 6, 2015

**Revision indicators and Date**

Effective Date Change: 6/1/2015

Supersedes: October 27, 2009

Format Changes: Conforms to OSHA 29CFR 1910.1200 (HCS)

**Key to Abbreviations**

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Services Number
CFR	Code of Federal Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
HEPA	High Efficiency Particulate Air
HCS	Hazard Communications Standard
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This safety data sheet was prepared to comply with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Disclaimer of Liability:**

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**Section 1: Product and Company Identification****Product Name**

Fiberglass Mesh Tape

**Product Identifiers**

*ProForm® BRAND Fiberglass Mesh Tape, 1.9" wide, self-adhering*

*KAL-MESH Fiberglass Mesh Tape, for Veneer Plaster Systems, Non-Adhesive*

**Other means of identification**

Drywall tape

**Recommended Use**

ProForm® Fiberglass Mesh Tape is a self-adhering fiberglass mesh tape used to conceal and reinforce wallboard joints. It can be used with Quick Set, FasTrack, and other setting-type joint compounds. Use per manufacturer's recommendations.

**Restrictions on Use**

None

**Manufacturer/Supplier Details**

National Gypsum Company

2001 Rexford Road

Charlotte, NC 28211

**Emergency Telephone Number**

Director Quality Services

(704) 551-5820 - 24 Hour Emergency Response

Website: [www.nationalgypsum.com](http://www.nationalgypsum.com)

**Section 2: Hazards Identification****United States (US)**

According to OSHA 29CFR 1910.1200 (HCS)

**GHS Classification of the substance or mixture**

Not classified

**GHS Label Elements**

**Pictogram** None

**Signal Word** None

**Hazard Statements** None

**Precautionary Statements****Prevention**

Use engineering controls and wet methods to minimize dust.

**Response**

If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Get medical attention if exposed or concerned.

**Storage**

Keep dry to preserve usefulness.

**Disposal**

Dispose of material in accordance with federal, state, and local regulations.

### Section 3: Composition/Information on Ingredients

Chemical Name	Common name/ Synonym	Identifiers CAS Number	% (weight)	Impurities
Oxides of silicon, aluminum, and calcium, fused in an amorphous vitreous state.	Continuous filament glass fiber, Fiberglass textile	65997-17-3	<99	

### Section 4: First-Aid Measures

<b>Inhalation</b>	Inhalation exposure is unlikely.
<b>Eye contact</b>	Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes. Remove contact lenses (if applicable). Seek medical attention if irritation persists.
<b>Skin contact</b>	Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present. Seek medical attention if irritation persists.
<b>Ingestion</b>	Not expected to occur. Seek medical attention if ingested.

#### Medical Conditions aggravated by exposure

Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

### Section 5: Fire-Fighting Measures

#### Extinguishing Media

Dry chemical, foam, water, or extinguishing media appropriate for surrounding fire.

#### Unusual Fire and Explosion Hazards

Material poses no fire-related hazard.

#### Special hazards arising from the mixture

None known

#### Special Protective Equipment and Precautions for Firefighters

A SCBA is recommended to limit exposures to combustion products when fighting any fire.

### Section 6: Accidental Release Measures

#### Personal precautions, protective equipment and emergency procedures

No special precautions required.

General recommendations:

Wear appropriate Personal Protective Equipment. (See Section 8)

#### Environmental precautions

This product does not present an ecological hazard to the environment.

Dispose of in accordance with applicable federal, state, and local regulations.

#### Methods and materials for containment and cleaning up

No specific clean-up procedures necessary. Pick up unused product to prevent tripping hazard.

### Section 7: Handling and Storage

#### Precautions for safe handling

Minimize generation of dust.

Provide appropriate exhaust ventilation at places where dust is formed.

Avoid contact with eyes, skin and clothing.

Wear recommended personal protective equipment when handling. (See Section 8)



**Conditions for safe storage, including any incompatibilities**

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

**Section 8: Exposure Controls/Personal Protection**

**Control Parameters**

Component	Exposure Limits	
	OSHA PEL (mg/m3)	ACGIH TLV (mg/m3)
Continuous filament, glass fiber	15 <sup>(T)</sup> 5 <sup>(R)</sup>	1 fiber/cc <sup>(R)</sup> 5 mg/m <sup>3</sup> (I)

T- Total Dust

R- Respirable Dust

I-Inhalable Dust

**Exposure Controls**

**Appropriate Engineering Controls**

Work/Hygiene Practices: Utilize methods to minimize dust production.

Ventilation: Not required

**Personal Protective Equipment**

**Respiratory Protection**

None required. However, a NIOSH approved particulate respirator is recommended in poorly ventilated areas or if the PEL/TLV is exceeded. OSHA's 29 CFR 1910.134 (Respiratory Protection Standard) must be followed whenever work conditions require respirator use.

**Eye Protection**

Safety glasses or goggles.

**Skin**

Gloves, protective clothing and/or barrier creams may be utilized if conditions warrant.

**Section 9: Physical and Chemical Properties**

- (a) **Appearance:** Coated woven fiberglass fabric
- (b) **Odor:** None
- (c) **Odor threshold:** Not available
- (d) **pH :** Not available
- (e) **Melting point/freezing point:** Not Available
- (f) **Initial boiling point and boiling range:** Not Available
- (g) **Flash point:** Not available
- (h) **Evaporation rate:** Not available
- (i) **Flammability (solid, gas):** Not flammable
- (j) **Upper/lower flammability or explosive limits:** Not available
- (k) **Vapor pressure:** Not available
- (l) **Vapor density:** Not available
- (m) **Relative density:** Not available
- (n) **Solubility(ies):** Not available
- (o) **Partition coefficient: n-octanol/water:** Not available
- (p) **Auto-ignition temperature:** Not available
- (q) **Decomposition temperature:** Not available
- (r) **Viscosity:** Not available
- (s) **Volatile organic compound (VOC) content:** None

**Section 10: Stability and Reactivity**

- (a) **Reactivity:** No data available
- (b) **Chemical stability:** Stable in dry environments
- (c) **Possibility of hazardous reactions:** None known
- (d) **Conditions to avoid (e.g., static discharge, shock, or vibration):** None known

- (e) **Incompatible materials:** None known.  
(f) **Hazardous decomposition products:** None known

## Section 11: Toxicological Information

### Information on Toxicological effects

#### Information on likely routes of exposure

<b>Ingestion</b>	Not a likely route of exposure.
<b>Inhalation</b>	Not a likely route of exposure.
<b>Skin contact</b>	Possible temporary itching, rash or redness.
<b>Eye contact</b>	Possible mechanical irritation.

### Symptoms related to the physical, chemical and toxicological characteristics

Prolonged skin contact may result in temporary irritation.

### Toxicological data

No toxicological data is available for this product. Toxicological information for components of this product listed below.

<b>Acute toxicity</b>	Not available
<b>Skin corrosion/irritation</b>	Not available
<b>Serious eye damage/eye irritation</b>	Not available
<b>Skin sensitization</b>	Not available
<b>Respiratory sensitization</b>	Not available
<b>Sensitization</b>	Not available
<b>Mutagenicity</b>	Not available
<b>Carcinogenicity</b>	Not available
<b>Reproductive effects</b>	Not available
<b>Specific target organ toxicity – single exposure</b>	Not available
<b>Aspiration toxicity</b>	Not available

## Section 12: Ecological Information

- (a) **Ecotoxicity (aquatic and terrestrial, where available):** This product does not present an ecological hazard to the environment.  
(b) **Persistence and degradability:** Unknown  
(c) **Bioaccumulative potential:** None known  
(d) **Mobility in soil:** Unknown  
(e) **Other adverse effects (such as hazardous to the ozone layer):** None known

## Section 13: Disposal Considerations

This material is not considered a hazardous waste. Dispose of according to Local, State, Federal, and Provincial Environmental Regulations.

## Section 14: Transport Information

This product is not a DOT hazardous material  
Shipping Name: Same as product name  
ICAO/IATA/IMO: Not applicable

## Section 15: Regulatory Information

### Federal Regulations

**SARA Title III:** Not listed under Sections 302, 304, and 313

**CERCLA:** Not listed

**RCRA:** Not listed

**OSHA:** Not listed**State Regulations**

California Prop 65: Not listed

**Section 16: Other Information**

**SDS Prepared by:** National Gypsum Company  
2001 Rexford Road  
Charlotte, NC 28211

**Phone Number:** (704) 551-5820

**Date of Preparation:** March 6, 2015

**Revision indicators and Date**

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EPA	Environmental Protection Agency
HEPA	High Efficiency Particulate Air
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HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
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TWA	Time Weighted Average
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**Section 1: Product and Company Identification****Product Name**

Fast Setting Joint Compounds

**Product Identifiers**

*ProForm® BRAND FS90 Fire-Shield® Compound*

*ProForm® BRAND FasTrack®*

*ProForm® BRAND FasTrack Plus®*

*ProForm® BRAND Quick Set™ Setting Compound*

*ProForm® BRAND Quick Set™ Lite Setting Compound*

*ProForm® BRAND Quick Patch Compound*

**Other means of identification**

Joint Compound, Taping compound, Gypsum Board Finishing Compound

**Recommended Use**

Setting type (or hardening) joint compounds used in joint finishing and repair of drywall. Use per manufacturer's recommendations.

**Restrictions on Use**

Use in well-ventilated area and avoid breathing dust.

Avoid skin contact.

**Manufacturer/Supplier Details**

National Gypsum Company

2001 Rexford Road

Charlotte, NC 28211

**Emergency Telephone Number**

Director Quality Services

(704) 551-5820 - 24 Hour Emergency Response

Website: [www.nationalgypsum.com](http://www.nationalgypsum.com)

**Section 2: Hazards Identification****United States (US)**

According to OSHA 29CFR 1910.1200 (HCS)

**GHS Classification of the substance or mixture**

Carcinogenicity - Category 1A - (H-350)

Specific target organ toxicity, repeated exposure – Category 1 (H-372)

Acute toxicity, inhalation - Category 4 (H-332)

Skin corrosion/irritation Category 2 (H315)

**GHS Label Elements****Pictogram****Signal Word**

**Danger**

**Hazard Statements**

H-350

May cause cancer.

H-332, 372

Harmful if inhaled. Causes damage to organs (lungs) through prolonged or repeated exposure.

H-315

Causes skin corrosion/irritation.

## Section 2: Hazards Identification (Continued)

### Precautionary Statements

#### Prevention

Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Do not breathe dust.  
Use personal protective equipment as required. (See Section 8)  
Use engineering controls and wet methods to minimize dust.

#### Response

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.  
If on skin, wash with plenty of soap and water.  
If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Get medical attention if exposed or concerned.

#### Storage

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

#### Disposal

Dispose of material in accordance with federal, state, and local regulations. Do not wash material down drains.

## Section 3: Composition/Information on Ingredients

Chemical Name	Common name/ Synonym	Identifiers CAS Number	% (weight)	Impurities
Calcium Sulfate Hemihydrate	Plaster of Paris, Stucco	10034-76-1	>70	Crystalline silica (CAS # 14808-60-7)
And may contain one or more of the following:				
Calcium Carbonate or Calcium/Magnesium Carbonate	Limestone, Dolomite	1317-65-3 16389-88-1	>10	Crystalline silica (CAS # 14808-60-7)
Mixture-silicates and aluminates	Mica	12001-26-2	<5	Crystalline silica (CAS # 14808-60-7)
Hydrated magnesium silicate	Talc (non-asbestiform)	14807-96-6	<5	Crystalline silica (CAS # 14808-60-7)
Mixture-various metal oxides	Perlite	93763-70-3	<10	Crystalline silica (CAS # 14808-60-7)
Magnesium aluminum phyllosilicate	Attapulgite Clay	12174-11-7	<5	Crystalline silica (CAS # 14808-60-7)
Aluminum silicate hydroxide	Pyrophyllite	12269-78-2	<10	Crystalline silica (CAS # 14808-60-7)
Polyvinyl Acetate Latex		9003-20-7	<5	
Polyvinyl Alcohol		25213-24-5	<5	

## Section 4: First-Aid Measures

<b>Inhalation</b>	Remove exposed individual to fresh air immediately. If breathing difficulty persists, seek medical attention.
<b>Eye contact</b>	Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes. Remove contact lenses (if applicable). Seek medical attention if irritation persists.
<b>Skin contact</b>	Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present. Seek medical attention if irritation persists.
<b>Ingestion</b>	This product is not expected to be hazardous and no harmful effects are expected upon ingestion of small amounts. Larger amounts may cause abdominal discomfort or possible obstruction of the digestive tract. Seek medical attention if problems persist.

### Medical Conditions aggravated by exposure

Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema, and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

## Section 5: Fire-Fighting Measures

### Extinguishing Media

Dry chemical, foam, water, or extinguishing media appropriate for surrounding fire.

### Unusual Fire and Explosion Hazards

Mixture poses no fire-related hazard.

### Special hazards arising from the mixture

None known

### Special Protective Equipment and Precautions for Firefighters

A SCBA is recommended to limit exposures to combustion products when fighting any fire.

## Section 6: Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures

No special precautions required.

General recommendations:

Wear appropriate Personal Protective Equipment. (See Section 8)

Maintain proper ventilation.

### Environmental precautions

This product does not present an ecological hazard to the environment.

Dispose of in accordance with applicable federal, state, and local regulations.

### Methods and materials for containment and cleaning up

Vacuum spilled material utilizing a vacuum equipped with a HEPA filter. Avoid dry sweeping.

Maintain proper ventilation to minimize dust.

Avoid washing material down drains. This material will eventually set and can cause clogs.

## Section 7: Handling and Storage

### Precautions for safe handling

Avoid breathing dust.

Minimize generation of dust.

Provide appropriate exhaust ventilation at places where dust is formed.

Avoid contact with eyes, skin and clothing.

Wear recommended personal protective equipment when handling. (See Section 8)

### Conditions for safe storage, including any incompatibilities

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

Do not store outside.

Keep containers closed when not in use.

Keep away from strong acids.

## Section 8: Exposure Controls/Personal Protection

### Control Parameters

Component	Exposure Limits	
	OSHA PEL (mg/m3)	ACGIH TLV (mg/m3)
Calcium Sulfate Hemihydrate (Plaster of Paris)	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Calcium Carbonate or Dolomite (limestone)	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Perlite	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Talc (non-asbestiform)	20 mppcf	2
Mica	20 mppcf	3
Attapulgitte Clay	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Pyrophyllite	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Crystalline Silica <sup>1</sup>	$[(10) / (\%SiO_2+2)]^{(R)}$ ; $[(30) / (\%SiO_2+2)]^{(T)}$	0.025 <sup>(R)</sup>
Polyvinyl Acetate Latex	NE	NE
Ethylene Vinyl Alcohol	NE	NE

1 – Present as an impurity in raw materials

T- Total Dust

NE- None Established

NL- None Listed

### Exposure Controls

#### Appropriate Engineering Controls

Work/Hygiene Practices: Utilize methods to minimize dust production. Use sanders equipped with vacuum capabilities whenever possible. Utilize a light water spray when feasible.

Ventilation: Provide local and general exhaust ventilation sufficient to maintain a dust level below the PEL/TLV.

#### Personal Protective Equipment

##### Respiratory Protection

A NIOSH approved particulate respirator is recommended in poorly ventilated areas or if the PEL/TLV is exceeded. OSHA's 29 CFR 1910.134 (Respiratory Protection Standard) must be followed whenever work conditions require respirator use.

##### Eye Protection

Safety glasses or goggles.

##### Skin

Gloves, protective clothing and/or barrier creams may be utilized if conditions warrant.

## Section 9: Physical and Chemical Properties

(a) **Appearance:** A white to off-white powder

(b) **Odor:** None

(c) **Odor threshold:** Not available

(d) **pH :** 7-9

(e) **Melting point/freezing point:** Not Available

(f) **Initial boiling point and boiling range:** Not Available

(g) **Flash point:** Not available

(h) **Evaporation rate:** Not available

(i) **Flammability (solid, gas):** Not flammable

(j) **Upper/lower flammability or explosive limits:** Not available

- (k) **Vapor pressure:** Not available  
(l) **Vapor density:** Not available  
(m) **Relative density:** ~2.5  
(n) **Solubility(ies):** 2.1 g/L @ 20° C  
(o) **Partition coefficient: n-octanol/water:** Not available  
(p) **Auto-ignition temperature:** Not available  
(q) **Decomposition temperature:** 825°C, 1450°C  
(r) **Viscosity:** Not available  
(s) **Volatile organic compound (VOC) content:** None

## Section 10: Stability and Reactivity

- (a) **Reactivity:** No data available  
(b) **Chemical stability:** Stable in dry environments  
(c) **Possibility of hazardous reactions:** None known  
(d) **Conditions to avoid (e.g., static discharge, shock, or vibration):** None known  
(e) **Incompatible materials:** Strong acids  
(f) **Hazardous decomposition products:** None known. Above 825°C limestone decomposes to calcium oxide (CaO) and carbon dioxide. Above 1450°C, gypsum can decompose and release sulfur dioxide (SO<sub>2</sub>) and oxides of carbon.

## Section 11: Toxicological Information

### Information on Toxicological effects

#### Information on likely routes of exposure

- Ingestion** Possible abdominal obstruction.  
**Inhalation** Dust may irritate respiratory system. Chronic exposure may result in lung disease. (See below)  
**Skin contact** May cause irritation, rash, itching, or dermatitis.  
**Eye contact** Dust may cause mechanical irritation.

### Symptoms related to the physical, chemical and toxicological characteristics

Acute exposure to airborne dust concentrations in excess of the PEL/TLV may result in coughing, dyspnea, wheezing, and a burning irritation of the nose, throat, and upper respiratory tract, along with possible impaired pulmonary function. Chronic exposures may result in lung disease. (Silicosis and/or lung cancer)

#### Toxicological data

No toxicological data is available for this product. Toxicological information for components of this product listed below.

- |  |  |
|--|--|
| <b>Acute toxicity</b>                    | Plaster of Paris: Oral LD50 (rat): >5000 mg/kg |
| <b>Skin corrosion/irritation</b>         | Not available                                  |
| <b>Serious eye damage/eye irritation</b> | Not available                                  |
| <b>Skin sensitization</b>                | Not available                                  |
| <b>Respiratory sensitization</b>         | Not available                                  |
| <b>Sensitization</b>                     | Not available                                  |
| <b>Mutagenicity</b>                      | No evidence of mutagenicity on Ames Test.      |
| <b>Carcinogenicity</b>                   | Not available                                  |

This product contains crystalline silica (quartz) as a naturally occurring impurity in some of the raw materials. The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen.

Some products may contain attapulgite clay. IARC classifies attapulgite (long fiber) carcinogenic to humans, Group 2B. Attapulgite is not classified as a carcinogen by NTP or OSHA.

Exposures to respirable crystalline silica are not expected during the recommended use of this product. However, actual levels must be determined by workplace Industrial Hygiene testing.



## Section 11: Toxicological Information (Continued)

<b>Reproductive effects</b>	Not available
<b>Specific target organ toxicity – single exposure</b>	Not available
<b>Aspiration toxicity</b>	Not available

## Section 12: Ecological Information

- (a) Ecotoxicity (aquatic and terrestrial, where available):** This product does not present an ecological hazard to the environment.
- (b) Persistence and degradability:** Unknown
- (c) Bioaccumulative potential:** Limestone and gypsum are naturally occurring minerals. Biodegradation and/or bioaccumulation potential is not applicable.
- (d) Mobility in soil:** Unknown
- (e) Other adverse effects (such as hazardous to the ozone layer):** None known

## Section 13: Disposal Considerations

This material is not considered a hazardous waste. Dispose of according to Local, State, Federal, and Provincial Environmental Regulations.

## Section 14: Transport Information

This product is not a DOT hazardous material  
Shipping Name: Same as product name  
ICAO/IATA/IMO: Not applicable

## Section 15: Regulatory Information

### Federal Regulations

**SARA Title III:** Not listed under Sections 302, 304, and 313

**CERCLA:** Not listed

**RCRA:** Not listed

**OSHA:** Dust and potential respirable crystalline silica generated during product use may be hazardous.

### State Regulations

California Prop 65: Respirable crystalline silica is known to the state of California to cause cancer. Industrial hygiene monitoring during recommended use of this product failed to identify any respirable crystalline silica.

### Canada WHMIS

All components of this product are included in the Canadian Domestic Substances List (DSL).

Crystalline silica: WHMIS Classification D2A

## Section 16: Other Information

**SDS Prepared by:** National Gypsum Company  
2001 Rexford Road  
Charlotte, NC 28211

**Phone Number:** (704) 551-5820

**Date of Preparation:** March 13, 2015

### Revision indicators and Date

Effective Date Change: 6/1/2015 Supersedes: June 12, 2014  
Format Changes: Conforms to OSHA 29CFR 1910.1200 (HCS)

### Key to Abbreviations

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DOT	Department of Transportation
EPA	Environmental Protection Agency
HEPA	High Efficiency Particulate Air
HCS	Hazard Communications Standard
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
NTP	National Toxicology Program
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**Section 1: Product and Company Identification****Product Name**

Ready Mix Joint Compounds

**Product Identifiers**

*Easy Finish Topping*

*Easy Finish All Purpose*

*ProForm All Purpose Heavy Viscosity*

*ProForm All Purpose Export EX 70*

*ProForm Multi-Use*

*ProForm Taping*

*ProForm Taping Lite*

*ProForm Lite Blue*

*ProForm Texture Grade*

*ProForm Tinted Lite*

*ProForm Pre-Blend 50 lb. bag*

*ProForm All Purpose*

*ProForm All Purpose Machine Grade*

*ProForm Lite*

*ProForm Lite with Dust-Tech*

*ProForm Ultra Lite All Purpose*

*ProForm Topping*

*ProForm XP with Dust-Tech*

*Advantage*

*Advantage Lite*

*Advantage Topping*

*ProForm Concrete-Cover Compound*

*ProForm Factory Built Housing Texture Grade Compound*

**Other means of identification**

Joint Compound, Taping Compound, Gypsum Board Finishing Compound

**Recommended Use**

All-purpose drying-type compounds used for finishing gypsum board products. Use per manufacturer's recommendations

**Restrictions on Use**

Use in well-ventilated area and avoid breathing dust.

Avoid skin contact.

**Manufacturer/Supplier Details**

National Gypsum Company

2001 Rexford Road

Charlotte, NC 28211

**Emergency Telephone Number**

Director Quality Services

(704) 551-5820 - 24 Hour Emergency Response

Website: [www.nationalgypsum.com](http://www.nationalgypsum.com)

**Section 2: Hazards Identification****United States (US)**

According to OSHA 29CFR 1910.1200 (HCS)

**GHS Classification of the substance or mixture**

Carcinogenicity - Category 1A - (H-350)

Specific target organ toxicity, repeated exposure – Category 1 (H-372)

Acute toxicity, inhalation - Category 4 (H-332)

Skin corrosion/irritation Category 2 (H315)

**GHS Label Elements****Pictogram****Signal Word**

**Danger**

**Hazard Statements**

H-350

H-332, 372

H-315

May cause cancer.

Harmful if inhaled. Causes damage to organs (lungs) through prolonged or repeated exposure.

Causes skin corrosion/irritation

## Section 2: Hazards Identification (Continued)

### Precautionary Statements

#### Prevention

Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Do not breathe dust.  
Use personal protective equipment as required. (See Section 8)  
Use engineering controls and wet methods to minimize dust.

#### Response

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.  
If on skin, wash with plenty of soap and water.  
If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Get medical attention if exposed or concerned.

#### Storage

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

#### Disposal

Dispose of material in accordance with federal, state, and local regulations

## Section 3: Composition/Information on Ingredients

Chemical Name	Common name/ Synonym	Identifiers CAS Number	% (weight)	Impurities
Calcium Carbonate or Calcium/Magnesium Carbonate	Limestone or Dolomite	1317-65-3 16389-88-1	<50	Crystalline silica (CAS # 14808-60-7)
And may contain one or more of the following:				
Mixture-silicates and aluminates	Mica	12001-26-2	<10	Crystalline silica (CAS # 14808-60-7)
Hydrated magnesium silicate	Talc (non-asbestiform)	14807-96-6	<5	Crystalline silica (CAS # 14808-60-7)
Mixture-various metal oxides	Perlite	93763-70-3	<10	Crystalline silica (CAS # 14808-60-7)
magnesium aluminum phyllosilicate	Attapulgate Clay	12174-11-7	<5	Crystalline silica (CAS # 14808-60-7)
Magnesium silicate	Sepiolite Clay	63800-37-3	<5	Crystalline silica (CAS # 14808-60-7)
Magnesium aluminum phyllosilicate	Smectite Clay	1302-78-9	<5	Crystalline silica (CAS # 14808-60-7)
Polyvinyl Acetate Latex		9003-20-7	<5	
Ethylene Vinyl Acetate Latex		24937-78-8	<5	

#### **Section 4: First-Aid Measures**

<b>Inhalation</b>	Remove exposed individual to fresh air immediately. If breathing difficulty persists, seek medical attention.
<b>Eye contact</b>	Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes. Remove contact lenses (if applicable). Seek medical attention if irritation persists.
<b>Skin contact</b>	Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present. Seek medical attention if irritation persists.
<b>Ingestion</b>	This product is not expected to be hazardous and no harmful effects are expected upon ingestion of small amounts. Larger amounts may cause abdominal discomfort or possible obstruction of the digestive tract. Seek medical attention if problems persist.

#### **Medical Conditions aggravated by exposure**

Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

#### **Section 5: Fire-Fighting Measures**

##### **Extinguishing Media**

Dry chemical, foam, water, or extinguishing media appropriate for surrounding fire.

##### **Unusual Fire and Explosion Hazards**

Mixture poses no fire-related hazard.

##### **Special hazards arising from the mixture**

None known

##### **Special Protective Equipment and Precautions for Firefighters**

A SCBA is recommended to limit exposures to combustion products when fighting any fire.

#### **Section 6: Accidental Release Measures**

##### **Personal precautions, protective equipment and emergency procedures**

No special precautions required.

General recommendations:

Wear appropriate Personal Protective Equipment. (See Section 8)

Maintain proper ventilation.

##### **Environmental precautions**

This product does not present an ecological hazard to the environment.

Dispose of in accordance with applicable federal, state, and local regulations.

##### **Methods and materials for containment and cleaning up**

Shovel or scoop spilled material back into container for use, if possible, or disposal.

Maintain proper ventilation to minimize dust.

Avoid washing material down drains. This material will eventually set and can cause clogs.

#### **Section 7: Handling and Storage**

##### **Precautions for safe handling**

Avoid breathing vapors when opening container.

Avoid breathing dust.

Minimize generation of dust.

Provide appropriate exhaust ventilation at places where dust is formed.

Avoid contact with eyes, skin and clothing.

Wear recommended personal protective equipment when handling. (See Section 8)

##### **Conditions for safe storage, including any incompatibilities**

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

Keep from freezing to preserve usefulness.

Keep containers closed when not in use.

Avoid contact with strong acids.

## Section 8: Exposure Controls/Personal Protection

### Control Parameters

	Exposure Limits	
Component	OSHA PEL (mg/m3)	ACGIH TLV (mg/m3)
Calcium Carbonate or Dolomite (limestone)	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Mica	20 mppcf	3
Talc (non-asbestiform)	20 mppcf	2
Perlite	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Attapulgite Clay	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Sepiolite Clay	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Smectite Clay	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Crystalline Silica <sup>1</sup>	$\left[\frac{(10)}{( \%SiO_2+2)}\right]^{(R)}$ ; $\left[\frac{(30)}{( \%SiO_2+2)}\right]^{(T)}$	0.025 <sup>(R)</sup>
Polyvinyl Acetate Latex	NE	NE
Ethylene Vinyl Acetate Latex	NE	NE

1 – Present as an impurity in raw materials  
T- Total Dust  
R- Respirable Dust

NE- None Established  
Mppcf – million particles per cubic foot

### Exposure Controls

#### Appropriate Engineering Controls

Work/Hygiene Practices: Utilize methods to minimize dust production. Use sanders equipped with vacuum capabilities whenever possible. Utilize a light water spray when feasible.

Ventilation: Provide local and general exhaust ventilation sufficient to maintain a dust level below the PEL/TLV.

#### Personal Protective Equipment

##### Respiratory Protection

A NIOSH approved particulate respirator is recommended in poorly ventilated areas or if the PEL/TLV is exceeded. OSHA's 29 CFR 1910.134 (Respiratory Protection Standard) must be followed whenever work conditions require respirator use.

##### Eye Protection

Safety glasses or goggles.

##### Skin

Gloves, protective clothing and/or barrier creams may be utilized if conditions warrant.

## Section 9: Physical and Chemical Properties

- (a) **Appearance:** A white to gray paste
- (b) **Odor:** Mild latex initially, Low to none after opening
- (c) **Odor threshold:** Not available
- (d) **pH :** 7-9
- (e) **Melting point/freezing point:** Not Available
- (f) **Initial boiling point and boiling range:** Not Available
- (g) **Flash point:** Not available
- (h) **Evaporation rate:** Not available
- (i) **Flammability (solid, gas):** Not flammable
- (j) **Upper/lower flammability or explosive limits:** Not available

- (k) **Vapor pressure:** Not available  
(l) **Vapor density:** Not available  
(m) **Relative density:** ~1.0-1.8  
(n) **Solubility(ies):** slightly soluble in water  
(o) **Partition coefficient: n-octanol/water:** Not available  
(p) **Auto-ignition temperature:** Not available  
(q) **Decomposition temperature:** 825°C  
(r) **Viscosity:** Not available  
(s) **Volatile organic compound (VOC) content:** <2 g/l

## Section 10: Stability and Reactivity

- (b) **Chemical stability:** Stable in dry environments  
(c) **Possibility of hazardous reactions:** None known  
(d) **Conditions to avoid (e.g., static discharge, shock, or vibration):** None known  
(e) **Incompatible materials:** Strong acids  
(f) **Hazardous decomposition products:** None known. Above 825° C limestone (CaCO<sub>3</sub>) decomposes to calcium oxide (CaO) and carbon dioxide.(CO<sub>2</sub>)

## Section 11: Toxicological Information

### Information on Toxicological effects

#### Information on likely routes of exposure

- Ingestion** Possible abdominal obstruction.  
**Inhalation** Dust may irritate respiratory system. Chronic exposure may result in lung disease. (See below)  
**Skin contact** May cause irritation, rash, itching, or dermatitis.  
**Eye contact** Dust may cause mechanical irritation.

### Symptoms related to the physical, chemical and toxicological characteristics

Acute exposure to airborne dust concentrations in excess of the PEL/TLV may result in coughing, dyspnea, wheezing, and a burning irritation of the nose, throat, and upper respiratory tract, along with possible impaired pulmonary function. Chronic exposures may result in lung disease. (Silicosis and/or lung cancer)

#### Toxicological data

No toxicological data is available for this product. Toxicological information for components of this product listed below.

- |  |               |
|--|---------------|
| <b>Acute toxicity</b>                    | Not available |
| <b>Skin corrosion/irritation</b>         | Not available |
| <b>Serious eye damage/eye irritation</b> | Not available |
| <b>Skin sensitization</b>                | Not available |
| <b>Respiratory sensitization</b>         | Not available |
| <b>Sensitization</b>                     | Not available |
| <b>Mutagenicity</b>                      | Not available |
| <b>Carcinogenicity</b>                   | Not available |

This product contains crystalline silica (quartz) as a naturally occurring impurity in some of the raw materials. The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen.

Some products may contain attapulgite clay. IARC classifies attapulgite (long fiber) carcinogenic to humans, Group 2B. Attapulgite is not classified as a carcinogen by NTP or OSHA.

Exposures to respirable crystalline silica are not expected during the recommended use of this product. However, actual levels must be determined by workplace Industrial Hygiene testing.

- |   |               |
|---|---------------|
| <b>Reproductive effects</b>                             | Not available |
| <b>Specific target organ toxicity – single exposure</b> | Not available |
| <b>Aspiration toxicity</b>                              | Not available |

## Section 12: Ecological Information

- (a) **Ecotoxicity (aquatic and terrestrial, where available):** This product does not present an ecological hazard to the environment.
- (b) **Persistence and degradability:** Unknown
- (c) **Bioaccumulative potential:** Limestone is a naturally occurring mineral. Biodegradation and/or bioaccumulation potential is not applicable.
- (d) **Mobility in soil:** Unknown
- (e) **Other adverse effects (such as hazardous to the ozone layer):** None known

## Section 13: Disposal Considerations

This material is not considered a hazardous waste. Dispose of according to Local, State, Federal, and Provincial Environmental Regulations.

## Section 14: Transport Information

This product is not a DOT hazardous material  
Shipping Name: Same as product name  
ICAO/IATA/IMO: Not applicable

## Section 15: Regulatory Information

All ingredients are included on the TSCA inventory.

### Federal Regulations

**SARA Title III:** Not listed under Sections 302, 304, and 313

**CERCLA:** Not listed

**RCRA:** Not listed

**OSHA:** Dust and potential respirable crystalline silica generated during product use may be hazardous.

### State Regulations

California Prop 65: Respirable crystalline silica is known to the state of California to cause cancer. Industrial hygiene monitoring during recommended use of this product failed to identify any respirable crystalline silica.

### Canada WHMIS

All components of this product are included in the Canadian Domestic Substances List (DSL).

Crystalline silica: WHMIS Classification D2A

## Section 16: Other Information

**SDS Prepared by:** National Gypsum Company  
2001 Rexford Road  
Charlotte, NC 28211

**Phone Number:** (704) 551-5820

**Date of Preparation:** March 3, 2015

### Revision indicators and Date

Effective Date Change: 6/1/2015

Supersedes: June 12, 2014

Format Changes: Conforms to OSHA 29CFR 1910.1200 (HCS)



## Section 16: Other Information (Continued)

### Key to Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Services Number
CFR	Code of Federal Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
HEPA	High Efficiency Particulate Air
HCS	Hazard Communications Standard
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This safety data sheet was prepared to comply with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

### Disclaimer of Liability:

As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of the material. Information contained herein is believed to be true and accurate, but all statements or suggestions are made without any warranty, express or implied, regarding accuracy of the information, the hazards connected with the use of the material, or the results to be obtained for the use thereof.

**Section 1: Product and Company Identification****Product Name**

ProForm® BRAND Texture Products

**Product Identifiers**

ProForm Perfect Spray Texture-Medium

ProForm Perfect Spray II Texture

ProForm Wall & Ceiling Spray

**Other means of identification**

Spray Textures

**Recommended Use**

Decorative ceiling and wall textures used in new construction or remodeling projects for interior walls and ceilings.

Use per manufacturer's recommendations.

**Restrictions on Use**

Use in well-ventilated area and avoid breathing dust.

Avoid skin contact.

**Manufacturer/Supplier Details**

National Gypsum Company

2001 Rexford Road

Charlotte, NC 28211

**Emergency Telephone Number**

Director Quality Services

(704) 551-5820 - 24 Hour Emergency Response

Website: [www.nationalgypsum.com](http://www.nationalgypsum.com)

**Section 2: Hazards Identification****United States (US)**

According to OSHA 29CFR 1910.1200 (HCS)

**GHS Classification of the substance or mixture**

Carcinogenicity - Category 1A - (H-350)

Specific target organ toxicity, repeated exposure – Category 1 (H-372)

Acute toxicity, inhalation - Category 4 (H-332)

Skin corrosion/irritation Category 2 (H315)

**GHS Label Elements****Pictogram****Signal Word**

**Danger**

**Hazard Statements**

H-350

May cause cancer.

H-332, 372

Harmful if inhaled. Causes damage to organs (lungs) through prolonged or repeated exposure.

H-315

Causes skin corrosion/irritation

## Section 2: Hazards Identification (Continued)

### Precautionary Statements

#### Prevention

Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Do not breathe dust.  
Use personal protective equipment as required. (See Section 8)  
Use engineering controls and wet methods to minimize dust.

#### Response

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.  
If on skin, wash with plenty of soap and water.  
If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Get medical attention if exposed or concerned.

#### Storage

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

#### Disposal

Dispose of material in accordance with federal, state, and local regulations

## Section 3: Composition/Information on Ingredients

Chemical Name	Common name/ Synonym	Identifiers CAS Number	% (weight)	Impurities
Calcium Carbonate or Calcium/Magnesium Carbonate	Limestone or Dolomite	1317-65-3 16389-88-1	<50	Crystalline silica (CAS # 14808-60-7)
And may contain one or more of the following:				
Mixture-silicates and aluminates	Mica	12001-26-2	<15	Crystalline silica (CAS # 14808-60-7)
Hydrated magnesium silicate	Talc (non-asbestiform)	14807-96-6	<30	Crystalline silica (CAS # 14808-60-7)
Mixture-various metal oxides	Perlite	93763-70-3	<10	Crystalline silica (CAS # 14808-60-7)
Magnesium aluminum phyllosilicate	Attapulgate Clay	12174-11-7	<5	Crystalline silica (CAS # 14808-60-7)
Aluminum silicate hydroxide	Pyrophyllite	12269-78-2	<10	Crystalline silica (CAS # 14808-60-7)
Mixture-aluminum silicates	Kaolin	1332-58-7	<10	Crystalline silica (CAS # 14808-60-7)
Mixture-silicates and aluminates, iron oxide	Diatomaceous Earth	68855-54-9	<5	Crystalline silica (CAS # 14808-60-7)
Polystyrene		9003-53-6	<5	
Starch		113894-92-1	<5	

## Section 4: First-Aid Measures

<b>Inhalation</b>	Remove exposed individual to fresh air immediately. If breathing difficulty persists, seek medical attention.
<b>Eye contact</b>	Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes.  Remove contact lenses (if applicable). Seek medical attention if irritation persists.
<b>Skin contact</b>	Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present. Seek medical attention if irritation persists.
<b>Ingestion</b>	This product is not expected to be hazardous and no harmful effects are expected upon ingestion of small amounts. Larger amounts may cause abdominal discomfort or possible obstruction of the digestive tract.  Seek medical attention if problems persist.

### Medical Conditions aggravated by exposure

Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

## Section 5: Fire-Fighting Measures

### Extinguishing Media

Dry chemical, foam, water, or extinguishing media appropriate for surrounding fire.

### Unusual Fire and Explosion Hazards

Mixture poses no fire-related hazard.

### Special hazards arising from the mixture

None known

### Special Protective Equipment and Precautions for Firefighters

A SCBA is recommended to limit exposures to combustion products when fighting any fire.

## Section 6: Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures

No special precautions required.

General recommendations:

Wear appropriate Personal Protective Equipment. (See Section 8)

Maintain proper ventilation.

### Environmental precautions

This product does not present an ecological hazard to the environment.

Dispose of in accordance with applicable federal, state, and local regulations.

### Methods and materials for containment and cleaning up

Vacuum spilled material utilizing a vacuum equipped with a HEPA filter. Avoid dry sweeping.

Maintain proper ventilation to minimize dust.

Avoid washing material down drains. This material will eventually set and can cause clogs.

## Section 7: Handling and Storage

### Precautions for safe handling

Minimize generation of mists while spraying.

Minimize generation of dust.

Avoid breathing dust or mist.

Provide appropriate exhaust ventilation at places where dust is formed.

Avoid contact with eyes, skin and clothing.

Wear recommended personal protective equipment when handling. (See Section 8)

### Conditions for safe storage, including any incompatibilities

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

Keep containers closed when not in use.

Avoid contact with strong acids.

## Section 8: Exposure Controls/Personal Protection

### Control Parameters

Component	Exposure Limits	ACGIH TLV (mg/m3)
	OSHA PEL (mg/m3)	
Calcium Carbonate or Dolomite (limestone)	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Kaolin	15 <sup>(T)</sup> 5 <sup>(R)</sup>	2 <sup>(R)</sup>
Perlite	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Talc (non-asbestiform)	20 mppcf	2
Mica	20 mppcf	3
Attapulgite Clay	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Pyrophyllite	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Crystalline Silica <sup>1</sup>	$[(10) / (\%SiO_2+2)]^{(R)}$ ; $[(30) / (\%SiO_2+2)]^{(T)}$	0.025 <sup>(R)</sup>
Starch	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Diatomaceous Earth	20 mppcf	10 <sup>(T)</sup>
Polystyrene	NL	NL

1 – Present as an impurity in raw materials

T- Total Dust

R- Respirable Dust

NL- None Listed

Mppcf – million particles per cubic foot

### Exposure Controls

#### Appropriate Engineering Controls

Work/Hygiene Practices: Utilize methods to minimize dust production. Use sanders equipped with vacuum capabilities whenever possible. Utilize a light water spray when feasible.

Ventilation: Provide local and general exhaust ventilation sufficient to maintain a dust level below the PEL/TLV.

#### Personal Protective Equipment

##### Respiratory Protection

A NIOSH approved particulate respirator is recommended in poorly ventilated areas or if the PEL/TLV is exceeded. OSHA's 29 CFR 1910.134 (Respiratory Protection Standard) must be followed whenever work conditions require respirator use.

##### Eye Protection

Safety glasses or goggles.

##### Skin

Gloves, protective clothing and/or barrier creams may be utilized if conditions warrant.

## Section 9: Physical and Chemical Properties

(a) **Appearance:** A white/gray powder

(b) **Odor:** None

(c) **Odor threshold:** Not available

(d) **pH :** 7-9

(e) **Melting point/freezing point:** Not Available

(f) **Initial boiling point and boiling range:** Not Available

(g) **Flash point:** Not available

(h) **Evaporation rate:** Not available

- (i) **Flammability (solid, gas):** Not flammable
- (j) **Upper/lower flammability or explosive limits:** Not available
- (k) **Vapor pressure:** Not available
- (l) **Vapor density:** Not available
- (m) **Relative density:** ~2.5
- (n) **Solubility(ies):** slightly soluble in water
- (o) **Partition coefficient: n-octanol/water:** Not available
- (p) **Auto-ignition temperature:** Not available
- (q) **Decomposition temperature:** 825°C
- (r) **Viscosity:** Not available
- (s) **Volatile organic compound (VOC) content:** None

## Section 10: Stability and Reactivity

- (a) **Reactivity:** No data available
- (b) **Chemical stability:** Stable in dry environments
- (c) **Possibility of hazardous reactions:** None known
- (d) **Conditions to avoid (e.g., static discharge, shock, or vibration):** None known
- (e) **Incompatible materials:** Strong acids
- (f) **Hazardous decomposition products:** None known. Above 825° C limestone (CaCO<sub>3</sub>) decomposes to calcium oxide (CaO) and carbon dioxide.(CO<sub>2</sub>)

## Section 11: Toxicological Information

### Information on Toxicological effects

#### Information on likely routes of exposure

- Ingestion** Possible abdominal obstruction.
- Inhalation** Dust may irritate respiratory system. Chronic exposure may result in lung disease. (See below)
- Skin contact** May cause irritation, rash, itching, or dermatitis.
- Eye contact** Dust may cause mechanical irritation.

### Symptoms related to the physical, chemical and toxicological characteristics

Acute exposure to airborne dust concentrations in excess of the PEL/TLV may result in coughing, dyspnea, wheezing, and a burning irritation of the nose, throat, and upper respiratory tract, along with possible impaired pulmonary function. Chronic exposures may result in lung disease. (Silicosis and/or lung cancer)

#### Toxicological data

No toxicological data is available for this product. Toxicological information for components of this product listed below.

- Acute toxicity** Not available
- Skin corrosion/irritation** Not available
- Serious eye damage/eye irritation** Not available
- Skin sensitization** Not available
- Respiratory sensitization** Not available
- Sensitization** Not available
- Mutagenicity** Not available
- Carcinogenicity** Not available

This product contains crystalline silica (quartz) as a naturally occurring impurity in some of the raw materials. The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen.

Some products may contain attapulgite clay. IARC classifies attapulgite (long fiber) carcinogenic to humans, Group 2B. Attapulgite is not classified as a carcinogen by NTP or OSHA.

Exposures to respirable crystalline silica are not expected during the recommended use of this product. However, actual levels must be determined by workplace Industrial Hygiene testing.

### Section 11: Toxicological Information (Continued)

Reproductive effects	Not available
Specific target organ toxicity – single exposure	Not available
Aspiration toxicity	Not available

### Section 12: Ecological Information

- (a) **Ecotoxicity (aquatic and terrestrial, where available):** This product does not present an ecological hazard to the environment.
- (b) **Persistence and degradability:** Unknown
- (c) **Bioaccumulative potential:** Limestone and various clays are naturally occurring minerals. Biodegradation and/or bioaccumulation potential is not applicable.
- (d) **Mobility in soil:** Unknown
- (e) **Other adverse effects (such as hazardous to the ozone layer):** None known

### Section 13: Disposal Considerations

This material is not considered a hazardous waste. Dispose of according to Local, State, Federal, and Provincial Environmental Regulations.

### Section 14: Transport Information

This product is not a DOT hazardous material  
Shipping Name: Same as product name  
ICAO/IATA/IMO: Not applicable

### Section 15: Regulatory Information

All ingredients are included on the TSCA inventory.

#### Federal Regulations

**SARA Title III:** Not listed under Sections 302, 304, and 313

**CERCLA:** Not listed

**RCRA:** Not listed

**OSHA:** Dust and potential respirable crystalline silica generated during product use may be hazardous.

#### State Regulations

California Prop 65: Respirable crystalline silica is known to the state of California to cause cancer. Industrial hygiene monitoring during recommended use of this product failed to identify any respirable crystalline silica.

#### Canada WHMIS

All components of this product are included in the Canadian Domestic Substances List (DSL).

Crystalline silica: WHMIS Classification D2A

### Section 16: Other Information

**SDS Prepared by:** National Gypsum Company  
2001 Rexford Road  
Charlotte, NC 28211

**Phone Number:** (704) 551-5820

**Date of Preparation:** March 14, 2015

#### Revision indicators and Date

**Effective Date Change:** 6/1/2015

Supersedes: June 12, 2014

**Format Changes:** Conforms to OSHA 29CFR 1910.1200 (HCS)

## Section 16: Other Information (Continued)

### Key to Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Services Number
CFR	Code of Federal Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
HEPA	High Efficiency Particulate Air
HCS	Hazard Communications Standard
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This safety data sheet was prepared to comply with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

### Disclaimer of Liability:

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**Section 1: Product and Company Identification****Product Name**

eXP Interior Extreme Products

**Product Identifiers**

*eXP Interior Extreme*

*eXP Interior Extreme AR (Abuse Resistant)*

*eXP Interior Extreme IR (Impact Resistant)*

**Other means of identification**

Wallboard, Gypsum Board. Plasterboard, Drywall

**Recommended Use**

Interior building walls where moisture is a concern. Use per manufacturer's recommendations.

**Restrictions on Use**

Use in well-ventilated area and avoid breathing dust.

Avoid skin contact.

**Manufacturer/Supplier Details**

National Gypsum Company

2001 Rexford Road

Charlotte, NC 28211

**Emergency Telephone Number**

Director Quality Services

(704) 551-5820 - 24 Hour Emergency Response

Website: [www.nationalgypsum.com](http://www.nationalgypsum.com)

**Section 2: Hazards Identification****United States (US)**

According to OSHA 29CFR 1910.1200 (HCS)

**GHS Classification of the substance or mixture**

Not classified

**GHS Label Elements**

**Pictogram** None

**Signal Word** None

**Hazard Statements** None

**Precautionary Statements****Prevention**

Do not breathe dust.

Use personal protective equipment as required. (See Section 8)

Use engineering controls and wet methods to minimize dust.

**Response**

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

If on skin, wash with plenty of soap and water.

If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Get medical attention if exposed or concerned.

**Storage**

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

**Disposal**

Dispose of material in accordance with federal, state, and local regulations.

### Section 3: Composition/Information on Ingredients

Chemical Name	Common name/ Synonym	Identifiers CAS Number	% (weight)	Impurities
Calcium Sulfate Dihydrate	Gypsum	13397-24-5	>91	Crystalline silica (CAS # 14808-60-7)
Hydrous phyllosilicate	Vermiculite	1318-00-9	<2	Crystalline silica (CAS # 14808-60-7)
Mixture-calcium, aluminum silicates, amorphous silica	Fiberglass, synthetic, vitreous, continuous	65997-17-3	<1	

### Section 4: First-Aid Measures

<b>Inhalation</b>	Remove exposed individual to fresh air immediately. If breathing difficulty persists, seek medical attention.
<b>Eye contact</b>	Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes.
	Remove contact lenses (if applicable). Seek medical attention if irritation persists.
<b>Skin contact</b>	Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present.
	Seek medical attention if irritation persists.
<b>Ingestion</b>	This product is not expected to be hazardous and no harmful effects are expected upon ingestion of small amounts. Larger amounts may cause abdominal discomfort or possible obstruction of the digestive tract.
	Seek medical attention if problems persist.

#### Medical Conditions aggravated by exposure

Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

### Section 5: Fire-Fighting Measures

#### Extinguishing Media

Dry chemical, foam, water, or extinguishing media appropriate for surrounding fire.

#### Unusual Fire and Explosion Hazards

Mixture poses no fire-related hazard.

#### Special hazards arising from the mixture

None known. Above 1450° C, material can decompose and release sulfur dioxide (SO<sub>2</sub>) and oxides of carbon.

#### Special Protective Equipment and Precautions for Firefighters

A SCBA is recommended to limit exposures to combustion products when fighting any fire.

### Section 6: Accidental Release Measures

#### Personal precautions, protective equipment and emergency procedures

No special precautions required.

General recommendations:

Wear appropriate Personal Protective Equipment. (See Section 8)

Maintain proper ventilation.

#### Environmental precautions

This product does not present an ecological hazard to the environment.

Dispose of in accordance with applicable federal, state, and local regulations.

#### Methods and materials for containment and cleaning up

Pick-up larger pieces to avoid a tripping hazard. Return large pieces of damaged/scraped material for recycling. Sweep or vacuum remaining material into a waste container for disposal. Use a light water spray to minimize dust generation. Maintain proper ventilation to minimize dust.

## Section 7: Handling and Storage

### Precautions for safe handling

Avoid breathing dust.

Minimize generation of dust.

Provide appropriate exhaust ventilation at places where dust is formed.

Avoid contact with eyes, skin and clothing.

Wear recommended personal protective equipment when handling. (See Section 8)

### Conditions for safe storage, including any incompatibilities

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

Store panels flat to minimize damage and warping.

Do not stack panels too high when storing to minimize the risk of falling.

## Section 8: Exposure Controls/Personal Protection

### Control Parameters

Component	Exposure Limits	
	OSHA PEL (mg/m <sup>3</sup> )	ACGIH TLV (mg/m <sup>3</sup> )
Calcium Sulfate Dihydrate	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Crystalline Silica <sup>1</sup>	$\left[\frac{(10)}{(\%SiO_2+2)}\right]$ <sup>(R)</sup> ; $\left[\frac{(30)}{(\%SiO_2+2)}\right]$ <sup>(T)</sup>	0.025 <sup>(R)</sup>
Vermiculite	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup> 3 <sup>(R)</sup>
Fiberglas, synthetic, vitreous, continuous	15 <sup>(T)</sup> 5 <sup>(R)</sup>	1 f/cc <sup>(R)</sup>

T- Total Dust

R-Respirable Dust

1-Present as an impurity in raw materials

### Exposure Controls

#### Appropriate Engineering Controls

Work/Hygiene Practices: Utilize methods to minimize dust production. Utilize wet methods, when appropriate, to reduce generation of dust.

Ventilation: Provide local and general exhaust ventilation sufficient to maintain a dust level below the PEL/TLV.

#### Personal Protective Equipment

##### Respiratory Protection

A NIOSH approved particulate respirator is recommended in poorly ventilated areas or if the PEL/TLV is exceeded. OSHA's 29 CFR 1910.134 (Respiratory Protection Standard) must be followed whenever work conditions require respirator use.

##### Eye Protection

Safety glasses or goggles.

##### Skin

Gloves, protective clothing and/or barrier creams may be utilized if conditions warrant.

## Section 9: Physical and Chemical Properties

**a) Appearance:** Coated gypsum board with white/gray core

**(b) Odor:** None

**(c) Odor threshold:** Not available

**(d) pH :** ~7

**(e) Melting point/freezing point:** Not Available

**(f) Initial boiling point and boiling range:** Not Available

**(g) Flash point:** Not available

**(h) Evaporation rate:** Not available

**(i) Flammability (solid, gas):** Not flammable

**(j) Upper/lower flammability or explosive limits:** Not available

**(k) Vapor pressure:** Not available

- (l) Vapor density: Not available
- (m) Relative density: 2.3 g/cc
- (n) Solubility(ies): 2.1 g/L @ 20° C
- (o) Partition coefficient: n-octanol/water: Not available
- (p) Auto-ignition temperature: Not available
- (q) Decomposition temperature: 1450°C
- (r) Viscosity: Not available
- (s) Volatile organic compound (VOC) content: None

## Section 10: Stability and Reactivity

- (a) Reactivity: No data available
- (b) Chemical stability: Stable in dry environments
- (c) Possibility of hazardous reactions: None known
- (d) Conditions to avoid (e.g., static discharge, shock, or vibration): None known
- (e) Incompatible materials: None
- (f) Hazardous decomposition products: None known. Above 1450° C gypsum will decompose to calcium oxide (CaO), with releases of sulfur dioxide (SO<sub>2</sub>) and various oxides of carbon.

## Section 11: Toxicological Information

### Information on Toxicological effects

#### Information on likely routes of exposure

- Ingestion** Not a likely route of exposure. May result in obstruction or temporary irritation of the digestive tract.
- Inhalation** Dust may irritate respiratory system. Chronic exposure may result in lung disease. (See below)
- Skin contact** May cause irritation, itching, rash and/or redness, dry skin or dermatitis.
- Eye contact** May cause mechanical irritation.

### Symptoms related to the physical, chemical and toxicological characteristics

Acute exposure to airborne dust concentrations in excess of the PEL/TLV may result in coughing, dyspnea, wheezing, and a burning irritation of the nose, throat, and upper respiratory tract, along with possible impaired pulmonary function. Chronic exposure to crystalline silica (a naturally occurring contaminant) in the respirable size has been shown to cause silicosis, a debilitating lung disease, and lung cancer.

Continued and prolonged contact may result in dry skin. Contact with dust and/or fiberglass may produce itching, rash and/or redness. Repeated or prolonged exposure may result in dermatitis.

### Toxicological data

No toxicological data is available for this product. Toxicological information for components of this product listed below.

- Acute toxicity** Gypsum: [OECD TG 420, Fixed dose procedure] Oral LD50 > 2,000-mg/kg b.w. for female rats (Sprague-Dawley)
- Skin corrosion/irritation** Gypsum was not irritating to the skin of rabbits at 1, 24, 48 and 72 hours after removal of test patches [OECD TG 404]
- Serious eye damage/eye irritation** Not available
- Skin sensitization** There is no indication of skin sensitization in guinea pigs [OECD TG 406].
- Respiratory sensitization** Not available
- Sensitization** Not available
- Mutagenicity** No evidence of mutagenicity on Ames Test.
- Carcinogenicity** Not available

This product contains crystalline silica (quartz) as a naturally occurring impurity in some of the raw materials. The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen.

Exposures to respirable crystalline silica are not expected during the recommended use of this product. Industrial hygiene monitoring to date has not identified any detectable respirable crystalline silica in dust sampling conducted utilizing recommended application procedures. However, actual levels must be determined by workplace hygiene testing.

## Section 11: Toxicological Information (Continued)

Reproductive effects	Not available
Specific target organ toxicity – single exposure	Not available
Aspiration toxicity	Not available

## Section 12: Ecological Information

**(a) Ecotoxicity (aquatic and terrestrial, where available):** This product does not present an ecological hazard to the environment.

**(b) Persistence and degradability:** Unknown

**(c) Bioaccumulative potential:** Gypsum is a naturally occurring mineral. Biodegradation and/or bioaccumulation potential is not applicable.

**(d) Mobility in soil:** Unknown

**(e) Other adverse effects (such as hazardous to the ozone layer):** None known

## Section 13: Disposal Considerations

This material is not considered a hazardous waste. Dispose of according to Local, State, Federal, and Provincial Environmental Regulations.

## Section 14: Transport Information

This product is not a DOT hazardous material

Shipping Name: Same as product name

ICAO/IATA/IMO: Not applicable

## Section 15: Regulatory Information

All ingredients are included on the TSCA inventory.

### Federal Regulations

**SARA Title III:** Not listed under Sections 302, 304, and 313

**CERCLA:** Not listed

**RCRA:** Not listed

**OSHA:** Dust and potential respirable crystalline silica generated during product use may be hazardous.

### State Regulations

California Prop 65: Respirable crystalline silica is known to the state of California to cause cancer. Industrial hygiene monitoring during recommended use of this product failed to identify any respirable crystalline silica.

### Canada WHMIS

All components of this product are included in the Canadian Domestic Substances List (DSL).

Crystalline silica: WHMIS Classification D2A

**Section 16: Other Information**

**SDS Prepared by:** National Gypsum Company  
2001 Rexford Road  
Charlotte, NC 28211

**Phone Number:** (704) 551-5820

**Date of Preparation:** April 21, 2015

**Revision indicators and Date**

Effective Date Change: 6/1/2015 Supersedes: March 6, 2013

Format Changes: Conforms to OSHA 29CFR 1910.1200 (HCS)

**Key to Abbreviations**

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Services Number
CFR	Code of Federal Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
HEPA	High Efficiency Particulate Air
HCS	Hazard Communications Standard
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

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# SAFETY DATA SHEET

## 1. Identification

**Product identifier** SHEETROCK® Brand Fiberglass Drywall Tape

**Other means of identification**

**SDS number** 05000054004

**Synonyms** Fiberglass Tape

**Recommended use** Interior use.

**Recommended restrictions** Use in accordance with manufacturer's recommendations.

### Manufacturer / Importer / Supplier / Distributor information

**Company name** United States Gypsum Company

**Address** 550 West Adams Street  
Chicago, Illinois 60661-3637

**Telephone** 1-800-874-4968

**Website** www.usg.com

**Emergency phone number** 1-800-507-8899

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Not classified.

**OSHA defined hazards** Not classified.

### Label elements

**Hazard symbol** None.

**Signal word** None.

**Hazard statement** None.

### Precautionary statement

**Prevention** Observe good industrial hygiene practices.

**Response** Get medical attention/advice if you feel unwell.

**Storage** Store as indicated in Section 7.

**Disposal** Dispose of in accordance with local, state, and federal regulations.

**Hazard(s) not otherwise classified (HNOC)** None known.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Continuous filament glass fiber	65997-17-3	60-80

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas. Product is composed of continuous fibers that do not qualify as respirable.

## 4. First-aid measures

**Inhalation** Due to the physical nature of this product, inhalation is unlikely. There are no known health effects due to inhalation.

**Skin contact** Direct, prolonged or repeated contact with the skin may cause irritation. Rinse area with plenty of water. Get medical attention if irritation develops and persists.

**Eye contact** Direct contact can cause irritation of eyes. Immediately flush eye(s) with plenty of water. If burning, redness, itching, pain or other symptoms persist or develop, consult physician.

**Ingestion** Due to the physical nature of this product, ingestion is unlikely. There are no known health effects due to ingestion.

**Most important symptoms/effects, acute and delayed** Mechanical irritation of skin, eyes and respiratory system.

**Indication of immediate medical attention and special treatment needed** Provide general supportive measures and treat symptomatically.

**General information** Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

**Suitable extinguishing media** Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media** Not applicable.

**Specific hazards arising from the chemical** Not a fire hazard.

**Special protective equipment and precautions for firefighters** Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Fire-fighting equipment/instructions** Use standard firefighting procedures and consider the hazards of other involved materials.

**Specific methods** Cool material exposed to heat with water spray and remove it if no risk is involved.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures** See Section 8 of the SDS for Personal Protective Equipment.

**Methods and materials for containment and cleaning up** No specific clean-up procedure noted. For waste disposal, see Section 13 of the SDS.

## 7. Handling and storage

**Precautions for safe handling** Avoid contact with skin and eyes. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities** Store at a minimum temperature of 45°F(7°C). Shelf life up to nine months under good storage conditions. Store away from incompatible materials. Protect product from physical damage.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Continuous filament glass fiber (CAS 65997-17-3)	TWA	1 fibers/cm3	Respirable fibers (length > 5 µm & aspect ratio ≥ 3:1)
		5 mg/m3	Inhalable fraction.

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Continuous filament glass fiber (CAS 65997-17-3)	TWA	3 fibers/cm3	Respirable fibers (≤ 3.5 µm in diameter & ≥ 10 µm in length)
		5 mg/m3	Fiber, total

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Appropriate engineering controls** Ventilation is not normally required.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear approved safety goggles.

#### Skin protection

**Hand protection** It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

**Other** Normal work clothing (long sleeved shirts and long pants) is recommended.

**Respiratory protection** Not necessary under normal conditions.

**Thermal hazards** None.

**General hygiene considerations** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Observe any medical surveillance requirements.

## 9. Physical and chemical properties

### Appearance

**Physical state** Solid.

**Form** Fibrous tape



<b>Color</b>	White.
<b>Odor</b>	Low to no odor.
<b>Odor threshold</b>	Not applicable.
<b>pH</b>	Not applicable.
<b>Melting point/freezing point</b>	1292 °F (700 °C)
<b>Initial boiling point and boiling range</b>	Not applicable.
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not applicable.
<b>Flammability limit - upper (%)</b>	Not applicable.
<b>Explosive limit - lower (%)</b>	Not applicable.
<b>Explosive limit - upper (%)</b>	Not applicable.
<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	2.5 (H <sub>2</sub> O=1)
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Insoluble in water.
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition temperature</b>	Not applicable.
<b>Viscosity</b>	Not applicable.
<b>Other information</b>	
<b>Bulk density</b>	156 lb/ft <sup>3</sup>
<b>VOC (Weight %)</b>	0 %

## 10. Stability and reactivity

<b>Reactivity</b>	Not available.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Carbon dioxide.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	Under normal conditions of intended use, this material does not pose a risk to health.
<b>Inhalation</b>	Not likely, due to the form of the product.
<b>Skin contact</b>	Direct, prolonged or repeated contact with the skin may cause irritation.
<b>Eye contact</b>	Direct contact may cause mechanical irritation of the eyes.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	May cause mechanical irritation of skin and eyes.

### Information on toxicological effects

<b>Acute toxicity</b>	None known.
<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.
<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.

## Respiratory or skin sensitization

**Respiratory sensitization** No data available.

**Skin sensitization** Not a skin sensitizer.

**Germ cell mutagenicity** Not expected to be mutagenic.

**Carcinogenicity** Not classified.

### IARC Monographs. Overall Evaluation of Carcinogenicity

Continuous filament glass fiber (CAS 65997-17-3) 3 Not classifiable as to carcinogenicity to humans.

**Reproductive toxicity** Not expected to be a reproductive hazard.

**Specific target organ toxicity - single exposure** No data available, but none expected.

**Specific target organ toxicity - repeated exposure** No data available, but none expected.

**Aspiration hazard** Due to the physical form of the product it is not an aspiration hazard.

**Further information** No other specific acute or chronic health impact noted.

## 12. Ecological information

**Ecotoxicity** The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent releases can have a harmful or damaging effect on the environment.

**Persistence and degradability** No data available.

**Bioaccumulative potential** Bioaccumulation is not expected.

**Mobility in soil** The product is not mobile in soil.

**Other adverse effects** None expected.

## 13. Disposal considerations

**Disposal instructions** Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.

**Local disposal regulations** Dispose of in accordance with local regulations.

**Hazardous waste code** Not regulated.

**Waste from residues / unused products** Dispose of in accordance with local regulations.

**Contaminated packaging** Dispose of in accordance with local regulations.

## 14. Transport information

### DOT

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

## 15. Regulatory information

**US federal regulations** This product is not hazardous according to OSHA 29CFR 1910.1200.

### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories**  
Immediate Hazard - No  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

### SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical      No

SARA 313 (TRI reporting)  
Not regulated.

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)**      Not regulated.

**US state regulations**      This product does not contain a chemical known to the State of California to cause cancer. Only applies to certain inhalable, bio persistent fibers.

**US. Massachusetts RTK - Substance List**

Not regulated.

**US. New Jersey Worker and Community Right-to-Know Act**

Not listed.

**US. Pennsylvania Worker and Community Right-to-Know Law**

Not listed.

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Not listed.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

**Issue date**      04-February-2014

**Revision date**      -

**Version #**      01

**Further information**      The International Agency for Research on Cancer (IARC) in June, 1987, categorized continuous filament glass fibers as not classifiable with respect to human carcinogenicity (Group 3). The evidence from human as well as animal studies was evaluated by IARC as insufficient to classify continuous filament glass fiber as a possible, probable, or confirmed cancer causing material. The ACGIH has established a TLV (Threshold Limit Value or recommended exposure limit) for continuous filament glass fiber of 1 fiber per cubic centimeter of air for respirable fibers and 5 mg per cubic meter of air for inhalable glass fiber dust. These levels were established to prevent mechanical irritation of the upper airways. IARC, NTP (US National Toxicology Program) and OSHA (US Occupational Safety and Health Administration) do not list continuous filament glass fibers as a carcinogen.

As manufactured, continuous filament glass fibers in this product are not respirable. Continuous filament glass products that are chopped, crushed or severely mechanically processed during manufacturing or use may contain a very small amount of respirable particulate, some of which may be glass shards.

NFPA Ratings:

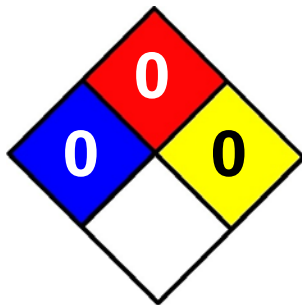
Health: 0

Flammability: 0

Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

## NFPA Ratings



## List of abbreviations

## References

## Disclaimer

NFPA: National Fire Protection Association.

HSDB® - Hazardous Substances Data Bank

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** SHEETROCK® Brand Joint Tape

**Other means of identification**

**SDS number** 61000054002

**Additional Product** SHEETROCK® Heavy Joint Tape

**Synonyms** Drywall Tape, Cellulose Tape

**Recommended use** Interior use.

**Recommended restrictions** Use in accordance with manufacturer's recommendations.

### Manufacturer/Importer/Supplier/Distributor information

**Company name** United States Gypsum Company

**Address** 550 West Adams Street  
Chicago, Illinois 60661-3637

**Telephone** 1-800-874-4968

**Website** www.usg.com

**Emergency phone number** 1-800-507-8899

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Not classified.

**OSHA defined hazards** Not classified.

### Label elements

**Hazard symbol** None.

**Signal word** None.

**Hazard statement** None.

### Precautionary statement

**Prevention** Observe good industrial hygiene practices.

**Response** Get medical attention/advice if you feel unwell.

**Storage** Store as indicated in Section 7.

**Disposal** Dispose of in accordance with local, state, and federal regulations.

**Hazard(s) not otherwise classified (HNOC)** None known.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Cellulose	9004-34-6	90 - 100
Calcium carbonate	471-34-1	1-5

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas.

## 4. First-aid measures

**Inhalation** Due to the physical nature of this product, inhalation is unlikely. There are no known health effects due to inhalation.

**Skin contact** Direct, prolonged or repeated contact with the skin may cause irritation. Contact along a length of the edge of the paper may result in a paper cut of the skin. Cuts or abrasions should be treated promptly with thorough cleansing of the affected area.

**Eye contact** Direct contact can cause irritation of eyes. Immediately flush eye(s) with plenty of water. If burning, redness, itching, pain or other symptoms persist or develop, consult physician.

<b>Ingestion</b>	Due to the physical nature of this product, ingestion is unlikely. There are no known health effects due to ingestion.
<b>Most important symptoms/effects, acute and delayed</b>	Mechanical irritation of skin, eyes and respiratory system.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	Not applicable.
<b>Specific hazards arising from the chemical</b>	Not a fire hazard.
<b>Special protective equipment and precautions for firefighters</b>	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>Specific methods</b>	Cool material exposed to heat with water spray and remove it if no risk is involved.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	See Section 8 of the SDS for Personal Protective Equipment.
<b>Methods and materials for containment and cleaning up</b>	No specific clean-up procedure noted. For waste disposal, see Section 13 of the SDS.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Avoid contact with skin and eyes. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices.
<b>Conditions for safe storage, including any incompatibilities</b>	Store away from incompatible materials. Protect product from physical damage.

## 8. Exposure controls/personal protection

<b>Occupational exposure limits</b>	No exposure limits noted for ingredient(s).
<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Appropriate engineering controls</b>	Ventilation is not normally required.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Wear approved safety goggles.
<b>Skin protection</b>	
<b>Hand protection</b>	It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.
<b>Other</b>	Normal work clothing (long sleeved shirts and long pants) is recommended.
<b>Respiratory protection</b>	Not necessary under normal conditions.
<b>Thermal hazards</b>	None.
<b>General hygiene considerations</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Observe any medical surveillance requirements.

## 9. Physical and chemical properties

<b>Appearance</b>	
<b>Physical state</b>	Solid.
<b>Form</b>	Paper tape.
<b>Color</b>	White.

<b>Odor</b>	Low to no odor.
<b>Odor threshold</b>	Not applicable.
<b>pH</b>	Not applicable.
<b>Melting point/freezing point</b>	451 °F (232.78 °C)
<b>Initial boiling point and boiling range</b>	Not applicable.
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not applicable.
<b>Flammability limit - upper (%)</b>	Not applicable.
<b>Explosive limit - lower (%)</b>	Not applicable.
<b>Explosive limit - upper (%)</b>	Not applicable.
<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	1.2 (H <sub>2</sub> O=1)
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Insoluble in water.
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition temperature</b>	Not applicable.
<b>Viscosity</b>	Not applicable.
<b>Other information</b>	
<b>Bulk density</b>	75 lb/ft <sup>3</sup>
<b>VOC (Weight %)</b>	0 %

## 10. Stability and reactivity

<b>Reactivity</b>	Not available.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Not likely, due to the form of the product.
<b>Skin contact</b>	Direct, prolonged or repeated contact with the skin may cause irritation.
<b>Eye contact</b>	Direct contact may cause mechanical irritation of the eyes.
<b>Ingestion</b>	Under normal conditions of intended use, this material does not pose a risk to health.

**Symptoms related to the physical, chemical and toxicological characteristics** May cause mechanical irritation of skin and eyes.

### Information on toxicological effects

<b>Acute toxicity</b>	None known.
<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.

<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	No data available.
<b>Skin sensitization</b>	Not a skin sensitizer.
<b>Germ cell mutagenicity</b>	Not expected to be mutagenic.
<b>Carcinogenicity</b>	Not expected to cause cancer.
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	
Not listed.	
<b>Reproductive toxicity</b>	Not expected to be a reproductive hazard.
<b>Specific target organ toxicity - single exposure</b>	No data available, but none expected.
<b>Specific target organ toxicity - repeated exposure</b>	No data available, but none expected.
<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.
<b>Further information</b>	No other specific acute or chronic health impact noted.

## 12. Ecological information

<b>Ecotoxicity</b>	The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent releases can have a harmful or damaging effect on the environment.
<b>Persistence and degradability</b>	No data available.
<b>Bioaccumulative potential</b>	Bioaccumulation is not expected.
<b>Mobility in soil</b>	The product is not mobile in soil.
<b>Other adverse effects</b>	None expected.

## 13. Disposal considerations

<b>Disposal instructions</b>	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.
<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.

## 14. Transport information

<b>DOT</b>	Not regulated as dangerous goods.
<b>IATA</b>	Not regulated as dangerous goods.
<b>IMDG</b>	Not regulated as dangerous goods.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

## 15. Regulatory information

<b>US federal regulations</b>	This product is not hazardous according to OSHA 29CFR 1910.1200.
<b>TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)</b>	
Not regulated.	
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	
Not listed.	
<b>CERCLA Hazardous Substance List (40 CFR 302.4)</b>	
Not listed.	



## Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories** Immediate Hazard - No  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312 Hazardous chemical** No

### SARA 313 (TRI reporting)

Not regulated.

## Other federal regulations

### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

**US state regulations** This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

### US. Massachusetts RTK - Substance List

Calcium carbonate (CAS 471-34-1)

Cellulose (CAS 9004-34-6)

### US. New Jersey Worker and Community Right-to-Know Act

Calcium carbonate (CAS 471-34-1)

Cellulose (CAS 9004-34-6)

### US. Pennsylvania Worker and Community Right-to-Know Law

Calcium carbonate (CAS 471-34-1)

Cellulose (CAS 9004-34-6)

### US. Rhode Island RTK

Not regulated.

### US. California Proposition 65

Not Listed.

## International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

**Issue date** 26-February-2015

**Revision date** -

**Version #** 01

**Further information** This product as sold and under normal conditions of intended use, does not present an inhalation, ingestion or skin hazard. However, individual user processes, (such as sanding, abrasive blasting, etc.) may result in the formation of dust and/or particulate that may present a variety of health hazards.

NFPA Ratings: 0

Health:

Flammability: 0

Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

**NFPA ratings****List of abbreviations****References**

NFPA: National Fire Protection Association.

HSDB® - Hazardous Substances Data Bank

**Disclaimer**

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** SHEETROCK® Brand UltraLight Flex Corner Tape

**Other means of identification**

**SDS number** 18000054009

**Synonyms** Paper-Faced Plastic Corner Bead or Trim

**Recommended use** Interior use.

**Recommended restrictions** Use in accordance with manufacturer's recommendations.

### Manufacturer / Importer / Supplier / Distributor information

**Company name** United States Gypsum Company

**Address** 550 West Adams Street  
Chicago, Illinois 60661-3637

**Telephone** 1-800-874-4968

**Website** www.usg.com

**Emergency phone number** 1-800-507-8899

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Not classified.

**OSHA defined hazards** Not classified.

**Label elements**

**Hazard symbol** None.

**Signal word** None.

**Hazard statement** None.

**Precautionary statement**

**Prevention** Observe good industrial hygiene practices.

**Response** Get medical attention/advice if any cut or injury occurs that cannot be treated using standard first aid practices.

**Storage** Store as indicated in Section 7.

**Disposal** Dispose of in accordance with local, state, and federal regulations.

**Hazard(s) not otherwise classified (HNOC)** None known.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Cellulose	9004-34-6	10-15

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas.

## 4. First-aid measures

**Inhalation** Due to the physical nature of this product, inhalation is unlikely. There are no known health effects due to inhalation.

**Skin contact** Contact along a length of the edge of the paper may result in a paper cut of the skin. Cuts or abrasions should be treated promptly with thorough cleansing of the affected area. Unload from package with caution and handle carefully.

**Eye contact** Direct contact can cause irritation of eyes. If burning, redness, itching, pain or other symptoms persist or develop, consult physician.

**Ingestion** Due to the physical nature of this product, ingestion is unlikely. There are no known health effects due to ingestion.

**Most important symptoms/effects, acute and delayed** Under normal conditions of intended use, this material does not pose a risk to health.

<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved.
<b>5. Fire-fighting measures</b>	
<b>Suitable extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	Not applicable.
<b>Specific hazards arising from the chemical</b>	Not a fire hazard.
<b>Special protective equipment and precautions for firefighters</b>	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>Specific methods</b>	Cool material exposed to heat with water spray and remove it if no risk is involved.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	See Section 8 of the SDS for Personal Protective Equipment.
<b>Methods and materials for containment and cleaning up</b>	No specific clean-up procedure noted. For waste disposal, see Section 13 of the SDS.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Avoid contact with skin and eyes. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices.
<b>Conditions for safe storage, including any incompatibilities</b>	Store away from incompatible materials. Protect product from physical damage.

## 8. Exposure controls/personal protection

<b>Occupational exposure limits</b>	No exposure limits noted for ingredient(s).
<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Appropriate engineering controls</b>	Not required.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Wear approved safety goggles.
<b>Skin protection</b>	
<b>Hand protection</b>	It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.
<b>Other</b>	Normal work clothing (long sleeved shirts and long pants) is recommended.
<b>Respiratory protection</b>	Respiratory protection not required, under normal use.
<b>Thermal hazards</b>	None.
<b>General hygiene considerations</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Observe any medical surveillance requirements.

## 9. Physical and chemical properties

<b>Appearance</b>	
<b>Physical state</b>	Solid.
<b>Form</b>	Paper-faced plastic strip
<b>Color</b>	Green/white.
<b>Odor</b>	Low to no odor.
<b>Odor threshold</b>	Not applicable.
<b>pH</b>	Not applicable.
<b>Melting point/freezing point</b>	275 - 325 °F (135 - 162.78 °C)
<b>Initial boiling point and boiling range</b>	Not applicable.
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.

**Flammability (solid, gas)** Not applicable.

**Upper/lower flammability or explosive limits**

**Flammability limit - lower (%)** Not applicable.

**Flammability limit - upper (%)** Not applicable.

**Explosive limit - lower (%)** Not applicable.

**Explosive limit - upper (%)** Not applicable.

**Vapor pressure** Not applicable.

**Vapor density** Not applicable.

**Relative density** 1 (H<sub>2</sub>O=1)

**Solubility(ies)**

**Solubility (water)** Insoluble in water.

**Partition coefficient (n-octanol/water)** Not applicable.

**Auto-ignition temperature** Not applicable.

**Decomposition temperature** Not available.

**Viscosity** Not applicable.

**Other information**

**Bulk density** 60 - 70 lb/ft<sup>3</sup>

**VOC (Weight %)** 0 %

## 10. Stability and reactivity

**Reactivity** Not available.

**Chemical stability** Material is stable under normal conditions.

**Possibility of hazardous reactions** Hazardous polymerization does not occur.

**Conditions to avoid** Contact with incompatible materials.

**Incompatible materials** Strong oxidizing agents.

**Hazardous decomposition products** No hazardous decomposition products are known.

## 11. Toxicological information

**Information on likely routes of exposure**

**Ingestion** Not likely, due to the form of the product.

**Inhalation** Not likely, due to the form of the product.

**Skin contact** Under normal conditions of intended use, this material does not pose a skin hazard. Contact along a length of the edge of the paper may result in a paper cut of the skin.

**Eye contact** Direct contact with eyes may cause temporary irritation.

**Symptoms related to the physical, chemical and toxicological characteristics** Under normal conditions of intended use, this material does not pose a risk to health.

**Information on toxicological effects**

**Acute toxicity** None known.

**Skin corrosion/irritation** Contact along a length of the edge of the paper may result in a paper cut of the skin.

**Serious eye damage/eye irritation** Direct contact with eyes may cause temporary irritation.

**Respiratory or skin sensitization**

**Respiratory sensitization** No data available.

**Skin sensitization** Not a skin sensitizer.

**Germ cell mutagenicity** Not expected to be mutagenic.

**Carcinogenicity** Not expected to cause cancer.

**Reproductive toxicity** Not expected to be a reproductive hazard.

**Specific target organ toxicity - single exposure** No data available, but none expected.

**Specific target organ toxicity - repeated exposure** No data available, but none expected.

<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.
<b>Further information</b>	No other specific acute or chronic health impact noted.

## 12. Ecological information

<b>Ecotoxicity</b>	The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent releases can have a harmful or damaging effect on the environment.
<b>Persistence and degradability</b>	No data available.
<b>Bioaccumulative potential</b>	Bioaccumulation is not expected.
<b>Mobility in soil</b>	The product is not mobile in soil.
<b>Other adverse effects</b>	None expected.

## 13. Disposal considerations

<b>Disposal instructions</b>	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.
<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.

## 14. Transport information

<b>DOT</b>	Not regulated as dangerous goods.
<b>IATA</b>	Not regulated as dangerous goods.
<b>IMDG</b>	Not regulated as dangerous goods.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

## 15. Regulatory information

<b>US federal regulations</b>	This product is not hazardous according to OSHA 29CFR 1910.1200.
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### **TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

### **US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

### **CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.

### **Superfund Amendments and Reauthorization Act of 1986 (SARA)**

<b>Hazard categories</b>	Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
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### **SARA 302 Extremely hazardous substance**

Not listed.

<b>SARA 311/312 Hazardous chemical</b>	No
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### **SARA 313 (TRI reporting)**

Not regulated.

### **Other federal regulations**

#### **Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

#### **Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

<b>Safe Drinking Water Act (SDWA)</b>	Not regulated.
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<b>US state regulations</b>	This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.
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**US. Massachusetts RTK - Substance List**

Cellulose (CAS 9004-34-6)

**US. New Jersey Worker and Community Right-to-Know Act**

Cellulose (CAS 9004-34-6)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Cellulose (CAS 9004-34-6)

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65****US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Not listed.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision****Issue date** 05-February-2014**Revision date** -**Version #** 01

**Further information** This product as sold and under normal conditions of intended use, does not present an inhalation, ingestion or skin hazard. However, individual user processes, (such as sanding, abrasive blasting, etc.) may result in the formation of dust and/or particulate that may present a variety of health hazards.

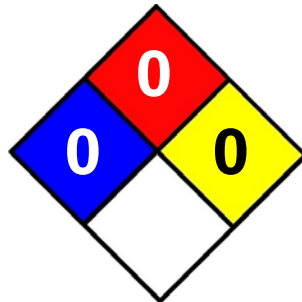
NFPA Ratings: 0

Health:

Flammability: 0

Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

**NFPA Ratings****List of abbreviations**

NFPA: National Fire Protection Association.

**References**

HSDB® - Hazardous Substances Data Bank

**Disclaimer**

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** SHEETROCK® Brand Dur-A-Bead® Corner Bead

**Other means of identification**

**SDS number** 18000054003

**Manufacturer name:** SHEETROCK® Brand Metal Trim

**Synonyms** Metal Corner Bead or Trim

**Recommended use** Interior use.

**Recommended restrictions** Use in accordance with manufacturer's recommendations.

### Manufacturer / Importer / Supplier / Distributor information

**Company name** United States Gypsum Company

**Address** 550 West Adams Street  
Chicago, Illinois 60661-3637

**Telephone** 1-800-874-4968

**Website** www.usg.com

**Emergency phone number** 1-800-507-8899

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Not classified.

**OSHA defined hazards** Not classified.

**Label elements**

**Hazard symbol** None.

**Signal word** None.

**Hazard statement** None.

**Precautionary statement**

**Prevention** Observe good industrial hygiene practices.

**Response** Get medical attention/advice if any cut or injury occurs that cannot be treated using standard first aid practices.

**Storage** Store as indicated in Section 7.

**Disposal** Dispose of in accordance with local, state, and federal regulations.

**Hazard(s) not otherwise classified (HNOC)** None known.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Steel	65997-19-5	> 80

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas.

Product is composed of galvanized steel. The following list identifies those elements which may exist in steel or which may comprise compounds present in steel or alloy steels. Aluminum, beryllium, boron, calcium, carbon, cerium, chromium, cobalt, copper, hafnium, iron, lanthanum, lead, magnesium, manganese, molybdenum, nickel, niobium, nitrogen, oxygen, phosphorus, selenium, silicon, sulfur, tantalum, tin, titanium, tungsten, vanadium, yttrium, zinc, zirconium

## 4. First-aid measures

**Inhalation** Due to the physical nature of this product, inhalation is unlikely. There are no known health effects due to inhalation.

**Skin contact** Edges and notches (where present) may be sharp and can cut skin. Cuts or abrasions should be treated promptly with thorough cleansing of the affected area. Seek medical attention for severe cuts or abrasions.

**Eye contact** Sharp edges and notches (where present) may cause cuts and irritation. If eye is cut or otherwise damaged, seek medical attention.



<b>Ingestion</b>	Due to the physical nature of this product, ingestion is unlikely. There are no known health effects due to ingestion.
<b>Most important symptoms/effects, acute and delayed</b>	Under normal conditions of intended use, this material does not pose a risk to health.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	Not applicable.
<b>Specific hazards arising from the chemical</b>	Not a fire hazard.
<b>Special protective equipment and precautions for firefighters</b>	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>Specific methods</b>	Cool material exposed to heat with water spray and remove it if no risk is involved.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	See Section 8 of the SDS for Personal Protective Equipment.
<b>Methods and materials for containment and cleaning up</b>	No specific clean-up procedure noted. For waste disposal, see Section 13 of the SDS.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Edges and notches (where present) may be sharp and can cut skin. Unload from package with caution and handle carefully.
<b>Conditions for safe storage, including any incompatibilities</b>	Store away from incompatible materials. Protect product from physical damage. Falling pieces can pose an injury hazard. Do not store open boxes or individual pieces above chest level.

## 8. Exposure controls/personal protection

<b>Occupational exposure limits</b>	No exposure limits noted for ingredient(s).
<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Appropriate engineering controls</b>	Not required.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Wear approved safety goggles.
<b>Skin protection</b>	
<b>Hand protection</b>	It is a good industrial hygiene practice to minimize skin contact. Use suitable protective gloves.
<b>Other</b>	Normal work clothing (long sleeved shirts and long pants) is recommended.
<b>Respiratory protection</b>	Respiratory protection not required, under normal use.
<b>Thermal hazards</b>	None.

## 9. Physical and chemical properties

<b>Appearance</b>	
<b>Physical state</b>	Solid.
<b>Form</b>	Metal strip
<b>Color</b>	Gray.
<b>Odor</b>	Low to no odor.
<b>Odor threshold</b>	Not applicable.
<b>pH</b>	Not applicable.
<b>Melting point/freezing point</b>	2400 - 2800 °F (1315.56 - 1537.78 °C)
<b>Initial boiling point and boiling range</b>	Not applicable.
<b>Flash point</b>	Not applicable.

<b>Evaporation rate</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not applicable.
<b>Flammability limit - upper (%)</b>	Not applicable.
<b>Explosive limit - lower (%)</b>	Not applicable.
<b>Explosive limit - upper (%)</b>	Not applicable.
<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	7 - 8 (H <sub>2</sub> O=1)
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Insoluble in water.
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not applicable.
<b>Other information</b>	
<b>Bulk density</b>	480 - 500 lb/ft <sup>3</sup>
<b>Particle size</b>	Varies.
<b>VOC (Weight %)</b>	0 %

## 10. Stability and reactivity

<b>Reactivity</b>	Not available.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Contact with incompatible materials.
<b>Incompatible materials</b>	Strong acids.
<b>Hazardous decomposition products</b>	Metal oxides.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	Not likely, due to the form of the product.
<b>Inhalation</b>	Not likely, due to the form of the product.
<b>Skin contact</b>	Under normal conditions of intended use, this material does not pose a skin hazard. Sharp edges may cause cuts and irritation.
<b>Eye contact</b>	Direct contact with eyes may cause irritation, cuts or abrasions.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Under normal conditions of intended use, this material does not pose a risk to health.

### Information on toxicological effects

<b>Acute toxicity</b>	None known.
<b>Skin corrosion/irritation</b>	Edges and notches (where present) may be sharp and can cut skin.
<b>Serious eye damage/eye irritation</b>	Contact with sharp edges and notches (where present) may cut the eye and cause eye damage.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	No data available.
<b>Skin sensitization</b>	Not a skin sensitizer.
<b>Germ cell mutagenicity</b>	Not expected to be mutagenic.
<b>Carcinogenicity</b>	Not expected to cause cancer.
<b>Reproductive toxicity</b>	Not expected to be a reproductive hazard.
<b>Specific target organ toxicity - single exposure</b>	No data available, but none expected.

<b>Specific target organ toxicity - repeated exposure</b>	No data available, but none expected.
<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.
<b>Further information</b>	No other specific acute or chronic health impact noted.

## 12. Ecological information

<b>Ecotoxicity</b>	Metals in massive forms presents a limited hazard for the environment.
<b>Persistence and degradability</b>	The product is not biodegradable.
<b>Bioaccumulative potential</b>	Bioaccumulation is not expected.
<b>Mobility in soil</b>	Metals in massive form are not mobile in the environment.
<b>Other adverse effects</b>	None expected.

## 13. Disposal considerations

<b>Disposal instructions</b>	The steel in this product is recyclable. Dispose in accordance with applicable federal, state, and local regulations.
<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.
<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.

## 14. Transport information

<b>DOT</b>	Not regulated as dangerous goods.
<b>IATA</b>	Not regulated as dangerous goods.
<b>IMDG</b>	Not regulated as dangerous goods.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

## 15. Regulatory information

<b>US federal regulations</b>	This product is not hazardous according to OSHA 29CFR 1910.1200.
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### **TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

### **US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

### **CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.

### **Superfund Amendments and Reauthorization Act of 1986 (SARA)**

<b>Hazard categories</b>	Immediate Hazard - No
	Delayed Hazard - No
	Fire Hazard - No
	Pressure Hazard - No
	Reactivity Hazard - No

### **SARA 302 Extremely hazardous substance**

Not listed.

<b>SARA 311/312 Hazardous chemical</b>	No
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### **SARA 313 (TRI reporting)**

Not regulated.

### **Other federal regulations**

#### **Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

#### **Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

<b>Safe Drinking Water Act (SDWA)</b>	Not regulated.
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**US state regulations**

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

**US. Massachusetts RTK - Substance List**

Not regulated.

**US. New Jersey Worker and Community Right-to-Know Act**

Not listed.

**US. Pennsylvania Worker and Community Right-to-Know Law**

Not listed.

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65****US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Not listed.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

**Issue date** 05-February-2014

**Revision date** -

**Version #** 01

**Further information** This product as sold and under normal conditions of intended use, does not present an inhalation, ingestion or skin hazard. However, individual user processes, (such as welding, sawing, brazing, grinding, abrasive blasting, and machining) may result in the formation of fumes, dust (combustible or otherwise), and/or particulate that may present a variety of health hazards. Molten steel is also hazardous.

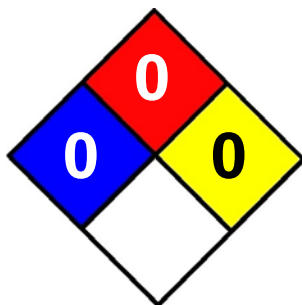
NFPA Ratings:

Health: 0

Flammability: 0

Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

**NFPA Ratings****List of abbreviations**

NFPA: National Fire Protection Association.

**References**

HSDB® - Hazardous Substances Data Bank

**Disclaimer**

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** SHEETROCK® Brand Paper Faced Metal Bead and Trim

**Other means of identification**

**SDS number** 18000054002

**Manufacturer names:** BABY BULL®, DANISH™, MICRO BEAD™, SANTA FE™, ULTRA BEAD™, Beaded Flex, Flexible Metal Tape-On Corner, PMB, Reveal, Shadowline, SLIC, SLOC, B1, B2, B4, B9

**Synonyms** Paper-Faced Metal Corner Bead or Trim, Flexible Metal Tape-On Corner

**Recommended use** Interior use.

**Recommended restrictions** Use in accordance with manufacturer's recommendations.

**Manufacturer / Importer / Supplier / Distributor information**

**Company name** United States Gypsum Company

**Address** 550 West Adams Street  
Chicago, Illinois 60661-3637

**Telephone** 1-800-874-4968

**Website** www.usg.com

**Emergency phone number** 1-800-507-8899

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Not classified.

**OSHA defined hazards** Not classified.

**Label elements**

**Hazard symbol** None.

**Signal word** None.

**Hazard statement** None.

**Precautionary statement**

**Prevention** Observe good industrial hygiene practices.

**Response** Get medical attention/advice if any cut or injury occurs that cannot be treated using standard first aid practices.

**Storage** Store as indicated in Section 7.

**Disposal** Dispose of in accordance with local, state, and federal regulations.

**Hazard(s) not otherwise classified (HNOC)** None known.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Steel	65997-19-5	>80
Cellulose	9004-34-6	5-10

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas.

Product is composed of galvanized steel, paper, and adhesive. The following list identifies those elements which may exist in steel or which may comprise compounds present in steel or alloy steels. Aluminum, beryllium, boron, calcium, carbon, cerium, chromium, cobalt, copper, hafnium, iron, lanthanum, lead, magnesium, manganese, molybdenum, nickel, niobium, nitrogen, oxygen, phosphorus, selenium, silicon, sulfur, tantalum, tin, titanium, tungsten, vanadium, yttrium, zinc, zirconium

## 4. First-aid measures

**Inhalation** Due to the physical nature of this product, inhalation is unlikely. There are no known health effects due to inhalation.

**Skin contact** Edges and notches (where present) may be sharp and can cut skin.

<b>Eye contact</b>	Sharp edges and notches (where present) may cause cuts and irritation. If eye is cut or otherwise damaged, seek medical attention.
<b>Ingestion</b>	Due to the physical nature of this product, ingestion is unlikely. There are no known health effects due to ingestion.
<b>Most important symptoms/effects, acute and delayed</b>	Under normal conditions of intended use, this material does not pose a risk to health.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	Not applicable.
<b>Specific hazards arising from the chemical</b>	Not a fire hazard.
<b>Special protective equipment and precautions for firefighters</b>	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>Specific methods</b>	Cool material exposed to heat with water spray and remove it if no risk is involved.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	See Section 8 of the SDS for Personal Protective Equipment.
<b>Methods and materials for containment and cleaning up</b>	No specific clean-up procedure noted. For waste disposal, see Section 13 of the SDS.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Edges and notches (where present) may be sharp and can cut skin. Unload from package with caution and handle carefully.
<b>Conditions for safe storage, including any incompatibilities</b>	Store away from incompatible materials. Protect product from physical damage. Falling pieces can pose an injury hazard. Do not store open boxes or individual pieces above chest level.

## 8. Exposure controls/personal protection

<b>Occupational exposure limits</b>	No exposure limits noted for ingredient(s).
<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Appropriate engineering controls</b>	Not required.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Wear approved safety goggles.
<b>Skin protection</b>	
<b>Hand protection</b>	It is a good industrial hygiene practice to minimize skin contact. Use suitable protective gloves.
<b>Other</b>	Normal work clothing (long sleeved shirts and long pants) is recommended.
<b>Respiratory protection</b>	Respiratory protection not required, under normal use.
<b>Thermal hazards</b>	None.

## 9. Physical and chemical properties

<b>Appearance</b>	
<b>Physical state</b>	Solid.
<b>Form</b>	Metal strip with paper facing
<b>Color</b>	Gray/white.
<b>Odor</b>	Low to no odor.
<b>Odor threshold</b>	Not applicable.
<b>pH</b>	Not applicable.
<b>Melting point/freezing point</b>	2400 - 2800 °F (1315.56 - 1537.78 °C) (base metal (steel))

<b>Initial boiling point and boiling range</b>	Not applicable.
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not applicable.
<b>Flammability limit - upper (%)</b>	Not applicable.
<b>Explosive limit - lower (%)</b>	Not applicable.
<b>Explosive limit - upper (%)</b>	Not applicable.
<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	7 - 8 (H <sub>2</sub> O=1) (base metal)
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Insoluble in water.
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition temperature</b>	Not applicable.
<b>Viscosity</b>	Not applicable.
<b>Other information</b>	
<b>Bulk density</b>	480 - 500 lb/ft <sup>3</sup> (base metal)
<b>Particle size</b>	Varies.
<b>VOC (Weight %)</b>	0 %

## 10. Stability and reactivity

<b>Reactivity</b>	Not available.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Contact with incompatible materials.
<b>Incompatible materials</b>	Strong acids.
<b>Hazardous decomposition products</b>	Metal oxides.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	Not likely, due to the form of the product.
<b>Inhalation</b>	Not likely, due to the form of the product.
<b>Skin contact</b>	Under normal conditions of intended use, this material does not pose a skin hazard. Sharp edges may cause cuts and irritation.
<b>Eye contact</b>	Direct contact with eyes may cause irritation, cuts or abrasions.

<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Under normal conditions of intended use, this material does not pose a risk to health.
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### Information on toxicological effects

<b>Acute toxicity</b>	None known.
<b>Skin corrosion/irritation</b>	Edges and notches (where present) may be sharp and can cut skin.
<b>Serious eye damage/eye irritation</b>	Contact with sharp edges and notches (where present) may cut the eye and cause eye damage.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	No data available.
<b>Skin sensitization</b>	Not a skin sensitizer.
<b>Germ cell mutagenicity</b>	Not expected to be mutagenic.
<b>Carcinogenicity</b>	Not expected to cause cancer.

<b>Reproductive toxicity</b>	Not expected to be a reproductive hazard.
<b>Specific target organ toxicity - single exposure</b>	No data available, but none expected.
<b>Specific target organ toxicity - repeated exposure</b>	No data available, but none expected.
<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.
<b>Further information</b>	No other specific acute or chronic health impact noted.

## 12. Ecological information

<b>Ecotoxicity</b>	Metals in massive forms presents a limited hazard for the environment.
<b>Persistence and degradability</b>	The product is not biodegradable.
<b>Bioaccumulative potential</b>	Bioaccumulation is not expected.
<b>Mobility in soil</b>	Metals in massive form are not mobile in the environment.
<b>Other adverse effects</b>	None expected.

## 13. Disposal considerations

<b>Disposal instructions</b>	The steel in this product is recyclable. Dispose in accordance with applicable federal, state, and local regulations.
<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.
<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.

## 14. Transport information

<b>DOT</b>	Not regulated as dangerous goods.
<b>IATA</b>	Not regulated as dangerous goods.
<b>IMDG</b>	Not regulated as dangerous goods.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

## 15. Regulatory information

<b>US federal regulations</b>	This product is not hazardous according to OSHA 29CFR 1910.1200.
<b>TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)</b>	Not regulated.
<b>US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	Not listed.
<b>CERCLA Hazardous Substance List (40 CFR 302.4)</b>	Not listed.
<b>Superfund Amendments and Reauthorization Act of 1986 (SARA)</b>	
<b>Hazard categories</b>	Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
<b>SARA 302 Extremely hazardous substance</b>	Not listed.
<b>SARA 311/312 Hazardous chemical</b>	No
<b>SARA 313 (TRI reporting)</b>	Not regulated.

### Other federal regulations

<b>Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List</b>	Not regulated.
<b>Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)</b>	Not regulated.



**Safe Drinking Water Act (SDWA)**

Not regulated.

**US state regulations**

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

**US. Massachusetts RTK - Substance List**

Not regulated.

**US. New Jersey Worker and Community Right-to-Know Act**

Not listed.

**US. Pennsylvania Worker and Community Right-to-Know Law**

Not listed.

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65****US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Not listed.

**International Inventories****Country(s) or region****Inventory name****On inventory (yes/no)\***

United States &amp; Puerto Rico

Toxic Substances Control Act (TSCA) Inventory

Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision****Issue date**

30-January-2014

**Revision date**

-

**Version #**

01

**Further information**

This product as sold and under normal conditions of intended use, does not present an inhalation, ingestion or skin hazard. However, individual user processes, (such as welding, sawing, brazing, grinding, abrasive blasting, and machining) may result in the formation of fumes, dust (combustible or otherwise), and/or particulate that may present a variety of health hazards. Molten steel is also hazardous.

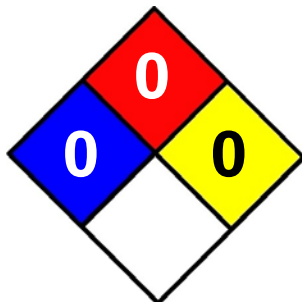
**NFPA Ratings:**

Health: 0

Flammability: 0

Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

**NFPA Ratings****List of abbreviations**

NFPA: National Fire Protection Association.

**References**

HSDB® - Hazardous Substances Data Bank

**Disclaimer**

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.

## 1. Identification

Product identifier	SHEETROCK® Brand EASY SAND™ Lightweight Setting-Type Joint Compound, 5, 20, 45, 90, 210
Other means of identification	
SDS number	61000030002
Synonyms	Joint Compound, Finishing Compound, Taping Compound, Mud
Recommended use	Interior use.
Recommended restrictions	Use in accordance with manufacturer's recommendations.
Manufacturer / Importer / Supplier / Distributor information	
Company name	United States Gypsum Company
Address	550 West Adams Street Chicago, Illinois 60661-3637
Telephone	1-800-874-4968
Website	www.usg.com
Emergency phone number	1-800-507-8899

## 2. Hazard(s) identification

<b>Physical hazards</b>	Not classified.	
<b>Health hazards</b>	Carcinogenicity	Category 1A
<b>OSHA defined hazards</b>	Not classified.	

### Label elements



<b>Signal word</b>	Danger	
<b>Hazard statement</b>	May cause cancer by inhalation.	
<b>Precautionary statement</b>		
<b>Prevention</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection.	
<b>Response</b>	If exposed or concerned: Get medical advice/attention.	
<b>Storage</b>	Store locked up.	
<b>Disposal</b>	Dispose of in accordance with local, state, and federal regulations.	
<b>Hazard(s) not otherwise classified (HNOC)</b>	Not classified.	

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1)	26499-65-0	> 60
Limestone	1317-65-3	< 40
Attapulgite	12174-11-7	< 10
Calcium sulfate dihydrate (Alternative CAS 10101-41-4)	13397-24-5	< 10
Mica	12001-26-2	< 10
Perlite	93763-70-3	< 10

## Impurities

Chemical name	CAS number	%
Crystalline silica (Quartz)	14808-60-7	< 1

## Composition comments

All concentrations are in percent by weight unless ingredient is a gas.

Raw materials in this product contain respirable crystalline silica as an impurity. The weight percent of respirable crystalline silica found in this product is <1.0%. Exposures to respirable crystalline silica during the normal use of this product must be determined by workplace hygiene testing.

## 4. First-aid measures

### Inhalation

Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

### Skin contact

Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

### Eye contact

Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.

### Ingestion

Plaster of Paris hardens and if ingested may result in stomach and intestinal blockage. Drinking gelatin solutions or large volumes of water may delay setting.

### Most important symptoms/effects, acute and delayed

Under normal conditions of intended use, this product is not expected to be a health risk. Dust may irritate throat and respiratory system and cause coughing.

### Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically.

### General information

Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

### Suitable extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

### Unsuitable extinguishing media

Not applicable.

### Specific hazards arising from the chemical

Not a fire hazard.

### Special protective equipment and precautions for firefighters

Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

### Fire-fighting equipment/instructions

Use standard firefighting procedures and consider the hazards of other involved materials.

### Specific methods

Cool material exposed to heat with water spray and remove it if no risk is involved.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

See Section 8 of the SDS for Personal Protective Equipment.

### Methods and materials for containment and cleaning up

Vacuum up the spilled material. Vacuums used for this purpose should be equipped with HEPA filters. Containers must be labeled. Collect in approved containers and seal securely. For waste disposal, see Section 13 of the SDS.

### Environmental precautions

Avoid discharge to drains, sewers, and other water systems.

## 7. Handling and storage

### Precautions for safe handling

Minimize dust production when mixing, sanding, or opening and closing bags. Avoid inhalation of dust. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices and use appropriate lifting techniques.

### Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Avoid contact with acids, water, and moisture.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium sulfate dihydrate (Alternative CAS 10101-41-4) (CAS 13397-24-5)	PEL	5 mg/m3	Respirable fraction.
Limestone (CAS 1317-65-3)	PEL	15 mg/m3 5 mg/m3	Total dust. Respirable fraction.
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	PEL	15 mg/m3 5 mg/m3	Total dust. Respirable fraction.
		15 mg/m3	Total dust.

#### US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	
Mica (CAS 12001-26-2)	TWA	20 mppcf	
Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.3 mg/m3	Total dust.
		0.1 mg/m3	Respirable.
		2.4 mppcf	Respirable.

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Calcium sulfate dihydrate (Alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	10 mg/m3	Inhalable fraction.
Mica (CAS 12001-26-2)	TWA	3 mg/m3	Respirable fraction.
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	10 mg/m3	Inhalable fraction.
Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

#### US NIOSH Pocket Guide to Chemical Hazards: Recommended exposure limit (REL)

Components	Type	Value	Form
Calcium sulfate dihydrate (Alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	5 mg/m3	Respirable.
Limestone (CAS 1317-65-3)	TWA	10 mg/m3 5 mg/m3 10 mg/m3	Total Respirable. Total
Mica (CAS 12001-26-2)	TWA	3 mg/m3	Respirable.
Perlite (CAS 93763-70-3)	TWA	5 mg/m3 10 mg/m3	Respirable. Total
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	5 mg/m3	Respirable.
Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	10 mg/m3 0.05 mg/m3	Total Respirable dust.

#### Biological limit values

No biological exposure limits noted for the ingredient(s).

#### Appropriate engineering controls

Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

**Individual protection measures, such as personal protective equipment**

<b>Eye/face protection</b>	Wear approved safety goggles.
<b>Skin protection</b>	
<b>Hand protection</b>	It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.
<b>Other</b>	Normal work clothing (long sleeved shirts and long pants) is recommended.
<b>Respiratory protection</b>	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.
<b>Thermal hazards</b>	None.
<b>General hygiene considerations</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash. Observe any medical surveillance requirements.

**9. Physical and chemical properties****Appearance**

<b>Physical state</b>	Solid.
<b>Form</b>	Powder.
<b>Color</b>	White to off-white.
<b>Odor</b>	Low to no odor.
<b>Odor threshold</b>	Not applicable.
<b>pH</b>	7.5 - 9.9
<b>Melting point/freezing point</b>	Not applicable.
<b>Initial boiling point and boiling range</b>	212 °F (100 °C)
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not applicable.
<b>Flammability limit - upper (%)</b>	Not applicable.
<b>Explosive limit - lower (%)</b>	Not applicable.
<b>Explosive limit - upper (%)</b>	Not applicable.
<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	0.6 - 0.7 (H <sub>2</sub> O=1)
<b>Solubility(ies)</b>	Soluble in water.
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition temperature</b>	Not applicable.
<b>Viscosity</b>	Not applicable.
<b>Other information</b>	
<b>Bulk density</b>	35 - 45 lbs/ft <sup>3</sup>
<b>VOC (Weight %)</b>	None detected.

**10. Stability and reactivity**

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.

<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	When mixed with water this product can become very hot. Encasing or making moulds of any body part can cause serious burns that may require surgical removal of affected tissue and even amputation of encased body part.
<b>Incompatible materials</b>	Acids. Exposure to water and acids must be supervised because the reactions are vigorous and produce large amounts of heat. Crystalline silica in contact with powerful oxidizing agents, such as fluorine, chlorine trifluoride and oxygen difluoride, may cause fires. Crystalline silica will dissolve in hydrofluoric acid and produce a corrosive gas, silicon tetrafluoride.
<b>Hazardous decomposition products</b>	Calcium oxides. Sulfur oxides. Silicon oxides. Above 1472°F (800°C) limestone (CaCO <sub>3</sub> ) can decompose to lime (CaO) and release carbon dioxide (CO <sub>2</sub> ).

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	Ingestion may cause irritation and stomach discomfort.
<b>Inhalation</b>	Inhalation of dusts may cause respiratory irritation. Prolonged and repeated exposure to airborne respirable crystalline silica can cause silicosis and/or lung cancer.
<b>Skin contact</b>	Under normal conditions of intended use, this product does not pose a skin hazard.
<b>Eye contact</b>	Direct contact with airborne particulates may cause temporary irritation.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Dust may irritate eyes and mucous membranes of the nose, throat and upper respiratory system causing sneezing and/or coughing.

### Information on toxicological effects

<b>Acute toxicity</b>	Not expected to be a hazard under normal conditions of intended use.
<b>Skin corrosion/irritation</b>	Prolonged or repeated skin contact may cause drying, cracking, or irritation.
<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.
<b>Skin sensitization</b>	Not a skin sensitizer. Plaster of Paris has displayed little sensitization potential.
<b>Germ cell mutagenicity</b>	Data does not suggest that this product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	Repeated and prolonged exposure to high levels of respirable crystalline silica may cause cancer.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

Attapulgit (CAS 12174-11-7)	2B Possibly carcinogenic to humans.
Crystalline silica (Quartz) (CAS 14808-60-7)	3 Not classifiable as to carcinogenicity to humans.
	1 Carcinogenic to humans.

#### NTP Report on Carcinogens

Crystalline silica (Quartz) (CAS 14808-60-7)	Known To Be Human Carcinogen.
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<b>Reproductive toxicity</b>	Not expected to be a reproductive hazard.
<b>Specific target organ toxicity - single exposure</b>	No data available, but none expected.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified. For detailed information, see section 16.
<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.
<b>Chronic effects</b>	Prolonged and routine inhalation of high levels of respirable crystalline silica particles can lead to the lung disease known as silicosis. Some studies show excess numbers of cases of scleroderma, connective tissue disorders, lupus, rheumatoid arthritis, chronic kidney diseases and end-stage kidney disease in workers exposed to respirable crystalline silica. Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

## 12. Ecological information

<b>Ecotoxicity</b>	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
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Components	Species	Test Results
Calcium sulfate dihydrate (Alternative CAS 10101-41-4) (CAS 13397-24-5)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours

Components	Species	Test Results
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours
<b>Persistence and degradability</b>	Calcium sulfate dissolves in water forming calcium and sulfate ions.	
<b>Bioaccumulative potential</b>	Bioaccumulation is not expected.	
<b>Mobility in soil</b>	No data available.	
<b>Other adverse effects</b>	None expected.	
<b>13. Disposal considerations</b>		
<b>Disposal instructions</b>	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.	
<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.	
<b>Hazardous waste code</b>	Not regulated.	
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.	
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.	
<b>14. Transport information</b>		
<b>DOT</b>		
Not regulated as a hazardous material by DOT.		
<b>IATA</b>		
Not regulated as a dangerous good.		
<b>IMDG</b>		
Not regulated as a dangerous good.		
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable.	
<b>15. Regulatory information</b>		
<b>US federal regulations</b>	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.	
<b>TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)</b>		
Not regulated.		
<b>US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>		
Not listed.		
<b>CERCLA Hazardous Substance List (40 CFR 302.4)</b>		
Not listed.		
<b>Superfund Amendments and Reauthorization Act of 1986 (SARA)</b>		
<b>Hazard categories</b>	Immediate Hazard - Yes Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No	
<b>SARA 302 Extremely hazardous substance</b>	No	
<b>SARA 311/312 Hazardous chemical</b>	Yes	
<b>SARA 313 (TRI reporting)</b>	Not regulated.	
<b>Other federal regulations</b>		
<b>Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List</b>		
Not regulated.		
<b>Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)</b>		
Not regulated.		
<b>Safe Drinking Water Act (SDWA)</b>	Not regulated.	
<b>Food and Drug Administration (FDA)</b>	Not regulated.	

## US state regulations

### US. Massachusetts RTK - Substance List

Calcium sulfate dihydrate (Alternative CAS 10101-41-4) (CAS 13397-24-5)  
Crystalline silica (Quartz) (CAS 14808-60-7)  
Limestone (CAS 1317-65-3)  
Mica (CAS 12001-26-2)  
Perlite (CAS 93763-70-3)  
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

### US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

### US. Pennsylvania RTK - Hazardous Substances

Calcium sulfate dihydrate (Alternative CAS 10101-41-4) (CAS 13397-24-5)  
Crystalline silica (Quartz) (CAS 14808-60-7)  
Limestone (CAS 1317-65-3)  
Mica (CAS 12001-26-2)  
Perlite (CAS 93763-70-3)  
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

### US. Rhode Island RTK

Not regulated.

### US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

#### US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Attapulgite (CAS 12174-11-7)  
Crystalline silica (Quartz) (CAS 14808-60-7)

## International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

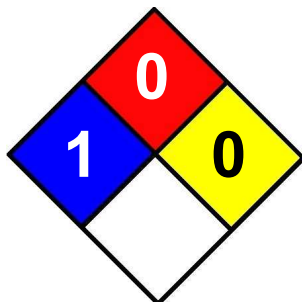
\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

Issue date	31-December-2013
Revision date	-
Version #	01
Further information	<p>Crystalline silica: Raw materials in this product may contain respirable crystalline silica. Exposures to respirable crystalline silica are not expected during the normal use of this product. However, actual levels must be determined by workplace hygiene testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.</p> <p>Attapulgite: Carcinogenic to experimental animals via a route of exposure not relevant to human exposure.</p> <p>Plaster of Paris: Is classified as a hazardous substance but is generally considered a safe material for routine use. When plaster of Paris is used responsibly it is not considered as a dangerous material. However, when mixed with water this product can become very hot. DO NOT attempt to make a cast enclosing any part of the body. Encasing any body part can cause serious burns and even amputation of the encased body part.</p> <p>NFPA Ratings: Health: 1 Flammability: 0 Physical hazard: 0</p> <p>Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe</p>

### NFPA Ratings





**Disclaimer**

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.

## 1. Identification

<b>Product identifier</b>	<b>SHEETROCK® DURABOND® Setting Type Joint Compound</b>
<b>Other means of identification</b>	
<b>SDS number</b>	61000030006
<b>Synonyms</b>	Joint Compound , Taping Compound, Mud, Finishing Compound
<b>Recommended use</b>	Interior use.
<b>Recommended restrictions</b>	Use in accordance with manufacturer's recommendations.
<b>Manufacturer / Importer / Supplier / Distributor information</b>	
<b>Company name</b>	United States Gypsum Company
<b>Address</b>	550 West Adams Street Chicago, Illinois 60661-3637
<b>Telephone</b>	1-800-874-4968
<b>Website</b>	www.usg.com
<b>Emergency phone number</b>	1-800-507-8899

## 2. Hazard(s) identification

<b>Physical hazards</b>	Not classified.	
<b>Health hazards</b>	Carcinogenicity	Category 1A
<b>OSHA defined hazards</b>	Not classified.	
<b>Label elements</b>		



<b>Signal word</b>	Danger
<b>Hazard statement</b>	May cause cancer by inhalation.
<b>Precautionary statement</b>	
<b>Prevention</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection.
<b>Response</b>	If exposed or concerned: Get medical advice/attention.
<b>Storage</b>	Store locked up.
<b>Disposal</b>	Dispose of in accordance with local, state, and federal regulations.
<b>Hazard(s) not otherwise classified (HNOC)</b>	Not classified.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1)	26499-65-0	> 60
Limestone	1317-65-3	< 30
Attapulgite	12174-11-7	< 10
Mica	12001-26-2	< 10
Perlite	93763-70-3	< 5

### Impurities

Chemical name	CAS number	%
Crystalline silica (Quartz)	14808-60-7	< 1

## Composition comments

All concentrations are in percent by weight unless ingredient is a gas.

Raw materials in this product contain respirable crystalline silica as an impurity. The weight percent of respirable crystalline silica found in this product is <1.0%. Exposures to respirable crystalline silica during the normal use of this product must be determined by workplace hygiene testing.

## 4. First-aid measures

### Inhalation

Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

### Skin contact

Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

### Eye contact

Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.

### Ingestion

Plaster of Paris hardens and if ingested may result in stomach and intestinal blockage. Drinking gelatin solutions or large volumes of water may delay setting.

### Most important symptoms/effects, acute and delayed

Under normal conditions of intended use, this product is not expected to be a health risk. Dust may irritate throat and respiratory system and cause coughing.

### Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically.

### General information

Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

### Suitable extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

### Unsuitable extinguishing media

Not applicable.

### Specific hazards arising from the chemical

Not a fire hazard.

### Special protective equipment and precautions for firefighters

Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

### Fire-fighting equipment/instructions

Use standard firefighting procedures and consider the hazards of other involved materials.

### Specific methods

Cool material exposed to heat with water spray and remove it if no risk is involved.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

See Section 8 of the SDS for Personal Protective Equipment.

### Methods and materials for containment and cleaning up

Vacuum up the spilled material. Vacuums used for this purpose should be equipped with HEPA filters. Containers must be labeled. Collect in approved containers and seal securely. For waste disposal, see Section 13 of the SDS.

### Environmental precautions

Avoid discharge to drains, sewers, and other water systems.

## 7. Handling and storage

### Precautions for safe handling

Minimize dust production when mixing, sanding, or opening and closing bags. Avoid inhalation of dust. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices and use appropriate lifting techniques.

### Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Avoid contact with acids, water, and moisture.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Limestone (CAS 1317-65-3)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	PEL	5 mg/m3	Respirable fraction.

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Components	Type	Value	Form
		15 mg/m3	Total dust.

**US. OSHA Table Z-3 (29 CFR 1910.1000)**

Components	Type	Value	
Mica (CAS 12001-26-2)	TWA	20 mppcf	
Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.3 mg/m3	Total dust.
		0.1 mg/m3	Respirable.
		2.4 mppcf	Respirable.

**US. ACGIH Threshold Limit Values**

Components	Type	Value	Form
Mica (CAS 12001-26-2)	TWA	3 mg/m3	Respirable fraction.
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	10 mg/m3	Inhalable fraction.
Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

**US NIOSH Pocket Guide to Chemical Hazards: Recommended exposure limit (REL)**

Components	Type	Value	Form
Limestone (CAS 1317-65-3)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Mica (CAS 12001-26-2)	TWA	3 mg/m3	Respirable.
Perlite (CAS 93763-70-3)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.

<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Appropriate engineering controls</b>	Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Wear approved safety goggles.
<b>Skin protection</b>	
<b>Hand protection</b>	It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.
<b>Other</b>	Normal work clothing (long sleeved shirts and long pants) is recommended.
<b>Respiratory protection</b>	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.
<b>Thermal hazards</b>	None.
<b>General hygiene considerations</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash. Observe any medical surveillance requirements.

## 9. Physical and chemical properties

### Appearance

Physical state	Solid.
Form	Powder.
Color	White to off white.

Odor Low to no odor.

Odor threshold Not applicable.

pH 7.5 - 9.9

Melting point/freezing point Not applicable.

Initial boiling point and boiling range Not applicable.

Flash point Not applicable.

Evaporation rate Not applicable.

Flammability (solid, gas) Not applicable.

### Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not applicable.

Flammability limit - upper (%) Not applicable.

Explosive limit - lower (%) Not applicable.

Explosive limit - upper (%) Not applicable.

Vapor pressure Not applicable.

Vapor density Not applicable.

Relative density 0.9 - 1.2

Solubility(ies) Soluble in water.

Partition coefficient (n-octanol/water) Not applicable.

Auto-ignition temperature Not applicable.

Decomposition temperature Not applicable.

Viscosity Not applicable.

### Other information

Bulk density 55 - 70 lbs/ft<sup>3</sup>

VOC (Weight %) None detected.

## 10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous reactions Hazardous polymerization does not occur.

Conditions to avoid When mixed with water this product can become very hot. Encasing or making moulds of any body part can cause serious burns that may require surgical removal of affected tissue and even amputation of encased body part.

Incompatible materials Acids. Exposure to water and acids must be supervised because the reactions are vigorous and produce large amounts of heat. Crystalline silica in contact with powerful oxidizing agents, such as fluorine, chlorine trifluoride and oxygen difluoride, may cause fires. Crystalline silica will dissolve in hydrofluoric acid and produce a corrosive gas, silicon tetrafluoride.

Hazardous decomposition products Calcium oxides. Sulfur oxides. Above 1472°F (800°C) limestone (CaCO<sub>3</sub>) can decompose to lime (CaO) and release carbon dioxide (CO<sub>2</sub>).

## 11. Toxicological information

### Information on likely routes of exposure

Ingestion Ingestion may cause irritation and stomach discomfort.

Inhalation Inhalation of dusts may cause respiratory irritation. Prolonged and repeated exposure to airborne respirable crystalline silica can cause silicosis and/or lung cancer.

Skin contact Under normal conditions of intended use, this product does not pose a skin hazard.

<b>Eye contact</b>	Direct contact with airborne particulates may cause temporary irritation.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Dust may irritate eyes and mucous membranes of the nose, throat and upper respiratory system causing sneezing and/or coughing.
<b>Information on toxicological effects</b>	
<b>Acute toxicity</b>	Not expected to be a hazard under normal conditions of intended use.
<b>Skin corrosion/irritation</b>	Prolonged or repeated skin contact may cause drying, cracking, or irritation.
<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.
<b>Skin sensitization</b>	Not a skin sensitizer. Plaster of Paris has displayed little sensitization potential.
<b>Germ cell mutagenicity</b>	Data does not suggest that this product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	Repeated and prolonged exposure to high levels of respirable crystalline silica may cause cancer.
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>	
Attapulgit (CAS 12174-11-7)	2B Possibly carcinogenic to humans.
Crystalline silica (Quartz) (CAS 14808-60-7)	3 Not classifiable as to carcinogenicity to humans.
	1 Carcinogenic to humans.
<b>NTP Report on Carcinogens</b>	
Crystalline silica (Quartz) (CAS 14808-60-7)	Known To Be Human Carcinogen.
<b>Reproductive toxicity</b>	Not expected to be a reproductive hazard.
<b>Specific target organ toxicity - single exposure</b>	No data available, but none expected.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified. For detailed information, see section 16.
<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.
<b>Chronic effects</b>	Prolonged and routine inhalation of high levels of respirable crystalline silica particles can lead to the lung disease known as silicosis. Some studies show excess numbers of cases of scleroderma, connective tissue disorders, lupus, rheumatoid arthritis, chronic kidney diseases and end-stage kidney disease in workers exposed to respirable crystalline silica. Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

## 12. Ecological information

<b>Ecotoxicity</b>	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
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Components	Species	Test Results
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours
<b>Persistence and degradability</b>	Calcium sulfate dissolves in water forming calcium and sulfate ions.	
<b>Bioaccumulative potential</b>	Bioaccumulation is not expected.	
<b>Mobility in soil</b>	No data available.	
<b>Other adverse effects</b>	None expected.	

## 13. Disposal considerations

<b>Disposal instructions</b>	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.
<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.

## 14. Transport information

<b>DOT</b>	Not regulated as a hazardous material by DOT.
<b>IATA</b>	Not regulated as a dangerous good.

## IMDG

Not regulated as a dangerous good.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

## 15. Regulatory information

### US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

#### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### Hazard categories

Immediate Hazard - Yes  
Delayed Hazard - Yes  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

#### SARA 302 Extremely hazardous substance

No

#### SARA 311/312 Hazardous chemical

Yes

#### SARA 313 (TRI reporting)

Not regulated.

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

#### Safe Drinking Water Act (SDWA)

Not regulated.

#### Food and Drug Administration (FDA)

Not regulated.

### US state regulations

#### US. Massachusetts RTK - Substance List

Crystalline silica (Quartz) (CAS 14808-60-7)  
Limestone (CAS 1317-65-3)  
Mica (CAS 12001-26-2)  
Perlite (CAS 93763-70-3)  
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

#### US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

#### US. Pennsylvania RTK - Hazardous Substances

Crystalline silica (Quartz) (CAS 14808-60-7)  
Limestone (CAS 1317-65-3)  
Mica (CAS 12001-26-2)  
Perlite (CAS 93763-70-3)  
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

#### US. Rhode Island RTK

Not regulated.

#### US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

#### US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Attapulgite (CAS 12174-11-7)  
Crystalline silica (Quartz) (CAS 14808-60-7)

## International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

**Issue date** 31-December-2013

**Revision date** -

**Version #** 01

**Further information** Crystalline silica: Raw materials in this product may contain respirable crystalline silica. Exposures to respirable crystalline silica are not expected during the normal use of this product. However, actual levels must be determined by workplace hygiene testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.

Attapulgit: Carcinogenic to experimental animals via a route of exposure not relevant to human exposure.

Plaster of Paris: Is classified as a hazardous substance but is generally considered a safe material for routine use. When plaster of Paris is used responsibly it is not considered as a dangerous material. However, when mixed with water this product can become very hot. DO NOT attempt to make a cast enclosing any part of the body. Encasing any body part can cause serious burns and even amputation of the encased body part.

NFPA Ratings:

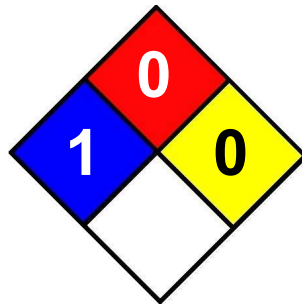
Health: 1

Flammability: 0

Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

### NFPA Ratings



### Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.





# SAFETY DATA SHEET

## 1. Identification

Product identifier	<b>SHEETROCK® Brand PLUS 3® Lightweight All Purpose Joint Compound, Ready-Mixed</b>
Other means of identification	
SDS number	61000010011
Synonyms	Joint Compound (Ready-Mixed) , Taping Compound, Mud, Finishing Compound
Recommended use	Interior use.
Recommended restrictions	Use in accordance with manufacturer's recommendations.
<b>Manufacturer / Importer / Supplier / Distributor information</b>	
Company name	United States Gypsum Company
Address	550 West Adams Street Chicago, Illinois 60661-3637
Telephone	1-800-874-4968
Website	www.usg.com
Emergency phone number	1-800-507-8899

## 2. Hazard(s) identification

Physical hazards	Not classified.
Health hazards	Not classified.
OSHA defined hazards	Not classified.
<b>Label elements</b>	
Hazard symbol	None.
Signal word	None.
Hazard statement	None.
<b>Precautionary statement</b>	
Prevention	Observe good industrial hygiene practices.
Response	Get medical attention/advice if you feel unwell.
Storage	Store as indicated in Section 7.
Disposal	Dispose of in accordance with local, state, and federal regulations.
Hazard(s) not otherwise classified (HNOC)	Not classified.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Limestone	1317-65-3	< 50
Perlite	93763-70-3	< 10
Attapulgite	12174-11-7	< 5

<b>Composition comments</b>	All concentrations are in percent by weight unless ingredient is a gas.
	Industrial hygiene studies by USG Corporation and governmental agencies did not detect airborne respirable crystalline silica during activities associated with the normal use of this product. However, job site air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

## 4. First-aid measures

<b>Inhalation</b>	Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.
<b>Skin contact</b>	Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.
<b>Eye contact</b>	Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.

<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Dust may irritate eyes and mucous membranes of the nose, throat and upper respiratory system causing sneezing and/or coughing. May cause allergic skin disorders in sensitive individuals.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	Not applicable.
<b>Specific hazards arising from the chemical</b>	Not a fire hazard.
<b>Special protective equipment and precautions for firefighters</b>	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>Specific methods</b>	Cool material exposed to heat with water spray and remove it if no risk is involved.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	See Section 8 of the SDS for Personal Protective Equipment.
<b>Methods and materials for containment and cleaning up</b>	<p>Large Spills: Scoop spilled materials and recover as much of the product as possible for use. If spillage is unrecoverable dispose according to local, state, and federal regulations.</p> <p>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.</p>
<b>Environmental precautions</b>	Avoid discharge to drains, sewers, and other water systems.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Avoid inhalation of dust and contact with skin and eyes. Minimize dust generation and accumulation. In case of insufficient ventilation, wear suitable respiratory equipment. Observe good industrial hygiene practices. Use proper lifting techniques.
<b>Conditions for safe storage, including any incompatibilities</b>	<p>Store in a cool, dry, well-ventilated place. Store in a closed container away from incompatible materials. Protect from moisture. Keep away from heat. Do not use if material has spoiled, i.e., there is a moldy appearance or an unpleasant odor. Keep containers closed when not in use.</p> <p>Filled 4.5 gallon pails of joint compound may be stacked a maximum of 3 layers high on a standard 48 x 48 pallet (16 pails per layer, 3 layers high). Pallets may only be stacked a maximum of two high.</p> <p>Filled cartons of joint compound may be stacked a maximum of 3 layers high on a standard 42 x 42 or 42 x 48 pallet (16 pails per layer, 3 layers high). Pallets may only be stacked a maximum of two high.</p>

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Limestone (CAS 1317-65-3)	PEL	5 mg/m3 15 mg/m3	Respirable fraction. Total dust.

#### US NIOSH Pocket Guide to Chemical Hazards: Recommended exposure limit (REL)

Components	Type	Value	Form
Limestone (CAS 1317-65-3)	TWA	5 mg/m3 10 mg/m3	Respirable. Total
Perlite (CAS 93763-70-3)	TWA	5 mg/m3 10 mg/m3	Respirable. Total

<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
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<b>Appropriate engineering controls</b>	Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Wear approved safety goggles.
<b>Skin protection</b>	
<b>Hand protection</b>	It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.
<b>Other</b>	Normal work clothing (long sleeved shirts and long pants) is recommended.
<b>Respiratory protection</b>	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.
<b>Thermal hazards</b>	None.
<b>General hygiene considerations</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash. Observe any medical surveillance requirements.

## 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	Semi-solid.
<b>Form</b>	Paste.
<b>Color</b>	Off-white.
<b>Odor</b>	Low to no odor.
<b>Odor threshold</b>	Not applicable.
<b>pH</b>	7.5 - 9.9
<b>Melting point/freezing point</b>	Not applicable.
<b>Initial boiling point and boiling range</b>	212 °F (100 °C)
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Not applicable.

### Upper/lower flammability or explosive limits

<b>Flammability limit - lower (%)</b>	Not applicable.
<b>Flammability limit - upper (%)</b>	Not applicable.
<b>Explosive limit - lower (%)</b>	Not applicable.
<b>Explosive limit - upper (%)</b>	Not applicable.
<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	1 - 1.3 (H <sub>2</sub> O=1)
<b>Solubility(ies)</b>	Soluble in water.
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition temperature</b>	Not applicable.
<b>Viscosity</b>	Not applicable.
<b>Other information</b>	
<b>Bulk density</b>	8.3 - 11 lb/gal
<b>VOC (Weight %)</b>	0.1 - 1.6 g/l (Calculated by EPA Method 24)

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	None known.
<b>Incompatible materials</b>	None known.
<b>Hazardous decomposition products</b>	Above 1472°F (800°C) limestone (CaCO <sub>3</sub> ) can decompose to lime (CaO) and release carbon dioxide (CO <sub>2</sub> ).

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	May cause discomfort if swallowed.
<b>Inhalation</b>	Airborne dust may irritate throat and upper respiratory system causing coughing.
<b>Skin contact</b>	May cause allergic skin reactions especially in individuals with pre-existing skin disease such as eczema. (See Section 16).
<b>Eye contact</b>	Airborne dust may cause mechanical eye irritation.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Dust may irritate eyes and mucous membranes of the nose, throat and upper respiratory system causing sneezing and/or coughing.

### Information on toxicological effects

<b>Acute toxicity</b>	Not expected to be a hazard under normal conditions of intended use.
<b>Skin corrosion/irritation</b>	Prolonged or repeated skin contact may cause drying, cracking, or irritation.
<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.
<b>Skin sensitization</b>	The product contains a small amount of sensitizing substance which may provoke an allergic reaction among sensitive individuals after repeated contact. For detailed information, see section 16.
<b>Germ cell mutagenicity</b>	Data does not suggest that this product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	This product is not expected to increase the risk of cancer.

### IARC Monographs. Overall Evaluation of Carcinogenicity

Attapulgit (CAS 12174-11-7)

2B Possibly carcinogenic to humans.

3 Not classifiable as to carcinogenicity to humans.

<b>Reproductive toxicity</b>	Not expected to be a reproductive hazard.
<b>Specific target organ toxicity - single exposure</b>	No data available, but none expected.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not an aspiration hazard.
<b>Chronic effects</b>	Prolonged exposure may cause chronic effects. For detailed information, see section 16.

## 12. Ecological information

<b>Ecotoxicity</b>	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
<b>Persistence and degradability</b>	No data available.
<b>Bioaccumulative potential</b>	Bioaccumulation is not expected.
<b>Mobility in soil</b>	No data available.
<b>Other adverse effects</b>	None expected.

## 13. Disposal considerations

<b>Disposal instructions</b>	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.
<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.

## 14. Transport information

### DOT

Not regulated as a hazardous material by DOT.

### IATA

Not regulated as a dangerous good.

### IMDG

Not regulated as a dangerous good.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

## 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories** Immediate Hazard - Yes  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

**SARA 302 Extremely hazardous substance** No

**SARA 311/312 Hazardous chemical** No

**SARA 313 (TRI reporting)**  
Not regulated.

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

**Food and Drug Administration (FDA)** Not regulated.

### US state regulations

#### US. Massachusetts RTK - Substance List

Limestone (CAS 1317-65-3)

Perlite (CAS 93763-70-3)

#### US. New Jersey Worker and Community Right-to-Know Act

Limestone (CAS 1317-65-3)

Perlite (CAS 93763-70-3)

#### US. Pennsylvania Worker and Community Right-to-Know Law

Limestone (CAS 1317-65-3)

Perlite (CAS 93763-70-3)

#### US. Rhode Island RTK

Not regulated.

#### US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

#### US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Attapulgite (CAS 12174-11-7)

## International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

**Issue date** 22-January-2014

**Revision date** -

**Version #** 01

**Further information** Vinyl acetate monomer, formaldehyde and acetaldehyde: Trace amounts of vinyl acetate monomer and formaldehyde may be found in this product.

Attapulgite: Carcinogenic to experimental animals via a route of exposure not relevant to human exposure.

Skin Sensitization Potential: This product contains an amount of Triazinetriethanol (THT) (CAS No. 4719-04-4) that is below the approved EPA regulated limits. THT can act as a sensitizer. Numerous human studies with concentrations up to 1% yielded negative (no sensitization) results. However, some results showed positive reactions in concentrations <0.5% mostly in persons with eczema.

Crystalline silica: Raw materials in this product may contain respirable crystalline silica. Exposures to respirable crystalline silica are not expected during the normal use of this product. However, actual levels must be determined by workplace hygiene testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.

Bucket NFPA Classification:

Health: 0

Flammability: 1

Physical hazard: 0

NFPA Ratings:

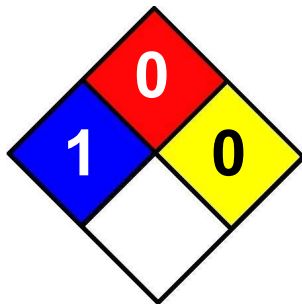
Health: 1

Flammability: 0

Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

### NFPA Ratings



### List of abbreviations

NFPA: National Fire Protection Association.

### References

Registry of Toxic Effects of Chemical Substances (RTECS)

HSDB® - Hazardous Substances Data Bank

Torben et al. (2001). Environmental and Health Assessment of Substances in Household Detergents and Cosmetic Products.

### Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** SHEETROCK® Brand All Purpose Joint Compound, Ready-Mixed

**Other means of identification**

**SDS number** 61000010001

**Synonyms** Joint Compound (Ready-Mixed) , Taping Compound, Mud, Finishing Compound

**Recommended use** Interior use.

**Recommended restrictions** Use in accordance with manufacturer's recommendations.

### Manufacturer/Importer/Supplier/Distributor information

**Company name** United States Gypsum Company

**Address** 550 West Adams Street  
Chicago, Illinois 60661-3637

**Telephone** 1-800-874-4968

**Website** www.usg.com

**Emergency phone number** 1-800-507-8899

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Not classified.

**OSHA defined hazards** Not classified.

### Label elements

**Hazard symbol** None.

**Signal word** None.

**Hazard statement** None.

### Precautionary statement

**Prevention** Observe good industrial hygiene practices.

**Response** Get medical attention/advice if you feel unwell.

**Storage** Store as indicated in Section 7.

**Disposal** Dispose of in accordance with local, state, and federal regulations.

**Hazard(s) not otherwise classified (HNOC)** None known.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Limestone	1317-65-3	> 35
Attapulgite	12174-11-7	< 5
Mica	12001-26-2	< 5
Talc	14807-96-6	< 5

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas.

Industrial hygiene studies by USG Corporation and governmental agencies did not detect airborne respirable crystalline silica during activities associated with the normal use of this product. However, job site air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

## 4. First-aid measures

<b>Inhalation</b>	Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.
<b>Skin contact</b>	Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.
<b>Eye contact</b>	Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.
<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Dust may irritate eyes and mucous membranes of the nose, throat and upper respiratory system causing sneezing and/or coughing. May cause allergic skin disorders in sensitive individuals.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	Not applicable.
<b>Specific hazards arising from the chemical</b>	Not a fire hazard.
<b>Special protective equipment and precautions for firefighters</b>	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>Specific methods</b>	Cool material exposed to heat with water spray and remove it if no risk is involved.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	See Section 8 of the SDS for Personal Protective Equipment.
<b>Methods and materials for containment and cleaning up</b>	<p>Large Spills: Scoop spilled materials and recover as much of the product as possible for use. If spillage is unrecoverable dispose according to local, state, and federal regulations.</p> <p>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.</p>
<b>Environmental precautions</b>	Avoid discharge to drains, sewers, and other water systems.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Avoid inhalation of dust and contact with skin and eyes. Minimize dust generation and accumulation. In case of insufficient ventilation, wear suitable respiratory equipment. Observe good industrial hygiene practices. Use proper lifting techniques.
<b>Conditions for safe storage, including any incompatibilities</b>	<p>Store in a cool, dry, well-ventilated place. Store in a closed container away from incompatible materials. Protect from moisture. Keep away from heat. Do not use if material has spoiled, i.e., there is a moldy appearance or an unpleasant odor. Keep containers closed when not in use.</p> <p>Filled 4.5 gallon pails of joint compound may be stacked a maximum of 3 layers high on a standard 48 x 48 pallet (16 pails per layer, 3 layers high). Pallets may only be stacked a maximum of two high.</p> <p>Filled cartons of joint compound may be stacked a maximum of 3 layers high on a standard 42 x 42 or 42 x 48 pallet (16 pails per layer, 3 layers high). Pallets may only be stacked a maximum of two high.</p>



## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Limestone (CAS 1317-65-3)	PEL	5 mg/m <sup>3</sup> 15 mg/m <sup>3</sup>	Respirable fraction. Total dust.

#### US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Mica (CAS 12001-26-2)	TWA	20 mppcf	
Talc (CAS 14807-96-6)	TWA	0.3 mg/m <sup>3</sup> 0.1 mg/m <sup>3</sup> 20 mppcf 2.4 mppcf	Total dust. Respirable.  Respirable.

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Mica (CAS 12001-26-2)	TWA	3 mg/m <sup>3</sup>	Respirable fraction.
Talc (CAS 14807-96-6)	TWA	2 mg/m <sup>3</sup>	Respirable fraction.

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Limestone (CAS 1317-65-3)	TWA	5 mg/m <sup>3</sup> 10 mg/m <sup>3</sup>	Respirable. Total
Mica (CAS 12001-26-2)	TWA	3 mg/m <sup>3</sup>	Respirable.
Talc (CAS 14807-96-6)	TWA	2 mg/m <sup>3</sup>	Respirable.

#### Biological limit values

No biological exposure limits noted for the ingredient(s).

#### Appropriate engineering controls

Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

#### Individual protection measures, such as personal protective equipment

##### Eye/face protection

Wear approved safety goggles.

##### Skin protection

##### Hand protection

It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

##### Other

Normal work clothing (long sleeved shirts and long pants) is recommended.

##### Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.

##### Thermal hazards

None.

#### General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash. Observe any medical surveillance requirements.

## 9. Physical and chemical properties

### Appearance

**Physical state** Semi-solid.

**Form** Paste.

**Color** Off-white.

**Odor** Low to no odor.

**Odor threshold** Not applicable.

**pH** 7.5 - 9.9

**Melting point/freezing point** Not applicable.

<b>Initial boiling point and boiling range</b>	212 °F (100 °C)
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not applicable.
<b>Flammability limit - upper (%)</b>	Not applicable.
<b>Explosive limit - lower (%)</b>	Not applicable.
<b>Explosive limit - upper (%)</b>	Not applicable.
<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	1.4 - 1.8 (H <sub>2</sub> O=1)
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Soluble in water.
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition temperature</b>	Not applicable.
<b>Viscosity</b>	Not applicable.
<b>Other information</b>	
<b>Bulk density</b>	12 - 15 lb/gal
<b>VOC (Weight %)</b>	0.1 - 1.4 g/l (Calculated by EPA Method 24)

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	None known.
<b>Incompatible materials</b>	None known.
<b>Hazardous decomposition products</b>	Above 1472°F (800°C) limestone (CaCO <sub>3</sub> ) can decompose to lime (CaO) and release carbon dioxide (CO <sub>2</sub> ).

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	May cause discomfort if swallowed.
<b>Inhalation</b>	Airborne dust may irritate throat and upper respiratory system causing coughing.
<b>Skin contact</b>	May cause allergic skin reactions especially in individuals with pre-existing skin disease such as eczema. (See Section 16).
<b>Eye contact</b>	Airborne dust may cause mechanical eye irritation.

<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Dust may irritate eyes and mucous membranes of the nose, throat and upper respiratory system causing sneezing and/or coughing.
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### Information on toxicological effects

<b>Acute toxicity</b>	Not expected to be a hazard under normal conditions of intended use.
<b>Skin corrosion/irritation</b>	Prolonged or repeated skin contact may cause drying, cracking, or irritation.
<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.

<b>Skin sensitization</b>	The product contains a small amount of sensitizing substance which may provoke an allergic reaction among sensitive individuals after repeated contact. For detailed information, see section 16.
<b>Germ cell mutagenicity</b>	Data does not suggest that this product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	This product is not expected to increase the risk of cancer.
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>	
Attapulgate (CAS 12174-11-7)	2B Possibly carcinogenic to humans.
Talc (CAS 14807-96-6)	3 Not classifiable as to carcinogenicity to humans.
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	
Not listed.	3 Not classifiable as to carcinogenicity to humans.
<b>Reproductive toxicity</b>	Not expected to be a reproductive hazard.
<b>Specific target organ toxicity - single exposure</b>	No data available, but none expected.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not an aspiration hazard.
<b>Chronic effects</b>	Prolonged exposure may cause chronic effects. For detailed information, see section 16.

## 12. Ecological information

<b>Ecotoxicity</b>	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
<b>Persistence and degradability</b>	No data available.
<b>Bioaccumulative potential</b>	Bioaccumulation is not expected.
<b>Mobility in soil</b>	No data available.
<b>Other adverse effects</b>	None expected.

## 13. Disposal considerations

<b>Disposal instructions</b>	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.
<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.

## 14. Transport information

<b>DOT</b>	Not regulated as dangerous goods.
<b>IATA</b>	Not regulated as dangerous goods.
<b>IMDG</b>	Not regulated as dangerous goods.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable.

## 15. Regulatory information

<b>US federal regulations</b>	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
<b>TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)</b>	
	Not regulated.
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	
	Not listed.
<b>CERCLA Hazardous Substance List (40 CFR 302.4)</b>	
	Not listed.

## Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories**                      Immediate Hazard - No  
   Delayed Hazard - No  
   Fire Hazard - No  
   Pressure Hazard - No  
   Reactivity Hazard - No

### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312 Hazardous chemical**                      No

### SARA 313 (TRI reporting)

Not regulated.

## Other federal regulations

### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act (SDWA)**                      Not regulated.

## US state regulations

### US. Massachusetts RTK - Substance List

Limestone (CAS 1317-65-3)

Mica (CAS 12001-26-2)

Talc (CAS 14807-96-6)

### US. New Jersey Worker and Community Right-to-Know Act

Limestone (CAS 1317-65-3)

Mica (CAS 12001-26-2)

Talc (CAS 14807-96-6)

### US. Pennsylvania Worker and Community Right-to-Know Law

Limestone (CAS 1317-65-3)

Mica (CAS 12001-26-2)

Talc (CAS 14807-96-6)

### US. Rhode Island RTK

Not regulated.

### US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

### US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Attapulgite (CAS 12174-11-7)

## International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

**Issue date**                                      07-August-2014

**Revision date**                                      -

**Version #**    01

## Further information

Vinyl acetic monomer, formaldehyde and acetaldehyde: Trace amounts of vinyl acetate monomer and formaldehyde may be found in this product.

Attapulgate: Carcinogenic to experimental animals via a route of exposure not relevant to human exposure.

Skin Sensitization Potential: This product contains an amount of Triazinetriethanol (THT) (CAS No. 4719-04-4) that is below the approved EPA regulated limits. THT can act as a sensitizer. Numerous human studies with concentrations up to 1% yielded negative (no sensitization) results. However, some results showed positive reactions in concentrations <0.5% mostly in persons with eczema.

Crystalline silica: Raw materials in this product may contain respirable crystalline silica. Exposures to respirable crystalline silica are not expected during the normal use of this product. However, actual levels must be determined by workplace hygiene testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.

Bucket NFPA Classification:

Health: 0

Flammability: 1

Physical hazard: 0

NFPA Ratings:

Health: 1

Flammability: 0

Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

## NFPA ratings



## List of abbreviations

NFPA: National Fire Protection Association.

## References

Registry of Toxic Effects of Chemical Substances (RTECS)

HSDB® - Hazardous Substances Data Bank

Torben et al. (2001). Environmental and Health Assessment of Substances in Household Detergents and Cosmetic Products.

## Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



# SAFETY DATA SHEET

## 1. Identification

<b>Product identifier</b>	<b>SHEETROCK® Brand Joint Compound, Topping, Ready-Mixed</b>
<b>Other means of identification</b>	
<b>SDS number</b>	61000010006
<b>Synonyms</b>	Joint Compound (Ready-Mixed) , Taping Compound, Mud, Finishing Compound
<b>Recommended use</b>	Interior use.
<b>Recommended restrictions</b>	Use in accordance with manufacturer's recommendations.
<b>Manufacturer / Importer / Supplier / Distributor information</b>	
<b>Company name</b>	United States Gypsum Company
<b>Address</b>	550 West Adams Street Chicago, Illinois 60661-3637
<b>Telephone</b>	1-800-874-4968
<b>Website</b>	www.usg.com
<b>Emergency phone number</b>	1-800-507-8899

## 2. Hazard(s) identification

<b>Physical hazards</b>	Not classified.
<b>Health hazards</b>	Not classified.
<b>OSHA defined hazards</b>	Not classified.
<b>Label elements</b>	
<b>Hazard symbol</b>	None.
<b>Signal word</b>	None.
<b>Hazard statement</b>	None.
<b>Precautionary statement</b>	
<b>Prevention</b>	Observe good industrial hygiene practices.
<b>Response</b>	Get medical attention/advice if you feel unwell.
<b>Storage</b>	Store as indicated in Section 7.
<b>Disposal</b>	Dispose of in accordance with local, state, and federal regulations.
<b>Hazard(s) not otherwise classified (HNOC)</b>	Not classified.

## 3. Composition/information on ingredients

### Mixtures

<b>Chemical name</b>	<b>CAS number</b>	<b>%</b>
Limestone	1317-65-3	> 60
Attapulgite	12174-11-7	< 5
Talc	14807-96-6	< 5

<b>Composition comments</b>	All concentrations are in percent by weight unless ingredient is a gas.  Industrial hygiene studies by USG Corporation and governmental agencies did not detect airborne respirable crystalline silica during activities associated with the normal use of this product. However, job site air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.
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## 4. First-aid measures

<b>Inhalation</b>	Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.
<b>Skin contact</b>	Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.
<b>Eye contact</b>	Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.

<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Dust may irritate eyes and mucous membranes of the nose, throat and upper respiratory system causing sneezing and/or coughing. May cause allergic skin disorders in sensitive individuals.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	Not applicable.
<b>Specific hazards arising from the chemical</b>	Not a fire hazard.
<b>Special protective equipment and precautions for firefighters</b>	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>Specific methods</b>	Cool material exposed to heat with water spray and remove it if no risk is involved.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	See Section 8 of the SDS for Personal Protective Equipment.
<b>Methods and materials for containment and cleaning up</b>	Large Spills: Scoop spilled materials and recover as much of the product as possible for use. If spillage is unrecoverable dispose according to local, state, and federal regulations.  Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
<b>Environmental precautions</b>	Avoid discharge to drains, sewers, and other water systems.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Avoid inhalation of dust and contact with skin and eyes. Minimize dust generation and accumulation. In case of insufficient ventilation, wear suitable respiratory equipment. Observe good industrial hygiene practices. Use proper lifting techniques.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in a cool, dry, well-ventilated place. Store in a closed container away from incompatible materials. Protect from moisture. Keep away from heat. Do not use if material has spoiled, i.e., there is a moldy appearance or an unpleasant odor. Keep containers closed when not in use.  Filled 4.5 gallon pails of joint compound may be stacked a maximum of 3 layers high on a standard 48 x 48 pallet (16 pails per layer, 3 layers high). Pallets may only be stacked a maximum of two high.  Filled cartons of joint compound may be stacked a maximum of 3 layers high on a standard 42 x 42 or 42 x 48 pallet (16 pails per layer, 3 layers high). Pallets may only be stacked a maximum of two high.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Limestone (CAS 1317-65-3)	PEL	5 mg/m3 15 mg/m3	Respirable fraction. Total dust.

#### US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Talc (CAS 14807-96-6)	TWA	0.3 mg/m3 0.1 mg/m3 20 millions of particle 2.4 millions of particle	Total dust. Respirable.  Respirable.

## US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Talc (CAS 14807-96-6)	TWA	2 mg/m3	Respirable fraction.

## US NIOSH Pocket Guide to Chemical Hazards: Recommended exposure limit (REL)

Components	Type	Value	Form
Limestone (CAS 1317-65-3)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Talc (CAS 14807-96-6)	TWA	2 mg/m3	Respirable.

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Appropriate engineering controls** Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear approved safety goggles.

#### Skin protection

**Hand protection** It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

**Other** Normal work clothing (long sleeved shirts and long pants) is recommended.

**Respiratory protection** If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.

**Thermal hazards** None.

**General hygiene considerations** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash. Observe any medical surveillance requirements.

## 9. Physical and chemical properties

### Appearance

**Physical state** Semi-solid.

**Form** Paste.

**Color** Off-white.

**Odor** Low to no odor.

**Odor threshold** Not applicable.

**pH** 7.5 - 9.9

**Melting point/freezing point** Not applicable.

**Initial boiling point and boiling range** 212 °F (100 °C)

**Flash point** Not applicable.

**Evaporation rate** Not applicable.

**Flammability (solid, gas)** Not applicable.

### Upper/lower flammability or explosive limits

**Flammability limit - lower (%)** Not applicable.

**Flammability limit - upper (%)** Not applicable.

**Explosive limit - lower (%)** Not applicable.

**Explosive limit - upper (%)** Not applicable.

**Vapor pressure** Not applicable.

**Vapor density** Not applicable.

**Relative density** 1.4 - 1.8 (H<sub>2</sub>O=1)

**Solubility(ies)** Soluble in water.



<b>Partition coefficient (n-octanol/water)</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition temperature</b>	Not applicable.
<b>Viscosity</b>	Not applicable.
<b>Other information</b>	
<b>Bulk density</b>	12 - 15 lb/gal
<b>VOC (Weight %)</b>	0.1 - 1.4 g/l (Calculated by EPA Method 24)

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	None known.
<b>Incompatible materials</b>	None known.
<b>Hazardous decomposition products</b>	Above 1472°F (800°C) limestone (CaCO <sub>3</sub> ) can decompose to lime (CaO) and release carbon dioxide (CO <sub>2</sub> ).

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	May cause discomfort if swallowed.
<b>Inhalation</b>	Airborne dust may irritate throat and upper respiratory system causing coughing.
<b>Skin contact</b>	May cause allergic skin reactions especially in individuals with pre-existing skin disease such as eczema. (See Section 16).
<b>Eye contact</b>	Airborne dust may cause mechanical eye irritation.

<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Dust may irritate eyes and mucous membranes of the nose, throat and upper respiratory system causing sneezing and/or coughing.
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### Information on toxicological effects

<b>Acute toxicity</b>	Not expected to be a hazard under normal conditions of intended use.
<b>Skin corrosion/irritation</b>	Prolonged or repeated skin contact may cause drying, cracking, or irritation.
<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.
<b>Skin sensitization</b>	The product contains a small amount of sensitizing substance which may provoke an allergic reaction among sensitive individuals after repeated contact. For detailed information, see section 16.
<b>Germ cell mutagenicity</b>	Data does not suggest that this product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	This product is not expected to increase the risk of cancer.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

Attapulgit (CAS 12174-11-7)	2B Possibly carcinogenic to humans.
Talc (CAS 14807-96-6)	3 Not classifiable as to carcinogenicity to humans.
	3 Not classifiable as to carcinogenicity to humans.

<b>Reproductive toxicity</b>	Not expected to be a reproductive hazard.
<b>Specific target organ toxicity - single exposure</b>	No data available, but none expected.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not an aspiration hazard.
<b>Chronic effects</b>	Prolonged exposure may cause chronic effects. For detailed information, see section 16.

## 12. Ecological information

<b>Ecotoxicity</b>	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
<b>Persistence and degradability</b>	No data available.
<b>Bioaccumulative potential</b>	Bioaccumulation is not expected.

<b>Mobility in soil</b>	No data available.
<b>Other adverse effects</b>	None expected.

### 13. Disposal considerations

<b>Disposal instructions</b>	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.
<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.

### 14. Transport information

#### DOT

Not regulated as a hazardous material by DOT.

#### IATA

Not regulated as a dangerous good.

#### IMDG

Not regulated as a dangerous good.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

### 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

#### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories** Immediate Hazard - Yes  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

**SARA 302 Extremely hazardous substance** No

**SARA 311/312 Hazardous chemical** No

**SARA 313 (TRI reporting)**  
Not regulated.

#### Other federal regulations

##### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

##### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

**Food and Drug Administration (FDA)** Not regulated.

#### US state regulations

##### US. Massachusetts RTK - Substance List

Limestone (CAS 1317-65-3)

Talc (CAS 14807-96-6)

##### US. New Jersey Worker and Community Right-to-Know Act

Limestone (CAS 1317-65-3)

Talc (CAS 14807-96-6)

## US. Pennsylvania Worker and Community Right-to-Know Law

Limestone (CAS 1317-65-3)

Talc (CAS 14807-96-6)

## US. Rhode Island RTK

Not regulated.

## US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

### US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Attapulgit (CAS 12174-11-7)

## International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

**Issue date** 21-January-2014

**Revision date** -

**Version #** 01

**Further information** Vinyl acetate monomer, formaldehyde and acetaldehyde: Trace amounts of vinyl acetate monomer and formaldehyde may be found in this product.

Attapulgit: Carcinogenic to experimental animals via a route of exposure not relevant to human exposure.

Skin Sensitization Potential: This product contains an amount of Triazinetriethanol (THT) (CAS No. 4719-04-4) that is below the approved EPA regulated limits. THT can act as a sensitizer. Numerous human studies with concentrations up to 1% yielded negative (no sensitization) results. However, some results showed positive reactions in concentrations <0.5% mostly in persons with eczema.

Crystalline silica: Raw materials in this product may contain respirable crystalline silica. Exposures to respirable crystalline silica are not expected during the normal use of this product. However, actual levels must be determined by workplace hygiene testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.

Bucket NFPA Classification:

Health: 0

Flammability: 1

Physical hazard: 0

NFPA Ratings:

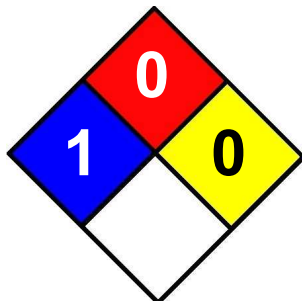
Health: 1

Flammability: 0

Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

## NFPA Ratings



## List of abbreviations

NFPA: National Fire Protection Association.

## References

Registry of Toxic Effects of Chemical Substances (RTECS)

HSDB® - Hazardous Substances Data Bank

Torben et al. (2001). Environmental and Health Assessment of Substances in Household Detergents and Cosmetic Products.

## Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** SHEETROCK® Brand Ceiling Spray Texture

**Other means of identification**

**SDS number** 48000020001

**Additional Products** QT Poly – Fine, Medium, and Coarse grades

**Synonyms** Spray texture

**Recommended use** Interior use.

**Recommended restrictions** Use in accordance with manufacturer's recommendations.

### Manufacturer/Importer/Supplier/Distributor information

**Company name** United States Gypsum Company

**Address** 550 West Adams Street  
Chicago, Illinois 60661-3637

**Telephone** 1-800-874-4968

**Website** www.usg.com

**Emergency phone number** 1-800-507-8899

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Carcinogenicity Category 1A  
Specific target organ toxicity, repeated exposure (inhalation) Category 2 (Lung)

**OSHA defined hazards** Not classified.

### Label elements



**Signal word** Danger

**Hazard statement** May cause cancer. May cause damage to organs (Lung) through prolonged or repeated exposure by inhalation.

**Precautionary statement**

**Prevention** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust.

**Response** If exposed or concerned: Get medical advice/attention.

**Storage** Store locked up.

**Disposal** Dispose of in accordance with local, state, and federal regulations.

**Hazard(s) not otherwise classified (HNOC)** None known.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Limestone	1317-65-3	> 85
Kaolin	1332-58-7	< 15
Attapulgit	12174-11-7	< 5
Diatomaceous earth	68855-54-9	< 5

Perlite	93763-70-3	< 5
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#### Impurities

Chemical name	CAS number	%
Crystalline silica (Quartz)	14808-60-7	< 3.5

#### Composition comments

All concentrations are in percent by weight unless ingredient is a gas.

Raw materials in this product contain respirable crystalline silica as an impurity. The weight percent of respirable crystalline silica found in this product is <3.5%. Exposures to respirable crystalline silica during the normal use of this product must be determined by workplace hygiene testing.

## 4. First-aid measures

#### Inhalation

Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

#### Skin contact

Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

#### Eye contact

Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.

#### Ingestion

Rinse mouth. Get medical attention if symptoms occur.

#### Most important symptoms/effects, acute and delayed

Under normal conditions of intended use, this product is not expected to be a health risk. Dust may irritate throat and respiratory system and cause coughing.

#### Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically.

#### General information

Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

#### Suitable extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

#### Unsuitable extinguishing media

Not applicable.

#### Specific hazards arising from the chemical

Not a fire hazard.

#### Special protective equipment and precautions for firefighters

Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

#### Fire fighting equipment/instructions

Use standard firefighting procedures and consider the hazards of other involved materials.

#### Specific methods

Cool material exposed to heat with water spray and remove it if no risk is involved.

## 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

See Section 8 of the SDS for Personal Protective Equipment.

#### Methods and materials for containment and cleaning up

Vacuum up the spilled material. Vacuums used for this purpose should be equipped with HEPA filters. Containers must be labeled. Collect in approved containers and seal securely. For waste disposal, see Section 13 of the SDS.

#### Environmental precautions

Avoid discharge to drains, sewers, and other water systems.

## 7. Handling and storage

#### Precautions for safe handling

Minimize dust production when mixing, sanding, or opening and closing bags. Avoid inhalation of dust. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices and use appropriate lifting techniques.

#### Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Avoid contact with acids, water, and moisture.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Kaolin (CAS 1332-58-7)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Limestone (CAS 1317-65-3)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

#### US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Diatomaceous earth (CAS 68855-54-9)	TWA	0.8 mg/m3	
		20 mppcf	
Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.3 mg/m3	Total dust.
		0.1 mg/m3	Respirable.

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Kaolin (CAS 1332-58-7)	TWA	2 mg/m3	Respirable fraction.
Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Diatomaceous earth (CAS 68855-54-9)	TWA	6 mg/m3	
Kaolin (CAS 1332-58-7)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Limestone (CAS 1317-65-3)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Perlite (CAS 93763-70-3)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.

#### Biological limit values

No biological exposure limits noted for the ingredient(s).

#### Appropriate engineering controls

Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

#### Individual protection measures, such as personal protective equipment

##### Eye/face protection

Wear approved safety goggles.

##### Skin protection

##### Hand protection

It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

##### Other

Normal work clothing (long sleeved shirts and long pants) is recommended.

##### Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.

##### Thermal hazards

None.

**General hygiene considerations**

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash. Observe any medical surveillance requirements.

**9. Physical and chemical properties****Appearance**

<b>Physical state</b>	Solid.
<b>Form</b>	Powder.
<b>Color</b>	Gray to off-white.

**Odor** Slight acrylic.

**Odor threshold** Not applicable.

**pH** 7 - 8.5

**Melting point/freezing point** Not applicable. / 32 °F (0 °C)

**Initial boiling point and boiling range** Not applicable.

**Flash point** Not applicable.

**Evaporation rate** Not applicable.

**Flammability (solid, gas)** Not applicable.

**Upper/lower flammability or explosive limits**

**Flammability limit - lower (%)** Not applicable.

**Flammability limit - upper (%)** Not applicable.

**Explosive limit - lower (%)** Not applicable.

**Explosive limit - upper (%)** Not applicable.

**Vapor pressure** Not applicable.

**Vapor density** Not applicable.

**Relative density** 2 - 3 (H<sub>2</sub>O=1)

**Solubility(ies)**

**Solubility (water)** Soluble in water.

**Partition coefficient (n-octanol/water)** Not applicable.

**Auto-ignition temperature** Not applicable.

**Decomposition temperature** Not applicable.

**Viscosity** Not applicable.

**Other information**

**Bulk density** 25 - 56.2 lb/ft<sup>3</sup>

**VOC (Weight %)** 0 g/l

**10. Stability and reactivity**

**Reactivity** The product is stable and non-reactive under normal conditions of use, storage and transport.

**Chemical stability** Material is stable under normal conditions.

**Possibility of hazardous reactions** Hazardous polymerization does not occur.

**Conditions to avoid** None known.

**Incompatible materials** Acids. Exposure to water and acids must be supervised because the reactions are vigorous and produce large amounts of heat. Crystalline silica in contact with powerful oxidizing agents, such as fluorine, chlorine trifluoride and oxygen difluoride, may cause fires. Crystalline silica will dissolve in hydrofluoric acid and produce a corrosive gas, silicon tetrafluoride.

**Hazardous decomposition products** Above 1472°F (800°C) limestone (CaCO<sub>3</sub>) can decompose to lime (CaO) and release carbon dioxide (CO<sub>2</sub>).

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Inhalation of dusts may cause respiratory irritation. Prolonged and repeated exposure to airborne respirable crystalline silica can cause silicosis and/or lung cancer.
<b>Skin contact</b>	Under normal conditions of intended use, this product does not pose a skin hazard.
<b>Eye contact</b>	Direct contact with airborne particulates may cause temporary irritation.
<b>Ingestion</b>	Ingestion may cause irritation and stomach discomfort.

<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Dust may irritate eyes and mucous membranes of the nose, throat and upper respiratory system causing sneezing and/or coughing.
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### Information on toxicological effects

<b>Acute toxicity</b>	Not expected to be a hazard under normal conditions of intended use.
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<b>Skin corrosion/irritation</b>	Not a skin irritant.
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<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.
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### Respiratory or skin sensitization

<b>Respiratory sensitization</b>	Not a respiratory sensitizer.
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<b>Skin sensitization</b>	Not a skin sensitizer.
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<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
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<b>Carcinogenicity</b>	Repeated and prolonged exposures to high levels of respirable crystalline silica may cause cancer.
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### IARC Monographs. Overall Evaluation of Carcinogenicity

Attapulgate (CAS -)	3 Not classifiable as to carcinogenicity to humans.
Attapulgate (CAS 12174-11-7)	2B Possibly carcinogenic to humans.
Crystalline silica (Quartz) (CAS 14808-60-7)	1 Carcinogenic to humans.
Diatomaceous earth (CAS 68855-54-9)	3 Not classifiable as to carcinogenicity to humans.

### NTP Report on Carcinogens

Crystalline silica (Quartz) (CAS 14808-60-7)	Known To Be Human Carcinogen.
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### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

<b>Reproductive toxicity</b>	Not expected to be a reproductive hazard.
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<b>Specific target organ toxicity - single exposure</b>	No data available, but none expected.
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<b>Specific target organ toxicity - repeated exposure</b>	May damage lung tissue through repeated and prolonged exposure to high levels of respirable crystalline silica particles.
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<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.
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<b>Chronic effects</b>	Prolonged and routine inhalation of high levels of respirable crystalline silica particles can lead to the lung disease known as silicosis. Some studies show excess numbers of cases of scleroderma, connective tissue disorders, lupus, rheumatoid arthritis, chronic kidney diseases and end-stage kidney disease in workers exposed to respirable crystalline silica. Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.
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## 12. Ecological information

<b>Ecotoxicity</b>	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
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<b>Persistence and degradability</b>	Not applicable.
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<b>Bioaccumulative potential</b>	Bioaccumulation is not expected.
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<b>Mobility in soil</b>	No data available.
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<b>Other adverse effects</b>	None expected.
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## 13. Disposal considerations

<b>Disposal instructions</b>	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
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<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.
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<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.

## 14. Transport information

### DOT

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

## 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

<b>Hazard categories</b>	Immediate Hazard - Yes Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
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### SARA 302 Extremely hazardous substance

Not listed.

<b>SARA 311/312 Hazardous chemical</b>	Yes
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### SARA 313 (TRI reporting)

Not regulated.

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

<b>Safe Drinking Water Act (SDWA)</b>	Not regulated.
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### US state regulations

#### US. Massachusetts RTK - Substance List

Crystalline silica (Quartz) (CAS 14808-60-7)  
Diatomaceous earth (CAS 68855-54-9)  
Kaolin (CAS 1332-58-7)  
Limestone (CAS 1317-65-3)  
Perlite (CAS 93763-70-3)

#### US. New Jersey Worker and Community Right-to-Know Act

Crystalline silica (Quartz) (CAS 14808-60-7)  
Kaolin (CAS 1332-58-7)  
Limestone (CAS 1317-65-3)  
Perlite (CAS 93763-70-3)

## US. Pennsylvania Worker and Community Right-to-Know Law

Crystalline silica (Quartz) (CAS 14808-60-7)  
Diatomaceous earth (CAS 68855-54-9)  
Kaolin (CAS 1332-58-7)  
Limestone (CAS 1317-65-3)  
Perlite (CAS 93763-70-3)

## US. Rhode Island RTK

Not regulated.

## US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

## US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Attapulgit (CAS 12174-11-7)  
Crystalline silica (Quartz) (CAS 14808-60-7)


## International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

Issue date	05-November-2014
Revision date	11-February-2015
Version #	02
Further information	Crystalline silica: Raw materials in this product may contain respirable crystalline silica. Exposures to respirable crystalline silica are not expected during the normal use of this product. However, actual levels must be determined by workplace hygiene testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.  Attapulgit: Carcinogenic to experimental animals via a route of exposure not relevant to human exposure.  NFPA Ratings: Health: 1 Flammability: 0 Physical hazard: 0 NFPA Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe
HMIS® ratings	Health: 1* Flammability: 0 Physical hazard: 0
NFPA ratings	

## List of abbreviations

NFPA: National Fire Protection Association.

## References

Registry of Toxic Effects of Chemical Substances (RTECS)  
HSDB® - Hazardous Substances Data Bank  
Torben et al. (2001). Environmental and Health Assessment of Substances in Household Detergents and Cosmetic Products.

## Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** SHEETROCK® Brand Acoustical Sealant

**Other means of identification**

**SDS number** 61000040001

**Synonyms** Sound Blocking Sealant

**Recommended use** Interior use.

**Recommended restrictions** Use in accordance with manufacturer's recommendations.

### Manufacturer/Importer/Supplier/Distributor information

**Company name** United States Gypsum Company

**Address** 550 West Adams Street  
Chicago, Illinois 60661-3637

**Telephone** 1-800-874-4968

**Website** www.usg.com

**Emergency phone number** 1-800-507-8899

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards**

Carcinogenicity	Category 1A
Reproductive toxicity	Category 1B
Specific target organ toxicity, repeated exposure	Category 2 (Kidneys)

**Environmental hazards**

Hazardous to the aquatic environment, acute hazard	Category 2
Hazardous to the aquatic environment, long-term hazard	Category 2

**OSHA defined hazards** Not classified.

**Label elements**



**Signal word** Danger

**Hazard statement** May cause cancer. Suspected of damaging fertility or the unborn child by inhalation. May cause damage to organs (Kidneys) through prolonged or repeated exposure. Toxic to aquatic life with long lasting effects.

### Precautionary statement

**Prevention** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment.

**Response** If exposed or concerned: Get medical advice/attention. Collect spillage.

**Storage** Store locked up.

**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.

**Hazard(s) not otherwise classified (HNOC)** None known.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Limestone	1317-65-3	> 55
Benzyl butyl phthalate	85-68-7	< 10
Ethylene glycol	107-21-1	< 5

#### Impurities

Chemical name	CAS number	%
Crystalline silica (Quartz)	14808-60-7	< 1

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas.

## 4. First-aid measures

<b>Inhalation</b>	Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.
<b>Skin contact</b>	Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.
<b>Eye contact</b>	Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.
<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Dust may irritate eyes and mucous membranes of the nose, throat and upper respiratory system causing sneezing and/or coughing. May cause allergic skin disorders in sensitive individuals.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	Not applicable.
<b>Specific hazards arising from the chemical</b>	Not a fire hazard.
<b>Special protective equipment and precautions for firefighters</b>	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>Specific methods</b>	Cool material exposed to heat with water spray and remove it if no risk is involved.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	See Section 8 of the SDS for Personal Protective Equipment.
<b>Methods and materials for containment and cleaning up</b>	<p>Large Spills: Scoop spilled materials and recover as much of the product as possible for use. If spillage is unrecoverable dispose according to local, state, and federal regulations.</p> <p>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.</p>
<b>Environmental precautions</b>	Avoid discharge to drains, sewers, and other water systems.

## 7. Handling and storage

### Precautions for safe handling

Avoid inhalation of dust and contact with skin and eyes. Minimize dust generation and accumulation. In case of insufficient ventilation, wear suitable respiratory equipment. Observe good industrial hygiene practices. Use proper lifting techniques.

### Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated place. Store in a closed container away from incompatible materials. Protect from moisture. Keep away from heat. Do not use if material has spoiled, i.e., there is a moldy appearance or an unpleasant odor. Keep containers closed when not in use.

Filled 4.5 gallon pails of joint compound may be stacked a maximum of 3 layers high on a standard 48 x 48 pallet (16 pails per layer, 3 layers high). Pallets may only be stacked a maximum of two high.

Filled cartons of joint compound may be stacked a maximum of 3 layers high on a standard 42 x 42 or 42 x 48 pallet (16 pails per layer, 3 layers high). Pallets may only be stacked a maximum of two high.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Limestone (CAS 1317-65-3)	PEL	5 mg/m <sup>3</sup>	Respirable fraction.
		15 mg/m <sup>3</sup>	Total dust.

#### US. OSHA Table Z-3 (29 CFR 1910.1000)

Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.3 mg/m <sup>3</sup>	Total dust.
		0.1 mg/m <sup>3</sup>	Respirable.

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Ethylene glycol (CAS 107-21-1)	Ceiling	100 mg/m <sup>3</sup>	Aerosol.
Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.025 mg/m <sup>3</sup>	Respirable fraction.

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Limestone (CAS 1317-65-3)	TWA	5 mg/m <sup>3</sup>	Respirable.
		10 mg/m <sup>3</sup>	Total
Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.05 mg/m <sup>3</sup>	Respirable dust.

### Biological limit values

No biological exposure limits noted for the ingredient(s).

### Appropriate engineering controls

Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Wear approved safety goggles.

#### Skin protection

##### Hand protection

It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

##### Other

Normal work clothing (long sleeved shirts and long pants) is recommended.



<b>Respiratory protection</b>	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.
<b>Thermal hazards</b>	None.
<b>General hygiene considerations</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash. Observe any medical surveillance requirements.

## 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	Solid.
<b>Form</b>	Paste.
<b>Color</b>	Off-white.
<b>Odor</b>	Acrylic.
<b>Odor threshold</b>	Not applicable.
<b>pH</b>	8 - 10
<b>Melting point/freezing point</b>	Not applicable.
<b>Initial boiling point and boiling range</b>	Not applicable.
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Not applicable.

### Upper/lower flammability or explosive limits

<b>Flammability limit - lower (%)</b>	Not applicable.
<b>Flammability limit - upper (%)</b>	Not applicable.
<b>Explosive limit - lower (%)</b>	Not applicable.
<b>Explosive limit - upper (%)</b>	Not applicable.

<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	1.6 (H <sub>2</sub> O=1)

### Solubility(ies)

<b>Solubility (water)</b>	Miscible with water.
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition temperature</b>	Not applicable.
<b>Viscosity</b>	Not applicable.

### Other information

<b>Bulk density</b>	13.4 lb/gal
<b>VOC (Weight %)</b>	< 15 g/l

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	None known.
<b>Incompatible materials</b>	None known.

**Hazardous decomposition products**

Above 1472°F (800°C) limestone (CaCO<sub>3</sub>) can decompose to lime (CaO) and release carbon dioxide (CO<sub>2</sub>).

## 11. Toxicological information

**Information on likely routes of exposure**

<b>Inhalation</b>	Airborne dust may irritate throat and upper respiratory system causing coughing.
<b>Skin contact</b>	May cause allergic skin reactions especially in individuals with pre-existing skin disease such as eczema. (See Section 16).
<b>Eye contact</b>	Airborne dust may cause mechanical eye irritation.
<b>Ingestion</b>	May cause discomfort if swallowed.

**Symptoms related to the physical, chemical and toxicological characteristics**

Dust may irritate eyes and mucous membranes of the nose, throat and upper respiratory system causing sneezing and/or coughing.

**Information on toxicological effects**

**Acute toxicity** Not expected to be a hazard under normal conditions of intended use.

Components	Species	Test Results
Ethylene glycol (CAS 107-21-1)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	9530 mg/kg
<i>Oral</i>		
LD50	Rat	4700 mg/kg

**Skin corrosion/irritation** Prolonged or repeated skin contact may cause drying, cracking, or irritation.

**Serious eye damage/eye irritation** Direct contact with eyes may cause temporary irritation.

**Respiratory or skin sensitization**

<b>Respiratory sensitization</b>	Not a respiratory sensitizer.
<b>Skin sensitization</b>	The product contains a small amount of sensitizing substance which may provoke an allergic reaction among sensitive individuals after repeated contact. For detailed information, see section 16.

**Germ cell mutagenicity** Data does not suggest that this product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity** May cause cancer.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

Benzyl butyl phthalate (CAS 85-68-7)	3 Not classifiable as to carcinogenicity to humans.
Crystalline silica (Quartz) (CAS 14808-60-7)	1 Carcinogenic to humans.

**NTP Report on Carcinogens**

Crystalline silica (Quartz) (CAS 14808-60-7)	Known To Be Human Carcinogen.
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**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**Reproductive toxicity** Suspected of damaging fertility or the unborn child.

**Specific target organ toxicity - single exposure** No data available, but none expected.

**Specific target organ toxicity - repeated exposure** May cause damage to the following organs through prolonged or repeated exposure:

**Aspiration hazard** Not an aspiration hazard.

**Chronic effects** Prolonged exposure may cause chronic effects. For detailed information, see section 16.

## 12. Ecological information

**Ecotoxicity** Toxic to aquatic life with long lasting effects.

Components	Species	Test Results
Ethylene glycol (CAS 107-21-1)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow (Pimephales promelas) 8050 mg/l, 96 hours

<b>Persistence and degradability</b>	No data available.
<b>Bioaccumulative potential</b>	Bioaccumulation is not expected.

<b>Partition coefficient n-octanol / water (log Kow)</b>	
Benzyl butyl phthalate (CAS 85-68-7)	4.91
Ethylene glycol (CAS 107-21-1)	-1.36

<b>Mobility in soil</b>	No data available.
<b>Other adverse effects</b>	None expected.

### 13. Disposal considerations

<b>Disposal instructions</b>	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.
<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.

### 14. Transport information

#### DOT

<b>UN number</b>	UN3077
<b>UN proper shipping name</b>	Environmentally hazardous substances, solid, n.o.s. (Benzyl butyl phthalate RQ = 1312 LBS)
<b>Transport hazard class(es)</b>	
<b>Class</b>	9
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	9
<b>Packing group</b>	III
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	Yes
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.
<b>Special provisions</b>	8, 146, 335, A112, B54, IB8, IP3, N20, T1, TP33
<b>Packaging exceptions</b>	155
<b>Packaging non bulk</b>	213
<b>Packaging bulk</b>	240

#### IATA

<b>UN number</b>	UN3077
<b>UN proper shipping name</b>	Environmentally hazardous substance, solid, n.o.s. (Benzyl butyl phthalate)
<b>Transport hazard class(es)</b>	
<b>Class</b>	9
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	9
<b>Packing group</b>	III
<b>Environmental hazards</b>	Yes
<b>ERG Code</b>	9L
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.

#### IMDG

<b>UN number</b>	UN3077
<b>UN proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Benzyl butyl phthalate)
<b>Transport hazard class(es)</b>	
<b>Class</b>	9
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	9
<b>Packing group</b>	III
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	Yes
<b>EmS</b>	F-A, S-F
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.



Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

## 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Benzyl butyl phthalate (CAS 85-68-7) LISTED

Ethylene glycol (CAS 107-21-1) LISTED

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories** Immediate Hazard - Yes  
Delayed Hazard - Yes  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical** Yes

**SARA 313 (TRI reporting)**

Chemical name	CAS number	% by wt.
Ethylene glycol	107-21-1	< 5

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Ethylene glycol (CAS 107-21-1)

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

**US state regulations**

**US. Massachusetts RTK - Substance List**

Benzyl butyl phthalate (CAS 85-68-7)  
Crystalline silica (Quartz) (CAS 14808-60-7)  
Ethylene glycol (CAS 107-21-1)  
Limestone (CAS 1317-65-3)

**US. New Jersey Worker and Community Right-to-Know Act**

Benzyl butyl phthalate (CAS 85-68-7)  
Crystalline silica (Quartz) (CAS 14808-60-7)  
Ethylene glycol (CAS 107-21-1)  
Limestone (CAS 1317-65-3)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Benzyl butyl phthalate (CAS 85-68-7)  
Crystalline silica (Quartz) (CAS 14808-60-7)  
Ethylene glycol (CAS 107-21-1)  
Limestone (CAS 1317-65-3)

**US. Rhode Island RTK**

Benzyl butyl phthalate (CAS 85-68-7)  
Ethylene glycol (CAS 107-21-1)

**US. California Proposition 65**

WARNING: This product contains a chemical known to the State of California to cause cancer.

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Benzyl butyl phthalate (CAS 85-68-7)

Crystalline silica (Quartz) (CAS 14808-60-7)

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

Issue date	01-April-2015
Revision date	-
Version #	01
Further information	<p>Skin Sensitization Potential: This product contains an amount of Triazinetriethanol (THT) (CAS No. 4719-04-4) that is below the approved EPA regulated limits. THT can act as a sensitizer. Numerous human studies with concentrations up to 1% yielded negative (no sensitization) results. However, some results showed positive reactions in concentrations &lt;0.5% mostly in persons with eczema.</p> <p>Crystalline silica: Raw materials in this product may contain respirable crystalline silica. Exposures to respirable crystalline silica are not expected during the normal use of this product. However, actual levels must be determined by workplace hygiene testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.</p> <p>Bucket NFPA Classification:</p> <p>Health: 0 Flammability: 1 Physical hazard: 0</p> <p>NFPA Ratings:</p> <p>Health: 2 Flammability: 0 Physical hazard: 0</p> <p>Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe</p>
HMIS® ratings	<p>Health: 1* Flammability: 0 Physical hazard: 0</p>
NFPA ratings	
List of abbreviations	NFPA: National Fire Protection Association.
References	<p>Registry of Toxic Effects of Chemical Substances (RTECS) HSDB® - Hazardous Substances Data Bank Torben et al. (2001). Environmental and Health Assessment of Substances in Household Detergents and Cosmetic Products.</p>
Disclaimer	This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** SHEETROCK® Brand Ceiling Spray Texture

**Other means of identification**

**SDS number** 48000020001

**Additional Products** QT Poly – Fine, Medium, and Coarse grades

**Synonyms** Spray texture

**Recommended use** Interior use.

**Recommended restrictions** Use in accordance with manufacturer's recommendations.

### Manufacturer/Importer/Supplier/Distributor information

**Company name** United States Gypsum Company

**Address** 550 West Adams Street  
Chicago, Illinois 60661-3637

**Telephone** 1-800-874-4968

**Website** www.usg.com

**Emergency phone number** 1-800-507-8899

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Carcinogenicity Category 1A  
Specific target organ toxicity, repeated exposure (inhalation) Category 2 (Lung)

**OSHA defined hazards** Not classified.

### Label elements



**Signal word** Danger

**Hazard statement** May cause cancer. May cause damage to organs (Lung) through prolonged or repeated exposure by inhalation.

**Precautionary statement**

**Prevention** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust.

**Response** If exposed or concerned: Get medical advice/attention.

**Storage** Store locked up.

**Disposal** Dispose of in accordance with local, state, and federal regulations.

**Hazard(s) not otherwise classified (HNOC)** None known.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Limestone	1317-65-3	> 85
Kaolin	1332-58-7	< 15
Attapulgit	12174-11-7	< 5
Diatomaceous earth	68855-54-9	< 5

Perlite	93763-70-3	< 5
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#### Impurities

Chemical name	CAS number	%
Crystalline silica (Quartz)	14808-60-7	< 3.5

#### Composition comments

All concentrations are in percent by weight unless ingredient is a gas.

Raw materials in this product contain respirable crystalline silica as an impurity. The weight percent of respirable crystalline silica found in this product is <3.5%. Exposures to respirable crystalline silica during the normal use of this product must be determined by workplace hygiene testing.

## 4. First-aid measures

#### Inhalation

Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

#### Skin contact

Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

#### Eye contact

Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.

#### Ingestion

Rinse mouth. Get medical attention if symptoms occur.

#### Most important symptoms/effects, acute and delayed

Under normal conditions of intended use, this product is not expected to be a health risk. Dust may irritate throat and respiratory system and cause coughing.

#### Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically.

#### General information

Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

#### Suitable extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

#### Unsuitable extinguishing media

Not applicable.

#### Specific hazards arising from the chemical

Not a fire hazard.

#### Special protective equipment and precautions for firefighters

Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

#### Fire fighting equipment/instructions

Use standard firefighting procedures and consider the hazards of other involved materials.

#### Specific methods

Cool material exposed to heat with water spray and remove it if no risk is involved.

## 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

See Section 8 of the SDS for Personal Protective Equipment.

#### Methods and materials for containment and cleaning up

Vacuum up the spilled material. Vacuums used for this purpose should be equipped with HEPA filters. Containers must be labeled. Collect in approved containers and seal securely. For waste disposal, see Section 13 of the SDS.

#### Environmental precautions

Avoid discharge to drains, sewers, and other water systems.

## 7. Handling and storage

#### Precautions for safe handling

Minimize dust production when mixing, sanding, or opening and closing bags. Avoid inhalation of dust. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices and use appropriate lifting techniques.

#### Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Avoid contact with acids, water, and moisture.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Kaolin (CAS 1332-58-7)	PEL	5 mg/m3 15 mg/m3	Respirable fraction. Total dust.
Limestone (CAS 1317-65-3)	PEL	5 mg/m3 15 mg/m3	Respirable fraction. Total dust.

#### US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Diatomaceous earth (CAS 68855-54-9)	TWA	0.8 mg/m3 20 mppcf	
Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.3 mg/m3 0.1 mg/m3	Total dust. Respirable.

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Kaolin (CAS 1332-58-7)	TWA	2 mg/m3	Respirable fraction.
Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Diatomaceous earth (CAS 68855-54-9)	TWA	6 mg/m3	
Kaolin (CAS 1332-58-7)	TWA	5 mg/m3 10 mg/m3	Respirable. Total
Limestone (CAS 1317-65-3)	TWA	5 mg/m3 10 mg/m3	Respirable. Total
Perlite (CAS 93763-70-3)	TWA	5 mg/m3 10 mg/m3	Respirable. Total
Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.

#### Biological limit values

No biological exposure limits noted for the ingredient(s).

#### Appropriate engineering controls

Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

#### Individual protection measures, such as personal protective equipment

##### Eye/face protection

Wear approved safety goggles.

##### Skin protection

##### Hand protection

It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

##### Other

Normal work clothing (long sleeved shirts and long pants) is recommended.

##### Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.

##### Thermal hazards

None.

**General hygiene considerations**

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash. Observe any medical surveillance requirements.

**9. Physical and chemical properties****Appearance**

<b>Physical state</b>	Solid.
<b>Form</b>	Powder.
<b>Color</b>	Gray to off-white.

**Odor** Slight acrylic.

**Odor threshold** Not applicable.

**pH** 7 - 8.5

**Melting point/freezing point** Not applicable. / 32 °F (0 °C)

**Initial boiling point and boiling range** Not applicable.

**Flash point** Not applicable.

**Evaporation rate** Not applicable.

**Flammability (solid, gas)** Not applicable.

**Upper/lower flammability or explosive limits**

**Flammability limit - lower (%)** Not applicable.

**Flammability limit - upper (%)** Not applicable.

**Explosive limit - lower (%)** Not applicable.

**Explosive limit - upper (%)** Not applicable.

**Vapor pressure** Not applicable.

**Vapor density** Not applicable.

**Relative density** 2 - 3 (H<sub>2</sub>O=1)

**Solubility(ies)**

**Solubility (water)** Soluble in water.

**Partition coefficient (n-octanol/water)** Not applicable.

**Auto-ignition temperature** Not applicable.

**Decomposition temperature** Not applicable.

**Viscosity** Not applicable.

**Other information**

**Bulk density** 25 - 56.2 lb/ft<sup>3</sup>

**VOC (Weight %)** 0 g/l

**10. Stability and reactivity**

**Reactivity** The product is stable and non-reactive under normal conditions of use, storage and transport.

**Chemical stability** Material is stable under normal conditions.

**Possibility of hazardous reactions** Hazardous polymerization does not occur.

**Conditions to avoid** None known.

**Incompatible materials** Acids. Exposure to water and acids must be supervised because the reactions are vigorous and produce large amounts of heat. Crystalline silica in contact with powerful oxidizing agents, such as fluorine, chlorine trifluoride and oxygen difluoride, may cause fires. Crystalline silica will dissolve in hydrofluoric acid and produce a corrosive gas, silicon tetrafluoride.

**Hazardous decomposition products** Above 1472°F (800°C) limestone (CaCO<sub>3</sub>) can decompose to lime (CaO) and release carbon dioxide (CO<sub>2</sub>).

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Inhalation of dusts may cause respiratory irritation. Prolonged and repeated exposure to airborne respirable crystalline silica can cause silicosis and/or lung cancer.
<b>Skin contact</b>	Under normal conditions of intended use, this product does not pose a skin hazard.
<b>Eye contact</b>	Direct contact with airborne particulates may cause temporary irritation.
<b>Ingestion</b>	Ingestion may cause irritation and stomach discomfort.

<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Dust may irritate eyes and mucous membranes of the nose, throat and upper respiratory system causing sneezing and/or coughing.
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### Information on toxicological effects

<b>Acute toxicity</b>	Not expected to be a hazard under normal conditions of intended use.
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<b>Skin corrosion/irritation</b>	Not a skin irritant.
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<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.
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### Respiratory or skin sensitization

<b>Respiratory sensitization</b>	Not a respiratory sensitizer.
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<b>Skin sensitization</b>	Not a skin sensitizer.
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<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
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<b>Carcinogenicity</b>	Repeated and prolonged exposures to high levels of respirable crystalline silica may cause cancer.
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### IARC Monographs. Overall Evaluation of Carcinogenicity

Attapulgit (CAS -)	3 Not classifiable as to carcinogenicity to humans.
Attapulgit (CAS 12174-11-7)	2B Possibly carcinogenic to humans.
Crystalline silica (Quartz) (CAS 14808-60-7)	1 Carcinogenic to humans.
Diatomaceous earth (CAS 68855-54-9)	3 Not classifiable as to carcinogenicity to humans.

### NTP Report on Carcinogens

Crystalline silica (Quartz) (CAS 14808-60-7)	Known To Be Human Carcinogen.
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### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

<b>Reproductive toxicity</b>	Not expected to be a reproductive hazard.
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<b>Specific target organ toxicity - single exposure</b>	No data available, but none expected.
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<b>Specific target organ toxicity - repeated exposure</b>	May damage lung tissue through repeated and prolonged exposure to high levels of respirable crystalline silica particles.
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<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.
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<b>Chronic effects</b>	Prolonged and routine inhalation of high levels of respirable crystalline silica particles can lead to the lung disease known as silicosis. Some studies show excess numbers of cases of scleroderma, connective tissue disorders, lupus, rheumatoid arthritis, chronic kidney diseases and end-stage kidney disease in workers exposed to respirable crystalline silica. Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.
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## 12. Ecological information

<b>Ecotoxicity</b>	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
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<b>Persistence and degradability</b>	Not applicable.
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<b>Bioaccumulative potential</b>	Bioaccumulation is not expected.
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<b>Mobility in soil</b>	No data available.
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<b>Other adverse effects</b>	None expected.
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## 13. Disposal considerations

<b>Disposal instructions</b>	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
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<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.
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<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.

## 14. Transport information

### DOT

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

## 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

<b>Hazard categories</b>	Immediate Hazard - Yes Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
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### SARA 302 Extremely hazardous substance

Not listed.

<b>SARA 311/312 Hazardous chemical</b>	Yes
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### SARA 313 (TRI reporting)

Not regulated.

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

<b>Safe Drinking Water Act (SDWA)</b>	Not regulated.
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### US state regulations

#### US. Massachusetts RTK - Substance List

Crystalline silica (Quartz) (CAS 14808-60-7)  
Diatomaceous earth (CAS 68855-54-9)  
Kaolin (CAS 1332-58-7)  
Limestone (CAS 1317-65-3)  
Perlite (CAS 93763-70-3)

#### US. New Jersey Worker and Community Right-to-Know Act

Crystalline silica (Quartz) (CAS 14808-60-7)  
Kaolin (CAS 1332-58-7)  
Limestone (CAS 1317-65-3)  
Perlite (CAS 93763-70-3)



## US. Pennsylvania Worker and Community Right-to-Know Law

Crystalline silica (Quartz) (CAS 14808-60-7)  
Diatomaceous earth (CAS 68855-54-9)  
Kaolin (CAS 1332-58-7)  
Limestone (CAS 1317-65-3)  
Perlite (CAS 93763-70-3)

## US. Rhode Island RTK

Not regulated.

## US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

## US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Attapulgit (CAS 12174-11-7)  
Crystalline silica (Quartz) (CAS 14808-60-7)


## International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

Issue date	05-November-2014
Revision date	11-February-2015
Version #	02
Further information	Crystalline silica: Raw materials in this product may contain respirable crystalline silica. Exposures to respirable crystalline silica are not expected during the normal use of this product. However, actual levels must be determined by workplace hygiene testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.  Attapulgit: Carcinogenic to experimental animals via a route of exposure not relevant to human exposure.  NFPA Ratings: Health: 1 Flammability: 0 Physical hazard: 0 NFPA Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe
HMIS® ratings	Health: 1* Flammability: 0 Physical hazard: 0
NFPA ratings	

## List of abbreviations

NFPA: National Fire Protection Association.

## References

Registry of Toxic Effects of Chemical Substances (RTECS)  
HSDB® - Hazardous Substances Data Bank  
Torben et al. (2001). Environmental and Health Assessment of Substances in Household Detergents and Cosmetic Products.

## Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



# SAFETY DATA SHEET

## 1. Identification

Product identifier	<b>SHEETROCK® Brand TUFF-HIDE™ Primer-Surfacer</b>
Other means of identification	
SDS number	60000010001
Recommended use	Interior use.
Recommended restrictions	Use in accordance with manufacturer's recommendations.
<b>Manufacturer / Importer / Supplier / Distributor information</b>	
Company name	United States Gypsum Company
Address	550 West Adams Street Chicago, Illinois 60661-3637
Telephone	1-800-874-4968
Website	www.usg.com
Emergency phone number	1-800-507-8899

## 2. Hazard(s) identification

Physical hazards	Not classified.
Health hazards	Not classified.
OSHA defined hazards	Not classified.
<b>Label elements</b>	
Hazard symbol	None.
Signal word	None.
Hazard statement	None.
<b>Precautionary statement</b>	
Prevention	Observe good industrial hygiene practices.
Response	Get medical attention/advice if you feel unwell.
Storage	Store as indicated in Section 7.
Disposal	Dispose of in accordance with local, state, and federal regulations.
Hazard(s) not otherwise classified (HNOC)	None known.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Limestone	1317-65-3	< 40
Attapulgite	12174-11-7	< 5
Calcium carbonate	471-34-1	< 5
Talc	14807-96-6	< 5
Titanium dioxide	13463-67-7	< 5

<b>Composition comments</b>	All concentrations are in percent by weight unless ingredient is a gas.
	Raw materials in this product contain respirable crystalline silica as a naturally occurring impurity. Since this product is a liquid slurry, the risk of inhaling particles will not occur during the recommended use of this product.

## 4. First-aid measures

<b>Inhalation</b>	Exposure to mists may cause temporary irritation to eyes, skin, nose, throat, and upper respiratory tract. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.
<b>Skin contact</b>	Rinse area with plenty of water. Get medical attention if irritation develops or persists.
<b>Eye contact</b>	Do not rub eyes. Flush thoroughly with water. If burning, redness, itching, pain, or other symptoms develop or persist get medical attention.

<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Under normal conditions of intended use, this material does not pose a risk to health.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	Not applicable.
<b>Specific hazards arising from the chemical</b>	Not a fire hazard.
<b>Special protective equipment and precautions for firefighters</b>	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>Specific methods</b>	Cool material exposed to heat with water spray and remove it if no risk is involved.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	See Section 8 of the SDS for Personal Protective Equipment.
<b>Methods and materials for containment and cleaning up</b>	Prevent entry into confined areas or water systems. Dilute with water and mop or wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Dispose of waste according to local regulations.
<b>Environmental precautions</b>	Avoid discharge to drains, sewers, and other water systems.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Minimize exposure to mists. In case of insufficient ventilation, wear suitable respiratory equipment. Observe good industrial hygiene practices. Use proper lifting techniques.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in a cool, dry place. Store in a closed container away from incompatible materials. Protect from moisture. Keep away from heat. Do not use if material has spoiled, i.e., there is a moldy appearance or an unpleasant odor. Keep containers closed when not in use.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium carbonate (CAS 471-34-1)	PEL	5 mg/m3	Respirable fraction.
Limestone (CAS 1317-65-3)	PEL	15 mg/m3	Total dust.
		5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Titanium dioxide (CAS 13463-67-7)	PEL	15 mg/m3	Total dust.

#### US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Talc (CAS 14807-96-6)	TWA	0.3 mg/m3	Total dust.
		0.1 mg/m3	Respirable.

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Talc (CAS 14807-96-6)	TWA	2 mg/m3	Respirable fraction.
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	

## US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Calcium carbonate (CAS 471-34-1)	TWA	5 mg/m3	Respirable.
Limestone (CAS 1317-65-3)	TWA	10 mg/m3	Total
		5 mg/m3	Respirable.
		10 mg/m3	Total
Talc (CAS 14807-96-6)	TWA	2 mg/m3	Respirable.
Biological limit values	No biological exposure limits noted for the ingredient(s).		
Appropriate engineering controls	Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.		
Individual protection measures, such as personal protective equipment			
Eye/face protection	Wear approved safety goggles.		
Skin protection			
Hand protection	It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.		
Other	Normal work clothing (long sleeved shirts and long pants) is recommended.		
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use. Observe any medical surveillance requirements.		
Thermal hazards	None.		
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Observe any medical surveillance requirements.		

## 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	Liquid.
<b>Form</b>	Slurry.
<b>Color</b>	White.
<b>Odor</b>	Slight acrylic.
<b>Odor threshold</b>	Not applicable.
<b>pH</b>	7.5 - 10
<b>Melting point/freezing point</b>	Not applicable. / 32 °F (0 °C)
<b>Initial boiling point and boiling range</b>	212 °F (100 °C)
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not applicable.
<b>Flammability limit - upper (%)</b>	Not applicable.
<b>Explosive limit - lower (%)</b>	Not applicable.
<b>Explosive limit - upper (%)</b>	Not applicable.
<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	1.4 - 1.7 (H <sub>2</sub> O=1)
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Soluble in water.
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not applicable.

<b>Decomposition temperature</b>	Not applicable.
<b>Viscosity</b>	90 - 130 KU (Krebs Units) (20 °C)
<b>Other information</b>	
<b>Bulk density</b>	12 - 14 lb/gal
<b>VOC (Weight %)</b>	33 g/l / 55-65% (Calculated by EPA Method 24)

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	None known.
<b>Incompatible materials</b>	None known.
<b>Hazardous decomposition products</b>	Above 1472°F (800°C) limestone (CaCO <sub>3</sub> ) can decompose to lime (CaO) and release carbon dioxide (CO <sub>2</sub> ).

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	May cause discomfort if swallowed.
<b>Inhalation</b>	Inhalation of mist may cause irritation to throat and or nasal passages.
<b>Skin contact</b>	The product contains a small amount of sensitizing substance which may provoke an allergic reaction among sensitive individuals in contact with skin.
<b>Eye contact</b>	May cause eye irritation.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Irritation of eyes and mucous membranes. Skin irritation.

### Information on toxicological effects

<b>Acute toxicity</b>	Neither inhalation nor skin contact contribute to acute toxicity of the substance or mixture. However, may cause discomfort if swallowed.
<b>Skin corrosion/irritation</b>	Prolonged or repeated skin contact may cause drying, cracking, or irritation.
<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not classified.
<b>Skin sensitization</b>	The product contains a small amount of sensitizing substance which may provoke an allergic reaction among sensitive individuals after repeated contact. For detailed information, see section 16.
<b>Germ cell mutagenicity</b>	Data does not suggest that this product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	Titanium Dioxide is listed by IARC as possibly carcinogenic to humans (Group 2B). This listing is based on inadequate evidence of carcinogenicity in humans and sufficient evidence in experimental animals.

### IARC Monographs. Overall Evaluation of Carcinogenicity

Attapulgite (CAS 12174-11-7)	2B Possibly carcinogenic to humans. 3 Not classifiable as to carcinogenicity to humans.
Titanium dioxide (CAS 13463-67-7)	2B Possibly carcinogenic to humans.
<b>Reproductive toxicity</b>	Not expected to be a reproductive hazard.
<b>Specific target organ toxicity - single exposure</b>	No data available, but none expected.
<b>Specific target organ toxicity - repeated exposure</b>	No data available, but none expected.
<b>Aspiration hazard</b>	Not an aspiration hazard.
<b>Chronic effects</b>	See section 16.

## 12. Ecological information

<b>Ecotoxicity</b>	The product contains a substance which is very toxic to aquatic organisms.
<b>Persistence and degradability</b>	Not applicable.
<b>Bioaccumulative potential</b>	Bioaccumulation is not expected.
<b>Mobility in soil</b>	Not available.

**Other adverse effects** None expected.

### 13. Disposal considerations

**Disposal instructions** Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.  
**Local disposal regulations** Dispose of in accordance with local regulations.  
**Hazardous waste code** Not regulated.  
**Waste from residues / unused products** Dispose of in accordance with local regulations.  
**Contaminated packaging** Dispose of in accordance with local regulations.

### 14. Transport information

#### DOT

Not regulated as dangerous goods.

#### IATA

Not regulated as dangerous goods.

#### IMDG

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

### 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

#### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories** Immediate Hazard - Yes  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

#### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312 Hazardous chemical** Yes

**SARA 313 (TRI reporting)**  
Not regulated.

#### Other federal regulations

##### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

##### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

#### US state regulations

##### US. Massachusetts RTK - Substance List

Calcium carbonate (CAS 471-34-1)  
Limestone (CAS 1317-65-3)  
Talc (CAS 14807-96-6)  
Titanium dioxide (CAS 13463-67-7)

##### US. New Jersey Worker and Community Right-to-Know Act

Calcium carbonate (CAS 471-34-1)  
Limestone (CAS 1317-65-3)  
Talc (CAS 14807-96-6)  
Titanium dioxide (CAS 13463-67-7)

## US. Pennsylvania Worker and Community Right-to-Know Law

Calcium carbonate (CAS 471-34-1)

Limestone (CAS 1317-65-3)

Talc (CAS 14807-96-6)

Titanium dioxide (CAS 13463-67-7)

## US. Rhode Island RTK

Not regulated.

## US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

### US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Attapulgite (CAS 12174-11-7)

Titanium dioxide (CAS 13463-67-7)

## International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

**Issue date** 05-February-2014

**Revision date** -

**Version #** 01

**Further information** Crystalline silica: Since this product is a liquid slurry, the risk of inhaling particles will not occur during the recommended use of this product. However, this product contains crystalline silica. Prolonged and repeated exposures to airborne free respirable crystalline silica can result in lung silicosis and/or lung cancer.

Vinyl acetic monomer, formaldehyde and acetaldehyde: Trace amounts of vinyl acetate monomer and formaldehyde may be found in this product.

Attapulgite: Carcinogenic to experimental animals via a route of exposure not relevant to human exposure. However, because this product is a liquid slurry, the risk of inhaling particles will not occur during the recommended use of this product.

Skin Sensitization Potential: This product contains an amount of Triazinetriethanol (THT) (CAS No. 4719-04-4) that is below the approved EPA regulated limits. THT can act as a sensitizer. Numerous human studies with concentrations up to 1% yielded negative (no sensitization) results. However, some results showed positive reactions in concentrations <0.5% mostly in persons with eczema.

Ethylene glycol is added to this product in trace amounts to prevent freezing in transit.

NFPA Ratings:

Health: 1

Flammability: 0

Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

### NFPA Ratings



### List of abbreviations

NFPA: National Fire Protection Association.

### References

Registry of Toxic Effects of Chemical Substances (RTECS)

HSDB® - Hazardous Substances Data Bank

Torben et al. (2001). Environmental and Health Assessment of Substances in Household Detergents and Cosmetic Products.

### Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.

# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

<b>Material name</b>	<b>All Purpose Dry Joint Compound</b>
<b>Product use</b>	Powdered compound that, after mixing with water, is used for covering gypsum board joints and spotting fasteners
<b>Product List</b>	See Product List found in Section 16
<b>Manufacturer information</b>	Georgia-Pacific Gypsum LLC 133 Peachtree Street, NE Atlanta, GA 30303 MSDS Request 404.652.5119 Technical Information 800.225.6119 Chemtrec - Emergency 800.424.9300

## 2. Hazards Identification

<b>Emergency overview</b>	<b>CAUTION!</b>  Crushing, mixing, or otherwise working with this product may generate large amounts of dust. Dust can be irritating to eyes, skin, and respiratory system.
<b>Potential health effects</b>	
<b>Eyes</b>	Dust may cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
<b>Skin</b>	Contact with skin may cause irritation. Dust may produce itching, rash, and redness. Handling can cause dry skin.
<b>Inhalation</b>	Dusts of this product may cause irritation to the nose, throat, or respiratory tract.
<b>Ingestion</b>	Not applicable under normal conditions of use. May result in obstruction or temporary irritation of the digestive tract.

## 3. Composition / Information on Ingredients

Components	CAS #	Percent/Wt
LIMESTONE (CALCIUM CARBONATE)	1317-65-3	60 - 100
MICA	12001-26-2	7 - 13
STARCH	113894-92-1	1 - 5
ATTAPULGITE	8031-18-3	1 - 5
EXPANDED PERLITE	93763-70-3	1 - 5
CRYSTALLINE SILICA (QUARTZ)*	14808-60-7	0.5 - 1.5

**Composition comments** Limestone (calcium carbonate), expanded perlite, mica, and attapulgite contain naturally occurring crystalline silica (quartz) which is listed as a lung carcinogen. See Section 8 for exposure information.

\*The weight percent for crystalline silica represents total crystalline silica and not the respirable fraction. Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

## 4. First Aid Measures

<b>First aid procedures</b>	
<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists.
<b>Skin contact</b>	For skin contact, wash immediately with soap and water. Get medical attention if irritation develops or persists.
<b>Inhalation</b>	Remove to fresh air. If symptoms persist, obtain medical attention.
<b>Ingestion</b>	May result in obstruction and irritation if ingested. Get medical attention.



## 5. Fire Fighting Measures

<b>Flammable properties</b>	Not flammable by OSHA/WHMIS criteria.
<b>Extinguishing media</b>	
<b>Suitable extinguishing media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Protection of firefighters</b>	
<b>Protective equipment and precautions for firefighters</b>	Firefighters should wear full protective clothing including self contained breathing apparatus.
<b>Explosion data</b>	
<b>Sensitivity to static discharge</b>	Not applicable.
<b>Sensitivity to mechanical impact</b>	Not applicable.
<b>Hazardous combustion products</b>	May include and are not limited to: oxides of carbon.

## 6. Accidental Release Measures

<b>Personal precautions</b>	Use personal protection recommended in Section 8. Keep unnecessary personnel away from the release.
<b>Environmental precautions</b>	Keep out of drains, sewers, ditches, and waterways.
<b>Methods for containment</b>	Contain the spill, then place in a suitable container. Minimize dust generation.
<b>Methods for cleaning up</b>	Sweep up or gather material and place in appropriate container for disposal.

## 7. Handling and Storage

<b>Handling</b>	Avoid contact with skin and eyes. Use only in well-ventilated areas. Handle and open container with care. Wear appropriate NIOSH approved dust mask or filtering facepiece if dust is generated. Do not eat or drink while using the product. Wash hands before eating, drinking, or smoking.
<b>Storage</b>	Keep the container tightly closed and dry. Store in a covered, dry, climate controlled area, away from incompatibles.

## 8. Exposure Controls / Personal Protection

### LIMESTONE (CALCIUM CARBONATE) (CAS # 1317-65-3)

	TWA	STEL	Ceiling
ACGIH	Not established	Not established	Not established
OSHA	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)	Not established	Not established

### MICA (CAS # 12001-26-2)

	TWA	STEL	Ceiling
ACGIH	3 mg/m3 TWA (respirable fraction)	Not established	Not established
OSHA	20 mppcf (respirable fraction, containing <1% crystalline silica)	Not established	Not established

### STARCH (CAS # 113894-92-1)

	TWA	STEL	Ceiling
ACGIH	10 mg/m3 TWA (inhalable fraction); 3 mg/m3 TWA (respirable fraction)	Not established	Not established
OSHA	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)	Not established	Not established

### ATTAPULGITE (CAS # 8031-18-3)

	TWA	STEL	Ceiling
ACGIH	10 mg/m3 TWA (inhalable fraction); 3 mg/m3 TWA (respirable fraction)	Not established	Not established
OSHA	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)	Not established	Not established

### EXPANDED PERLITE (CAS # 93763-70-3)

	TWA	STEL	Ceiling
ACGIH	10 mg/m3 TWA (inhalable fraction); 3 mg/m3 TWA (respirable fraction)	Not established	Not established
OSHA	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)	Not established	Not established

### CRYSTALLINE SILICA (QUARTZ)\* (CAS # 14808-60-7)

	TWA	STEL	Ceiling
ACGIH	0.025 mg/m3 0.025 mg/m3 TWA respirable fraction	Not established	Not established
OSHA	((250)/(%SiO <sub>2</sub> + 5) mppcf TWA (respirable)); ((10)/(%SiO <sub>2</sub> + 2) mg/m3 TWA (respirable)); ((30)/(%SiO <sub>2</sub> + 2) mg/m3 TWA (total dust))	Not established	Not established

#### Exposure guidelines

\*The weight percent for crystalline silica represents total crystalline silica and not the respirable fraction. Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

#### Engineering controls

When using product, provide local and general exhaust ventilation to keep airborne dust concentrations below exposure limits. Use wet methods, if appropriate, to reduce the generation of dust.

## Personal protective equipment

### Eye / face protection

Safety glasses or goggles are recommended when using this product. Ensure compliance with OSHA's PPE standards (29 CFR 1910.132 (general) and 133 (eye and face protection)). Safety shower/eye wash fountain is recommended in the workplace area (29 CFR 1910.151(c)).

### Skin protection

Impervious protective clothing and gloves recommended to prevent drying or irritation of skin. Ensure compliance with OSHA's PPE standards (29 CFR 1910.132 (general) and 138 (hand protection)). Safety shower/eye wash fountain is recommended in the workplace area (29 CFR 1910.151 (c)).

### Respiratory protection

A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).

## 9. Physical & Chemical Properties

Appearance	Powder
Color	Light grey to white
Physical State	Solid
Odor	Low odor
Odor threshold	Not available
pH	8 - 10
Freezing point	Not applicable
Boiling point	Not applicable
Flash point	Not applicable
Evaporation rate	Not available
Flammability	Not Flammable
Flammability limits in air, upper, % by volume	Not applicable
Flammability limits in air, lower, % by volume	Not applicable
Vapor pressure	Not applicable
Vapor density	Not applicable
Specific gravity	2
Octanol/H <sub>2</sub> O coeff	Not available
Solubility (water)	2 % @ 22°C
Auto-ignition temperature	Not applicable

## 10. Chemical Stability & Reactivity Information

Chemical stability	Stable at normal conditions.
Conditions of Reactivity	Not expected under normal conditions of use.
Incompatible materials	Strong acids. Oxidizers.
Hazardous decomposition products	May include and are not limited to: oxides of carbon when heated to decomposition.
Possibility of hazardous reactions	Not expected under normal conditions of use.

## 11. Toxicological Information

Toxicological information	No toxicological data available for this product. Toxicological information for components of this product is listed below.
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### Toxicological information (Ingredients)

#### CRYSTALLINE SILICA (QUARTZ)\* (CAS # 14808-60-7)

Toxicology Data - Selected LD50s and LC50s

Oral LD50 Rat 500 mg/kg

#### EXPANDED PERLITE (CAS # 93763-70-3)

Toxicology Data - Selected LD50s and LC50s

Oral LD50 Mouse 12960 mg/kg

**Routes of exposure** Skin contact. Eye contact. Inhalation.

**Sensitization** Not expected to be hazardous by OSHA/WHMIS criteria.

Material name: All Purpose Dry Joint Compound

ID: GP-70F Effective date: 07-16-2010

MSDS NA

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<b>Chronic effects</b>	Not expected to be hazardous by OSHA/WHMIS criteria.
<b>Carcinogenicity</b>	Not expected to be hazardous by OSHA/WHMIS criteria.
<b>Mutagenicity</b>	Not expected to be hazardous by OSHA/WHMIS criteria.
<b>Reproductive effects</b>	Not expected to be hazardous by OSHA/WHMIS criteria.
<b>Teratogenicity</b>	Not expected to be hazardous by OSHA/WHMIS criteria.
<b>Synergistic materials</b>	Not available.

## 12. Ecological Information

<b>Ecotoxicity</b>	This material is not expected to be harmful to aquatic life.
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## 13. Disposal Considerations

<b>Disposal instructions</b>	This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste.
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## 14. Transport Information

### Department of Transportation (DOT) Requirements

This product is not regulated as a hazardous material by the United States (DOT) transportation regulations.

### Canadian Transportation of Dangerous Goods (TDG) Requirements

Not regulated as dangerous goods.

## 15. Regulatory Information

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

<b>Hazard categories</b>	Immediate Hazard - Yes Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
<b>Section 302 extremely hazardous substance</b>	No
<b>Section 311 hazardous chemical</b>	Yes
<b>Section 313 hazardous chemical</b>	No

### US federal regulations

### Canadian regulations

<b>Canada - WHMIS - Ingredient Disclosure List</b>		
CRYSTALLINE SILICA (QUARTZ)*	14808-60-7	1 %
MICA	12001-26-2	1 %

### Inventory status

Country(s) or region	Inventory name	Compliant w/inventory requirements (yes/no)
Canada	Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

## 16. Other Information

### Product list

ToughRock® All Purpose Powder Compound	M-905, M-918
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<b>HMIS® ratings</b>	Health: 1 Flammability: 0 Physical hazard: 1
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<b>NFPA ratings</b>	Health: 1 Flammability: 0 Instability: 0
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<b>Other information</b>	Products on this MSDS do not contain asbestos.
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**Disclaimer**

The information and data herein are believed to be accurate and have been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. Buyer assumes all risk of use, storage and handling of the product in compliance with applicable federal, state and local laws and regulations. Georgia-Pacific and its subsidiaries make no warranty of any kind, expressed or implied, concerning the accuracy or completeness of the information and data herein. The implied warranties of merchantability and fitness for a particular purpose are specifically excluded. Georgia-Pacific and its subsidiaries will not be liable for claims relating to any party's use of or reliance on information and data contained herein regardless of whether it is claimed that the information and data are inaccurate, incomplete or otherwise misleading.

**Effective Date**

16-Jul-2010

**Supersedes**

30-Jul-2007

**Prepared by**

Georgia-Pacific LLC  
404.652.5119

# SAFETY DATA SHEET

## 1. Identification

<b>Product identifier</b>	<b>ToughRock® All-Purpose Lightweight Ready Mix Joint Compound</b>
<b>Other means of identification</b>	None.
<b>Recommended use</b>	Premixed compound for finishing gypsum board joints and spotting fasteners
<b>Recommended restrictions</b>	Workers (and your customers or users in the case of resale) should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

### Manufacturer/Importer/Supplier/Distributor information

<b>Company name</b>	Georgia-Pacific Gypsum LLC	
<b>Address</b>	133 Peachtree Street, NE Atlanta, GA 30303	
<b>Telephone</b>	Technical Information	800.225.6119
	(M)SDS Request	404.652.5119
<b>E-mail</b>	Not available.	
<b>Emergency phone number</b>	Chemtrec - Emergency	800.424.9300

## 2. Hazard(s) identification

<b>Physical hazards</b>	Not classified.	
<b>Health hazards</b>	Sensitization, skin	Category 1
	Carcinogenicity	Category 1A
	Specific target organ toxicity, repeated exposure	Category 1 (lung)
<b>Environmental hazards</b>	Not classified.	
<b>OSHA defined hazards</b>	Not classified.	
<b>Label elements</b>		



<b>Signal word</b>	Danger
<b>Hazard statement</b>	May cause an allergic skin reaction. May cause cancer. Causes damage to organs (lung) through prolonged or repeated exposure.
<b>Precautionary statement</b>	
<b>Prevention</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust. Wash exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.
<b>Response</b>	IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. If exposed or concerned: Get medical advice/attention. Specific treatment (see section 4 on the SDS).
<b>Storage</b>	Keep container tightly closed. Store away from acids.
<b>Disposal</b>	Dispose of contents/container in accordance with applicable regulations.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	None.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	Common name and synonyms	CAS number	%
CRYSTALLINE SILICA (QUARTZ)		14808-60-7	1 - 5
HEXAHYDRO-1,3,5-TRIS(2-HYDROXYETHYL)-S-TRIAZINE		4719-04-4	0.1 - 1
Other components below reportable levels			60 - 100

The specific chemical identity and/or percentage of composition has been withheld as a trade secret.

#### 4. First-aid measures

<b>Inhalation</b>	Move to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions.
<b>Eye contact</b>	Rinse with water. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	May cause an allergic skin reaction. Dermatitis. Rash. Prolonged exposure may cause chronic effects.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

#### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Use water spray to cool unopened containers.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

#### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Stop the flow of material, if this is without risk. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground.

#### 7. Handling and storage

<b>Precautions for safe handling</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US OSHA Table Z-3: Calculated Time Weighted Average (TWA) (mg/m3)

Components	Type	Value	Form
CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)	TWA	4.29 mg/m3	Total dust.
		1.43 mg/m3	Respirable.

#### US ACGIH Threshold Limit Values: Time Weighted Average (TWA): mg/m3, non-standard units

Components	Type	Value	Form
CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.

### Biological limit values

No biological exposure limits noted for the ingredient(s).

### Exposure guidelines

Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.  
Exposure limits for CRYSTALLINE SILICA - The US OSHA exposure limits 8 hour TWA for CRYSTALLINE SILICA (QUARTZ) are calculated from the following equations:  $30/(\%SiO_2+2)$  mg/m3 for total dust; and  $10/(\%SiO_2+2)$  mg/m3 for the respirable fraction.

### Appropriate engineering controls

When using product, provide local and general exhaust ventilation to keep airborne dust concentrations below exposure limits. Use wet methods, if appropriate, to reduce the generation of dust.

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Wear safety glasses with side shields (or goggles). Ensure compliance with OSHA's PPE standard (29 CFR 1910.132 and .133) for eye and face protection. Safety shower/eye wash fountain must be readily available in the workplace area (29 CFR 1910.151(c)).

#### Skin protection

##### Hand protection

Wear appropriate chemical resistant gloves.

##### Other

Impervious protective clothing and gloves recommended to prevent drying or irritation of skin. Ensure compliance with OSHA's PPE standards (29 CFR 1910.132 (general) and 138 (hand protection)). Safety shower/eye wash fountain is recommended in the workplace area (29 CFR 1910.151 (c)).

#### Respiratory protection

A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).

#### Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

### General hygiene considerations

Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

## 9. Physical and chemical properties

### Appearance

#### Physical state

Solid.

#### Form

Solid.

#### Color

Not available.

### Odor

Low odor

### Odor threshold

Not available.

### pH

Not available.

### Melting point/freezing point

Not available.



Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
<b>Upper/lower flammability or explosive limits</b>	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
<b>Solubility(ies)</b>	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.

## 10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Acids.
Hazardous decomposition products	May include and are not limited to: oxides of carbon when heated to decomposition.

## 11. Toxicological information

### Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	May cause an allergic skin reaction.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Not applicable under normal conditions of use. May result in obstruction or temporary irritation of the digestive tract.

Symptoms related to the physical, chemical and toxicological characteristics	Coughing. Discomfort in the chest. Shortness of breath. May cause an allergic skin reaction. Dermatitis. Rash.
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### Information on toxicological effects

Acute toxicity	May cause an allergic skin reaction.
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Product	Species	Test Results
ToughRock® All-Purpose Lightweight Ready Mix Joint Compound		
<b>Acute</b>		
Inhalation		
LC50	Rat	338 mg/l, 4 hours estimated

Components	Species	Test Results
HEXAHYDRO-1,3,5-TRIS(2-HYDROXYETHYL)-S-TRIAZINE (CAS 4719-04-4)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rat	> 4000 mg/kg
<b>Inhalation</b>		
<i>Mist</i>		
LC50	Rat	0.338 mg/l, 4 hours
<b>Oral</b>		
LD50	Rat	1000 mg/kg

\* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation.

**Serious eye damage/eye irritation** Direct contact with eyes may cause temporary irritation.

#### Respiratory or skin sensitization

**Respiratory sensitization** Not a respiratory sensitizer.

**Skin sensitization** May cause an allergic skin reaction.

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity** May cause cancer. Exposure to respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by IARC and NTP as a lung carcinogen. Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given exposure to a respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of respirable crystalline silica exposure and the length of time (usually years) of exposure. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7) 1 Carcinogenic to humans.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

#### US. National Toxicology Program (NTP) Report on Carcinogens

CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7) Known To Be Human Carcinogen.

**Reproductive toxicity** This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure** Not classified.

**Specific target organ toxicity - repeated exposure** Causes damage to organs (lung) through prolonged or repeated exposure.

**Aspiration hazard** Not an aspiration hazard.

**Chronic effects** Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

## 12. Ecological information

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Product	Species	Test Results
ToughRock® All-Purpose Lightweight Ready Mix Joint Compound		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50 Fish	15449.3232 mg/l, 96 hours estimated

Components	Species	Test Results
CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50	Zebra danio (Danio rerio) > 10000 mg/l, 96 Hours OECD SIDS
HEXAHYDRO-1,3,5-TRIS(2-HYDROXYETHYL)-S-TRIAZINE (CAS 4719-04-4)		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50	Fish 16.07 mg/l, 96 hours

\* Estimates for product may be based on additional component data not shown.

<b>Persistence and degradability</b>	No data is available on the degradability of this product.
<b>Bioaccumulative potential</b>	No data available.
<b>Mobility in soil</b>	No data available.
<b>Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

### 13. Disposal considerations

<b>Disposal instructions</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

### 14. Transport information

<b>DOT</b>	Not regulated as dangerous goods.
<b>IATA</b>	Not regulated as dangerous goods.
<b>IMDG</b>	Not regulated as dangerous goods.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable.

### 15. Regulatory information

<b>US federal regulations</b>	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
<b>TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)</b>	
HEXAHYDRO-1,3,5-TRIS(2-HYDROXYETHYL)-S-TRIAZI 1.0 % One-Time Export Notification only. NE (CAS 4719-04-4)	
<b>CERCLA Hazardous Substance List (40 CFR 302.4)</b>	
Not listed.	
<b>SARA 304 Emergency release notification</b>	
Not regulated.	
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	
Not listed.	

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**                      Immediate Hazard - Yes  
   Delayed Hazard - Yes  
   Fire Hazard - No  
   Pressure Hazard - No  
   Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical**                      Yes

**SARA 313 (TRI reporting)**  
Not regulated.

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)**                      Not regulated.

**US state regulations****US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed.

**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)

**US. Massachusetts RTK - Substance List**

CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)

**US. New Jersey Worker and Community Right-to-Know Act**

CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)

**US. Pennsylvania Worker and Community Right-to-Know Law**

CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

WARNING: This product contains a chemical known to the State of California to cause cancer.

**US - California Proposition 65 - CRT: Listed date/Carcinogenic substance**

CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)                      Listed: October 1, 1988

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

**Issue date**                      May-14-2015  
**Revision date**                      May-21-2015  
**Version #**                      02  
**HMIS® ratings**                      Health: 2\*  
   Flammability: 0  
   Physical hazard: 0  
**NFPA ratings**                      Health: 2  
   Flammability: 0  
   Instability: 0

## Disclaimer

This SDS is intended to quickly provide useful information to the user(s) of this material or product. It is not intended to serve as a comprehensive discussion of all possible risks or hazards, and it assumes a reasonable use of the product. The information contained in this SDS is believed to be accurate as of the date of preparation of this SDS and has been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. The user or handler (or their employer) should consider the specific conditions in which this material will be used, handled, or stored and determine what specific safety or other precautions are required. Employers should ensure that their employees, agents, contractors, and customers who will use the product receive adequate warnings and safe handling procedures, including a current SDS. Product users or handlers (or their employer) who are unsure of what specific precautions are required should consult their employer, product supplier, or safety or health professionals before handling or working with this product. Please notify us immediately if you believe this SDS or other safety and health information about this product is inaccurate or incomplete.

## 1. Product and Company Identification

<b>Material name</b>	<b>109 Ceiling Texture Spray</b>
<b>Product use</b>	Decorative ceiling texture.
<b>Product list</b>	See Product List found in Section 16
<b>Manufacturer information</b>	Georgia-Pacific Gypsum LLC 133 Peachtree Street, NE Atlanta, GA 30303 MSDS Request 404.652.5119 Technical Information 800.225.6119 Chemtrec - Emergency 800.424.9300

## 2. Hazards Identification

<b>Emergency overview</b>	CAUTION!  Crushing, mixing, or otherwise working with this product may generate large amounts of dust. Dust can be irritating to eyes, skin, and respiratory system.
<b>Potential health effects</b>	
<b>Eyes</b>	Dust or mist may cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
<b>Skin</b>	Handling can cause dry skin. Dust may cause skin irritation.
<b>Inhalation</b>	Dusts of this product may cause irritation to the nose, throat, or respiratory tract.
<b>Ingestion</b>	Not applicable under normal conditions of use. May result in obstruction or temporary irritation of the digestive tract.

## 3. Composition / Information on Ingredients

Components	CAS #	Percent
LIMESTONE (CALCIUM CARBONATE)	1317-65-3	60 - 100
TALC	14807-96-6	7 - 13
CRYSTALLINE SILICA (QUARTZ)*	14808-60-7	1 - 5
MAGNESIUM CARBONATE	546-93-0	1 - 5

**Composition comments** Limestone (calcium carbonate) and talc contain naturally occurring crystalline silica (quartz) which is listed as a lung carcinogen. See Section 8 for exposure information.

\*The weight percent for crystalline silica represents total crystalline silica and not the respirable fraction. Jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

## 4. First Aid Measures

<b>First aid procedures</b>	
<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists.
<b>Skin contact</b>	For skin contact, wash immediately with soap and water. Get medical attention if irritation develops or persists.
<b>Inhalation</b>	Remove to fresh air. If symptoms persist, obtain medical attention.
<b>Ingestion</b>	May result in obstruction and irritation if ingested. Get medical attention.

## 5. Fire Fighting Measures

<b>Extinguishing media</b>	
<b>Suitable extinguishing media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Fire fighting equipment/instructions</b>	Firefighters should wear full protective clothing including self contained breathing apparatus.

**Explosion data**

**Sensitivity to static discharge** Not applicable.

**Sensitivity to mechanical impact** Not applicable.

**Hazardous combustion products** May include and are not limited to: oxides of carbon.

**6. Accidental Release Measures**

**Personal precautions** Use personal protection recommended in Section 8. Keep unnecessary personnel away from the release.

**Environmental precautions** Keep out of drains, sewers, ditches, and waterways.

**Methods for containment** Contain the spill, then place in a suitable container. Minimize dust generation.

**Methods for cleaning up** Sweep up or gather material and place in appropriate container for disposal. Rinse area with water.

**7. Handling and Storage**

**Handling** Avoid contact with skin and eyes. Avoid breathing dust. Use only in well-ventilated areas. Handle and open container with care. Wear appropriate NIOSH approved dust mask or filtering facepiece if dust is generated. Do not eat or drink while using the product. Wash hands before eating, drinking, or smoking.

**Storage** Keep the container tightly closed and dry. Store in a covered, dry, climate controlled area, away from incompatibles.

**8. Exposure Controls / Personal Protection****Occupational exposure limits****ACGIH**

Components	Type	Value	Form
CRYSTALLINE SILICA (QUARTZ)* (14808-60-7)	TWA	0.025 mg/m3	(Respirable fraction)
TALC (14807-96-6)	TWA	2 mg/m3	Respirable fraction.

**U.S. - OSHA**

Components	Type	Value	Form
CRYSTALLINE SILICA (QUARTZ)* (14808-60-7)	TWA	1.4 mg/m3	Respirable fraction.
LIMESTONE (CALCIUM CARBONATE) (1317-65-3)	PEL	4.3 mg/m3 15 mg/m3	Total dust. Total dust.
MAGNESIUM CARBONATE (546-93-0)	PEL	5 mg/m3 5 mg/m3 5 mg/m3	Respirable fraction. (Respirable fraction) Respirable fraction.
TALC (14807-96-6)	TWA	15 mg/m3 0.3 mg/m3 2.4 mppcf 0.1 mg/m3 20 mppcf	Total dust. Total dust. Respirable. Respirable.

**Exposure guidelines** The US OSHA exposure limits for CRYSTALLINE SILICA (QUARTZ) are calculated from the following equations:  $30/(\%SiO_2+2)$  mg/m3 for total dust; and  $10/(\%SiO_2+2)$  mg/m3 for the respirable fraction.

\*The weight percent for crystalline silica represents total crystalline silica and not the respirable fraction. Jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

**Engineering controls** When using product, provide local and general exhaust ventilation to keep airborne dust concentrations below exposure limits. Use wet methods, if appropriate, to reduce the generation of dust.

## Personal protective equipment

### Eye / face protection

Safety glasses or goggles are recommended when using this product. Ensure compliance with OSHA's PPE standard (29 CFR 1910.132 and .133) for eye and face protection. Safety shower/eye wash fountain must be readily available in the workplace area (29 CFR 1910.151(c)).

### Skin protection

Impervious protective clothing and gloves recommended to prevent drying or irritation of skin. Ensure compliance with OSHA's PPE standards (29 CFR 1910.132 (general) and 138 (hand protection)). Safety shower/eye wash fountain is recommended in the workplace area (29 CFR 1910.151 (c)).

### Respiratory protection

A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).

## 9. Physical & Chemical Properties

Appearance	Powder
Color	White
Form	Solid
Odor	Low odor
Odor threshold	Not available
pH	8 - 10
Freezing point	Not available
Boiling point	Not applicable
Flash point	Not applicable
Evaporation rate	Not available
Flammability	Not flammable
Flammability limits in air, upper, % by volume	0.0089 estimated
	Not applicable
Flammability limits in air, lower, % by volume	0.0017 estimated
	Not applicable
Vapor pressure	11.7543 hPa estimated
	Not applicable
Vapor density	Not available
Specific gravity	2.2
	2.62613 estimated
Partition coefficient (n-octanol/water)	Not available
Solubility (water)	1 %
Auto-ignition temperature	Not applicable

## 10. Chemical Stability & Reactivity Information

Chemical stability	Stable at normal conditions.
Conditions of reactivity	Not expected under normal conditions of use.
Incompatible materials	None known.
Hazardous decomposition products	May include and are not limited to: oxides of carbon when heated to decomposition.

## 11. Toxicological Information

Toxicological information	No toxicological data available for this product. Toxicological information for components of this product is listed below.
Routes of exposure	Inhalation. Skin contact. Eye contact.
Sensitization	Not expected to be hazardous by OSHA/WHMIS criteria.
Chronic effects	Not expected to be hazardous by OSHA/WHMIS criteria.



<b>Carcinogenicity</b>	<p>Hazardous by OSHA/WHMIS criteria.</p> <p>Exposure to respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by IARC and NTP as a lung carcinogen. Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given exposure to a respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of respirable crystalline silica exposure and the length of time (usually years) of exposure.</p>
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<b>ACGIH Carcinogens</b>	
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	US ACGIH Threshold Limit Values: A2 carcinogen
<b>IARC Monographs Overall Evaluation of Carcinogenicity</b>	
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	1 Volume 68, Volume 100C
TALC (CAS 14807-96-6)	2B Volume 93
	3 Volume 42, Supplement 7, Volume 93

<b>Mutagenicity</b>	Not expected to be hazardous by OSHA/WHMIS criteria.
<b>Reproductive effects</b>	Not expected to be hazardous by OSHA/WHMIS criteria.
<b>Teratogenicity</b>	Not expected to be hazardous by OSHA/WHMIS criteria.
<b>Synergistic materials</b>	Not available.

## 12. Ecological Information

<b>Ecotoxicity</b>	Not considered to be harmful to aquatic life.
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## 13. Disposal Considerations

<b>Disposal instructions</b>	This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste.
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## 14. Transport Information

<b>DOT</b>	Not regulated as dangerous goods.
<b>TDG</b>	Not regulated as dangerous goods.

## 15. Regulatory Information

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

<b>Hazard categories</b>	Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
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<b>Section 302 extremely hazardous substance</b>	No
<b>Section 311 hazardous chemical</b>	Yes
<b>Section 313 hazardous chemical</b>	No

<b>US federal regulations</b>	The components of this product are not subject to TSCA 12(b) Export Notification.
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### Canadian regulations

<b>Canada WHMIS Ingredient Disclosure: Threshold limits</b>	
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	1 %

<b>WHMIS status</b>	Non-controlled
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### Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

Product list	
Ceiling Texture Spray	Q-950
HMIS® ratings	Health: 1 Flammability: 0 Physical hazard: 0
NFPA ratings	Health: 1 Flammability: 0 Instability: 0
Disclaimer	The information and data herein are believed to be accurate and have been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. Buyer assumes all risk of use, storage and handling of the product in compliance with applicable federal, state and local laws and regulations. Georgia-Pacific and its subsidiaries make no warranty of any kind, expressed or implied, concerning the accuracy or completeness of the information and data herein. The implied warranties of merchantability and fitness for a particular purpose are specifically excluded. Georgia-Pacific and its subsidiaries will not be liable for claims relating to any party's use of or reliance on information and data contained herein regardless of whether it is claimed that the information and data are inaccurate, incomplete or otherwise misleading.
Effective Date	14-Aug-2012
Prepared by	Georgia-Pacific LLC 404.652.5119

Effective Date: 01/01/04  
Supercedes Date: 09/14/00

**• \*\* Section 1 – Chemical Product and Company Identification \*\*\***

**Product Name:** READY MIX™ All Purpose/Topping Compounds

**Product Code:** See Product Lists found in Section 16 (Page 6 of 7)

**Product Use:** Compound for covering gypsum board joints and spotting fasteners

**Manufacturer Information**

G-P Gypsum Corporation  
A wholly owned subsidiary of  
Georgia-Pacific Corporation  
133 Peachtree Street, N.E.  
Atlanta, GA 30303

Georgia-Pacific Canada, Inc.  
A wholly owned subsidiary of  
Georgia-Pacific Corporation  
Allanburg Road  
Thorold Ontario  
L2V 3ZB, Canada

(770) 987-5190 (Technical Information)  
(404) 652-5119 (MSDS Request Line)

EMERGENCY #: 1-800-434-9300 (CHEMTREC)

**\*\*\* Section 2 – Composition / Information on Ingredients \*\*\***

CAS #	Component	% Wt	OSHA PEL	ACGIH TLV
7778-18-9	Gypsum (calcium sulfate)	50 - 75%	15 mg/m <sup>3</sup> Total Dust 5 mg/m <sup>3</sup> Respirable Dust	10 mg/m <sup>3</sup> Total Dust
471-34-1	Limestone (calcium carbonate)		0.1 mg/m <sup>3</sup> Respirable Dust (Quartz)	0.1 mg/m <sup>3</sup> Respirable Dust (Quartz)
93763-70-3	Perlite	< 3	15 mg/m <sup>3</sup> Total Dust 5 mg/m <sup>3</sup> Respirable Dust	10 mg/m <sup>3</sup> Total Dust
12174-11-7	Attapulgite (hydrous magnesium aluminum silicate)	< 7	0.1 mg/m <sup>3</sup> Respirable Dust (Quartz)	0.1 mg/m <sup>3</sup> Respirable Dust (Quartz)
113894-92-1	Starch	< 2	15 mg/m <sup>3</sup> Total Dust 5 mg/m <sup>3</sup> Respirable Dust	10 mg/m <sup>3</sup> Total Dust
12001-26-2	Mica	< 3*	3 mg/m <sup>3</sup> Respirable Dust	3 mg/m <sup>3</sup> Respirable Dust
34375-28-5	2((Hydroxymethyl) amino) ethanol	< 1	None	None

\* Mica is contained only in GYPROC® All Purpose READY MIX™ joint compound manufactured at the Ft. Lauderdale plant.

Gypsum, limestone, perlite, attapulgite and mica contain naturally occurring crystalline silica (quartz). Due to its natural occurrence, the exact percentage of crystalline silica is unknown. Both OSHA PEL and ACGIH TLV are 0.1 mg/m<sup>3</sup> for respirable quartz dust.

Exposure limits are in accord with those recommended by OSHA in the 1989 revision of PELs.

**\* \* \* Section 3 – Hazards Identification \* \* \***

**Emergency Overview**

The container headspace may contain a trace amount of formaldehyde and vinyl acetate gas. This gas dissipates quickly upon opening the container. Sanding this product after hardening may generate large amounts of dust. Dust may cause upper respiratory tract, lung, eye, nasal and skin irritation.

**Description:**

White or off white paste-like compound.

**Potential Health Effects:**

Gaseous formaldehyde may cause temporary irritation to the nose and throat. This product contains naturally occurring crystalline silica (quartz). Respirable crystalline silica is listed as a lung carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program (NTP).

**Potential Health Effects: Inhalation**

Dust can cause irritation to the respiratory tract. Good housekeeping practices are recommended.

**Potential Health Effects: Eyes**

Dust can cause mechanical eye irritation. Good housekeeping practices are recommended.

**Potential Health Effects: Skin**

Handling can cause dry skin. Dust and glass fibers may produce itching, rash and redness.

**Potential Health Effects: Ingestion**

Not applicable under normal conditions of use. May result in obstruction and temporary irritation of the digestive tract.

**HMIS Ratings: Health: 1 Fire: 0 Reactivity: 0**

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4

**\* \* \* Section 4 – First Aid Measures \* \* \***

**First Aid: Inhalation**

Remove to fresh air immediately. If persistent irritation, severe coughing or breathing difficulty occurs, get medical attention.

**First Aid: Skin**

Wash affected areas gently with soap and water. If irritation persists, get medical attention. Launder contaminated clothing before reuse or dispose of properly.

**First Aid: Eyes**

Immediately rinse with water. Remove contact lenses. Hold eyelids apart and flush eyes with water for at least 15 minutes. If irritation persists, get medical attention.

**First Aid: Ingestion**

Ingestion may result in obstruction and/or irritation to the digestive tract. Get medical attention, if needed.

**\*\*\* Section 5 – Fire Fighting Measures \*\*\***

**Flash Point:**

Not applicable.

**Flammable Limits:**

Not combustible.

**Hazardous Combustion Products:**

None.

**Autoignition Temperature:**

Not applicable.

**Extinguishing Media**

Not applicable.

**\*\*\* Section 6 – Accidental Release Measures \*\*\***

To prevent obstruction, do not wash down drain. Scoop material into a waste container for disposal. If needed, use water spray to wet down and minimize dust generation. Wear approved respirator, if necessary.

**\*\*\* Section 7 - Handling and Storage \*\*\***

Do not store outside or in direct sunlight. Carefully open container to avoid breathing possible fumes. When compound has been completely used, discard container. Do not reuse container.

**\*\*\* Section 8 – Exposure Controls / Personal Protection \*\*\***

**Exposure Guidelines**

Exposure limits can be found in Section 2: Composition/Information on Ingredients.

**Engineering Controls**

When sanding hardened product, provide local and general exhaust ventilation to keep airborne concentrations below exposure limits. Use wet methods, if appropriate, to reduce generation of dust.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

(PPE RECOMMENDATIONS BELOW: IT MAY BE NECESSARY TO FOLLOW PPE REQUIREMENTS AS DETERMINED BY YOUR WORKPLACE)

**Personal Protective Equipment: Eyes/Face**

Wear eye goggles or safety glasses for nuisance dust. Ensure compliance with OSHA's PPE standards (29 CFR 1910.132 and 133) for eye and face protection.

**Personal Protective Equipment: Skin**

Protective gloves recommended to prevent drying or irritation of hands. Ensure compliance with OSHA's PPE standards 29 CFR 1910.132 (general) and 138 (hand protection).

**Personal Protective Equipment: Respiratory**

Wear NIOSH approved respirator when permissible exposure limit to dust may be exceeded.

Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).

**\*\*\* Section 9 – Physical & Chemical Properties \*\*\***

<b>Appearance:</b>	White/Off white paste-like compound	<b>Odor:</b>	Low odor
<b>Physical State:</b>	Solid	<b>PH:</b>	8 -10
<b>Vapor Pressure:</b>	Not applicable	<b>Vapor Density:</b>	Not applicable
<b>Boiling Point:</b>	Not applicable	<b>Melting Point:</b>	Not applicable
<b>Solubility (H<sub>2</sub>O)</b>	1.5 - 2.0	<b>Specific Gravity:</b>	1.3 - 2.5

**\*\*\* Section 10 – Chemical Stability & Reactivity Information \*\*\***

**Chemical Stability**

Stable.

**Chemical Stability: Conditions to Avoid**

Contact with strong acids.

**Incompatibility**

Strong acids.

**Hazardous Polymerization**

Will not occur.

**\*\*\* Section 11 – Toxicological Information \*\*\***

**Crystalline Silica:**

Respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by the International Agency for Research on Cancer (IARC) and National Toxicology Program (NTP) as a lung carcinogen.

Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given exposure to respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of dust exposure and the length of time (usually years) of exposure.

**\*\*\* Section 12 – Ecological Information \*\*\***

**A: Environmental Fate**

No Information Found

**B. Environmental Toxicity – Aquatic Toxicity**

No Information Found

**\*\*\* Section 13 – Disposal Considerations \*\*\***

**US EPA Waste Number & Descriptions**

**A: General Product Information**

This product if discarded as supplied is not considered a hazardous waste under Federal Hazardous Waste Regulations 40 CFR 261. If processing use or contamination alters the material the waste must be tested using methods described in 40 CFR 261 to determine if it meets applicable definitions of hazardous wastes.

**B: Component Waste Numbers**

Not Applicable.

**Disposal Instructions**

Dispose of as inert solid in landfill. Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

**\*\*\* Section 14 – Transportation Information \*\*\***

This material is not a DOT hazardous material.

**\*\*\* Section 15 – Regulatory Information \*\*\***

**US Federal Regulations**

**A: General Product Information**

Dust and potential respirable crystalline silica generated from cutting, sanding or otherwise machining this product may be hazardous.

**B: Component Analysis**

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4):

OSHA: Dust and potential respirable crystalline silica generated from mixing, sanding or otherwise using this product may be hazardous.

TSCA: This product complies with TSCA inventory requirements.

SARA 313: None.

RCRA: If discarded in its purchased form, this product would not be a hazardous waste. Under RCRA, however, it is the responsibility of the product user to determine at the time of disposal whether a material containing this product or derived from this product should be classified as a hazardous waste.

## State Regulations

### California Prop 65:

Airborne particles of respirable size crystalline silica are known to the State of California to cause cancer. Worker exposure testing conducted by Georgia-Pacific on various industrial gypsum products did not demonstrate an exposure to respirable crystalline silica.

### CANADA WHMIS:

This product is not a controlled product.

<p style="text-align: center;">* * * <b>Section 16 - Other Information</b> * * *</p>
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## MSDS REVISION SUMMARY:

Effective Date Change: 01/01/2004 Supercedes: 09/14/00  
Various language and format changes to meet ANSI 16-Section Format  
Section 16: Product Additions and Name Changes

### Product List for MSDS 69A:

DENS-ARMOR® COTE All Purpose READY MIX™ Joint Compound	V-971, M-971, FL-971, TEX-971
TOUGHROCK® All Purpose READY MIX™ Joint Compound	V-990, M-986, FL-986; TEX-974
TOUGHROCK® READY MIX™ Topping Compound	V-988, M-984, TEX-975

## Other Information

IMPORTANT: The information and data herein are believed to be accurate and have been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. Buyer assumes all risk of use, storage and handling of the product in compliance with applicable federal, state and local laws and regulations. Georgia-Pacific and its subsidiaries make no warranty of any kind, express or implied, concerning the accuracy or completeness of the information and data herein. The implied warranties of merchantability and fitness for a particular purpose are specifically excluded. Georgia-Pacific and its subsidiaries will not be liable for claims relating to any party's use of or reliance on information and data contained herein regardless of whether it is claimed that the information and data are inaccurate, incomplete or otherwise misleading.



**Key/Legend:**

ACGIH	American Conference of Governmental Industrial Hygienists
C	Ceiling Limit
CAS	Chemical Abstract Services Number
CFR	Code of Federal Regulations
DOT	Department of Transportation
DSL	Domestic Substance List
EPA	Environmental Protection Agency
HEPA	High Efficiency Particulate Air
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
NA	Not Available or Not Applicable
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety and Health
NJTSP	New Jersey Trade Secret Registry
NSL	Non-Domestic Substance List
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PPE	Personal Protective Equipment
STEL	Short Term Exposure Limit
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHIMS	Workplace Hazardous Materials Information System

This is the end of  
**READY MIX™ All Purpose/Topping Compounds**

# SAFETY DATA SHEET

## 1. Identification

<b>Product identifier</b>	<b>ToughRock® All-Purpose Lightweight Ready Mix Joint Compound</b>
<b>Other means of identification</b>	None.
<b>Recommended use</b>	Premixed compound for finishing gypsum board joints and spotting fasteners
<b>Recommended restrictions</b>	Workers (and your customers or users in the case of resale) should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

### Manufacturer/Importer/Supplier/Distributor information

<b>Company name</b>	Georgia-Pacific Gypsum LLC	
<b>Address</b>	133 Peachtree Street, NE Atlanta, GA 30303	
<b>Telephone</b>	Technical Information	800.225.6119
	(M)SDS Request	404.652.5119
<b>E-mail</b>	Not available.	
<b>Emergency phone number</b>	Chemtrec - Emergency	800.424.9300

## 2. Hazard(s) identification

<b>Physical hazards</b>	Not classified.	
<b>Health hazards</b>	Sensitization, skin	Category 1
	Carcinogenicity	Category 1A
	Specific target organ toxicity, repeated exposure	Category 1 (lung)
<b>Environmental hazards</b>	Not classified.	
<b>OSHA defined hazards</b>	Not classified.	
<b>Label elements</b>		



<b>Signal word</b>	Danger
<b>Hazard statement</b>	May cause an allergic skin reaction. May cause cancer. Causes damage to organs (lung) through prolonged or repeated exposure.
<b>Precautionary statement</b>	
<b>Prevention</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust. Wash exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.
<b>Response</b>	IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. If exposed or concerned: Get medical advice/attention. Specific treatment (see section 4 on the SDS).
<b>Storage</b>	Keep container tightly closed. Store away from acids.
<b>Disposal</b>	Dispose of contents/container in accordance with applicable regulations.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	None.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	Common name and synonyms	CAS number	%
CRYSTALLINE SILICA (QUARTZ)		14808-60-7	1 - 5
HEXAHYDRO-1,3,5-TRIS(2-HYDROXYETHYL)-S-TRIAZINE		4719-04-4	0.1 - 1
Other components below reportable levels			60 - 100

The specific chemical identity and/or percentage of composition has been withheld as a trade secret.

#### 4. First-aid measures

<b>Inhalation</b>	Move to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions.
<b>Eye contact</b>	Rinse with water. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	May cause an allergic skin reaction. Dermatitis. Rash. Prolonged exposure may cause chronic effects.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

#### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Use water spray to cool unopened containers.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

#### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Stop the flow of material, if this is without risk. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground.

#### 7. Handling and storage

<b>Precautions for safe handling</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US OSHA Table Z-3: Calculated Time Weighted Average (TWA) (mg/m3)

Components	Type	Value	Form
CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)	TWA	4.29 mg/m3	Total dust.
		1.43 mg/m3	Respirable.

#### US ACGIH Threshold Limit Values: Time Weighted Average (TWA): mg/m3, non-standard units

Components	Type	Value	Form
CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.

### Biological limit values

No biological exposure limits noted for the ingredient(s).

### Exposure guidelines

Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.  
Exposure limits for CRYSTALLINE SILICA - The US OSHA exposure limits 8 hour TWA for CRYSTALLINE SILICA (QUARTZ) are calculated from the following equations:  $30/(\%SiO_2+2)$  mg/m3 for total dust; and  $10/(\%SiO_2+2)$  mg/m3 for the respirable fraction.

### Appropriate engineering controls

When using product, provide local and general exhaust ventilation to keep airborne dust concentrations below exposure limits. Use wet methods, if appropriate, to reduce the generation of dust.

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Wear safety glasses with side shields (or goggles). Ensure compliance with OSHA's PPE standard (29 CFR 1910.132 and .133) for eye and face protection. Safety shower/eye wash fountain must be readily available in the workplace area (29 CFR 1910.151(c)).

#### Skin protection

##### Hand protection

Wear appropriate chemical resistant gloves.

##### Other

Impervious protective clothing and gloves recommended to prevent drying or irritation of skin. Ensure compliance with OSHA's PPE standards (29 CFR 1910.132 (general) and 138 (hand protection)). Safety shower/eye wash fountain is recommended in the workplace area (29 CFR 1910.151 (c)).

#### Respiratory protection

A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).

#### Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

### General hygiene considerations

Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

## 9. Physical and chemical properties

### Appearance

#### Physical state

Solid.

#### Form

Solid.

#### Color

Not available.

### Odor

Low odor

### Odor threshold

Not available.

### pH

Not available.

### Melting point/freezing point

Not available.

Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
<b>Upper/lower flammability or explosive limits</b>	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
<b>Solubility(ies)</b>	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.

## 10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Acids.
Hazardous decomposition products	May include and are not limited to: oxides of carbon when heated to decomposition.

## 11. Toxicological information

### Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	May cause an allergic skin reaction.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Not applicable under normal conditions of use. May result in obstruction or temporary irritation of the digestive tract.

Symptoms related to the physical, chemical and toxicological characteristics	Coughing. Discomfort in the chest. Shortness of breath. May cause an allergic skin reaction. Dermatitis. Rash.
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### Information on toxicological effects

Acute toxicity	May cause an allergic skin reaction.
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Product	Species	Test Results
ToughRock® All-Purpose Lightweight Ready Mix Joint Compound		
<b>Acute</b>		
Inhalation		
LC50	Rat	338 mg/l, 4 hours estimated

Components	Species	Test Results
HEXAHYDRO-1,3,5-TRIS(2-HYDROXYETHYL)-S-TRIAZINE (CAS 4719-04-4)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rat	> 4000 mg/kg
<b>Inhalation</b>		
<i>Mist</i>		
LC50	Rat	0.338 mg/l, 4 hours
<b>Oral</b>		
LD50	Rat	1000 mg/kg

\* Estimates for product may be based on additional component data not shown.

<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.
<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.
<b>Skin sensitization</b>	May cause an allergic skin reaction.
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	May cause cancer. Exposure to respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by IARC and NTP as a lung carcinogen. Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given exposure to a respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of respirable crystalline silica exposure and the length of time (usually years) of exposure. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7) 1 Carcinogenic to humans.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

#### US. National Toxicology Program (NTP) Report on Carcinogens

CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7) Known To Be Human Carcinogen.

<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.
<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	Causes damage to organs (lung) through prolonged or repeated exposure.
<b>Aspiration hazard</b>	Not an aspiration hazard.
<b>Chronic effects</b>	Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

## 12. Ecological information

<b>Ecotoxicity</b>	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
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Product	Species	Test Results
ToughRock® All-Purpose Lightweight Ready Mix Joint Compound		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50 Fish	15449.3232 mg/l, 96 hours estimated

Components	Species	Test Results
CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50	Zebra danio (Danio rerio) > 10000 mg/l, 96 Hours OECD SIDS
HEXAHYDRO-1,3,5-TRIS(2-HYDROXYETHYL)-S-TRIAZINE (CAS 4719-04-4)		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50	Fish 16.07 mg/l, 96 hours

\* Estimates for product may be based on additional component data not shown.

<b>Persistence and degradability</b>	No data is available on the degradability of this product.
<b>Bioaccumulative potential</b>	No data available.
<b>Mobility in soil</b>	No data available.
<b>Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

### 13. Disposal considerations

<b>Disposal instructions</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

### 14. Transport information

<b>DOT</b>	Not regulated as dangerous goods.
<b>IATA</b>	Not regulated as dangerous goods.
<b>IMDG</b>	Not regulated as dangerous goods.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable.

### 15. Regulatory information

<b>US federal regulations</b>	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
<b>TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)</b>	
HEXAHYDRO-1,3,5-TRIS(2-HYDROXYETHYL)-S-TRIAZI 1.0 % One-Time Export Notification only. NE (CAS 4719-04-4)	
<b>CERCLA Hazardous Substance List (40 CFR 302.4)</b>	
Not listed.	
<b>SARA 304 Emergency release notification</b>	
Not regulated.	
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	
Not listed.	

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**                      Immediate Hazard - Yes  
   Delayed Hazard - Yes  
   Fire Hazard - No  
   Pressure Hazard - No  
   Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical**                      Yes

**SARA 313 (TRI reporting)**

Not regulated.

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)**                      Not regulated.

**US state regulations****US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed.

**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)

**US. Massachusetts RTK - Substance List**

CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)

**US. New Jersey Worker and Community Right-to-Know Act**

CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)

**US. Pennsylvania Worker and Community Right-to-Know Law**

CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

WARNING: This product contains a chemical known to the State of California to cause cancer.

**US - California Proposition 65 - CRT: Listed date/Carcinogenic substance**

CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)                      Listed: October 1, 1988

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

**Issue date**                      May-14-2015  
**Revision date**                      May-21-2015  
**Version #**                      02  
**HMIS® ratings**                      Health: 2\*  
   Flammability: 0  
   Physical hazard: 0  
**NFPA ratings**                      Health: 2  
   Flammability: 0  
   Instability: 0



## Disclaimer

This SDS is intended to quickly provide useful information to the user(s) of this material or product. It is not intended to serve as a comprehensive discussion of all possible risks or hazards, and it assumes a reasonable use of the product. The information contained in this SDS is believed to be accurate as of the date of preparation of this SDS and has been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. The user or handler (or their employer) should consider the specific conditions in which this material will be used, handled, or stored and determine what specific safety or other precautions are required. Employers should ensure that their employees, agents, contractors, and customers who will use the product receive adequate warnings and safe handling procedures, including a current SDS. Product users or handlers (or their employer) who are unsure of what specific precautions are required should consult their employer, product supplier, or safety or health professionals before handling or working with this product. Please notify us immediately if you believe this SDS or other safety and health information about this product is inaccurate or incomplete.

# SAFETY DATA SHEET


## 1. Identification

<b>Product identifier</b>	<b>ToughRock® All-Purpose Lightweight Ready Mix Joint Compound</b>
<b>Other means of identification</b>	None.
<b>Recommended use</b>	Premixed compound for finishing gypsum board joints and spotting fasteners
<b>Recommended restrictions</b>	Workers (and your customers or users in the case of resale) should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

### Manufacturer/Importer/Supplier/Distributor information

<b>Company name</b>	Georgia-Pacific Gypsum LLC	
<b>Address</b>	133 Peachtree Street, NE Atlanta, GA 30303	
<b>Telephone</b>	Technical Information	800.225.6119
	(M)SDS Request	404.652.5119
<b>E-mail</b>	Not available.	
<b>Emergency phone number</b>	Chemtrec - Emergency	800.424.9300

## 2. Hazard(s) identification

<b>Physical hazards</b>	Not classified.	
<b>Health hazards</b>	Sensitization, skin	Category 1
	Carcinogenicity	Category 1A
	Specific target organ toxicity, repeated exposure	Category 1 (lung)
<b>Environmental hazards</b>	Not classified.	
<b>OSHA defined hazards</b>	Not classified.	
<b>Label elements</b>		

**Signal word** Danger

**Hazard statement** May cause an allergic skin reaction. May cause cancer. Causes damage to organs (lung) through prolonged or repeated exposure.

### Precautionary statement

<b>Prevention</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust. Wash exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.
<b>Response</b>	IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. If exposed or concerned: Get medical advice/attention. Specific treatment (see section 4 on the SDS).
<b>Storage</b>	Keep container tightly closed. Store away from acids.
<b>Disposal</b>	Dispose of contents/container in accordance with applicable regulations.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	None.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	Common name and synonyms	CAS number	%
CRYSTALLINE SILICA (QUARTZ)		14808-60-7	1 - 5
HEXAHYDRO-1,3,5-TRIS(2-HYDROXYETHYL)-S-TRIAZINE		4719-04-4	0.1 - 1
Other components below reportable levels			60 - 100

The specific chemical identity and/or percentage of composition has been withheld as a trade secret.

#### 4. First-aid measures

<b>Inhalation</b>	Move to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions.
<b>Eye contact</b>	Rinse with water. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	May cause an allergic skin reaction. Dermatitis. Rash. Prolonged exposure may cause chronic effects.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

#### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Use water spray to cool unopened containers.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

#### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Stop the flow of material, if this is without risk. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground.

#### 7. Handling and storage

<b>Precautions for safe handling</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US OSHA Table Z-3: Calculated Time Weighted Average (TWA) (mg/m3)

Components	Type	Value	Form
CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)	TWA	4.29 mg/m3	Total dust.
		1.43 mg/m3	Respirable.

#### US ACGIH Threshold Limit Values: Time Weighted Average (TWA): mg/m3, non-standard units

Components	Type	Value	Form
CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.

### Biological limit values

No biological exposure limits noted for the ingredient(s).

### Exposure guidelines

Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.  
Exposure limits for CRYSTALLINE SILICA - The US OSHA exposure limits 8 hour TWA for CRYSTALLINE SILICA (QUARTZ) are calculated from the following equations:  $30/(\%SiO_2+2)$  mg/m3 for total dust; and  $10/(\%SiO_2+2)$  mg/m3 for the respirable fraction.

### Appropriate engineering controls

When using product, provide local and general exhaust ventilation to keep airborne dust concentrations below exposure limits. Use wet methods, if appropriate, to reduce the generation of dust.

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Wear safety glasses with side shields (or goggles). Ensure compliance with OSHA's PPE standard (29 CFR 1910.132 and .133) for eye and face protection. Safety shower/eye wash fountain must be readily available in the workplace area (29 CFR 1910.151(c)).

#### Skin protection

##### Hand protection

Wear appropriate chemical resistant gloves.

##### Other

Impervious protective clothing and gloves recommended to prevent drying or irritation of skin. Ensure compliance with OSHA's PPE standards (29 CFR 1910.132 (general) and 138 (hand protection)). Safety shower/eye wash fountain is recommended in the workplace area (29 CFR 1910.151 (c)).

#### Respiratory protection

A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).

#### Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

### General hygiene considerations

Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

## 9. Physical and chemical properties

### Appearance

Physical state	Solid.
Form	Solid.
Color	Not available.

Odor Low odor

Odor threshold Not available.

pH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
<b>Upper/lower flammability or explosive limits</b>	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
<b>Solubility(ies)</b>	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.

## 10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Acids.
Hazardous decomposition products	May include and are not limited to: oxides of carbon when heated to decomposition.

## 11. Toxicological information

### Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	May cause an allergic skin reaction.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Not applicable under normal conditions of use. May result in obstruction or temporary irritation of the digestive tract.

Symptoms related to the physical, chemical and toxicological characteristics	Coughing. Discomfort in the chest. Shortness of breath. May cause an allergic skin reaction. Dermatitis. Rash.
--	--

### Information on toxicological effects

Acute toxicity	May cause an allergic skin reaction.
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Product	Species	Test Results
ToughRock® All-Purpose Lightweight Ready Mix Joint Compound		
<b>Acute</b>		
Inhalation		
LC50	Rat	338 mg/l, 4 hours estimated

Components	Species	Test Results
HEXAHYDRO-1,3,5-TRIS(2-HYDROXYETHYL)-S-TRIAZINE (CAS 4719-04-4)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rat	> 4000 mg/kg
<b>Inhalation</b>		
<i>Mist</i>		
LC50	Rat	0.338 mg/l, 4 hours
<b>Oral</b>		
LD50	Rat	1000 mg/kg

\* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation.

**Serious eye damage/eye irritation** Direct contact with eyes may cause temporary irritation.

#### Respiratory or skin sensitization

**Respiratory sensitization** Not a respiratory sensitizer.

**Skin sensitization** May cause an allergic skin reaction.

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity** May cause cancer. Exposure to respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by IARC and NTP as a lung carcinogen. Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given exposure to a respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of respirable crystalline silica exposure and the length of time (usually years) of exposure. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7) 1 Carcinogenic to humans.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

#### US. National Toxicology Program (NTP) Report on Carcinogens

CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7) Known To Be Human Carcinogen.

**Reproductive toxicity** This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure** Not classified.

**Specific target organ toxicity - repeated exposure** Causes damage to organs (lung) through prolonged or repeated exposure.

**Aspiration hazard** Not an aspiration hazard.

**Chronic effects** Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

## 12. Ecological information

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Product	Species	Test Results
ToughRock® All-Purpose Lightweight Ready Mix Joint Compound		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50 Fish	15449.3232 mg/l, 96 hours estimated

Components	Species	Test Results
CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50	Zebra danio (Danio rerio) > 10000 mg/l, 96 Hours OECD SIDS
HEXAHYDRO-1,3,5-TRIS(2-HYDROXYETHYL)-S-TRIAZINE (CAS 4719-04-4)		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50	Fish 16.07 mg/l, 96 hours

\* Estimates for product may be based on additional component data not shown.

<b>Persistence and degradability</b>	No data is available on the degradability of this product.
<b>Bioaccumulative potential</b>	No data available.
<b>Mobility in soil</b>	No data available.
<b>Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

### 13. Disposal considerations

<b>Disposal instructions</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

### 14. Transport information

<b>DOT</b>	Not regulated as dangerous goods.
<b>IATA</b>	Not regulated as dangerous goods.
<b>IMDG</b>	Not regulated as dangerous goods.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable.

### 15. Regulatory information

<b>US federal regulations</b>	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
<b>TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)</b>	
HEXAHYDRO-1,3,5-TRIS(2-HYDROXYETHYL)-S-TRIAZI 1.0 % One-Time Export Notification only. NE (CAS 4719-04-4)	
<b>CERCLA Hazardous Substance List (40 CFR 302.4)</b>	
Not listed.	
<b>SARA 304 Emergency release notification</b>	
Not regulated.	
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	
Not listed.	

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**                      Immediate Hazard - Yes  
   Delayed Hazard - Yes  
   Fire Hazard - No  
   Pressure Hazard - No  
   Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical**                      Yes

**SARA 313 (TRI reporting)**

Not regulated.

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)**                      Not regulated.

**US state regulations****US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed.

**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)

**US. Massachusetts RTK - Substance List**

CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)

**US. New Jersey Worker and Community Right-to-Know Act**

CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)

**US. Pennsylvania Worker and Community Right-to-Know Law**

CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

WARNING: This product contains a chemical known to the State of California to cause cancer.

**US - California Proposition 65 - CRT: Listed date/Carcinogenic substance**

CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)                      Listed: October 1, 1988

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

**Issue date**                                      May-14-2015  
**Revision date**                                      May-21-2015  
**Version #**    02  
**HMIS® ratings**                                      Health: 2\*  
    Flammability: 0  
    Physical hazard: 0  
**NFPA ratings**    Health: 2  
    Flammability: 0  
    Instability: 0



## Disclaimer

This SDS is intended to quickly provide useful information to the user(s) of this material or product. It is not intended to serve as a comprehensive discussion of all possible risks or hazards, and it assumes a reasonable use of the product. The information contained in this SDS is believed to be accurate as of the date of preparation of this SDS and has been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. The user or handler (or their employer) should consider the specific conditions in which this material will be used, handled, or stored and determine what specific safety or other precautions are required. Employers should ensure that their employees, agents, contractors, and customers who will use the product receive adequate warnings and safe handling procedures, including a current SDS. Product users or handlers (or their employer) who are unsure of what specific precautions are required should consult their employer, product supplier, or safety or health professionals before handling or working with this product. Please notify us immediately if you believe this SDS or other safety and health information about this product is inaccurate or incomplete.

# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Material name** 104 Sandable 5, 20, 45, 90 Setting Compound  
**Product use** Setting type compound for covering gypsum board joints and spotting fasteners  
**Product List** See Product List found in Section 16  
**Manufacturer information** Georgia-Pacific Gypsum LLC  
 133 Peachtree Street, NE  
 Atlanta, GA 30303  
 MSDS Request 404.652.5119  
 Technical Information 800.225.6119  
 Chemtrec - Emergency 800.424.9300

## 2. Hazards Identification

**Emergency overview** CAUTION!  
 A natural chemical reaction during hardening (rehydration) develops sufficient heat that may cause severe burns in the event of contact with skin. These burns may possibly result in permanent injury. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. Crushing, mixing, sanding, or otherwise working with this product may generate large amounts of dust. Dust can be irritating to the eyes, skin, and respiratory system.

**Potential health effects**

**Eyes** Dust may cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

**Skin** Skin contact during hardening (rehydration) may slowly develop sufficient heat that may cause severe burns possibly resulting in permanent injury. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. Handling can cause dry skin.

**Inhalation** Dusts of this product may cause irritation to the nose, throat, or respiratory tract.

**Ingestion** Not applicable under normal conditions of use. May result in obstruction or temporary irritation of the digestive tract.

## 3. Composition / Information on Ingredients

Components	CAS #	Percent/Wt
GYPSUM (CALCIUM SULFATE)	7778-18-9	40 - 70
LIMESTONE (CALCIUM CARBONATE)	1317-65-3	10 - 30
PERLITE	93763-70-3	7 - 13
TALC	14807-96-6	1 - 5
MAGNESIUM CARBONATE	546-93-0	1 - 5
CRYSTALLINE SILICA (QUARTZ)	14808-60-7	1 - 5
ATTAPULGITE	12174-11-7	1 - 5
BENTONITE	1302-78-9	0.1 - 1

**Composition comments** Gypsum (calcium sulfate), limestone (calcium carbonate), perlite, talc, bentonite, and attapulgitite contain naturally occurring crystalline silica (quartz) which is listed as a lung carcinogen. See Section 8 for exposure information.

The weight percent for crystalline silica represents total crystalline silica and not the respirable fraction. Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

## 4. First Aid Measures

### First aid procedures

<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists.
<b>Skin contact</b>	For skin contact, wash immediately with soap and water. Get medical attention if irritation develops or persists.
<b>Inhalation</b>	Remove to fresh air. If symptoms persist, obtain medical attention.
<b>Ingestion</b>	May result in obstruction and irritation if ingested. Get medical attention.

## 5. Fire Fighting Measures

<b>Flammable properties</b>	Not available
<b>Extinguishing media</b>	
<b>Suitable extinguishing media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Protection of firefighters</b>	
<b>Protective equipment and precautions for firefighters</b>	Firefighters should wear full protective clothing including self contained breathing apparatus.
<b>Explosion data</b>	
<b>Sensitivity to static discharge</b>	Not applicable.
<b>Sensitivity to mechanical impact</b>	Not applicable.
<b>Hazardous combustion products</b>	May include, and are not limited to: calcium oxide and sulfur dioxide.

## 6. Accidental Release Measures

<b>Personal precautions</b>	Use personal protection recommended in Section 8. Keep unnecessary personnel away from the release.
<b>Environmental precautions</b>	Keep out of drains, sewers, ditches, and waterways.
<b>Methods for containment</b>	Contain the spill, then place in a suitable container. Minimize dust generation.
<b>Methods for cleaning up</b>	Sweep up or gather material and place in appropriate container for disposal.

## 7. Handling and Storage

<b>Handling</b>	Avoid contact with skin and eyes. Use only in well-ventilated areas. Handle and open container with care. Wear appropriate NIOSH approved dust mask or filtering facepiece if dust is generated. Do not eat or drink while using the product. Wash hands before eating, drinking, or smoking.
<b>Storage</b>	Keep the container tightly closed and dry. Store in a covered, dry, climate controlled area, away from incompatibles.

## 8. Exposure Controls / Personal Protection

### GYPSUM (CALCIUM SULFATE) (CAS # 7778-18-9)

	TWA	STEL	Ceiling
ACGIH	10 mg/m3 TWA (inhalable fraction)	Not established	Not established
OSHA	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)	Not established	Not established

### LIMESTONE (CALCIUM CARBONATE) (CAS # 1317-65-3)

	TWA	STEL	Ceiling
ACGIH	10 mg/m3 TWA (inhalable fraction); 3 mg/m3 TWA (respirable fraction)	Not established	Not established
OSHA	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)	Not established	Not established

### PERLITE (CAS # 93763-70-3)

	TWA	STEL	Ceiling
ACGIH	10 mg/m3 TWA (inhalable fraction); 3 mg/m3 TWA (respirable fraction)	Not established	Not established
OSHA	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)	Not established	Not established

### TALC (CAS # 14807-96-6)

	TWA	STEL	Ceiling
ACGIH	2 mg/m3 TWA (respirable fraction, particulate matter containing no asbestos and <1% crystalline silica)	Not established	Not established
OSHA	20 mppcf	Not established	Not established

### MAGNESIUM CARBONATE (CAS # 546-93-0)

	TWA	STEL	Ceiling
ACGIH	10 mg/m3 TWA (inhalable fraction); 3 mg/m3 TWA (respirable fraction)	Not established	Not established
OSHA	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)	Not established	Not established

### CRYSTALLINE SILICA (QUARTZ) (CAS # 14808-60-7)

	TWA	STEL	Ceiling
ACGIH	0.025 mg/m3 TWA (respirable fraction)	Not established	Not established
OSHA	((10)/(%SiO <sub>2</sub> + 2) mg/m3 TWA (respirable)); ((30)/(%SiO <sub>2</sub> + 2) mg/m3 TWA (total dust)); ((250)/(%SiO <sub>2</sub> + 5) mppcf TWA (respirable))	Not established	Not established

### ATTAPULGITE (CAS # 12174-11-7)

	TWA	STEL	Ceiling
ACGIH	10 mg/m3 TWA (inhalable fraction); 3 mg/m3 TWA (respirable fraction)	Not established	Not established

OSHA	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)	Not established	Not established
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#### BENTONITE (CAS # 1302-78-9)

	TWA	STEL	Ceiling
ACGIH	10 mg/m3 TWA (inhalable fraction); 3 mg/m3 TWA (respirable fraction)	Not established	Not established
OSHA	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)	Not established	Not established

**Engineering controls** When using product, provide local and general exhaust ventilation to keep airborne dust concentrations below exposure limits. Use wet methods, if appropriate, to reduce the generation of dust.

#### Personal protective equipment

<b>Eye / face protection</b>	Safety glasses or goggles are recommended when using this product. Ensure compliance with OSHA's PPE standard (29 CFR 1910.132 and .133) for eye and face protection. Safety shower/eye wash fountain must be readily available in the workplace area (29 CFR 1910.151(c)).
<b>Skin protection</b>	Impervious protective clothing and gloves recommended to prevent drying or irritation of skin. Ensure compliance with OSHA's PPE standards (29 CFR 1910.132 (general) and 138 (hand protection)). Safety shower/eye wash fountain is recommended in the workplace area (29 CFR 1910.151 (c)).
<b>Respiratory protection</b>	A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2)

## 9. Physical & Chemical Properties

Color	Grey to off-white
Odor	Low odor
pH	8 - 10
Freezing point	Not applicable
Boiling point	Not applicable
Flash point	Not applicable
Flammability	Not Flammable
Flammability limits in air, upper, % by volume	Not applicable
Flammability limits in air, lower, % by volume	Not applicable
Vapor pressure	Not applicable
Vapor density	Not applicable
Specific gravity	2
Solubility (water)	1.5 - 1.7 %
Auto-ignition temperature	Not applicable
VOC	0 % estimated
Viscosity	Not applicable

## 10. Chemical Stability & Reactivity Information

<b>Chemical stability</b>	Stable at normal conditions.
<b>Conditions of Reactivity</b>	Reacts with water (normal condition of use).
<b>Incompatible materials</b>	Strong acids and Oxidizers.
<b>Hazardous decomposition products</b>	May include and are not limited to: calcium oxide and sulfur dioxide.

## 11. Toxicological Information

**Toxicological information** No toxicological data available for this product. Toxicological information for components of this product is listed below.

### Toxicological information (Ingredients)

#### GYPSUM (CALCIUM SULFATE) (CAS # 7778-18-9)

Toxicology Data - Selected LD50s and LC50s

Oral LD50 Mouse: 5824 mg/kg

Oral LD50 Rat: 3000 mg/kg

#### CRYSTALLINE SILICA (QUARTZ) (CAS # 14808-60-7)

Toxicology Data - Selected LD50s and LC50s

Oral LD50 Rat: 500 mg/kg

#### BENTONITE (CAS # 1302-78-9)

Toxicology Data - Selected LD50s and LC50s

Oral LD50 Rat: 5000 mg/kg

### Routes of exposure

Inhalation. Skin contact. Eye contact.

### Sensitization

Not hazardous by OSHA/WHMIS criteria.

### Chronic effects

Not expected to be hazardous by WHMIS criteria.

Exposure to respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by IARC and NTP as a lung carcinogen. Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given exposure to a respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of respirable crystalline silica exposure and the length of time (usually years) of exposure.

The weight percent for crystalline silica represents total crystalline silica and not the respirable fraction. Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

### Carcinogenicity

Hazardous by OSHA/WHMIS criteria.

#### ATTAPULGITE (CAS # 12174-11-7)

IARC - Group 2B (Possibly Carcinogenic to Humans)

U.S. - OSHA - Hazard Communication Carcinogens

Monograph 68 [1997] (long fibres >5 µm), Supplement 7 [1987] Present

#### CRYSTALLINE SILICA (QUARTZ) (CAS # 14808-60-7)

ACGIH - Threshold Limit Values - Carcinogens

IARC - Group 1 (Carcinogenic to Humans)

A2 - Suspected Human Carcinogen

Monograph 68 [1997] (listed under Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources)

NTP (National Toxicology Program) - Report on Carcinogens - Known Human Carcinogens

Known Human Carcinogen

U.S. - OSHA - Hazard Communication Carcinogens

Present

### Mutagenicity

Not expected to be hazardous by OSHA/WHMIS criteria.

### Reproductive effects

Not expected to be hazardous by OSHA/WHMIS criteria.

### Teratogenicity

Not expected to be hazardous by OSHA/WHMIS criteria.

### Synergistic materials

Not available.

## 12. Ecological Information

### Ecotoxicity

Not considered to be harmful to aquatic life.

#### BENTONITE (CAS # 1302-78-9)

Ecotoxicity - Freshwater Fish Species Data

96 Hr LC50 Salmo gairdneri: 8.0-19.0 g/L; 96 Hr LC50 Oncorhynchus mykiss: 19000 mg/L [static]

#### GYPSUM (CALCIUM SULFATE) (CAS # 7778-18-9)

Ecotoxicity - Freshwater Fish Species Data

96 Hr LC50 Lepomis macrochirus: 2980 mg/L [static]; 96 Hr LC50 Pimephales promelas: >1970 mg/L [static]

#### TALC (CAS # 14807-96-6)

Ecotoxicity - Freshwater Fish Species Data

96 Hr LC50 Brachydanio rerio: >100 g/L [semi-static]

## 13. Disposal Considerations

### Disposal instructions

This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste.

## 14. Transport Information

### Department of Transportation (DOT) Requirements

This product is not regulated as a hazardous material by the United States (DOT) transportation regulations.

### Canadian Transportation of Dangerous Goods (TDG) Requirements

Not regulated as dangerous goods.

## 15. Regulatory Information

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

<b>Hazard categories</b>	Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
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<b>Section 302 extremely hazardous substance</b>	No
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<b>Section 311 hazardous chemical</b>	Yes
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<b>Section 313 hazardous chemical</b>	No
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### US federal regulations

<b>WHMIS classification</b>	D2A - Other Toxic Effects-VERY TOXIC
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### Canadian regulations

**CRYSTALLINE SILICA (QUARTZ) (CAS # 14808-60-7)**

Canada - WHMIS - Ingredient Disclosure List	1 %
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## 16. Other Information

### Product list

Sandable 5 Setting Compound	M-993
Sandable 20 Setting Compound	M-994
Sandable 45 Setting Compound	M-996
Sandable 90 Setting Compound	M-997
Dens-Armor® Cote Sandable 90 Setting Compound	M-980, Q-980
Toughrock® Sandable 20 Setting Compound	Q-995
Toughrock® Sandable 45 Setting Compound	Q-996
Toughrock® Sandable 90 Setting Compound	Q-997

<b>HMIS® ratings</b>	Health: 1 Flammability: 0 Physical hazard: 0
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<b>NFPA ratings</b>	Health: 1 Flammability: 0 Instability: 0
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<b>Other information</b>	Products on this MSDS do not contain asbestos.
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<b>Disclaimer</b>	The information and data herein are believed to be accurate and have been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. Buyer assumes all risk of use, storage and handling of the product in compliance with applicable federal, state and local laws and regulations. Georgia-Pacific and its subsidiaries make no warranty of any kind, expressed or implied, concerning the accuracy or completeness of the information and data herein. The implied warranties of merchantability and fitness for a particular purpose are specifically excluded. Georgia-Pacific and its subsidiaries will not be liable for claims relating to any party's use of or reliance on information and data contained herein regardless of whether it is claimed that the information and data are inaccurate, incomplete or otherwise misleading.
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<b>Effective Date</b>	24-Aug-2009
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<b>Supersedes</b>	25-Apr-2007
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<b>Prepared by</b>	Georgia-Pacific LLC 404.652.5119
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## 1. Product and Company Identification

Material name	106A Toughrock® Setting Compounds
Product use	Setting type compound for covering gypsum board joints and spotting fasteners
Product List	See Product List found in Section 16
Manufacturer information	Georgia-Pacific Gypsum LLC 133 Peachtree Street, NE Atlanta, GA 30303 MSDS Request 404.652.5119 Technical Information 800.225.6119 Chemtrec - Emergency 800.424.9300

## 2. Hazards Identification

Emergency overview	CAUTION!  A natural chemical reaction during hardening (rehydration) develops sufficient heat that may cause severe burns in the event of contact with skin. These burns may possibly result in permanent injury. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. Crushing, mixing, sanding, or otherwise working with this product may generate large amounts of dust. Dust can be irritating to the eyes, skin, and respiratory system.
Potential health effects	
Eyes	Dust may cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
Skin	Skin contact during hardening (rehydration) may slowly develop sufficient heat that may cause severe burns possibly resulting in permanent injury. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. Handling can cause dry skin.
Inhalation	Dust may cause respiratory tract irritation.
Ingestion	Not applicable under normal conditions of use. May result in obstruction or temporary irritation of the digestive tract.

## 3. Composition / Information on Ingredients

Components	CAS #	Percent/Wt
GYPSUM (CALCIUM SULFATE)	7778-18-9	60 - 100
MICA*	12001-26-2	1 - 5
ATTAPULGITE	12174-11-7	1 - 5
CRYSTALLINE SILICA (QUARTZ)	14808-60-7	0.1 - 1

**Composition comments**      \* - Not found in Toughrock® 300 Setting Compound - Q-998.

Gypsum (calcium sulfate), mica and attapulgite contain naturally occurring crystalline silica (quartz) which is listed as a lung carcinogen. See Section 8 for exposure information.

The weight percent for crystalline silica represents total crystalline silica and not the respirable fraction. Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

## 4. First Aid Measures

First aid procedures	
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists.
Skin contact	For skin contact, wash immediately with soap and water. Get medical attention if irritation develops or persists.
Inhalation	Remove to fresh air. If symptoms persist, obtain medical attention.



**Ingestion**

May result in obstruction and irritation if ingested. Get medical attention.

## 5. Fire Fighting Measures

**Flammable properties**

Not available

**Extinguishing media****Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Protection of firefighters****Protective equipment and precautions for firefighters**

Firefighters should wear full protective clothing including self contained breathing apparatus.

**Explosion data****Sensitivity to static discharge**

Not applicable.

**Sensitivity to mechanical impact**

Not applicable.

**Hazardous combustion products**

May include, and are not limited to: calcium oxide and sulfur dioxide.

## 6. Accidental Release Measures

**Personal precautions**

Use personal protection recommended in Section 8. Keep unnecessary personnel away from the release.

**Environmental precautions**

Keep out of drains, sewers, ditches, and waterways.

**Methods for containment**

Contain the spill, then place in a suitable container. Minimize dust generation.

**Methods for cleaning up**

Sweep up or gather material and place in appropriate container for disposal.

## 7. Handling and Storage

**Handling**

Avoid contact with skin and eyes. Use only in well-ventilated areas. Handle and open container with care. Wear appropriate NIOSH approved dust mask or filtering facepiece if dust is generated. Do not eat or drink while using the product. Wash hands before eating, drinking, or smoking.

**Storage**

Keep the container tightly closed and dry. Store in a covered, dry, climate controlled area, away from incompatibles.

## 8. Exposure Controls / Personal Protection

### GYPSUM (CALCIUM SULFATE) (CAS # 7778-18-9)

	TWA	STEL	Ceiling
ACGIH	10 mg/m3 TWA (inhalable fraction)	Not established	Not established
OSHA	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)	Not established	Not established

### MICA\* (CAS # 12001-26-2)

	TWA	STEL	Ceiling
ACGIH	10 mg/m3 TWA (inhalable fraction); 3 mg/m3 TWA (respirable fraction)	Not established	Not established
OSHA	20 mppcf	Not established	Not established

### ATTAPULGITE (CAS # 12174-11-7)

	TWA	STEL	Ceiling
ACGIH	10 mg/m3 TWA (inhalable fraction); 3 mg/m3 TWA (respirable fraction)	Not established	Not established
OSHA	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)	Not established	Not established

### CRYSTALLINE SILICA (QUARTZ) (CAS # 14808-60-7)

	TWA	STEL	Ceiling
ACGIH	0.025 mg/m3 TWA (respirable fraction)	Not established	Not established
OSHA	((10)/(%SiO <sub>2</sub> + 2) mg/m3 TWA (respirable)); ((30)/(%SiO <sub>2</sub> + 2) mg/m3 TWA (total dust)); ((250)/(%SiO <sub>2</sub> + 5) mppcf TWA (respirable))	Not established	Not established

**Engineering controls** When using product, provide local and general exhaust ventilation to keep airborne dust concentrations below exposure limits. Use wet methods, if appropriate, to reduce generation of dust.

#### Personal protective equipment

<b>Eye / face protection</b>	Ensure compliance with OSHA's PPE standard (29 CFR 1910.132 and .133) for eye and face protection. Safety glasses or goggles are recommended when using this product. Safety shower/eye wash fountain must be readily available in the workplace area (29 CFR 1910.151(c)).
<b>Skin protection</b>	Impervious protective clothing and gloves recommended to prevent drying or irritation of skin. Ensure compliance with OSHA's PPE standards (29 CFR 1910.132 (general) and 138 (hand protection)). Safety shower/eye wash fountain is recommended in the workplace area (29 CFR 1910.151 (c)).
<b>Respiratory protection</b>	A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2)

## 9. Physical & Chemical Properties

<b>Color</b>	White, gray or buff
<b>Odor</b>	Low odor
<b>pH</b>	8 - 10
<b>Freezing point</b>	Not applicable
<b>Boiling point</b>	Not applicable
<b>Flash point</b>	Not applicable

<b>Flammability</b>	Not Flammable
<b>Flammability limits in air, upper, % by volume</b>	Not applicable
<b>Flammability limits in air, lower, % by volume</b>	Not applicable
<b>Vapor pressure</b>	Not applicable
<b>Vapor density</b>	Not applicable
<b>Specific gravity</b>	2
<b>Solubility (water)</b>	1.2 %
<b>Auto-ignition temperature</b>	Not applicable
<b>VOC</b>	Not applicable
<b>Viscosity</b>	Not applicable

## 10. Chemical Stability & Reactivity Information

<b>Chemical stability</b>	Stable at normal conditions.
<b>Conditions of Reactivity</b>	Reacts with water (normal condition of use).
<b>Incompatible materials</b>	Strong acids. Oxidizers.
<b>Hazardous decomposition products</b>	May include and are not limited to: Oxides of carbon when heated to decomposition.

## 11. Toxicological Information

<b>Toxicological information</b>	No toxicological data available for this product. Toxicological information for components of this product is listed below.
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### Toxicological information (Ingredients)

#### GYPSUM (CALCIUM SULFATE) (CAS # 7778-18-9)

Toxicology Data - Selected LD50s and LC50s

Oral LD50 Mouse: 5824 mg/kg

Oral LD50 Rat: 3000 mg/kg

#### CRYSTALLINE SILICA (QUARTZ) (CAS # 14808-60-7)

Toxicology Data - Selected LD50s and LC50s

Oral LD50 Rat: 500 mg/kg

<b>Routes of exposure</b>	Inhalation. Skin contact. Eye contact.
<b>Sensitization</b>	Not hazardous by OSHA/WHMIS criteria.
<b>Chronic effects</b>	Not expected to be hazardous by OSHA/WHMIS criteria.

Exposure to respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by IARC and NTP as a lung carcinogen. Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given exposure to a respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of respirable crystalline silica exposure and the length of time (usually years) of exposure.

The weight percent for crystalline silica represents total crystalline silica and not the respirable fraction. Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

<b>Carcinogenicity</b>	Hazardous by OSHA/WHMIS criteria.
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#### ATTAPULGITE (CAS # 12174-11-7)

IARC - Group 2B (Possibly Carcinogenic to Humans)

U.S. - OSHA - Hazard Communication Carcinogens

Monograph 68 [1997] (long fibres >5 µm), Supplement 7 [1987]  
Present

#### CRYSTALLINE SILICA (QUARTZ) (CAS # 14808-60-7)

ACGIH - Threshold Limit Values - Carcinogens

IARC - Group 1 (Carcinogenic to Humans)

A2 - Suspected Human Carcinogen

Monograph 68 [1997] (listed under Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources)

NTP (National Toxicology Program) - Report on Carcinogens - Known Human Carcinogens

Known Human Carcinogen

U.S. - OSHA - Hazard Communication Carcinogens

Present

<b>Mutagenicity</b>	Not expected to be hazardous by OSHA/WHMIS criteria.
<b>Reproductive effects</b>	Not expected to be hazardous by OSHA/WHMIS criteria.
<b>Teratogenicity</b>	Not expected to be hazardous by OSHA/WHMIS criteria.
<b>Synergistic materials</b>	Not available.

## 12. Ecological Information

**Ecotoxicity** Not considered to be harmful to aquatic life.

**GYPSUM (CALCIUM SULFATE) (CAS # 7778-18-9)**

Ecotoxicity - Freshwater Fish Species Data

96 Hr LC50 *Lepomis macrochirus*: 2980 mg/L [static]; 96 Hr  
LC50 *Pimephales promelas*: >1970 mg/L [static]

## 13. Disposal Considerations

**Disposal instructions** This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste.

## 14. Transport Information

### Department of Transportation (DOT) Requirements

This product is not regulated as a hazardous material by the United States (DOT) transportation regulations.

### Canadian Transportation of Dangerous Goods (TDG) Requirements

Not regulated as dangerous goods.

## 15. Regulatory Information

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories** Immediate Hazard - Yes  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

**Section 302 extremely hazardous substance** No

**Section 311 hazardous chemical** Yes

**Section 313 hazardous chemical** No

**WHMIS classification** D2A - Other Toxic Effects-VERY TOXIC

### Canadian regulations

**CRYSTALLINE SILICA (QUARTZ) (CAS # 14808-60-7)**

Canada - WHMIS - Ingredient Disclosure List 1 %

**MICA\* (CAS # 12001-26-2)**

Canada - WHMIS - Ingredient Disclosure List 1 %

## 16. Other Information

### Product list

Toughrock® 45 Setting Compound	Q-993
Toughrock® 90 Setting Compound	Q-994
Toughrock® 300 Setting Compound	Q-998

**HMIS® ratings** Health: 1  
Flammability: 0  
Physical hazard: 0

**NFPA ratings** Health: 1  
Flammability: 0  
Instability: 0

**Other information** Products on this MSDS do not contain asbestos.

**Disclaimer**

The information and data herein are believed to be accurate and have been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. Buyer assumes all risk of use, storage and handling of the product in compliance with applicable federal, state and local laws and regulations. Georgia-Pacific and its subsidiaries make no warranty of any kind, expressed or implied, concerning the accuracy or completeness of the information and data herein. The implied warranties of merchantability and fitness for a particular purpose are specifically excluded. Georgia-Pacific and its subsidiaries will not be liable for claims relating to any party's use of or reliance on information and data contained herein regardless of whether it is claimed that the information and data are inaccurate, incomplete or otherwise misleading.

**Effective Date**

02-Sep-2009

**Supersedes**

01-May-2007

**Prepared by**

Georgia-Pacific LLC  
404.652.5119

# SAFETY DATA SHEET

Rigid Vinyl

## Section 1. Identification

<b>GHS product identifier</b>	:	Rigid Vinyl
<b>Chemical name</b>	:	
<b>Other means of identification</b>	:	Polyvinyl Chloride
<b>Product code</b>	:	Not Available
<b>Product type</b>	:	Not Available
		Solid
<b>Identified uses</b>		
		Drywall Accessories
<b>Supplier's details</b>	:	Trim-Tex, Inc. 3700 W. Pratt Ave Lincolnwood, IL 60712 Tel: 1- 847-674-3379 Fax: 1- 847-679-3017 Email: georges@trim-tex.com Web Site: www.trim-tex.com
<b>Emergency telephone number (with hours of operation)</b>	:	CHEMTREC, U.S. : 1-800-424-9300 International: +1-703-527-3887 24/7

## Section 2. Hazards identification

<b>OSHA/HCS status</b>	:	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
<b>Classification of the substance or mixture</b>	:	Not classified.  This product is an Article under the United States Hazard Communication System. Therefore it is EXEMPTED from the regulatory requirements under HCS.
<b><u>GHS label elements</u></b>		
<b>Signal word</b>	:	No signal word.
<b>Hazard statements</b>	:	No known significant effects or critical hazards.
<b><u>Precautionary statements</u></b>		
<b>Prevention</b>	:	Not applicable.
<b>Response</b>	:	Not applicable.



## Section 2. Hazards identification

<b>Storage</b>	: Not applicable.
<b>Disposal</b>	: Not applicable.
<b>Hazards not otherwise classified (HNOC)</b>	: None known.

## Section 3. Composition/information on ingredients

<b>Substance/mixture</b>	: Mixture
<b>Chemical name</b>	: Polyvinyl Chloride
<b>Other means of identification</b>	: Not Available

### CAS number/other identifiers

<b>CAS number</b>	: Not applicable.
<b>Product code</b>	: Not Available

<b>Ingredient name</b>	<b>%</b>	<b>CAS number</b>
Titanium dioxide	5 - 10	13463-67-7

**Any concentration shown as a range is to protect confidentiality or is due to batch variation.**

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

<b>Eye contact</b>	: If a dust particle enters the eye, flush with water and consult a physician if necessary.
<b>Inhalation</b>	: If dust particles are inhaled, remove to fresh air and consult a physician if necessary.
<b>Skin contact</b>	: Not expected to cause skin irritation.
<b>Ingestion</b>	: Unlikely route of exposure.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

<b>Eye contact</b>	: No known significant effects or critical hazards.
<b>Inhalation</b>	: No known significant effects or critical hazards.
<b>Skin contact</b>	: No known significant effects or critical hazards.
<b>Ingestion</b>	: No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

<b>Eye contact</b>	: No known significant effects or critical hazards.
<b>Inhalation</b>	: No known significant effects or critical hazards.
<b>Skin contact</b>	: No known significant effects or critical hazards.
<b>Ingestion</b>	: No known significant effects or critical hazards.

### Indication of immediate medical attention and special treatment needed, if necessary

<b>Notes to physician</b>	: Treat symptomatically.
<b>Specific treatments</b>	: No specific treatment.



## Section 4. First aid measures

**Protection of first-aiders** : No special protection is required.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

**Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** : No specific fire or explosion hazard.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
metal oxide/oxides  
Hydrogen chloride gas (HCl)

**Special protective actions for fire-fighters** : No special measures are required.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : Not applicable.

**For emergency responders** : Not applicable.

**Environmental precautions** : Not applicable.

### Methods and materials for containment and cleaning up

**Spill** : Pick up mechanically.

## Section 7. Handling and storage

### Precautions for safe handling

**Protective measures** : Put on appropriate personal protective equipment (see Section 8).

**Advice on general occupational hygiene** : Normal good industrial hygiene.

**Conditions for safe storage, including any incompatibilities** : Take precautionary measures to avoid fire hazard. Store in normal room conditions without direct exposure to sunlight.



## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
Titanium dioxide	<b>OSHA PEL (United States, 2/2013).</b> TWA: 15 mg/m <sup>3</sup> 8 hours. Form: Total dust <b>ACGIH TLV (United States, 3/2015).</b> TWA: 10 mg/m <sup>3</sup> 8 hours.

**Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

### Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to dusts.

#### Skin protection

**Hand protection** : Gloves should be worn when handling hot material.

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved.

**Respiratory protection** : Not required under normal conditions of use.

## Section 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	: Solid.
<b>Color</b>	: Various.
<b>Odor</b>	: Slight.
<b>Odor threshold</b>	: Not available.
<b>pH</b>	: Not available.
<b>Melting point</b>	: Not available.
<b>Boiling point</b>	: Not available.
<b>Flash point</b>	: Not available.
<b>Evaporation rate</b>	: Not available.
<b>Flammability (solid, gas)</b>	: Not available.
<b>Lower and upper explosive (flammable) limits</b>	: Not available.
<b>Vapor pressure</b>	: Not available.
<b>Vapor density</b>	: Not available.
<b>Relative density</b>	: Not available.
<b>Solubility</b>	: Not available.
<b>Partition coefficient: n-octanol/water</b>	: Not available.



## Section 9. Physical and chemical properties

**Auto-ignition temperature** : Not available.  
**Decomposition temperature** : Not available.  
**Viscosity** : Not available.  
**Volatility** : Not available.

## Section 10. Stability and reactivity

**Reactivity** : No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability** : The product is stable.

**Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid** : No specific data.

**Incompatible materials** : Reactive or incompatible with the following materials: oxidizing materials.

**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

There is no data available.

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Titanium dioxide	Skin - Mild irritant	Human	-	72 hours 300 µg Intermittent	-

#### Sensitization

There is no data available.

#### Carcinogenicity

##### Classification

Product/ingredient name	OSHA	IARC	NTP	ACGIH	EPA	NIOSH
Titanium dioxide	-	2B	-	A4	-	+

#### Specific target organ toxicity (single exposure)

There is no data available.

#### Specific target organ toxicity (repeated exposure)

There is no data available.

#### Aspiration hazard

There is no data available.

**Information on the likely routes of exposure** : Dermal contact. Eye contact.

#### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.



## Section 11. Toxicological information

<b>Inhalation</b>	: No known significant effects or critical hazards.
<b>Skin contact</b>	: No known significant effects or critical hazards.
<b>Ingestion</b>	: No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Eye contact</b>	: No known significant effects or critical hazards.
<b>Inhalation</b>	: No known significant effects or critical hazards.
<b>Skin contact</b>	: No known significant effects or critical hazards.
<b>Ingestion</b>	: No known significant effects or critical hazards.

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

<b>Potential immediate effects</b>	: No known significant effects or critical hazards.
<b>Potential delayed effects</b>	: No known significant effects or critical hazards.

#### Long term exposure

<b>Potential immediate effects</b>	: No known significant effects or critical hazards.
<b>Potential delayed effects</b>	: No known significant effects or critical hazards.

#### Potential chronic health effects

<b>General</b>	: No known significant effects or critical hazards.
<b>Carcinogenicity</b>	: No known significant effects or critical hazards.
<b>Mutagenicity</b>	: No known significant effects or critical hazards.
<b>Teratogenicity</b>	: No known significant effects or critical hazards.
<b>Developmental effects</b>	: No known significant effects or critical hazards.
<b>Fertility effects</b>	: No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

There is no data available.

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
Titanium dioxide	Acute EC50 5.83 mg/L Fresh water	Algae - Pseudokirchneriella subcapitata - Exponential growth phase	72 hours
	Acute LC50 3 mg/L Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 5.5 ppm Fresh water	Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Acute LC50 1000 mg/L Fresh water	Fish - Pimephales promelas	96 hours
	Chronic NOEC 0.984 mg/L Fresh water	Algae - Pseudokirchneriella subcapitata - Exponential growth phase	72 hours

### Persistence and degradability

There is no data available.



## Section 12. Ecological information

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Titanium dioxide	-	352	low

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : There is no data available.

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : It must be disposed of in accordance with Federal, State and Local environmental control regulations. Recycling of PVC should be encouraged where possible.

## Section 14. Transport information

	DOT	IMDG	IATA
<b>UN number</b>	Not regulated.	Not regulated.	Not regulated.
<b>UN proper shipping name</b>	-	-	-
<b>Transport hazard class(es)</b>	-	-	-
<b>Packing group</b>	-	-	-
<b>Environmental hazards</b>	No.	No.	No.
<b>Additional information</b>	-	-	-

**AERG** : Not applicable.

**Special precautions for user** : Not applicable.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** : Not available.

## Section 15. Regulatory information

**U.S. Federal regulations** : TSCA 8(a) PAIR: 4-Vinylcyclohexene; 2-Methylpropan-2-ol  
TSCA 8(a) CDR Exempt/Partial exemption: Not determined  
United States inventory (TSCA 8b): All components are listed or exempted.  
Clean Water Act (CWA) 311: Styrene; Methyl methacrylate

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Not listed



## Section 15. Regulatory information

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

### SARA 302/304

#### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

### SARA 311/312

**Classification** : Not applicable.

#### Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Titanium dioxide	5 - 10	No.	No.	No.	No.	Yes.

### SARA 313

No products were found.

### State regulations

**Massachusetts** : The following components are listed: Titanium dioxide

**New York** : None of the components are listed.

**New Jersey** : The following components are listed: Titanium dioxide

**Pennsylvania** : The following components are listed: Titanium dioxide

### California Prop. 65

**WARNING:** This product contains a chemical known to the State of California to cause cancer.

**WARNING:** This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Titanium dioxide	Yes.	No.	No.	No.
Carbon black	Yes.	No.	No.	No.
Styrene	Yes.	No.	No.	No.
1,3-Butadiene	Yes.	Yes.	Yes.	No.
4-Vinylcyclohexene	Yes.	Yes.	No.	No.
Crystalline silica, quartz	Yes.	No.	No.	No.

## Section 16. Other information

### History

**Date of issue mm/dd/yyyy** : 12/15/2015

**Date of previous issue** : 05/15/2015

**Version** : 1.1

**Prepared by** : KMK Regulatory Services Inc.

### Key to abbreviations

: ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.



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1. National Shaftliner XP
2. National Gypsum Board XP
3. National HI-Abuse XP
4. National HI-Impact XP
5. National eXP Sheathing
6. National eXP Shaftliner
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16. National Plaster Base Blue Board
17. USG Durock Cement Board
18. USG Fiberock Aqua Tough
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## **Gypsum Board – continued**

- 24. USG Abuse Resistant Type X
- 25. USG Firecode C
- 26. USG Foil Backed Firecode C
- 27. USG Type X
- 28. USG ¼ High Flex
- 29. USG Shaftliner Glass-Mat
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- 32. USG UltraLight 30 Firecode
- 33. GP Fireguard Gypsum
- 34. GP Paper Faced Gypsum
- 35. GP Glass MAT-Faced Panels
- 36. GP DensGlass Sheathing
- 37. GP DensGlass Shaftliner
- 38. GP DensShield Tile Backer
- 39. GP DensArmour Plus
- 40. GP DensArmour Plus Abuse-Resistant
- 41. GP DensArmour Plus Impact-Resistant
- 42. GP Tough Rock & Abuse-Resistant
- 43. ArmorCore Bullet Resistant



**Section 1: Product and Company Identification****Product Name/Identifier**

1" Fire-Shield® Shaftliner XP®

**Other means of identification**

Wallboard, Gypsum Board. Plasterboard, Drywall

**Recommended Use**

Interior building walls, elevator shaft construction, Area Separation Wall Systems. Use per manufacturer's recommendations.

**Restrictions on Use**

Use in well-ventilated area and avoid breathing dust.

Avoid skin contact.

**Manufacturer/Supplier Details**

National Gypsum Company

2001 Rexford Road

Charlotte, NC 28211

**Emergency Telephone Number**

Director Quality Services

(704) 551-5820 - 24 Hour Emergency Response

Website: [www.nationalgypsum.com](http://www.nationalgypsum.com)

**Section 2: Hazards Identification****United States (US)**

According to OSHA 29CFR 1910.1200 (HCS)

**GHS Classification of the substance or mixture**

Not classified

**GHS Label Elements**

**Pictogram** None

**Signal Word** None

**Hazard Statements** None

**Precautionary Statements****Prevention**

Do not breathe dust.

Use personal protective equipment as required. (See Section 8)

Use engineering controls and wet methods to minimize dust.

**Response**

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

If on skin, wash with plenty of soap and water.

If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Get medical attention if exposed or concerned.

**Storage**

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

**Disposal**

Dispose of material in accordance with federal, state, and local regulations.

### Section 3: Composition/Information on Ingredients

Chemical Name	Common name/ Synonym	Identifiers CAS Number	% (weight)	Impurities
Calcium Sulfate Dihydrate	Gypsum	13397-24-5	>85	Crystalline silica (CAS # 14808-60-7)
Cellulose	Paper Fiber	9004-34-6	<10	

### Section 4: First-Aid Measures

<b>Inhalation</b>	Remove exposed individual to fresh air immediately. If breathing difficulty persists, seek medical attention.
<b>Eye contact</b>	Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes. Remove contact lenses (if applicable). Seek medical attention if irritation persists.
<b>Skin contact</b>	Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present. Seek medical attention if irritation persists.
<b>Ingestion</b>	This product is not expected to be hazardous and no harmful effects are expected upon ingestion of small amounts. Larger amounts may cause abdominal discomfort or possible obstruction of the digestive tract. Seek medical attention if problems persist.

#### Medical Conditions aggravated by exposure

Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

### Section 5: Fire-Fighting Measures

#### Extinguishing Media

Dry chemical, foam, water, or extinguishing media appropriate for surrounding fire.

#### Unusual Fire and Explosion Hazards

Mixture poses no fire-related hazard.

#### Special hazards arising from the mixture

None known. Above 1450°C, material can decompose and release sulfur dioxide (SO<sub>2</sub>) and oxides of carbon.

#### Special Protective Equipment and Precautions for Firefighters

A SCBA is recommended to limit exposures to combustion products when fighting any fire.

### Section 6: Accidental Release Measures

#### Personal precautions, protective equipment and emergency procedures

No special precautions required.

General recommendations:

Wear appropriate Personal Protective Equipment. (See Section 8)

Maintain proper ventilation.

#### Environmental precautions

This product does not present an ecological hazard to the environment.

Dispose of in accordance with applicable federal, state, and local regulations.

#### Methods and materials for containment and cleaning up

Pick-up larger pieces to avoid a tripping hazard. Return large pieces of damaged/scraped material for recycling. Sweep or vacuum remaining material into a waste container for disposal. Use a light water spray to minimize dust generation. Maintain proper ventilation to minimize dust.

**Section 7: Handling and Storage****Precautions for safe handling**

Avoid breathing dust.

Minimize generation of dust.

Provide appropriate exhaust ventilation at places where dust is formed.

Avoid contact with eyes, skin and clothing.

Wear recommended personal protective equipment when handling. (See Section 8)

**Conditions for safe storage, including any incompatibilities**

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

Store panels flat to minimize damage and warping.

Do not stack panels too high when storing to minimize the risk of falling.

**Section 8: Exposure Controls/Personal Protection****Control Parameters**

Component	Exposure Limits	
	OSHA PEL (mg/m <sup>3</sup> )	ACGIH TLV (mg/m <sup>3</sup> )
Calcium Sulfate Dihydrate	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Crystalline Silica <sup>1</sup>	$[(10) / (\%SiO_2+2)]^{(R)}$ ; $[(30) / (\%SiO_2+2)]^{(T)}$	0.025 <sup>(R)</sup>
Cellulose	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>

T-Total Dust

R-Respirable Dust

1-Present as an impurity in raw materials

**Exposure Controls****Appropriate Engineering Controls**

Work/Hygiene Practices: Utilize methods to minimize dust production. Utilize wet methods, when appropriate, to reduce generation of dust.

Ventilation: Provide local and general exhaust ventilation sufficient to maintain a dust level below the PEL/TLV.

**Personal Protective Equipment****Respiratory Protection**

A NIOSH approved particulate respirator is recommended in poorly ventilated areas or if the PEL/TLV is exceeded. OSHA's 29 CFR 1910.134 (Respiratory Protection Standard) must be followed whenever work conditions require respirator use.

**Eye Protection**

Safety glasses or goggles.

**Skin**

Gloves, protective clothing and/or barrier creams may be utilized if conditions warrant.

**Section 9: Physical and Chemical Properties**

**a) Appearance:** Paper-faced gypsum board with white/gray core

**(b) Odor:** None

**(c) Odor threshold:** Not available

**(d) pH :** ~7

**(e) Melting point/freezing point:** Not Available

**(f) Initial boiling point and boiling range:** Not Available

**(g) Flash point:** Not available

**(h) Evaporation rate:** Not available

**(i) Flammability (solid, gas):** Not flammable

**(j) Upper/lower flammability or explosive limits:** Not available

**(k) Vapor pressure:** Not available

**(l) Vapor density:** Not available

**(m) Relative density:** 2.3 g/cc

- (n) **Solubility(ies):** 2.1 g/L @ 20° C  
 (o) **Partition coefficient: n-octanol/water:** Not available  
 (p) **Auto-ignition temperature:** Not available  
 (q) **Decomposition temperature:** 1450°C  
 (r) **Viscosity:** Not available  
 (s) **Volatile organic compound (VOC) content:** None

## Section 10: Stability and Reactivity

- (a) **Reactivity:** No data available  
 (b) **Chemical stability:** Stable in dry environments  
 (c) **Possibility of hazardous reactions:** None known  
 (d) **Conditions to avoid (e.g., static discharge, shock, or vibration):** None known  
 (e) **Incompatible materials:** None  
 (f) **Hazardous decomposition products:** None known. Above 1450° C gypsum will decompose to calcium oxide (CaO), with releases of sulfur dioxide (SO<sub>2</sub>) and various oxides of carbon.

## Section 11: Toxicological Information

### Information on Toxicological effects

#### Information on likely routes of exposure

- Ingestion** Not a likely route of exposure. May result in obstruction or temporary irritation of the digestive tract.  
**Inhalation** Dust may irritate respiratory system. Chronic exposure may result in lung disease. (See below)  
**Skin contact** May cause irritation, dry skin or dermatitis.  
**Eye contact** May cause mechanical irritation.

#### Symptoms related to the physical, chemical and toxicological characteristics

Acute exposure to airborne dust concentrations in excess of the PEL/TLV may result in coughing, dyspnea, wheezing, and a burning irritation of the nose, throat, and upper respiratory tract, along with possible impaired pulmonary function. Chronic exposure to crystalline silica (a naturally occurring contaminant) in the respirable size has been shown to cause silicosis, a debilitating lung disease, and lung cancer.

Continued and prolonged contact may result in dry skin. Contact with dust and/or fiberglass may produce itching, rash and/or redness. Repeated or prolonged exposure may result in dermatitis.

### Toxicological data

No toxicological data is available for this product. Toxicological information for components of this product listed below.

<b>Acute toxicity</b>	Gypsum: [OECD TG 420, Fixed dose procedure] Oral LD50 > 2,000-mg/kg b.w. for female rats (Sprague-Dawley)
<b>Skin corrosion/irritation</b>	Gypsum was not irritating to the skin of rabbits at 1, 24, 48 and 72 hours after removal of test patches [OECD TG 404]
<b>Serious eye damage/eye irritation</b>	Not available
<b>Skin sensitization</b>	There is no indication of skin sensitization in guinea pigs [OECD TG 406].
<b>Respiratory sensitization</b>	Not available
<b>Sensitization</b>	Not available
<b>Mutagenicity</b>	No evidence of mutagenicity on Ames Test.
<b>Carcinogenicity</b>	Not available

This product contains crystalline silica (quartz) as a naturally occurring impurity in some of the raw materials. The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen.

Exposures to respirable crystalline silica are not expected during the recommended use of this product. Industrial hygiene monitoring to date has not identified any detectable respirable crystalline silica in dust sampling conducted utilizing recommended application procedures. However, actual levels must be determined by workplace hygiene testing.

## Section 11: Toxicological Information (Continued)

Reproductive effects	Not available
Specific target organ toxicity – single exposure	Not available
Aspiration toxicity	Not available

## Section 12: Ecological Information

**(a) Ecotoxicity (aquatic and terrestrial, where available):** This product does not present an ecological hazard to the environment.

**(b) Persistence and degradability:** Unknown

**(c) Bioaccumulative potential:** Gypsum is a naturally occurring mineral. Biodegradation and/or bioaccumulation potential is not applicable.

**(d) Mobility in soil:** Unknown

**(e) Other adverse effects (such as hazardous to the ozone layer):** None known

## Section 13: Disposal Considerations

This material is not considered a hazardous waste. Dispose of according to Local, State, Federal, and Provincial Environmental Regulations.

## Section 14: Transport Information

This product is not a DOT hazardous material

Shipping Name: Same as product name

ICAO/IATA/IMO: Not applicable

## Section 15: Regulatory Information

All ingredients are included on the TSCA inventory.

### Federal Regulations

**SARA Title III:** Not listed under Sections 302, 304, and 313

**CERCLA:** Not listed

**RCRA:** Not listed

**OSHA:** Dust and potential respirable crystalline silica generated during product use may be hazardous.

### State Regulations

California Prop 65: Respirable crystalline silica is known to the state of California to cause cancer. Industrial hygiene monitoring during recommended use of this product failed to identify any respirable crystalline silica.

### Canada WHMIS

All components of this product are included in the Canadian Domestic Substances List (DSL).

Crystalline silica: WHMIS Classification D2A

**Section 16: Other Information**

**SDS Prepared by:** National Gypsum Company  
2001 Rexford Road  
Charlotte, NC 28211

**Phone Number:** (704) 551-5820

**Date of Preparation:** April 20, 2015

**Revision indicators and Date**

Effective Date Change: 6/1/2015 Supersedes: March 6, 2013

Format Changes: Conforms to OSHA 29CFR 1910.1200 (HCS)

**Key to Abbreviations**

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Services Number
CFR	Code of Federal Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
HEPA	High Efficiency Particulate Air
HCS	Hazard Communications Standard
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This safety data sheet was prepared to comply with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Disclaimer of Liability:**

As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of the material. Information contained herein is believed to be true and accurate, but all statements or suggestions are made without any warranty, express or implied, regarding accuracy of the information, the hazards connected with the use of the material, or the results to be obtained for the use thereof.

**Section 1: Product and Company Identification****Product Name**

XP Gypsum Board

**Product Identifiers**

*XP® Gypsum Board ½" Regular*

*XP® Gypsum Board ½" FSC*

*XP® Gypsum Board 5/8" FS*

**Other means of identification**

Wallboard, Gypsum Board, Plasterboard, Drywall

**Recommended Use**

Interior building walls, elevator shaft construction, Area Separation Wall Systems. Use per manufacturer's recommendations.

**Restrictions on Use**

Use in well-ventilated area and avoid breathing dust.

Avoid skin contact.

**Manufacturer/Supplier Details**

National Gypsum Company

2001 Rexford Road

Charlotte, NC 28211

**Emergency Telephone Number**

Director Quality Services

(704) 551-5820 - 24 Hour Emergency Response

Website: [www.nationalgypsum.com](http://www.nationalgypsum.com)

**Section 2: Hazards Identification****United States (US)**

According to OSHA 29CFR 1910.1200 (HCS)

**GHS Classification of the substance or mixture**

Not classified

**GHS Label Elements**

**Pictogram** None

**Signal Word** None

**Hazard Statements** None

**Precautionary Statements****Prevention**

Do not breathe dust.

Use personal protective equipment as required. (See Section 8)

Use engineering controls and wet methods to minimize dust.

**Response**

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

If on skin, wash with plenty of soap and water.

If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Get medical attention if exposed or concerned.

**Storage**

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

**Disposal**

Dispose of material in accordance with federal, state, and local regulations

### Section 3: Composition/Information on Ingredients

Chemical Name	Common name/ Synonym	Identifiers CAS Number	% (weight)	Impurities
Calcium Sulfate Dihydrate	Gypsum	13397-24-5	>85	Crystalline silica (CAS # 14808-60-7)
Cellulose	Paper Fiber	9004-34-6	<10	

### Section 4: First-Aid Measures

<b>Inhalation</b>	Remove exposed individual to fresh air immediately. If breathing difficulty persists, seek medical attention.
<b>Eye contact</b>	Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes.
	Remove contact lenses (if applicable). Seek medical attention if irritation persists.
<b>Skin contact</b>	Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present.
	Seek medical attention if irritation persists.
<b>Ingestion</b>	This product is not expected to be hazardous and no harmful effects are expected upon ingestion of small amounts. Larger amounts may cause abdominal discomfort or possible obstruction of the digestive tract.
	Seek medical attention if problems persist.

#### Medical Conditions aggravated by exposure

Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

### Section 5: Fire-Fighting Measures

#### Extinguishing Media

Dry chemical, foam, water, or extinguishing media appropriate for surrounding fire.

#### Unusual Fire and Explosion Hazards

Mixture poses no fire-related hazard.

#### Special hazards arising from the mixture

None known. Above 1450°C, material can decompose and release sulfur dioxide (SO<sub>2</sub>) and oxides of carbon.

#### Special Protective Equipment and Precautions for Firefighters

A SCBA is recommended to limit exposures to combustion products when fighting any fire.

### Section 6: Accidental Release Measures

#### Personal precautions, protective equipment and emergency procedures

No special precautions required.

General recommendations:

Wear appropriate Personal Protective Equipment. (See Section 8)

Maintain proper ventilation.

#### Environmental precautions

This product does not present an ecological hazard to the environment.

Dispose of in accordance with applicable federal, state, and local regulations.

#### Methods and materials for containment and cleaning up

Pick-up larger pieces to avoid a tripping hazard. Return large pieces of damaged/scraped material for recycling. Sweep or vacuum remaining material into a waste container for disposal. Use a light water spray to minimize dust generation. Maintain proper ventilation to minimize dust.



## Section 7: Handling and Storage

### Precautions for safe handling

Avoid breathing dust.

Minimize generation of dust.

Provide appropriate exhaust ventilation at places where dust is formed.

Avoid contact with eyes, skin and clothing.

Wear recommended personal protective equipment when handling. (See Section 8)

### Conditions for safe storage, including any incompatibilities

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

Store panels flat to minimize damage and warping.

Do not stack panels too high when storing to minimize the risk of falling.

## Section 8: Exposure Controls/Personal Protection

### Control Parameters

Component	Exposure Limits	
	OSHA PEL (mg/m3)	ACGIH TLV (mg/m3)
Calcium Sulfate Dihydrate	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Crystalline Silica <sup>1</sup>	$[(10) / (\%SiO_2+2)]^{(R)}$ ; $[(30) / (\%SiO_2+2)]^{(T)}$	0.025 <sup>(R)</sup>
Cellulose	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>

T- Total Dust

R- Respirable Dust

1- Present as an impurity in raw materials

### Exposure Controls

#### Appropriate Engineering Controls

Work/Hygiene Practices: Utilize methods to minimize dust production. Utilize wet methods, when appropriate, to reduce generation of dust.

Ventilation: Provide local and general exhaust ventilation sufficient to maintain a dust level below the PEL/TLV.

#### Personal Protective Equipment

##### Respiratory Protection

A NIOSH approved particulate respirator is recommended in poorly ventilated areas or if the PEL/TLV is exceeded. OSHA's 29 CFR 1910.134 (Respiratory Protection Standard) must be followed whenever work conditions require respirator use.

##### Eye Protection

Safety glasses or goggles.

##### Skin

Gloves, protective clothing and/or barrier creams may be utilized if conditions warrant.

## Section 9: Physical and Chemical Properties

**a) Appearance:** Paper-faced gypsum board with white/gray core

**(b) Odor:** None

**(c) Odor threshold:** Not available

**(d) pH :** ~7

**(e) Melting point/freezing point:** Not Available

**(f) Initial boiling point and boiling range:** Not Available

**(g) Flash point:** Not available

**(h) Evaporation rate:** Not available

**(i) Flammability (solid, gas):** Not flammable

**(j) Upper/lower flammability or explosive limits:** Not available

**(k) Vapor pressure:** Not available

**(l) Vapor density:** Not available

**(m) Relative density:** 2.3 g/cc

- (n) **Solubility(ies):** 2.1 g/L @ 20° C  
 (o) **Partition coefficient: n-octanol/water:** Not available  
 (p) **Auto-ignition temperature:** Not available  
 (q) **Decomposition temperature:** 1450°C  
 (r) **Viscosity:** Not available  
 (s) **Volatile organic compound (VOC) content:** None

## Section 10: Stability and Reactivity

- (a) **Reactivity:** No data available  
 (b) **Chemical stability:** Stable in dry environments  
 (c) **Possibility of hazardous reactions:** None known  
 (d) **Conditions to avoid (e.g., static discharge, shock, or vibration):** None known  
 (e) **Incompatible materials:** None  
 (f) **Hazardous decomposition products:** None known. Above 1450° C gypsum will decompose to calcium oxide (CaO), with releases of sulfur dioxide (SO<sub>2</sub>) and various oxides of carbon.

## Section 11: Toxicological Information

### Information on Toxicological effects

#### Information on likely routes of exposure

- Ingestion** Not a likely route of exposure. May result in obstruction or temporary irritation of the digestive tract.  
**Inhalation** Dust may irritate respiratory system. Chronic exposure may result in lung disease. (See below)  
**Skin contact** May cause irritation, dry skin or dermatitis.  
**Eye contact** May cause mechanical irritation.

#### Symptoms related to the physical, chemical and toxicological characteristics

Acute exposure to airborne dust concentrations in excess of the PEL/TLV may result in coughing, dyspnea, wheezing, and a burning irritation of the nose, throat, and upper respiratory tract, along with possible impaired pulmonary function. Chronic exposure to crystalline silica (a naturally occurring contaminant) in the respirable size has been shown to cause silicosis, a debilitating lung disease, and lung cancer.  
 Continued and prolonged contact may result in dry skin. Contact with dust and/or fiberglass may produce itching, rash and/or redness. Repeated or prolonged exposure may result in dermatitis.

### Toxicological data

No toxicological data is available for this product. Toxicological information for components of this product listed below.

<b>Acute toxicity</b>	Gypsum: [OECD TG 420, Fixed dose procedure] Oral LD50 > 2,000-mg/kg b.w. for female rats (Sprague-Dawley)
<b>Skin corrosion/irritation</b>	Gypsum was not irritating to the skin of rabbits at 1, 24, 48 and 72 hours after removal of test patches [OECD TG 404]
<b>Serious eye damage/eye irritation</b>	Not available
<b>Skin sensitization</b>	There is no indication of skin sensitization in guinea pigs [OECD TG 406].
<b>Respiratory sensitization</b>	Not available
<b>Sensitization</b>	Not available
<b>Mutagenicity</b>	No evidence of mutagenicity on Ames Test.
<b>Carcinogenicity</b>	Not available

This product contains crystalline silica (quartz) as a naturally occurring impurity in some of the raw materials. The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen. Exposures to respirable crystalline silica are not expected during the recommended use of this product. Industrial hygiene monitoring to date has not identified any detectable respirable crystalline silica in dust sampling conducted utilizing recommended application procedures. However, actual levels must be determined by workplace hygiene testing.

## Section 11: Toxicological Information (Continued)

Reproductive effects	Not available
Specific target organ toxicity – single exposure	Not available
Aspiration toxicity	Not available

## Section 12: Ecological Information

**(a) Ecotoxicity (aquatic and terrestrial, where available):** This product does not present an ecological hazard to the environment.

**(b) Persistence and degradability:** Unknown

**(c) Bioaccumulative potential:** Gypsum is a naturally occurring mineral. Biodegradation and/or bioaccumulation potential is not applicable.

**(d) Mobility in soil:** Unknown

**(e) Other adverse effects (such as hazardous to the ozone layer):** None known

## Section 13: Disposal Considerations

This material is not considered a hazardous waste. Dispose of according to Local, State, Federal, and Provincial Environmental Regulations.

## Section 14: Transport Information

This product is not a DOT hazardous material

Shipping Name: Same as product name

ICAO/IATA/IMO: Not applicable

## Section 15: Regulatory Information

All ingredients are included on the TSCA inventory.

### Federal Regulations

**SARA Title III:** Not listed under Sections 302, 304, and 313

**CERCLA:** Not listed

**RCRA:** Not listed

**OSHA:** Dust and potential respirable crystalline silica generated during product use may be hazardous.

### State Regulations

California Prop 65: Respirable crystalline silica is known to the state of California to cause cancer. Industrial hygiene monitoring during recommended use of this product failed to identify any respirable crystalline silica.

### Canada WHMIS

All components of this product are included in the Canadian Domestic Substances List (DSL).

Crystalline silica: WHMIS Classification D2A

## Section 16: Other Information

**SDS Prepared by:** National Gypsum Company  
2001 Rexford Road  
Charlotte, NC 28211  
**Phone Number:** (704) 551-5820

**Date of Preparation:** April 20, 2015

### Revision indicators and Date

**Effective Date Change:** 7/24/2015 **Supersedes:** June 1, 2015  
**Format Changes:** Correct Composition/Information

### Key to Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Services Number
CFR	Code of Federal Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
HEPA	High Efficiency Particulate Air
HCS	Hazard Communications Standard
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This safety data sheet was prepared to comply with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

### Disclaimer of Liability:

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**Section 1: Product and Company Identification****Product Name/Identifier**

Hi-Abuse XP® Gypsum Board

**Other means of identification**

Wallboard, Gypsum Board. Plasterboard, Drywall

**Recommended Use**

Wall assemblies in areas where surface durability and impact resistance are major concerns. Use per manufacturer's recommendations.

**Restrictions on Use**

Use in well-ventilated area and avoid breathing dust.

Avoid skin contact.

**Manufacturer/Supplier Details**

National Gypsum Company

2001 Rexford Road

Charlotte, NC 28211

**Emergency Telephone Number**

Director Quality Services

(704) 551-5820 - 24 Hour Emergency Response

Website: [www.nationalgypsum.com](http://www.nationalgypsum.com)

**Section 2: Hazards Identification****United States (US)**

According to OSHA 29CFR 1910.1200 (HCS)

**GHS Classification of the substance or mixture**

Not classified

**GHS Label Elements**

**Pictogram** None

**Signal Word** None

**Hazard Statements** None

**Precautionary Statements****Prevention**

Do not breathe dust.

Use personal protective equipment as required. (See Section 8)

Use engineering controls and wet methods to minimize dust.

**Response**

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

If on skin, wash with plenty of soap and water.

If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Get medical attention if exposed or concerned.

**Storage**

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

**Disposal**

Dispose of material in accordance with federal, state, and local regulations

### Section 3: Composition/Information on Ingredients

Chemical Name	Common name/ Synonym	Identifiers CAS Number	% (weight)	Impurities
Calcium Sulfate Dihydrate	Gypsum	13397-24-5	>85	Crystalline silica (CAS # 14808-60-7)
Cellulose	Paper Fiber	9004-34-6	<10	

### Section 4: First-Aid Measures

**Inhalation** Remove exposed individual to fresh air immediately. If breathing difficulty persists, seek medical attention.

**Eye contact** Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes.  
Remove contact lenses (if applicable). Seek medical attention if irritation persists.

**Skin contact** Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present.  
Seek medical attention if irritation persists.

**Ingestion** This product is not expected to be hazardous and no harmful effects are expected upon ingestion of small amounts. Larger amounts may cause abdominal discomfort or possible obstruction of the digestive tract.  
Seek medical attention if problems persist.

**Medical Conditions aggravated by exposure**

Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

### Section 5: Fire-Fighting Measures

**Extinguishing Media**

Dry chemical, foam, water, or extinguishing media appropriate for surrounding fire.

**Unusual Fire and Explosion Hazards**

Mixture poses no fire-related hazard.

**Special hazards arising from the mixture**

None known. Above 1450°C, material can decompose and release sulfur dioxide (SO<sub>2</sub>) and oxides of carbon.

**Special Protective Equipment and Precautions for Firefighters**

A SCBA is recommended to limit exposures to combustion products when fighting any fire.

### Section 6: Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures**

No special precautions required.

General recommendations:

Wear appropriate Personal Protective Equipment. (See Section 8)

Maintain proper ventilation.

**Environmental precautions**

This product does not present an ecological hazard to the environment.

Dispose of in accordance with applicable federal, state, and local regulations.

**Methods and materials for containment and cleaning up**

Pick-up larger pieces to avoid a tripping hazard. Return large pieces of damaged/scraped material for recycling. Sweep or vacuum remaining material into a waste container for disposal. Use a light water spray to minimize dust generation. Maintain proper ventilation to minimize dust.

## Section 7: Handling and Storage

### Precautions for safe handling

Avoid breathing dust.

Minimize generation of dust.

Provide appropriate exhaust ventilation at places where dust is formed.

Avoid contact with eyes, skin and clothing.

Wear recommended personal protective equipment when handling. (See Section 8)

### Conditions for safe storage, including any incompatibilities

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

Store panels flat to minimize damage and warping.

Do not stack panels too high when storing to minimize the risk of falling.

## Section 8: Exposure Controls/Personal Protection

### Control Parameters

Component	Exposure Limits	
	OSHA PEL (mg/m3)	ACGIH TLV (mg/m3)
Calcium Sulfate Dihydrate	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Crystalline Silica <sup>1</sup>	$[(10) / (\%SiO_2+2)]^{(R)}$ ; $[(30) / (\%SiO_2+2)]^{(T)}$	0.025 <sup>(R)</sup>
Cellulose	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>

T- Total Dust

R-Respirable Dust

1-Present as an impurity in raw materials

### Exposure Controls

#### Appropriate Engineering Controls

Work/Hygiene Practices: Utilize methods to minimize dust production. Utilize wet methods, when appropriate, to reduce generation of dust.

Ventilation: Provide local and general exhaust ventilation sufficient to maintain a dust level below the PEL/TLV.

#### Personal Protective Equipment

##### Respiratory Protection

A NIOSH approved particulate respirator is recommended in poorly ventilated areas or if the PEL/TLV is exceeded. OSHA's 29 CFR 1910.134 (Respiratory Protection Standard) must be followed whenever work conditions require respirator use.

##### Eye Protection

Safety glasses or goggles.

##### Skin

Gloves, protective clothing and/or barrier creams may be utilized if conditions warrant.

## Section 9: Physical and Chemical Properties

**a) Appearance:** Paper-faced gypsum board with white/gray core

**(b) Odor:** None

**(c) Odor threshold:** Not available

**(d) pH :** ~7

**(e) Melting point/freezing point:** Not Available

**(f) Initial boiling point and boiling range:** Not Available

**(g) Flash point:** Not available

**(h) Evaporation rate:** Not available

**(i) Flammability (solid, gas):** Not flammable

**(j) Upper/lower flammability or explosive limits:** Not available

**(k) Vapor pressure:** Not available

**(l) Vapor density:** Not available

- (m) **Relative density:** 2.3 g/cc  
(n) **Solubility(ies):** 2.1 g/L @ 20° C  
(o) **Partition coefficient: n-octanol/water:** Not available  
(p) **Auto-ignition temperature:** Not available  
(q) **Decomposition temperature:** 1450°C  
(r) **Viscosity:** Not available  
(s) **Volatile organic compound (VOC) content:** None

## Section 10: Stability and Reactivity

- (a) **Reactivity:** No data available  
(b) **Chemical stability:** Stable in dry environments  
(c) **Possibility of hazardous reactions:** None known  
(d) **Conditions to avoid (e.g., static discharge, shock, or vibration):** None known  
(e) **Incompatible materials:** None  
(f) **Hazardous decomposition products:** None known. Above 1450° C gypsum will decompose to calcium oxide (CaO), with releases of sulfur dioxide (SO<sub>2</sub>) and various oxides of carbon.

## Section 11: Toxicological Information

### Information on Toxicological effects

#### Information on likely routes of exposure

- Ingestion** Not a likely route of exposure. May result in obstruction or temporary irritation of the digestive tract.  
**Inhalation** Dust may irritate respiratory system. Chronic exposure may result in lung disease. (See below)  
**Skin contact** May cause irritation, dry skin or dermatitis.  
**Eye contact** May cause mechanical irritation.

#### Symptoms related to the physical, chemical and toxicological characteristics

Acute exposure to airborne dust concentrations in excess of the PEL/TLV may result in coughing, dyspnea, wheezing, and a burning irritation of the nose, throat, and upper respiratory tract, along with possible impaired pulmonary function. Chronic exposure to crystalline silica (a naturally occurring contaminant) in the respirable size has been shown to cause silicosis, a debilitating lung disease, and lung cancer.

Continued and prolonged contact may result in dry skin. Contact with dust and/or fiberglass may produce itching, rash and/or redness. Repeated or prolonged exposure may result in dermatitis.

### Toxicological data

No toxicological data is available for this product. Toxicological information for components of this product listed below.

- Acute toxicity** Gypsum: [OECD TG 420, Fixed dose procedure] Oral LD50 > 2,000-mg/kg b.w. for female rats (Sprague-Dawley)  
**Skin corrosion/irritation** Gypsum was not irritating to the skin of rabbits at 1, 24, 48 and 72 hours after removal of test patches [OECD TG 404]  
**Serious eye damage/eye irritation** Not available  
**Skin sensitization** There is no indication of skin sensitization in guinea pigs [OECD TG 406].  
**Respiratory sensitization** Not available  
**Sensitization** Not available  
**Mutagenicity** No evidence of mutagenicity on Ames Test.  
**Carcinogenicity** Not available

This product contains crystalline silica (quartz) as a naturally occurring impurity in some of the raw materials. The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen.

Exposures to respirable crystalline silica are not expected during the recommended use of this product. Industrial hygiene monitoring to date has not identified any detectable respirable crystalline silica in dust sampling conducted utilizing recommended application procedures. However, actual levels must be determined by workplace hygiene testing.



## Section 11: Toxicological Information (Continued)

Reproductive effects	Not available
Specific target organ toxicity – single exposure	Not available
Aspiration toxicity	Not available

## Section 12: Ecological Information

**(a) Ecotoxicity (aquatic and terrestrial, where available):** This product does not present an ecological hazard to the environment.

**(b) Persistence and degradability:** Unknown

**(c) Bioaccumulative potential:** Gypsum is a naturally occurring mineral. Biodegradation and/or bioaccumulation potential is not applicable.

**(d) Mobility in soil:** Unknown

**(e) Other adverse effects (such as hazardous to the ozone layer):** None known

## Section 13: Disposal Considerations

This material is not considered a hazardous waste. Dispose of according to Local, State, Federal, and Provincial Environmental Regulations.

## Section 14: Transport Information

This product is not a DOT hazardous material

Shipping Name: Same as product name

ICAO/IATA/IMO: Not applicable

## Section 15: Regulatory Information

All ingredients are included on the TSCA inventory.

### Federal Regulations

**SARA Title III:** Not listed under Sections 302, 304, and 313

**CERCLA:** Not listed

**RCRA:** Not listed

**OSHA:** Dust and potential respirable crystalline silica generated during product use may be hazardous.

### State Regulations

California Prop 65: Respirable crystalline silica is known to the state of California to cause cancer. Industrial hygiene monitoring during recommended use of this product failed to identify any respirable crystalline silica.

### Canada WHMIS

All components of this product are included in the Canadian Domestic Substances List (DSL).

Crystalline silica: WHMIS Classification D2A

## Section 16: Other Information

**SDS Prepared by:** National Gypsum Company  
2001 Rexford Road  
Charlotte, NC 28211  
**Phone Number:** (704) 551-5820

**Date of Preparation:** April 21, 2015

### Revision indicators and Date

Effective Date Change: 6/1/2015 Supersedes: July 1, 2009  
Format Changes: Conforms to OSHA 29CFR 1910.1200 (HCS)

### Key to Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Services Number
CFR	Code of Federal Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
HEPA	High Efficiency Particulate Air
HCS	Hazard Communications Standard
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This safety data sheet was prepared to comply with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

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**Section 1: Product and Company Identification****Product Name/Identifier**

Hi-Impact® XP® Gypsum Board

**Other means of identification**

Wallboard, Gypsum Board. Plasterboard, Drywall

**Recommended Use**

Interior building walls, elevator shaft construction, Area Separation Wall Systems. Use per manufacturer's recommendations.

**Restrictions on Use**

Use in well-ventilated area and avoid breathing dust.

Avoid skin contact.

**Manufacturer/Supplier Details**

National Gypsum Company

2001 Rexford Road

Charlotte, NC 28211

**Emergency Telephone Number**

Director Quality Services

(704) 551-5820 - 24 Hour Emergency Response

Website: [www.nationalgypsum.com](http://www.nationalgypsum.com)

**Section 2: Hazards Identification****United States (US)**

According to OSHA 29CFR 1910.1200 (HCS)

**GHS Classification of the substance or mixture**

Not classified

**GHS Label Elements**

**Pictogram** None

**Signal Word** None

**Hazard Statements** None

**Precautionary Statements****Prevention**

Do not breathe dust.

Use personal protective equipment as required. (See Section 8)

Use engineering controls and wet methods to minimize dust.

**Response**

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

If on skin, wash with plenty of soap and water.

If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Get medical attention if exposed or concerned.

**Storage**

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

**Disposal**

Dispose of material in accordance with federal, state, and local regulations.

### Section 3: Composition/Information on Ingredients

Chemical Name	Common name/ Synonym	Identifiers CAS Number	% (weight)	Impurities
Calcium Sulfate Dihydrate	Gypsum	13397-24-5	<85	Crystalline silica (CAS # 14808-60-7)
Cellulose	Paper Fiber	9004-34-6	<10	
Mixture-calcium, aluminum silicates, amorphous silica	Fiberglass, synthetic, vitreous, continuous	65997-17-3	<1	

### Section 4: First-Aid Measures

<b>Inhalation</b>	Remove exposed individual to fresh air immediately. If breathing difficulty persists, seek medical attention.
<b>Eye contact</b>	Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes.
	Remove contact lenses (if applicable). Seek medical attention if irritation persists.
<b>Skin contact</b>	Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present.
	Seek medical attention if irritation persists.
<b>Ingestion</b>	This product is not expected to be hazardous and no harmful effects are expected upon ingestion of small amounts. Larger amounts may cause abdominal discomfort or possible obstruction of the digestive tract.
	Seek medical attention if problems persist.

#### Medical Conditions aggravated by exposure

Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

### Section 5: Fire-Fighting Measures

#### Extinguishing Media

Dry chemical, foam, water, or extinguishing media appropriate for surrounding fire.

#### Unusual Fire and Explosion Hazards

Mixture poses no fire-related hazard.

#### Special hazards arising from the mixture

None known. Above 1450°C, material can decompose and release sulfur dioxide (SO<sub>2</sub>) and oxides of carbon.

#### Special Protective Equipment and Precautions for Firefighters

A SCBA is recommended to limit exposures to combustion products when fighting any fire.

### Section 6: Accidental Release Measures

#### Personal precautions, protective equipment and emergency procedures

No special precautions required.

General recommendations:

Wear appropriate Personal Protective Equipment. (See Section 8)

Maintain proper ventilation.

#### Environmental precautions

This product does not present an ecological hazard to the environment.

Dispose of in accordance with applicable federal, state, and local regulations.

#### Methods and materials for containment and cleaning up

Pick-up larger pieces to avoid a tripping hazard. Return large pieces of damaged/scraped material for recycling. Sweep or vacuum remaining material into a waste container for disposal. Use a light water spray to minimize dust generation. Maintain proper ventilation to minimize dust.

## Section 7: Handling and Storage

### Precautions for safe handling

Avoid breathing dust.

Minimize generation of dust.

Provide appropriate exhaust ventilation at places where dust is formed.

Avoid contact with eyes, skin and clothing.

Wear recommended personal protective equipment when handling. (See Section 8)

### Conditions for safe storage, including any incompatibilities

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

Store panels flat to minimize damage and warping.

Do not stack panels too high when storing to minimize the risk of falling.

## Section 8: Exposure Controls/Personal Protection

### Control Parameters

Component	Exposure Limits	
	OSHA PEL (mg/m <sup>3</sup> )	ACGIH TLV (mg/m <sup>3</sup> )
Calcium Sulfate Dihydrate	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Crystalline Silica <sup>1</sup>	$\left[\frac{(10)}{(\%SiO_2+2)}\right]^{(R)}$ ; $\left[\frac{(30)}{(\%SiO_2+2)}\right]^{(T)}$	0.025 <sup>(R)</sup>
Cellulose	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Fiberglas, synthetic, vitreous, continuous	15 <sup>(T)</sup> 5 <sup>(R)</sup>	1 f/cc <sup>(R)</sup>

T- Total Dust

R-Respirable Dust

1-Present as an impurity in raw materials

### Exposure Controls

#### Appropriate Engineering Controls

Work/Hygiene Practices: Utilize methods to minimize dust production. Utilize wet methods, when appropriate, to reduce generation of dust.

Ventilation: Provide local and general exhaust ventilation sufficient to maintain a dust level below the PEL/TLV.

#### Personal Protective Equipment

##### Respiratory Protection

A NIOSH approved particulate respirator is recommended in poorly ventilated areas or if the PEL/TLV is exceeded. OSHA's 29 CFR 1910.134 (Respiratory Protection Standard) must be followed whenever work conditions require respirator use.

##### Eye Protection

Safety glasses or goggles.

##### Skin

Gloves, protective clothing and/or barrier creams may be utilized if conditions warrant.

## Section 9: Physical and Chemical Properties

**a) Appearance:** Paper-faced gypsum board with white/gray core

**(b) Odor:** None

**(c) Odor threshold:** Not available

**(d) pH :** ~7

**(e) Melting point/freezing point:** Not Available

**(f) Initial boiling point and boiling range:** Not Available

**(g) Flash point:** Not available

**(h) Evaporation rate:** Not available

**(i) Flammability (solid, gas):** Not flammable

**(j) Upper/lower flammability or explosive limits:** Not available

**(k) Vapor pressure:** Not available

- (l) **Vapor density:** Not available  
(m) **Relative density:** 2.3 g/cc  
(n) **Solubility(ies):** 2.1 g/L @ 20° C  
(o) **Partition coefficient: n-octanol/water:** Not available  
(p) **Auto-ignition temperature:** Not available  
(q) **Decomposition temperature:** 1450°C  
(r) **Viscosity:** Not available  
(s) **Volatile organic compound (VOC) content:** None

## Section 10: Stability and Reactivity

- (a) **Reactivity:** No data available  
(b) **Chemical stability:** Stable in dry environments  
(c) **Possibility of hazardous reactions:** None known  
(d) **Conditions to avoid (e.g., static discharge, shock, or vibration):** None known  
(e) **Incompatible materials:** None  
(f) **Hazardous decomposition products:** None known. Above 1450° C gypsum will decompose to calcium oxide (CaO), with releases of sulfur dioxide (SO<sub>2</sub>) and various oxides of carbon.

## Section 11: Toxicological Information

### Information on Toxicological effects

#### Information on likely routes of exposure

- Ingestion** Not a likely route of exposure. May result in obstruction or temporary irritation of the digestive tract.  
**Inhalation** Dust may irritate respiratory system. Chronic exposure may result in lung disease. (See below)  
**Skin contact** May cause irritation, itching, rash and/or redness, dry skin or dermatitis.  
**Eye contact** May cause mechanical irritation.

### Symptoms related to the physical, chemical and toxicological characteristics

Acute exposure to airborne dust concentrations in excess of the PEL/TLV may result in coughing, dyspnea, wheezing, and a burning irritation of the nose, throat, and upper respiratory tract, along with possible impaired pulmonary function. Chronic exposure to crystalline silica (a naturally occurring contaminant) in the respirable size has been shown to cause silicosis, a debilitating lung disease, and lung cancer.

Continued and prolonged contact may result in dry skin. Contact with dust and/or fiberglass may produce itching, rash and/or redness. Repeated or prolonged exposure may result in dermatitis.

### Toxicological data

No toxicological data is available for this product. Toxicological information for components of this product listed below.

- Acute toxicity** Gypsum: [OECD TG 420, Fixed dose procedure] Oral LD50 > 2,000-mg/kg b.w. for female rats (Sprague-Dawley)  
**Skin corrosion/irritation** Gypsum was not irritating to the skin of rabbits at 1, 24, 48 and 72 hours after removal of test patches [OECD TG 404]  
**Serious eye damage/eye irritation** Not available  
**Skin sensitization** There is no indication of skin sensitization in guinea pigs [OECD TG 406].  
**Respiratory sensitization** Not available  
**Sensitization** Not available  
**Mutagenicity** No evidence of mutagenicity on Ames Test.  
**Carcinogenicity** Not available

This product contains crystalline silica (quartz) as a naturally occurring impurity in some of the raw materials. The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen.

Exposures to respirable crystalline silica are not expected during the recommended use of this product. Industrial hygiene monitoring to date has not identified any detectable respirable crystalline silica in dust sampling conducted utilizing recommended application procedures. However, actual levels must be determined by workplace hygiene testing.

## Section 11: Toxicological Information (Continued)

Reproductive effects	Not available
Specific target organ toxicity – single exposure	Not available
Aspiration toxicity	Not available

## Section 12: Ecological Information

**(a) Ecotoxicity (aquatic and terrestrial, where available):** This product does not present an ecological hazard to the environment.

**(b) Persistence and degradability:** Unknown

**(c) Bioaccumulative potential:** Gypsum is a naturally occurring mineral. Biodegradation and/or bioaccumulation potential is not applicable.

**(d) Mobility in soil:** Unknown

**(e) Other adverse effects (such as hazardous to the ozone layer):** None known

## Section 13: Disposal Considerations

This material is not considered a hazardous waste. Dispose of according to Local, State, Federal, and Provincial Environmental Regulations.

## Section 14: Transport Information

This product is not a DOT hazardous material

Shipping Name: Same as product name

ICAO/IATA/IMO: Not applicable

## Section 15: Regulatory Information

All ingredients are included on the TSCA inventory.

### Federal Regulations

**SARA Title III:** Not listed under Sections 302, 304, and 313

**CERCLA:** Not listed

**RCRA:** Not listed

**OSHA:** Dust and potential respirable crystalline silica generated during product use may be hazardous.

### State Regulations

California Prop 65: Respirable crystalline silica is known to the state of California to cause cancer. Industrial hygiene monitoring during recommended use of this product failed to identify any respirable crystalline silica.

### Canada WHMIS

All components of this product are included in the Canadian Domestic Substances List (DSL).

Crystalline silica: WHMIS Classification D2A

## Section 16: Other Information

**SDS Prepared by:** National Gypsum Company  
2001 Rexford Road  
Charlotte, NC 28211  
**Phone Number:** (704) 551-5820

**Date of Preparation:** April 21, 2015

### Revision indicators and Date

Effective Date Change: 6/1/2015                      Supersedes: July 1, 2009  
Format Changes: Conforms to OSHA 29CFR 1910.1200 (HCS)

### Key to Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Services Number
CFR	Code of Federal Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
HEPA	High Efficiency Particulate Air
HCS	Hazard Communications Standard
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This safety data sheet was prepared to comply with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

### Disclaimer of Liability:

As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of the material. Information contained herein is believed to be true and accurate, but all statements or suggestions are made without any warranty, express or implied, regarding accuracy of the information, the hazards connected with the use of the material, or the results to be obtained for the use thereof.



**Section 1: Product and Company Identification****Product Name/Identifier**

eXP Sheathing

**Other means of identification**

Wallboard, Gypsum Board. Plasterboard, Drywall

**Recommended Use**

Exterior building walls where moisture is a concern. Use per manufacturer's recommendations.

**Restrictions on Use**

Use in well-ventilated area and avoid breathing dust.

Avoid skin contact.

**Manufacturer/Supplier Details**

National Gypsum Company  
2001 Rexford Road  
Charlotte, NC 28211

**Emergency Telephone Number**

Director Quality Services

(704) 551-5820 - 24 Hour Emergency Response

Website: [www.nationalgypsum.com](http://www.nationalgypsum.com)

**Section 2: Hazards Identification****United States (US)**

According to OSHA 29CFR 1910.1200 (HCS)

**GHS Classification of the substance or mixture**

Not classified

**GHS Label Elements**

<b>Pictogram</b>	None
<b>Signal Word</b>	None
<b>Hazard Statements</b>	None

**Precautionary Statements****Prevention**

Do not breathe dust.

Use personal protective equipment as required. (See Section 8)

Use engineering controls and wet methods to minimize dust.

**Response**

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

If on skin, wash with plenty of soap and water.

If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Get medical attention if exposed or concerned.

**Storage**

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

**Disposal**

Dispose of material in accordance with federal, state, and local regulations

### Section 3: Composition/Information on Ingredients

Chemical Name	Common name/ Synonym	Identifiers CAS Number	% (weight)	Impurities
Calcium Sulfate Dihydrate	Gypsum	13397-24-5	>91	Crystalline silica (CAS # 14808-60-7)
Hydrous phyllosilicate	Vermiculite	1318-00-9	<2	Crystalline silica (CAS # 14808-60-7)
Mixture-calcium, aluminum silicates, amorphous silica	Fiberglass, synthetic, vitreous, continuous	65997-17-3	<1	

### Section 4: First-Aid Measures

<b>Inhalation</b>	Remove exposed individual to fresh air immediately. If breathing difficulty persists, seek medical attention.
<b>Eye contact</b>	Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes. Remove contact lenses (if applicable). Seek medical attention if irritation persists.
<b>Skin contact</b>	Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present. Seek medical attention if irritation persists.
<b>Ingestion</b>	This product is not expected to be hazardous and no harmful effects are expected upon ingestion of small amounts. Larger amounts may cause abdominal discomfort or possible obstruction of the digestive tract. Seek medical attention if problems persist.

#### Medical Conditions aggravated by exposure

Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

### Section 5: Fire-Fighting Measures

#### Extinguishing Media

Dry chemical, foam, water, or extinguishing media appropriate for surrounding fire.

#### Unusual Fire and Explosion Hazards

Mixture poses no fire-related hazard.

#### Special hazards arising from the mixture

None known. Above 1450°C, material can decompose and release sulfur dioxide (SO<sub>2</sub>) and oxides of carbon.

#### Special Protective Equipment and Precautions for Firefighters

A SCBA is recommended to limit exposures to combustion products when fighting any fire.

### Section 6: Accidental Release Measures

#### Personal precautions, protective equipment and emergency procedures

No special precautions required.

General recommendations:

Wear appropriate Personal Protective Equipment. (See Section 8)

Maintain proper ventilation.

#### Environmental precautions

This product does not present an ecological hazard to the environment.

Dispose of in accordance with applicable federal, state, and local regulations.

#### Methods and materials for containment and cleaning up

Pick-up larger pieces to avoid a tripping hazard. Return large pieces of damaged/scraped material for recycling. Sweep or vacuum remaining material into a waste container for disposal. Use a light water spray to minimize dust generation. Maintain proper ventilation to minimize dust.

## Section 7: Handling and Storage

### Precautions for safe handling

Avoid breathing dust.  
Minimize generation of dust.  
Provide appropriate exhaust ventilation at places where dust is formed.  
Avoid contact with eyes, skin and clothing.  
Wear recommended personal protective equipment when handling. (See Section 8)

### Conditions for safe storage, including any incompatibilities

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.  
Store panels flat to minimize damage and warping.  
Do not stack panels too high when storing to minimize the risk of falling.

## Section 8: Exposure Controls/Personal Protection

### Control Parameters

Component	Exposure Limits	
	OSHA PEL (mg/m <sup>3</sup> )	ACGIH TLV (mg/m <sup>3</sup> )
Calcium Sulfate Dihydrate	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Crystalline Silica <sup>1</sup>	$[(10) / (\%SiO_2+2)]^{(R)}$ ; $[(30) / (\%SiO_2+2)]^{(T)}$	0.025 <sup>(R)</sup>
Vermiculite	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup> 3 <sup>(R)</sup>
Fiberglas, synthetic, vitreous, continuous	15 <sup>(T)</sup> 5 <sup>(R)</sup>	1 f/cc <sup>(R)</sup>

T- Total Dust

R-Respirable Dust

1-Present as an impurity in raw materials

### Exposure Controls

#### Appropriate Engineering Controls

Work/Hygiene Practices: Utilize methods to minimize dust production. Utilize wet methods, when appropriate, to reduce generation of dust.

Ventilation: Provide local and general exhaust ventilation sufficient to maintain a dust level below the PEL/TLV.

#### Personal Protective Equipment

##### Respiratory Protection

A NIOSH approved particulate respirator is recommended in poorly ventilated areas or if the PEL/TLV is exceeded. OSHA's 29 CFR 1910.134 (Respiratory Protection Standard) must be followed whenever work conditions require respirator use.

##### Eye Protection

Safety glasses or goggles.

##### Skin

Gloves, protective clothing and/or barrier creams may be utilized if conditions warrant.

## Section 9: Physical and Chemical Properties

- a) **Appearance:** Coated gypsum board with white/gray core
- (b) **Odor:** None
- (c) **Odor threshold:** Not available
- (d) **pH :** ~7
- (e) **Melting point/freezing point:** Not Available
- (f) **Initial boiling point and boiling range:** Not Available
- (g) **Flash point:** Not available
- (h) **Evaporation rate:** Not available
- (i) **Flammability (solid, gas):** Not flammable
- (j) **Upper/lower flammability or explosive limits:** Not available
- (k) **Vapor pressure:** Not available

- (l) **Vapor density:** Not available  
(m) **Relative density:** 2.3 g/cc  
(n) **Solubility(ies):** 2.1 g/L @ 20° C  
(o) **Partition coefficient: n-octanol/water:** Not available  
(p) **Auto-ignition temperature:** Not available  
(q) **Decomposition temperature:** 1450°C  
(r) **Viscosity:** Not available  
(s) **Volatile organic compound (VOC) content:** None

## Section 10: Stability and Reactivity

- (a) **Reactivity:** No data available  
(b) **Chemical stability:** Stable in dry environments  
(c) **Possibility of hazardous reactions:** None known  
(d) **Conditions to avoid (e.g., static discharge, shock, or vibration):** None known  
(e) **Incompatible materials:** None  
(f) **Hazardous decomposition products:** None known. Above 1450° C gypsum will decompose to calcium oxide (CaO), with releases of sulfur dioxide (SO<sub>2</sub>) and various oxides of carbon.

## Section 11: Toxicological Information

### Information on Toxicological effects

#### Information on likely routes of exposure

- Ingestion** Not a likely route of exposure. May result in obstruction or temporary irritation of the digestive tract.  
**Inhalation** Dust may irritate respiratory system. Chronic exposure may result in lung disease. (See below)  
**Skin contact** May cause irritation, itching, rash and/or redness, dry skin or dermatitis.  
**Eye contact** May cause mechanical irritation.

#### Symptoms related to the physical, chemical and toxicological characteristics

Acute exposure to airborne dust concentrations in excess of the PEL/TLV may result in coughing, dyspnea, wheezing, and a burning irritation of the nose, throat, and upper respiratory tract, along with possible impaired pulmonary function. Chronic exposure to crystalline silica (a naturally occurring contaminant) in the respirable size has been shown to cause silicosis, a debilitating lung disease, and lung cancer.  
Continued and prolonged contact may result in dry skin. Contact with dust and/or fiberglass may produce itching, rash and/or redness. Repeated or prolonged exposure may result in dermatitis.

#### Toxicological data

No toxicological data is available for this product. Toxicological information for components of this product listed below.

- Acute toxicity** Gypsum: [OECD TG 420, Fixed dose procedure] Oral LD50 > 2,000-mg/kg b.w. for female rats (Sprague-Dawley)  
**Skin corrosion/irritation** Gypsum was not irritating to the skin of rabbits at 1, 24, 48 and 72 hours after removal of test patches [OECD TG 404]  
**Serious eye damage/eye irritation** Not available  
**Skin sensitization** There is no indication of skin sensitization in guinea pigs [OECD TG 406].  
**Respiratory sensitization** Not available  
**Sensitization** Not available  
**Mutagenicity** No evidence of mutagenicity on Ames Test.  
**Carcinogenicity** Not available

This product contains crystalline silica (quartz) as a naturally occurring impurity in some of the raw materials. The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen. Exposures to respirable crystalline silica are not expected during the recommended use of this product. Industrial hygiene monitoring to date has not identified any detectable respirable crystalline silica in dust sampling conducted utilizing recommended application procedures. However, actual levels must be determined by workplace hygiene testing.

## Section 11: Toxicological Information (Continued)

Reproductive effects	Not available
Specific target organ toxicity – single exposure	Not available
Aspiration toxicity	Not available

## Section 12: Ecological Information

**(a) Ecotoxicity (aquatic and terrestrial, where available):** This product does not present an ecological hazard to the environment.

**(b) Persistence and degradability:** Unknown

**(c) Bioaccumulative potential:** Gypsum is a naturally occurring mineral. Biodegradation and/or bioaccumulation potential is not applicable.

**(d) Mobility in soil:** Unknown

**(e) Other adverse effects (such as hazardous to the ozone layer):** None known

## Section 13: Disposal Considerations

This material is not considered a hazardous waste. Dispose of according to Local, State, Federal, and Provincial Environmental Regulations.

## Section 14: Transport Information

This product is not a DOT hazardous material

Shipping Name: Same as product name

ICAO/IATA/IMO: Not applicable

## Section 15: Regulatory Information

All ingredients are included on the TSCA inventory.

### Federal Regulations

**SARA Title III:** Not listed under Sections 302, 304, and 313

**CERCLA:** Not listed

**RCRA:** Not listed

**OSHA:** Dust and potential respirable crystalline silica generated during product use may be hazardous.

### State Regulations

California Prop 65: Respirable crystalline silica is known to the state of California to cause cancer. Industrial hygiene monitoring during recommended use of this product failed to identify any respirable crystalline silica.

### Canada WHMIS

All components of this product are included in the Canadian Domestic Substances List (DSL).

Crystalline silica: WHMIS Classification D2A

## Section 16: Other Information

**SDS Prepared by:** National Gypsum Company  
2001 Rexford Road  
Charlotte, NC 28211  
**Phone Number:** (704) 551-5820

**Date of Preparation:** April 21, 2015

### Revision indicators and Date

Effective Date Change: 6/1/2015 Supersedes: March 6, 2013  
Format Changes: Conforms to OSHA 29CFR 1910.1200 (HCS)

### Key to Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Services Number
CFR	Code of Federal Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
HEPA	High Efficiency Particulate Air
HCS	Hazard Communications Standard
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

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### Disclaimer of Liability:

As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of the material. Information contained herein is believed to be true and accurate, but all statements or suggestions are made without any warranty, express or implied, regarding accuracy of the information, the hazards connected with the use of the material, or the results to be obtained for the use thereof.

**Section 1: Product and Company Identification****Product Name/Identifier**

eXP Shaftliner

**Other means of identification**

Wallboard, Gypsum Board. Plasterboard, Drywall

**Recommended Use**

Interior building walls, elevator shaft construction, Area Separation Wall Systems. Use per manufacturer's recommendations.

**Restrictions on Use**

Use in well-ventilated area and avoid breathing dust.

Avoid skin contact.

**Manufacturer/Supplier Details**

National Gypsum Company

2001 Rexford Road

Charlotte, NC 28211

**Emergency Telephone Number**

Director Quality Services

(704) 551-5820 - 24 Hour Emergency Response

Website: [www.nationalgypsum.com](http://www.nationalgypsum.com)

**Section 2: Hazards Identification****United States (US)**

According to OSHA 29CFR 1910.1200 (HCS)

**GHS Classification of the substance or mixture**

Not classified

**GHS Label Elements**

<b>Pictogram</b>	None
<b>Signal Word</b>	None
<b>Hazard Statements</b>	None

**Precautionary Statements****Prevention**

Do not breathe dust.

Use personal protective equipment as required. (See Section 8)

Use engineering controls and wet methods to minimize dust.

**Response**

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

If on skin, wash with plenty of soap and water.

If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Get medical attention if exposed or concerned.

**Storage**

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

**Disposal**

Dispose of material in accordance with federal, state, and local regulations

### Section 3: Composition/Information on Ingredients

Chemical Name	Common name/ Synonym	Identifiers CAS Number	% (weight)	Impurities
Calcium Sulfate Dihydrate	Gypsum	13397-24-5	>91	Crystalline silica (CAS # 14808-60-7)
Hydrous phyllosilicate	Vermiculite	1318-00-9	<2	Crystalline silica (CAS # 14808-60-7)
Mixture-calcium, aluminum silicates, amorphous silica	Fiberglass, synthetic, vitreous, continuous	65997-17-3	<1	

### Section 4: First-Aid Measures

<b>Inhalation</b>	Remove exposed individual to fresh air immediately. If breathing difficulty persists, seek medical attention.
<b>Eye contact</b>	Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes.
	Remove contact lenses (if applicable). Seek medical attention if irritation persists.
<b>Skin contact</b>	Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present.
	Seek medical attention if irritation persists.
<b>Ingestion</b>	This product is not expected to be hazardous and no harmful effects are expected upon ingestion of small amounts. Larger amounts may cause abdominal discomfort or possible obstruction of the digestive tract.
	Seek medical attention if problems persist.

#### Medical Conditions aggravated by exposure

Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

### Section 5: Fire-Fighting Measures

#### Extinguishing Media

Dry chemical, foam, water, or extinguishing media appropriate for surrounding fire.

#### Unusual Fire and Explosion Hazards

Mixture poses no fire-related hazard.

#### Special hazards arising from the mixture

None known. Above 1450° C, material can decompose and release sulfur dioxide (SO<sub>2</sub>) and oxides of carbon.

#### Special Protective Equipment and Precautions for Firefighters

A SCBA is recommended to limit exposures to combustion products when fighting any fire.

### Section 6: Accidental Release Measures

#### Personal precautions, protective equipment and emergency procedures

No special precautions required.

General recommendations:

Wear appropriate Personal Protective Equipment. (See Section 8)

Maintain proper ventilation.

#### Environmental precautions

This product does not present an ecological hazard to the environment.

Dispose of in accordance with applicable federal, state, and local regulations.

#### Methods and materials for containment and cleaning up

Pick-up larger pieces to avoid a tripping hazard. Return large pieces of damaged/scraped material for recycling. Sweep or vacuum remaining material into a waste container for disposal. Use a light water spray to minimize dust generation. Maintain proper ventilation to minimize dust.



## Section 7: Handling and Storage

### Precautions for safe handling

Avoid breathing dust.  
Minimize generation of dust.  
Provide appropriate exhaust ventilation at places where dust is formed.  
Avoid contact with eyes, skin and clothing.  
Wear recommended personal protective equipment when handling. (See Section 8)

### Conditions for safe storage, including any incompatibilities

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.  
Store panels flat to minimize damage and warping.  
Do not stack panels too high when storing to minimize the risk of falling.

## Section 8: Exposure Controls/Personal Protection

### Control Parameters

Component	Exposure Limits	
	OSHA PEL (mg/m <sup>3</sup> )	ACGIH TLV (mg/m <sup>3</sup> )
Calcium Sulfate Dihydrate	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Crystalline Silica <sup>1</sup>	$[(10) / (\%SiO_2 + 2)]^{(R)}$ ; $[(30) / (\%SiO_2 + 2)]^{(T)}$	0.025 <sup>(R)</sup>
Vermiculite	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup> 3 <sup>(R)</sup>
Fiberglas, synthetic, vitreous, continuous	15 <sup>(T)</sup> 5 <sup>(R)</sup>	1 f/cc <sup>(R)</sup>

T- Total Dust

R-Respirable Dust

1-Present as an impurity in raw materials

### Exposure Controls

#### Appropriate Engineering Controls

Work/Hygiene Practices: Utilize methods to minimize dust production. Utilize wet methods, when appropriate, to reduce generation of dust.

Ventilation: Provide local and general exhaust ventilation sufficient to maintain a dust level below the PEL/TLV.

#### Personal Protective Equipment

##### Respiratory Protection

A NIOSH approved particulate respirator is recommended in poorly ventilated areas or if the PEL/TLV is exceeded. OSHA's 29 CFR 1910.134 (Respiratory Protection Standard) must be followed whenever work conditions require respirator use.

##### Eye Protection

Safety glasses or goggles.

##### Skin

Gloves, protective clothing and/or barrier creams may be utilized if conditions warrant.

## Section 9: Physical and Chemical Properties

**a) Appearance:** Coated gypsum board with white/gray core

**(b) Odor:** None

**(c) Odor threshold:** Not available

**(d) pH :** ~7

**(e) Melting point/freezing point:** Not Available

**(f) Initial boiling point and boiling range:** Not Available

**(g) Flash point:** Not available

**(h) Evaporation rate:** Not available

**(i) Flammability (solid, gas):** Not flammable

**(j) Upper/lower flammability or explosive limits:** Not available

**(k) Vapor pressure:** Not available

- (l) **Vapor density:** Not available  
(m) **Relative density:** 2.3 g/cc  
(n) **Solubility(ies):** 2.1 g/L @ 20° C  
(o) **Partition coefficient: n-octanol/water:** Not available  
(p) **Auto-ignition temperature:** Not available  
(q) **Decomposition temperature:** 1450°C  
(r) **Viscosity:** Not available  
(s) **Volatile organic compound (VOC) content:** None

## Section 10: Stability and Reactivity

- (a) **Reactivity:** No data available  
(b) **Chemical stability:** Stable in dry environments  
(c) **Possibility of hazardous reactions:** None known  
(d) **Conditions to avoid (e.g., static discharge, shock, or vibration):** None known  
(e) **Incompatible materials:** None  
(f) **Hazardous decomposition products:** None known. Above 1450° C gypsum will decompose to calcium oxide (CaO), with releases of sulfur dioxide (SO<sub>2</sub>) and various oxides of carbon.

## Section 11: Toxicological Information

### Information on Toxicological effects

#### Information on likely routes of exposure

- Ingestion** Not a likely route of exposure. May result in obstruction or temporary irritation of the digestive tract.  
**Inhalation** Dust may irritate respiratory system. Chronic exposure may result in lung disease. (See below)  
**Skin contact** May cause irritation, itching, rash and/or redness, dry skin or dermatitis.  
**Eye contact** May cause mechanical irritation

#### Symptoms related to the physical, chemical and toxicological characteristics

Acute exposure to airborne dust concentrations in excess of the PEL/TLV may result in coughing, dyspnea, wheezing, and a burning irritation of the nose, throat, and upper respiratory tract, along with possible impaired pulmonary function. Chronic exposure to crystalline silica (a naturally occurring contaminant) in the respirable size has been shown to cause silicosis, a debilitating lung disease, and lung cancer.  
Continued and prolonged contact may result in dry skin. Contact with dust and/or fiberglass may produce itching, rash and/or redness. Repeated or prolonged exposure may result in dermatitis.

#### Toxicological data

No toxicological data is available for this product. Toxicological information for components of this product listed below.

- Acute toxicity** Gypsum: [OECD TG 420, Fixed dose procedure] Oral LD50 > 2,000-mg/kg b.w. for female rats (Sprague-Dawley)  
**Skin corrosion/irritation** Gypsum was not irritating to the skin of rabbits at 1, 24, 48 and 72 hours after removal of test patches [OECD TG 404]  
**Serious eye damage/eye irritation** Not available  
**Skin sensitization** There is no indication of skin sensitization in guinea pigs [OECD TG 406].  
**Respiratory sensitization** Not available  
**Sensitization** Not available  
**Mutagenicity** No evidence of mutagenicity on Ames Test.  
**Carcinogenicity** Not available

This product contains crystalline silica (quartz) as a naturally occurring impurity in some of the raw materials. The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen. Exposures to respirable crystalline silica are not expected during the recommended use of this product. Industrial hygiene monitoring to date has not identified any detectable respirable crystalline silica in dust sampling conducted utilizing recommended application procedures. However, actual levels must be determined by workplace hygiene testing.

## Section 11: Toxicological Information (Continued)

Reproductive effects	Not available
Specific target organ toxicity – single exposure	Not available
Aspiration toxicity	Not available

## Section 12: Ecological Information

**(a) Ecotoxicity (aquatic and terrestrial, where available):** This product does not present an ecological hazard to the environment.

**(b) Persistence and degradability:** Unknown

**(c) Bioaccumulative potential:** Gypsum is a naturally occurring mineral. Biodegradation and/or bioaccumulation potential is not applicable.

**(d) Mobility in soil:** Unknown

**(e) Other adverse effects (such as hazardous to the ozone layer):** None known

## Section 13: Disposal Considerations

This material is not considered a hazardous waste. Dispose of according to Local, State, Federal, and Provincial Environmental Regulations.

## Section 14: Transport Information

This product is not a DOT hazardous material

Shipping Name: Same as product name

ICAO/IATA/IMO: Not applicable

## Section 15: Regulatory Information

All ingredients are included on the TSCA inventory.

### Federal Regulations

**SARA Title III:** Not listed under Sections 302, 304, and 313

**CERCLA:** Not listed

**RCRA:** Not listed

**OSHA:** Dust and potential respirable crystalline silica generated during product use may be hazardous.

### State Regulations

California Prop 65: Respirable crystalline silica is known to the state of California to cause cancer. Industrial hygiene monitoring during recommended use of this product failed to identify any respirable crystalline silica.

### Canada WHMIS

All components of this product are included in the Canadian Domestic Substances List (DSL).

Crystalline silica: WHMIS Classification D2A

## Section 16: Other Information

**SDS Prepared by:** National Gypsum Company  
2001 Rexford Road  
Charlotte, NC 28211

**Phone Number:** (704) 551-5820

**Date of Preparation:** April 21, 2015

### Revision indicators and Date

Effective Date Change: 6/1/2015 Supersedes: March 6, 2013

Format Changes: Conforms to OSHA 29CFR 1910.1200 (HCS)

### Key to Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Services Number
CFR	Code of Federal Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
HEPA	High Efficiency Particulate Air
HCS	Hazard Communications Standard
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This safety data sheet was prepared to comply with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

### Disclaimer of Liability:

As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of the material. Information contained herein is believed to be true and accurate, but all statements or suggestions are made without any warranty, express or implied, regarding accuracy of the information, the hazards connected with the use of the material, or the results to be obtained for the use thereof.

**Section 1: Product and Company Identification****Product Name**

eXP Interior Extreme Products

**Product Identifiers**

*eXP Interior Extreme*

*eXP Interior Extreme AR (Abuse Resistant)*

*eXP Interior Extreme IR (Impact Resistant)*

**Other means of identification**

Wallboard, Gypsum Board. Plasterboard, Drywall

**Recommended Use**

Interior building walls where moisture is a concern. Use per manufacturer's recommendations.

**Restrictions on Use**

Use in well-ventilated area and avoid breathing dust.

Avoid skin contact.

**Manufacturer/Supplier Details**

National Gypsum Company

2001 Rexford Road

Charlotte, NC 28211

**Emergency Telephone Number**

Director Quality Services

(704) 551-5820 - 24 Hour Emergency Response

Website: [www.nationalgypsum.com](http://www.nationalgypsum.com)

**Section 2: Hazards Identification****United States (US)**

According to OSHA 29CFR 1910.1200 (HCS)

**GHS Classification of the substance or mixture**

Not classified

**GHS Label Elements**

**Pictogram** None

**Signal Word** None

**Hazard Statements** None

**Precautionary Statements****Prevention**

Do not breathe dust.

Use personal protective equipment as required. (See Section 8)

Use engineering controls and wet methods to minimize dust.

**Response**

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

If on skin, wash with plenty of soap and water.

If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Get medical attention if exposed or concerned.

**Storage**

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

**Disposal**

Dispose of material in accordance with federal, state, and local regulations.

### Section 3: Composition/Information on Ingredients

Chemical Name	Common name/ Synonym	Identifiers CAS Number	% (weight)	Impurities
Calcium Sulfate Dihydrate	Gypsum	13397-24-5	>91	Crystalline silica (CAS # 14808-60-7)
Hydrous phyllosilicate	Vermiculite	1318-00-9	<2	Crystalline silica (CAS # 14808-60-7)
Mixture-calcium, aluminum silicates, amorphous silica	Fiberglass, synthetic, vitreous, continuous	65997-17-3	<1	

### Section 4: First-Aid Measures

<b>Inhalation</b>	Remove exposed individual to fresh air immediately. If breathing difficulty persists, seek medical attention.
<b>Eye contact</b>	Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes.
	Remove contact lenses (if applicable). Seek medical attention if irritation persists.
<b>Skin contact</b>	Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present.
	Seek medical attention if irritation persists.
<b>Ingestion</b>	This product is not expected to be hazardous and no harmful effects are expected upon ingestion of small amounts. Larger amounts may cause abdominal discomfort or possible obstruction of the digestive tract.
	Seek medical attention if problems persist.

#### Medical Conditions aggravated by exposure

Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

### Section 5: Fire-Fighting Measures

#### Extinguishing Media

Dry chemical, foam, water, or extinguishing media appropriate for surrounding fire.

#### Unusual Fire and Explosion Hazards

Mixture poses no fire-related hazard.

#### Special hazards arising from the mixture

None known. Above 1450° C, material can decompose and release sulfur dioxide (SO<sub>2</sub>) and oxides of carbon.

#### Special Protective Equipment and Precautions for Firefighters

A SCBA is recommended to limit exposures to combustion products when fighting any fire.

### Section 6: Accidental Release Measures

#### Personal precautions, protective equipment and emergency procedures

No special precautions required.

General recommendations:

Wear appropriate Personal Protective Equipment. (See Section 8)

Maintain proper ventilation.

#### Environmental precautions

This product does not present an ecological hazard to the environment.

Dispose of in accordance with applicable federal, state, and local regulations.

#### Methods and materials for containment and cleaning up

Pick-up larger pieces to avoid a tripping hazard. Return large pieces of damaged/scraped material for recycling. Sweep or vacuum remaining material into a waste container for disposal. Use a light water spray to minimize dust generation. Maintain proper ventilation to minimize dust.

## Section 7: Handling and Storage

### Precautions for safe handling

Avoid breathing dust.

Minimize generation of dust.

Provide appropriate exhaust ventilation at places where dust is formed.

Avoid contact with eyes, skin and clothing.

Wear recommended personal protective equipment when handling. (See Section 8)

### Conditions for safe storage, including any incompatibilities

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

Store panels flat to minimize damage and warping.

Do not stack panels too high when storing to minimize the risk of falling.

## Section 8: Exposure Controls/Personal Protection

### Control Parameters

Component	Exposure Limits	
	OSHA PEL (mg/m <sup>3</sup> )	ACGIH TLV (mg/m <sup>3</sup> )
Calcium Sulfate Dihydrate	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Crystalline Silica <sup>1</sup>	$\left[\frac{(10)}{(\%SiO_2+2)}\right]$ <sup>(R)</sup> ; $\left[\frac{(30)}{(\%SiO_2+2)}\right]$ <sup>(T)</sup>	0.025 <sup>(R)</sup>
Vermiculite	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup> 3 <sup>(R)</sup>
Fiberglas, synthetic, vitreous, continuous	15 <sup>(T)</sup> 5 <sup>(R)</sup>	1 f/cc <sup>(R)</sup>

T- Total Dust

R-Respirable Dust

1-Present as an impurity in raw materials

### Exposure Controls

#### Appropriate Engineering Controls

Work/Hygiene Practices: Utilize methods to minimize dust production. Utilize wet methods, when appropriate, to reduce generation of dust.

Ventilation: Provide local and general exhaust ventilation sufficient to maintain a dust level below the PEL/TLV.

#### Personal Protective Equipment

##### Respiratory Protection

A NIOSH approved particulate respirator is recommended in poorly ventilated areas or if the PEL/TLV is exceeded. OSHA's 29 CFR 1910.134 (Respiratory Protection Standard) must be followed whenever work conditions require respirator use.

##### Eye Protection

Safety glasses or goggles.

##### Skin

Gloves, protective clothing and/or barrier creams may be utilized if conditions warrant.

## Section 9: Physical and Chemical Properties

**a) Appearance:** Coated gypsum board with white/gray core

**(b) Odor:** None

**(c) Odor threshold:** Not available

**(d) pH :** ~7

**(e) Melting point/freezing point:** Not Available

**(f) Initial boiling point and boiling range:** Not Available

**(g) Flash point:** Not available

**(h) Evaporation rate:** Not available

**(i) Flammability (solid, gas):** Not flammable

**(j) Upper/lower flammability or explosive limits:** Not available

**(k) Vapor pressure:** Not available

- (l) **Vapor density:** Not available  
 (m) **Relative density:** 2.3 g/cc  
 (n) **Solubility(ies):** 2.1 g/L @ 20° C  
 (o) **Partition coefficient: n-octanol/water:** Not available  
 (p) **Auto-ignition temperature:** Not available  
 (q) **Decomposition temperature:** 1450°C  
 (r) **Viscosity:** Not available  
 (s) **Volatile organic compound (VOC) content:** None

## Section 10: Stability and Reactivity

- (a) **Reactivity:** No data available  
 (b) **Chemical stability:** Stable in dry environments  
 (c) **Possibility of hazardous reactions:** None known  
 (d) **Conditions to avoid (e.g., static discharge, shock, or vibration):** None known  
 (e) **Incompatible materials:** None  
 (f) **Hazardous decomposition products:** None known. Above 1450° C gypsum will decompose to calcium oxide (CaO), with releases of sulfur dioxide (SO<sub>2</sub>) and various oxides of carbon.

## Section 11: Toxicological Information

### Information on Toxicological effects

#### Information on likely routes of exposure

- Ingestion** Not a likely route of exposure. May result in obstruction or temporary irritation of the digestive tract.  
**Inhalation** Dust may irritate respiratory system. Chronic exposure may result in lung disease. (See below)  
**Skin contact** May cause irritation, itching, rash and/or redness, dry skin or dermatitis.  
**Eye contact** May cause mechanical irritation.

### Symptoms related to the physical, chemical and toxicological characteristics

Acute exposure to airborne dust concentrations in excess of the PEL/TLV may result in coughing, dyspnea, wheezing, and a burning irritation of the nose, throat, and upper respiratory tract, along with possible impaired pulmonary function. Chronic exposure to crystalline silica (a naturally occurring contaminant) in the respirable size has been shown to cause silicosis, a debilitating lung disease, and lung cancer.

Continued and prolonged contact may result in dry skin. Contact with dust and/or fiberglass may produce itching, rash and/or redness. Repeated or prolonged exposure may result in dermatitis.

### Toxicological data

No toxicological data is available for this product. Toxicological information for components of this product listed below.

- Acute toxicity** Gypsum: [OECD TG 420, Fixed dose procedure] Oral LD50 > 2,000-mg/kg b.w. for female rats (Sprague-Dawley)  
**Skin corrosion/irritation** Gypsum was not irritating to the skin of rabbits at 1, 24, 48 and 72 hours after removal of test patches [OECD TG 404]  
**Serious eye damage/eye irritation** Not available  
**Skin sensitization** There is no indication of skin sensitization in guinea pigs [OECD TG 406].  
**Respiratory sensitization** Not available  
**Sensitization** Not available  
**Mutagenicity** No evidence of mutagenicity on Ames Test.  
**Carcinogenicity** Not available

This product contains crystalline silica (quartz) as a naturally occurring impurity in some of the raw materials. The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen.

Exposures to respirable crystalline silica are not expected during the recommended use of this product. Industrial hygiene monitoring to date has not identified any detectable respirable crystalline silica in dust sampling conducted utilizing recommended application procedures. However, actual levels must be determined by workplace hygiene testing.



## Section 11: Toxicological Information (Continued)

Reproductive effects	Not available
Specific target organ toxicity – single exposure	Not available
Aspiration toxicity	Not available

## Section 12: Ecological Information

**(a) Ecotoxicity (aquatic and terrestrial, where available):** This product does not present an ecological hazard to the environment.

**(b) Persistence and degradability:** Unknown

**(c) Bioaccumulative potential:** Gypsum is a naturally occurring mineral. Biodegradation and/or bioaccumulation potential is not applicable.

**(d) Mobility in soil:** Unknown

**(e) Other adverse effects (such as hazardous to the ozone layer):** None known

## Section 13: Disposal Considerations

This material is not considered a hazardous waste. Dispose of according to Local, State, Federal, and Provincial Environmental Regulations.

## Section 14: Transport Information

This product is not a DOT hazardous material

Shipping Name: Same as product name

ICAO/IATA/IMO: Not applicable

## Section 15: Regulatory Information

All ingredients are included on the TSCA inventory.

### Federal Regulations

**SARA Title III:** Not listed under Sections 302, 304, and 313

**CERCLA:** Not listed

**RCRA:** Not listed

**OSHA:** Dust and potential respirable crystalline silica generated during product use may be hazardous.

### State Regulations

California Prop 65: Respirable crystalline silica is known to the state of California to cause cancer. Industrial hygiene monitoring during recommended use of this product failed to identify any respirable crystalline silica.

### Canada WHMIS

All components of this product are included in the Canadian Domestic Substances List (DSL).

Crystalline silica: WHMIS Classification D2A

**Section 16: Other Information**

**SDS Prepared by:** National Gypsum Company  
2001 Rexford Road  
Charlotte, NC 28211

**Phone Number:** (704) 551-5820

**Date of Preparation:** April 21, 2015

**Revision indicators and Date**

Effective Date Change: 6/1/2015 Supersedes: March 6, 2013

Format Changes: Conforms to OSHA 29CFR 1910.1200 (HCS)

**Key to Abbreviations**

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Services Number
CFR	Code of Federal Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
HEPA	High Efficiency Particulate Air
HCS	Hazard Communications Standard
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

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**Section 1: Product and Company Identification****Product Name/Identifier**

eXP Tile Backer

**Other means of identification**

Wallboard, Gypsum Board. Plasterboard, Drywall

**Recommended Use**

Interior building walls where moisture is a concern. Use per manufacturer's recommendations.

**Restrictions on Use**

Use in well-ventilated area and avoid breathing dust.

Avoid skin contact.

**Manufacturer/Supplier Details**

National Gypsum Company

2001 Rexford Road

Charlotte, NC 28211

**Emergency Telephone Number**

Director Quality Services

(704) 551-5820 - 24 Hour Emergency Response

Website: [www.nationalgypsum.com](http://www.nationalgypsum.com)

**Section 2: Hazards Identification****United States (US)**

According to OSHA 29CFR 1910.1200 (HCS)

**GHS Classification of the substance or mixture**

Not classified

**GHS Label Elements**

**Pictogram** None

**Signal Word** None

**Hazard Statements** None

**Precautionary Statements****Prevention**

Do not breathe dust.

Use personal protective equipment as required. (See Section 8)

Use engineering controls and wet methods to minimize dust.

**Response**

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

If on skin, wash with plenty of soap and water.

If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Get medical attention if exposed or concerned.

**Storage**

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

**Disposal**

Dispose of material in accordance with federal, state, and local regulations

### Section 3: Composition/Information on Ingredients

Chemical Name	Common name/ Synonym	Identifiers CAS Number	% (weight)	Impurities
Calcium Sulfate Dihydrate	Gypsum	13397-24-5	>91	Crystalline silica (CAS # 14808-60-7)
Hydrous phyllosilicate	Vermiculite	1318-00-9	<2	Crystalline silica (CAS # 14808-60-7)
Mixture-calcium, aluminum silicates, amorphous silica	Fiberglass, synthetic, vitreous, continuous	65997-17-3	<1	

### Section 4: First-Aid Measures

<b>Inhalation</b>	Remove exposed individual to fresh air immediately. If breathing difficulty persists, seek medical attention.
<b>Eye contact</b>	Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes. Remove contact lenses (if applicable). Seek medical attention if irritation persists.
<b>Skin contact</b>	Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present. Seek medical attention if irritation persists.
<b>Ingestion</b>	This product is not expected to be hazardous and no harmful effects are expected upon ingestion of small amounts. Larger amounts may cause abdominal discomfort or possible obstruction of the digestive tract. Seek medical attention if problems persist.

#### Medical Conditions aggravated by exposure

Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

### Section 5: Fire-Fighting Measures

#### Extinguishing Media

Dry chemical, foam, water, or extinguishing media appropriate for surrounding fire.

#### Unusual Fire and Explosion Hazards

Mixture poses no fire-related hazard.

#### Special hazards arising from the mixture

None known. Above 1450°C, material can decompose and release sulfur dioxide (SO<sub>2</sub>) and oxides of carbon.

#### Special Protective Equipment and Precautions for Firefighters

A SCBA is recommended to limit exposures to combustion products when fighting any fire.

### Section 6: Accidental Release Measures

#### Personal precautions, protective equipment and emergency procedures

No special precautions required.

General recommendations:

Wear appropriate Personal Protective Equipment. (See Section 8)

Maintain proper ventilation.

#### Environmental precautions

This product does not present an ecological hazard to the environment.

Dispose of in accordance with applicable federal, state, and local regulations.

#### Methods and materials for containment and cleaning up

Pick-up larger pieces to avoid a tripping hazard. Return large pieces of damaged/scraped material for recycling. Sweep or vacuum remaining material into a waste container for disposal. Use a light water spray to minimize dust generation. Maintain proper ventilation to minimize dust.

## Section 7: Handling and Storage

### Precautions for safe handling

Avoid breathing dust.  
Minimize generation of dust.  
Provide appropriate exhaust ventilation at places where dust is formed.  
Avoid contact with eyes, skin and clothing.  
Wear recommended personal protective equipment when handling. (See Section 8)

### Conditions for safe storage, including any incompatibilities

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.  
Store panels flat to minimize damage and warping.  
Do not stack panels too high when storing to minimize the risk of falling.

## Section 8: Exposure Controls/Personal Protection

### Control Parameters

Component	Exposure Limits	
	OSHA PEL (mg/m <sup>3</sup> )	ACGIH TLV (mg/m <sup>3</sup> )
Calcium Sulfate Dihydrate	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Crystalline Silica <sup>1</sup>	$[(10) / (\%SiO_2+2)]^{(R)}$ ; $[(30) / (\%SiO_2+2)]^{(T)}$	0.025 <sup>(R)</sup>
Vermiculite	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup> 3 <sup>(R)</sup>
Fiberglas, synthetic, vitreous, continuous	15 <sup>(T)</sup> 5 <sup>(R)</sup>	1 f/cc <sup>(R)</sup>

T- Total Dust

R-Respirable Dust

1-Present as an impurity in raw materials

### Exposure Controls

#### Appropriate Engineering Controls

Work/Hygiene Practices: Utilize methods to minimize dust production. Utilize wet methods, when appropriate, to reduce generation of dust.

Ventilation: Provide local and general exhaust ventilation sufficient to maintain a dust level below the PEL/TLV.

#### Personal Protective Equipment

##### Respiratory Protection

A NIOSH approved particulate respirator is recommended in poorly ventilated areas or if the PEL/TLV is exceeded. OSHA's 29 CFR 1910.134 (Respiratory Protection Standard) must be followed whenever work conditions require respirator use.

##### Eye Protection

Safety glasses or goggles.

##### Skin

Gloves, protective clothing and/or barrier creams may be utilized if conditions warrant.

## Section 9: Physical and Chemical Properties

**a) Appearance:** Coated gypsum board with white/gray core

**(b) Odor:** None

**(c) Odor threshold:** Not available

**(d) pH :** ~7

**(e) Melting point/freezing point:** Not Available

**(f) Initial boiling point and boiling range:** Not Available

**(g) Flash point:** Not available

**(h) Evaporation rate:** Not available

**(i) Flammability (solid, gas):** Not flammable

**(j) Upper/lower flammability or explosive limits:** Not available

**(k) Vapor pressure:** Not available

- (l) **Vapor density:** Not available  
 (m) **Relative density:** 2.3 g/cc  
 (n) **Solubility(ies):** 2.1 g/L @ 20° C  
 (o) **Partition coefficient: n-octanol/water:** Not available  
 (p) **Auto-ignition temperature:** Not available  
 (q) **Decomposition temperature:** 1450°C  
 (r) **Viscosity:** Not available  
 (s) **Volatile organic compound (VOC) content:** None

## Section 10: Stability and Reactivity

- (a) **Reactivity:** No data available  
 (b) **Chemical stability:** Stable in dry environments  
 (c) **Possibility of hazardous reactions:** None known  
 (d) **Conditions to avoid (e.g., static discharge, shock, or vibration):** None known  
 (e) **Incompatible materials:** None  
 (f) **Hazardous decomposition products:** None known. Above 1450° C gypsum will decompose to calcium oxide (CaO), with releases of sulfur dioxide (SO<sub>2</sub>) and various oxides of carbon.

## Section 11: Toxicological Information

### Information on Toxicological effects

#### Information on likely routes of exposure

- Ingestion** Not a likely route of exposure. May result in obstruction or temporary irritation of the digestive tract.  
**Inhalation** Dust may irritate respiratory system. Chronic exposure may result in lung disease. (See below)  
**Skin contact** May cause irritation, itching, rash and/or redness, dry skin or dermatitis.  
**Eye contact** May cause mechanical irritation.

#### Symptoms related to the physical, chemical and toxicological characteristics

Acute exposure to airborne dust concentrations in excess of the PEL/TLV may result in coughing, dyspnea, wheezing, and a burning irritation of the nose, throat, and upper respiratory tract, along with possible impaired pulmonary function. Chronic exposure to crystalline silica (a naturally occurring contaminant) in the respirable size has been shown to cause silicosis, a debilitating lung disease, and lung cancer.  
 Continued and prolonged contact may result in dry skin. Contact with dust and/or fiberglass may produce itching, rash and/or redness. Repeated or prolonged exposure may result in dermatitis.

#### Toxicological data

No toxicological data is available for this product. Toxicological information for components of this product listed below.

- Acute toxicity** Gypsum: [OECD TG 420, Fixed dose procedure] Oral LD50 > 2,000-mg/kg b.w. for female rats (Sprague-Dawley)  
**Skin corrosion/irritation** Gypsum was not irritating to the skin of rabbits at 1, 24, 48 and 72 hours after removal of test patches [OECD TG 404]  
**Serious eye damage/eye irritation** Not available  
**Skin sensitization** There is no indication of skin sensitization in guinea pigs [OECD TG 406].  
**Respiratory sensitization** Not available  
**Sensitization** Not available  
**Mutagenicity** No evidence of mutagenicity on Ames Test.  
**Carcinogenicity** Not available

This product contains crystalline silica (quartz) as a naturally occurring impurity in some of the raw materials. The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen. Exposures to respirable crystalline silica are not expected during the recommended use of this product. Industrial hygiene monitoring to date has not identified any detectable respirable crystalline silica in dust sampling conducted utilizing recommended application procedures. However, actual levels must be determined by workplace hygiene testing.

## Section 11: Toxicological Information (Continued)

Reproductive effects	Not available
Specific target organ toxicity – single exposure	Not available
Aspiration toxicity	Not available

## Section 12: Ecological Information

**(a) Ecotoxicity (aquatic and terrestrial, where available):** This product does not present an ecological hazard to the environment.

**(b) Persistence and degradability:** Unknown

**(c) Bioaccumulative potential:** Gypsum is a naturally occurring mineral. Biodegradation and/or bioaccumulation potential is not applicable.

**(d) Mobility in soil:** Unknown

**(e) Other adverse effects (such as hazardous to the ozone layer):** None known

## Section 13: Disposal Considerations

This material is not considered a hazardous waste. Dispose of according to Local, State, Federal, and Provincial Environmental Regulations.

## Section 14: Transport Information

This product is not a DOT hazardous material  
Shipping Name: Same as product name  
ICAO/IATA/IMO: Not applicable

## Section 15: Regulatory Information

All ingredients are included on the TSCA inventory.

### Federal Regulations

**SARA Title III:** Not listed under Sections 302, 304, and 313

**CERCLA:** Not listed

**RCRA:** Not listed

**OSHA:** Dust and potential respirable crystalline silica generated during product use may be hazardous.

### State Regulations

California Prop 65: Respirable crystalline silica is known to the state of California to cause cancer. Industrial hygiene monitoring during recommended use of this product failed to identify any respirable crystalline silica.

### Canada WHMIS

All components of this product are included in the Canadian Domestic Substances List (DSL).

Crystalline silica: WHMIS Classification D2A

## Section 16: Other Information

**SDS Prepared by:** National Gypsum Company  
2001 Rexford Road  
Charlotte, NC 28211

**Phone Number:** (704) 551-5820

**Date of Preparation:** April 21, 2015

### Revision indicators and Date

Effective Date Change: 6/1/2015 Supersedes: March 6, 2013

Format Changes: Conforms to OSHA 29CFR 1910.1200 (HCS)

### Key to Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Services Number
CFR	Code of Federal Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
HEPA	High Efficiency Particulate Air
HCS	Hazard Communications Standard
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

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**Section 1: Product and Company Identification****Product Name**

Miscellaneous Gypsum Products

**Product Identifiers**

**Gypsum**

**Land Plaster**

**Accelerator**

**Cement Rock**

**Agricultural Gypsum**

**Other means of identification**

None

**Recommended Use**

Accelerate set of gypsum plaster, Stabilize soil, Accelerate set of cement. Use per manufacturer's recommendations.

**Restrictions on Use**

Use in well-ventilated area and avoid breathing dust.

Avoid skin contact.

**Manufacturer/Supplier Details**

National Gypsum Company

2001 Rexford Road

Charlotte, NC 28211

**Emergency Telephone Number**

Director Quality Services

(704) 551-5820 - 24 Hour Emergency Response

Website: [www.nationalgypsum.com](http://www.nationalgypsum.com)

**Section 2: Hazards Identification****United States (US)**

According to OSHA 29CFR 1910.1200 (HCS)

**GHS Classification of the substance or mixture**

Specific target organ toxicity, repeated exposure – Category 2 (H-373)

Acute toxicity, inhalation - Category 4 (H-332)

Acute toxicity, dermal - Category 4 (H312)

**GHS Label Elements****Pictogram****Signal Word****Warning****Hazard Statements**

H-373

Causes damage to organs through prolonged or repeated exposure (lungs)

H-312 & 332

Harmful in contact with skin or inhaled.

**Precautionary Statements****Prevention**

Do not breathe dust.

Use personal protective equipment as required. (See Section 8)

Use engineering controls and wet methods to minimize dust.

**Section 2: Hazards Identification (Continued)****Response**

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

If on skin, wash with plenty of soap and water.

If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Get medical attention if exposed or concerned.

**Storage**

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

**Disposal**

Dispose of material in accordance with federal, state, and local regulations

**Section 3: Composition/Information on Ingredients**

Chemical Name	Common name/ Synonym	Identifiers CAS Number	% (weight)	Impurities
Calcium Sulfate Dihydrate	Gypsum, Landplaster	10101-41-4	>85	Crystalline silica (CAS # 14808-60-7)

**Section 4: First-Aid Measures****Inhalation**

Remove exposed individual to fresh air immediately. If breathing difficulty persists, seek medical attention.

**Eye contact**

Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes.

Remove contact lenses (if applicable). Seek medical attention if irritation persists.

**Skin contact**

Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present.

Seek medical attention if irritation persists.

**Ingestion**

This product is not expected to be hazardous and no harmful effects are expected upon ingestion of small amounts. Larger amounts may cause abdominal discomfort or possible obstruction of the digestive tract.

Seek medical attention if problems persist.

**Medical Conditions aggravated by exposure**

Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

**Section 5: Fire-Fighting Measures****Extinguishing Media**

Dry chemical, foam, water, or extinguishing media appropriate for surrounding fire.

**Unusual Fire and Explosion Hazards**

Mixture poses no fire-related hazard.

**Special hazards arising from the mixture**

None known. Above 1450°C, material can decompose and release sulfur dioxide (SO<sub>2</sub>) and oxides of carbon.

**Special Protective Equipment and Precautions for Firefighters**

A SCBA is recommended to limit exposures to combustion products when fighting any fire.

**Section 6: Accidental Release Measures****Personal precautions, protective equipment and emergency procedures**

No special precautions required.

General recommendations:

Wear appropriate Personal Protective Equipment. (See Section 8)

Maintain proper ventilation.

### Environmental precautions

This product does not present an ecological hazard to the environment.  
Dispose of in accordance with applicable federal, state, and local regulations.

### Methods and materials for containment and cleaning up

Vacuum spilled material utilizing a vacuum equipped with a HEPA filter. Avoid dry sweeping.  
Maintain proper ventilation to minimize dust.

## Section 7: Handling and Storage

### Precautions for safe handling

Avoid breathing dust.  
Minimize generation of dust.  
Provide appropriate exhaust ventilation at places where dust is formed.  
Avoid contact with eyes, skin and clothing.  
Wear recommended personal protective equipment when handling. (See Section 8)

### Conditions for safe storage, including any incompatibilities

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.  
Keep containers closed when not in use.

## Section 8: Exposure Controls/Personal Protection

### Control Parameters

Component	Exposure Limits	
	OSHA PEL (mg/m3)	ACGIH TLV (mg/m3)
Calcium Sulfate Dihydrate	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Crystalline Silica <sup>1</sup>	$\left[\frac{(10)}{(30)} / (\%SiO_2+2)\right]^{(R)}$ $\left[\frac{(10)}{(30)} / (\%SiO_2+2)\right]^{(T)}$	0.025 <sup>(R)</sup>

T- Total Dust

R-Respirable Dust

1 – Present as an impurity in raw materials

### Exposure Controls

#### Appropriate Engineering Controls

Work/Hygiene Practices: Utilize methods to minimize dust production. Utilize wet methods, when appropriate, to reduce generation of dust.

Ventilation: Provide local and general exhaust ventilation sufficient to maintain a dust level below the PEL/TLV.

### Personal Protective Equipment

#### Respiratory Protection

A NIOSH approved particulate respirator is recommended in poorly ventilated areas or if the PEL/TLV is exceeded. OSHA's 29 CFR 1910.134 (Respiratory Protection Standard) must be followed whenever work conditions require respirator use.

#### Eye Protection

Safety glasses or goggles.

#### Skin

Gloves, protective clothing and/or barrier creams may be utilized if conditions warrant.

## Section 9: Physical and Chemical Properties

- (a) **Appearance:** A white/gray powder
- (b) **Odor:** None
- (c) **Odor threshold:** Not available
- (d) **pH :** ~7
- (e) **Melting point/freezing point:** Not Available
- (f) **Initial boiling point and boiling range:** Not Available
- (g) **Flash point:** Not available
- (h) **Evaporation rate:** Not available
- (i) **Flammability (solid, gas):** Not flammable
- (j) **Upper/lower flammability or explosive limits:** Not available
- (k) **Vapor pressure:** Not available
- (l) **Vapor density:** Not available
- (m) **Relative density:** 2.3 g/cc
- (n) **Solubility(ies):** 2.1 g/L @ 20° C
- (o) **Partition coefficient: n-octanol/water:** Not available
- (p) **Auto-ignition temperature:** Not available
- (q) **Decomposition temperature:** 1450°C
- (r) **Viscosity:** Not available
- (s) **Volatile organic compound (VOC) content:** None

## Section 10: Stability and Reactivity

- (a) **Reactivity:** No data available
- (b) **Chemical stability:** Stable in dry environments
- (c) **Possibility of hazardous reactions:** None known
- (d) **Conditions to avoid (e.g., static discharge, shock, or vibration):** None known
- (e) **Incompatible materials:** Strong acids
- (f) **Hazardous decomposition products:** None known. Above 1450° C gypsum will decompose to calcium oxide (CaO), with releases of sulfur dioxide (SO<sub>2</sub>) and various oxides of carbon.

## Section 11: Toxicological Information

### Information on Toxicological effects

#### Information on likely routes of exposure

- Ingestion** Possible abdominal discomfort or obstruction.
- Inhalation** Dust may irritate respiratory system. Chronic exposure may result in lung disease. (See below)
- Skin contact** May cause irritation, rash, itching, or dermatitis.
- Eye contact** Dust may cause mechanical irritation.

### Symptoms related to the physical, chemical and toxicological characteristics

Continued and prolonged contact may result in dry skin. Contact with dust may produce itching, rash and/or redness. Repeated or prolonged exposure may result in dermatitis.

Acute exposure to airborne dust concentrations in excess of the PEL/TLV may result in coughing, dyspnea, wheezing, and a burning irritation of the nose, throat, and upper respiratory tract, along with possible impaired pulmonary function. Chronic exposure to crystalline silica (a naturally occurring contaminant) in the respirable size has been shown to cause silicosis, a debilitating lung disease, and lung cancer.

### Toxicological data

No toxicological data is available for this product. Toxicological information for components of this product listed below.

<b>Acute toxicity</b>	Gypsum: [OECD TG 420, Fixed dose procedure] Oral LD50 > 2,000-mg/kg b.w. for female rats (Sprague-Dawley)
<b>Skin corrosion/irritation</b>	Gypsum was not irritating to the skin of rabbits at 1, 24, 48 and 72 hours after removal of test patches [OECD TG 404]
<b>Serious eye damage/eye irritation</b>	Not available
<b>Skin sensitization</b>	There is no indication of skin sensitization in guinea pigs [OECD TG 406].
<b>Respiratory sensitization</b>	Not available
<b>Sensitization</b>	Not available
<b>Mutagenicity</b>	No evidence of mutagenicity on Ames Test.
<b>Carcinogenicity</b>	Not available
This product contains crystalline silica (quartz) as a naturally occurring impurity in some of the raw materials. The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen. Exposures to respirable crystalline silica are not expected during the recommended use of this product. Industrial hygiene monitoring to date has not identified any detectable respirable crystalline silica in dust sampling conducted utilizing recommended application procedures. However, actual levels must be determined by workplace hygiene testing.	
<b>Reproductive effects</b>	Not available
<b>Specific target organ toxicity – single exposure</b>	Not available
<b>Aspiration toxicity</b>	Not available

## Section 12: Ecological Information

- (a) Ecotoxicity (aquatic and terrestrial, where available):** This product does not present an ecological hazard to the environment.
- (b) Persistence and degradability:** Unknown
- (c) Bioaccumulative potential:** Gypsum is a naturally occurring mineral. Biodegradation and/or bioaccumulation potential is not applicable.
- (d) Mobility in soil:** Unknown
- (e) Other adverse effects (such as hazardous to the ozone layer):** None known

## Section 13: Disposal Considerations

This material is not considered a hazardous waste. Dispose of according to Local, State, Federal, and Provincial Environmental Regulations.

## Section 14: Transport Information

This product is not a DOT hazardous material  
Shipping Name: Same as product name  
ICAO/IATA/IMO: Not applicable

## Section 15: Regulatory Information

All ingredients are included on the TSCA inventory.

### Federal Regulations

**SARA Title III:** Not listed under Sections 302, 304, and 313

**CERCLA:** Not listed

**RCRA:** Not listed

**OSHA:** Dust and potential respirable crystalline silica generated during product use may be hazardous.

### State Regulations

California Prop 65: Respirable crystalline silica is known to the state of California to cause cancer. Industrial hygiene monitoring during recommended use of this product failed to identify any respirable crystalline silica.

### Canada WHMIS

All components of this product are included in the Canadian Domestic Substances List (DSL).

Crystalline silica: WHMIS Classification D2A

## Section 16: Other Information

**SDS Prepared by:** National Gypsum Company  
2001 Rexford Road  
Charlotte, NC 28211  
**Phone Number:** (704) 551-5820

**Date of Preparation:** April 5, 2015

### Revision indicators and Date

**Effective Date Change:** 6/1/2015 **Supersedes:** July 30, 2013  
**Format Changes:** Conforms to OSHA 29CFR 1910.1200 (HCS)

### Key to Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Services Number
CFR	Code of Federal Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
HEPA	High Efficiency Particulate Air
HCS	Hazard Communications Standard
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

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**Section 1: Product and Company Identification****Product Name**

Gold Bond® BRAND Retarder

**Product Identifiers**

*Retarder (Job Use and High Strength)*

**Recommended Use**

Material added to plaster to lengthen setting time. Use per manufacturer's recommendations.

**Restrictions on Use**

Use in well-ventilated area and avoid breathing dust.

Avoid skin contact.

**Manufacturer/Supplier Details**

National Gypsum Company  
2001 Rexford Road  
Charlotte, NC 28211

**Emergency Telephone Number**

Director Quality Services

(704) 551-5820 - 24 Hour Emergency Response

Website: [www.nationalgypsum.com](http://www.nationalgypsum.com)

**Section 2: Hazards Identification****United States (US)**

According to OSHA 29CFR 1910.1200 (HCS)

**GHS Classification of the substance or mixture**

Carcinogenicity - Category 1A - (H-350)

Specific target organ toxicity, repeated exposure – Category 1 (H-372)

Acute toxicity, inhalation - Category 4 (H-332)

Skin corrosion/irritation Category 2 (H314)

Serious eye damage/eye irritation – Category 1 (H-318)

**GHS Label Elements****Pictogram****Signal Word**

**Danger**

**Hazard Statements**

H-350

May cause cancer.

H-332, 372

Harmful if inhaled. Causes damage to organs (lungs) through prolonged or repeated exposure.

H-314, 318

Causes severe skin burns and eye damage

**Precautionary Statements****Prevention**

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

## Section 2: Hazards Identification (Continued)

Do not breathe dust.  
Use personal protective equipment as required. (See Section 8)  
Use in a well-ventilated area.  
Use engineering controls and wet methods to minimize dust.

### Response

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.  
If on skin, wash with plenty of soap and water.  
If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Get medical attention if exposed or concerned.

### Storage

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

### Disposal

Dispose of material in accordance with federal, state, and local regulations.

## Section 3: Composition/Information on Ingredients

Chemical Name	Common name/ Synonym	Identifiers CAS Number	% (weight)	Impurities
Calcium Sulfate-based intermediate	Proteinaceous Material	NE	<75	Crystalline silica (CAS # 14808-60-7)
Calcium Hydroxide	Hydrated Lime	1305-62-0	<25	Crystalline silica (CAS # 14808-60-7)
And may contain the following:				
Calcium Carbonate	Limestone	1317-65-3	<10	Crystalline silica (CAS # 14808-60-7)

NE-None established

## Section 4: First-Aid Measures

**Inhalation** Remove exposed individual to fresh air immediately. If breathing difficulty persists, seek medical attention.  
**Eye contact** Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes.  
Remove contact lenses (if applicable). Seek medical attention if irritation persists.  
**Skin contact** Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present. Seek medical attention if irritation persists.  
**Ingestion** May cause abdominal discomfort or possible obstruction of the digestive tract.  
Seek medical attention if problems persist.

### Medical Conditions aggravated by exposure

Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

## Section 5: Fire-Fighting Measures

### Extinguishing Media

Dry chemical, foam, water, or extinguishing media appropriate for surrounding fire.

### Unusual Fire and Explosion Hazards

Mixture poses no fire-related hazard.

### Special hazards arising from the mixture

None known. Above 1450°C, material can decompose and release sulfur dioxide (SO<sub>2</sub>), calcium oxide (CaO) and oxides of carbon.

### Special Protective Equipment and Precautions for Firefighters

A SCBA is recommended to limit exposures to combustion products when fighting any fire.



## Section 6: Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures

No special precautions required.

General recommendations:

Wear appropriate Personal Protective Equipment. (See Section 8)

Maintain proper ventilation.

### Environmental precautions

This product may be toxic to fish due to its high alkalinity.

Dispose of in accordance with applicable federal, state, and local regulations.

### Methods and materials for containment and cleaning up

Vacuum spilled material utilizing a vacuum equipped with a HEPA filter. Avoid dry sweeping.

Maintain proper ventilation to minimize dust.

## Section 7: Handling and Storage

### Precautions for safe handling

Avoid breathing dust.

Minimize generation of dust.

Provide appropriate exhaust ventilation at places where dust is formed.

Avoid contact with eyes, skin and clothing.

Wear recommended personal protective equipment when handling. (See Section 8)

### Conditions for safe storage, including any incompatibilities

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

Keep containers closed when not in use.

Avoid contact with acids and water.

## Section 8: Exposure Controls/Personal Protection

### Control Parameters

Component	Exposure Limits	
	OSHA PEL (mg/m3)	ACGIH TLV (mg/m3)
Calcium Carbonate (Limestone)	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Crystalline Silica <sup>1</sup>	$[(10) / (\%SiO_2+2)]^{(R)}$ $[(30) / (\%SiO_2+2)]^{(T)}$	0.025 <sup>(R)</sup>
Calcium Hydroxide (Hydrated Lime)	15 <sup>(T)</sup> 5 <sup>(R)</sup>	5 <sup>(R)</sup>

T- Total Dust

R-Respirable Dust

1 – Present as an impurity in raw materials

### Exposure Controls

#### Appropriate Engineering Controls

Work/Hygiene Practices: Utilize methods to minimize dust production. Utilize wet methods, when appropriate, to reduce generation of dust.

Ventilation: Provide local and general exhaust ventilation sufficient to maintain a dust level below the PEL/TLV.

### Personal Protective Equipment

#### Respiratory Protection

A NIOSH approved particulate respirator is recommended in poorly ventilated areas or if the PEL/TLV is exceeded. OSHA's 29 CFR 1910.134 (Respiratory Protection Standard) must be followed whenever work conditions require respirator use.

#### Eye Protection

Safety glasses or goggles.

#### Skin

Gloves, protective clothing and/or barrier creams may be utilized if conditions warrant.

## Section 9: Physical and Chemical Properties

- (a) **Appearance:** A gray/brown powder
- (b) **Odor:** None
- (c) **Odor threshold:** Not available
- (d) **pH :** ~12
- (e) **Melting point/freezing point:** Not Available
- (f) **Initial boiling point and boiling range:** Not Available
- (g) **Flash point:** Not available
- (h) **Evaporation rate:** Not available
- (i) **Flammability (solid, gas):** Not flammable
- (j) **Upper/lower flammability or explosive limits:** Not available
- (k) **Vapor pressure:** Not available
- (l) **Vapor density:** Not available
- (m) **Relative density:** Not available
- (n) **Solubility(ies):** slightly soluble in water
- (o) **Partition coefficient: n-octanol/water:** Not available
- (p) **Auto-ignition temperature:** Not available
- (q) **Decomposition temperature:** 1450°C
- (r) **Viscosity:** Not available
- (s) **Volatile organic compound (VOC) content:** None

## Section 10: Stability and Reactivity

- (a) **Reactivity:** No data available
- (b) **Chemical stability:** Stable in dry environments
- (c) **Possibility of hazardous reactions:** None known
- (d) **Conditions to avoid (e.g., static discharge, shock, or vibration):** None known
- (e) **Incompatible materials:** None
- (f) **Hazardous decomposition products:** None known. Above 1450° C gypsum will decompose to calcium oxide (CaO), with releases of sulfur dioxide (SO<sub>2</sub>) and various oxides of carbon.

## Section 11: Toxicological Information

### Information on Toxicological effects

#### Information on likely routes of exposure

- |                     |  |
|---------------------|--|
| <b>Ingestion</b>    | May cause gastrointestinal irritation.   |
| <b>Inhalation</b>   | Dust may irritate respiratory system. Chronic exposure may result in lung disease. (See below) |
| <b>Skin contact</b> | May cause burns, irritation, or dermatitis. (See below)  |
| <b>Eye contact</b>  | Contact with dust may cause burns and/or mechanical irritation.                                |

### Symptoms related to the physical, chemical and toxicological characteristics

Due to its alkalinity, material may cause severe irritation and/or burns to the eyes, skin and digestive system, if ingested. Continued and prolonged contact may also result in dry skin. Contact with dust may produce itching, rash and/or redness. Repeated or prolonged exposure may result in dermatitis.

Acute exposure to airborne dust concentrations in excess of the PEL/TLV may result in coughing, dyspnea, wheezing, and a burning irritation of the nose, throat, and upper respiratory tract, along with possible impaired pulmonary function. Chronic exposure to crystalline silica (a naturally occurring contaminant) in the respirable size has been shown to cause silicosis, a debilitating lung disease, and lung cancer.

### Toxicological data

No toxicological data is available for this product. Toxicological information for components of this product listed below.

### Section 11: Toxicological Information (Continued)

Acute toxicity	Not available
Skin corrosion/irritation	Not available
Serious eye damage/eye irritation	Not available
Skin sensitization	Not available
Respiratory sensitization	Not available
Sensitization	Not available
Mutagenicity	Not available
Carcinogenicity	Not available

This product contains crystalline silica (quartz) as a naturally occurring impurity in some of the raw materials. The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen.

Exposures to respirable crystalline silica are not expected during the recommended use of this product. Industrial hygiene monitoring to date has not identified any detectable respirable crystalline silica in dust sampling conducted utilizing recommended application procedures. However, actual levels must be determined by workplace hygiene testing.

Reproductive effects	Not available
Specific target organ toxicity – single exposure	Not available
Aspiration toxicity	Not available

### Section 12: Ecological Information

**(a) Ecotoxicity (aquatic and terrestrial, where available):** This product could be toxic to fish due to its high alkalinity.

**(b) Persistence and degradability:** Unknown

**(c) Bioaccumulative potential:** Gypsum and limestone are naturally occurring minerals. Biodegradation and/or bioaccumulation potential is not applicable.

**(d) Mobility in soil:** Unknown

**(e) Other adverse effects (such as hazardous to the ozone layer):** None known

### Section 13: Disposal Considerations

This material is not considered a hazardous waste. Dispose of according to Local, State, Federal, and Provincial Environmental Regulations.

### Section 14: Transport Information

This product is not a DOT hazardous material

Shipping Name: Same as product name

ICAO/IATA/IMO: Not applicable

### Section 15: Regulatory Information

All ingredients are included on the TSCA inventory.

#### Federal Regulations

**SARA Title III:** Not listed under Sections 302, 304, and 313

**CERCLA:** Not listed

**RCRA:** Not listed

**OSHA:** Dust and potential respirable crystalline silica generated during product use may be hazardous.

#### State Regulations

California Prop 65: Respirable crystalline silica is known to the state of California to cause cancer. Industrial hygiene monitoring during recommended use of this product failed to identify any respirable crystalline silica.

#### Canada WHMIS

All components of this product are included in the Canadian Domestic Substances List (DSL).

Crystalline silica: WHMIS Classification D2A

## Section 16: Other Information

**SDS Prepared by:** National Gypsum Company  
2001 Rexford Road  
Charlotte, NC 28211

**Phone Number:** (704) 551-5820

**Date of Preparation:** March 30, 2015

**Revision indicators and Date**

**Effective Date Change:** 6/1/2015      **Supersedes:** May 5, 2014

**Format Changes:** Conforms to OSHA 29CFR 1910.1200 (HCS)

### Key to Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Services Number
CFR	Code of Federal Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
HEPA	High Efficiency Particulate Air
HCS	Hazard Communications Standard
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

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**Section 1: Product and Company Identification****Product Name/Identifier**

1" Fire-Shield® Shaftliner Panel

**Other means of identification**

Wallboard, Gypsum Board. Plasterboard, Drywall

**Recommended Use**

Used as a component in cavity shaftwall systems, area separation walls and solid gypsum partitions. Use per manufacturer's recommendations.

**Restrictions on Use**

Use in well-ventilated area and avoid breathing dust.

Avoid skin contact.

**Manufacturer/Supplier Details**

National Gypsum Company

2001 Rexford Road

Charlotte, NC 28211

**Emergency Telephone Number**

Director Quality Services

(704) 551-5820 - 24 Hour Emergency Response

Website: [www.nationalgypsum.com](http://www.nationalgypsum.com)

**Section 2: Hazards Identification****United States (US)**

According to OSHA 29CFR 1910.1200 (HCS)

**GHS Classification of the substance or mixture**

Not classified

**GHS Label Elements**

**Pictogram** None

**Signal Word** None

**Hazard Statements** None

**Precautionary Statements****Prevention**

Do not breathe dust.

Use personal protective equipment as required. (See Section 8)

Use engineering controls and wet methods to minimize dust.

**Response**

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

If on skin, wash with plenty of soap and water.

If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Get medical attention if exposed or concerned.

**Storage**

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

**Disposal**

Dispose of material in accordance with federal, state, and local regulations

### Section 3: Composition/Information on Ingredients

Chemical Name	Common name/ Synonym	Identifiers CAS Number	% (weight)	Impurities
Calcium Sulfate Dihydrate	Gypsum	13397-24-5	85-95	Crystalline silica (CAS # 14808-60-7)
Cellulose	Paper Fiber	9004-34-6	5-15	

### Section 4: First-Aid Measures

<b>Inhalation</b>	Remove exposed individual to fresh air immediately. If breathing difficulty persists, seek medical attention.
<b>Eye contact</b>	Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes. Remove contact lenses (if applicable). Seek medical attention if irritation persists.
<b>Skin contact</b>	Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present. Seek medical attention if irritation persists.
<b>Ingestion</b>	This product is not expected to be hazardous and no harmful effects are expected upon ingestion of small amounts. Larger amounts may cause abdominal discomfort or possible obstruction of the digestive tract. Seek medical attention if problems persist.

#### Medical Conditions aggravated by exposure

Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

### Section 5: Fire-Fighting Measures

#### Extinguishing Media

Dry chemical, foam, water, or extinguishing media appropriate for surrounding fire.

#### Unusual Fire and Explosion Hazards

Mixture poses no fire-related hazard.

#### Special hazards arising from the mixture

None known. Above 1450°C, material can decompose and release sulfur dioxide (SO<sub>2</sub>) and oxides of carbon.

#### Special Protective Equipment and Precautions for Firefighters

A SCBA is recommended to limit exposures to combustion products when fighting any fire.

### Section 6: Accidental Release Measures

#### Personal precautions, protective equipment and emergency procedures

No special precautions required.

General recommendations:

Wear appropriate Personal Protective Equipment. (See Section 8)

Maintain proper ventilation.

#### Environmental precautions

This product does not present an ecological hazard to the environment.

Dispose of in accordance with applicable federal, state, and local regulations.

#### Methods and materials for containment and cleaning up

Pick-up larger pieces to avoid a tripping hazard. Return large pieces of damaged/scraped material for recycling. Sweep or vacuum remaining material into a waste container for disposal. Use a light water spray to minimize dust generation. Maintain proper ventilation to minimize dust.

## Section 7: Handling and Storage

### Precautions for safe handling

Avoid breathing dust.

Minimize generation of dust.

Provide appropriate exhaust ventilation at places where dust is formed.

Avoid contact with eyes, skin and clothing.

Wear recommended personal protective equipment when handling. (See Section 8)

### Conditions for safe storage, including any incompatibilities

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

Store panels flat to minimize damage and warping.

Do not stack panels too high when storing to minimize the risk of falling.

## Section 8: Exposure Controls/Personal Protection

### Control Parameters

Component	Exposure Limits	
	OSHA PEL (mg/m <sup>3</sup> )	ACGIH TLV (mg/m <sup>3</sup> )
Calcium Sulfate Dihydrate	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Crystalline Silica <sup>1</sup>	$[(10) / (\%SiO_2+2)]^{(R)}$ ; $[(30) / (\%SiO_2+2)]^{(T)}$	0.025 <sup>(R)</sup>
Cellulose	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>

T- Total Dust

R-Respirable Dust

1-Present as an impurity in raw materials

### Exposure Controls

#### Appropriate Engineering Controls

Work/Hygiene Practices: Utilize methods to minimize dust production. Utilize wet methods, when appropriate, to reduce generation of dust.

Ventilation: Provide local and general exhaust ventilation sufficient to maintain a dust level below the PEL/TLV.

#### Personal Protective Equipment

##### Respiratory Protection

A NIOSH approved particulate respirator is recommended in poorly ventilated areas or if the PEL/TLV is exceeded. OSHA's 29 CFR 1910.134 (Respiratory Protection Standard) must be followed whenever work conditions require respirator use.

##### Eye Protection

Safety glasses or goggles.

##### Skin

Gloves, protective clothing and/or barrier creams may be utilized if conditions warrant.

## Section 9: Physical and Chemical Properties

**a) Appearance:** Paper-faced gypsum board with white/gray core

**(b) Odor:** None

**(c) Odor threshold:** Not available

**(d) pH :** ~7

**(e) Melting point/freezing point:** Not Available

**(f) Initial boiling point and boiling range:** Not Available

**(g) Flash point:** Not available

**(h) Evaporation rate:** Not available

**(i) Flammability (solid, gas):** Not flammable

**(j) Upper/lower flammability or explosive limits:** Not available

**(k) Vapor pressure:** Not available

**(l) Vapor density:** Not available

**(m) Relative density:** 2.3 g/cc

- (n) **Solubility(ies):** 2.1 g/L @ 20° C  
(o) **Partition coefficient: n-octanol/water:** Not available  
(p) **Auto-ignition temperature:** Not available  
(q) **Decomposition temperature:** 1450°C  
(r) **Viscosity:** Not available  
(s) **Volatile organic compound (VOC) content:** None

## Section 10: Stability and Reactivity

- (a) **Reactivity:** No data available  
(b) **Chemical stability:** Stable in dry environments  
(c) **Possibility of hazardous reactions:** None known  
(d) **Conditions to avoid (e.g., static discharge, shock, or vibration):** None known  
(e) **Incompatible materials:** None  
(f) **Hazardous decomposition products:** None known. Above 1450° C gypsum will decompose to calcium oxide (CaO), with releases of sulfur dioxide (SO<sub>2</sub>) and various oxides of carbon.

## Section 11: Toxicological Information

### Information on Toxicological effects

#### Information on likely routes of exposure

- Ingestion** Not a likely route of exposure. May result in obstruction or temporary irritation of the digestive tract.  
**Inhalation** Dust may irritate respiratory system. Chronic exposure may result in lung disease. (See below)  
**Skin contact** May cause irritation, dry skin or dermatitis.  
**Eye contact** May cause mechanical irritation.

#### Symptoms related to the physical, chemical and toxicological characteristics

Acute exposure to airborne dust concentrations in excess of the PEL/TLV may result in coughing, dyspnea, wheezing, and a burning irritation of the nose, throat, and upper respiratory tract, along with possible impaired pulmonary function. Chronic exposure to crystalline silica (a naturally occurring contaminant) in the respirable size has been shown to cause silicosis, a debilitating lung disease, and lung cancer. Continued and prolonged contact may result in dry skin. Contact with dust and/or fiberglass may produce itching, rash and/or redness. Repeated or prolonged exposure may result in dermatitis.

#### Toxicological data

No toxicological data is available for this product. Toxicological information for components of this product listed below.

- |  |  |
|--|--|
| <b>Acute toxicity</b>                    | Gypsum: [OECD TG 420, Fixed dose procedure] Oral LD50 > 2,000-mg/kg b.w. for female rats (Sprague-Dawley)              |
| <b>Skin corrosion/irritation</b>         | Gypsum was not irritating to the skin of rabbits at 1, 24, 48 and 72 hours after removal of test patches [OECD TG 404] |
| <b>Serious eye damage/eye irritation</b> | Not available  |
| <b>Skin sensitization</b>                | There is no indication of skin sensitization in guinea pigs [OECD TG 406].   |
| <b>Respiratory sensitization</b>         | Not available  |
| <b>Sensitization</b>                     | Not available  |
| <b>Mutagenicity</b>                      | No evidence of mutagenicity on Ames Test.  |
| <b>Carcinogenicity</b>                   | Not available  |

This product contains crystalline silica (quartz) as a naturally occurring impurity in some of the raw materials. The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen. Exposures to respirable crystalline silica are not expected during the recommended use of this product. Industrial hygiene monitoring to date has not identified any detectable respirable crystalline silica in dust sampling conducted utilizing recommended application procedures. However, actual levels must be determined by workplace hygiene testing.



**Section 11: Toxicological Information (Continued)**

Reproductive effects	Not available
Specific target organ toxicity – single exposure	Not available
Aspiration toxicity	Not available

**Section 12: Ecological Information**

**(a) Ecotoxicity (aquatic and terrestrial, where available):** This product does not present an ecological hazard to the environment.

**(b) Persistence and degradability:** Unknown

**(c) Bioaccumulative potential:** Gypsum is a naturally occurring mineral. Biodegradation and/or bioaccumulation potential is not applicable.

**(d) Mobility in soil:** Unknown

**(e) Other adverse effects (such as hazardous to the ozone layer):** None known

**Section 13: Disposal Considerations**

This material is not considered a hazardous waste. Dispose of according to Local, State, Federal, and Provincial Environmental Regulations.

**Section 14: Transport Information**

This product is not a DOT hazardous material

Shipping Name: Same as product name

ICAO/IATA/IMO: Not applicable

**Section 15: Regulatory Information**

All ingredients are included on the TSCA inventory.

**Federal Regulations**

**SARA Title III:** Not listed under Sections 302, 304, and 313

**CERCLA:** Not listed

**RCRA:** Not listed

**OSHA:** Dust and potential respirable crystalline silica generated during product use may be hazardous.

**State Regulations**

California Prop 65: Respirable crystalline silica is known to the state of California to cause cancer. Industrial hygiene monitoring during recommended use of this product failed to identify any respirable crystalline silica.

**Canada WHMIS**

All components of this product are included in the Canadian Domestic Substances List (DSL).

Crystalline silica: WHMIS Classification D2A

**Section 16: Other Information**

**SDS Prepared by:** National Gypsum Company  
2001 Rexford Road  
Charlotte, NC 28211

**Phone Number:** (704) 551-5820

**Date of Preparation:** April 23, 2015

**Revision indicators and Date**

Effective Date Change: 6/1/2015 Supersedes: March 6, 2013  
Format Changes: Conforms to OSHA 29CFR 1910.1200 (HCS)

**Key to Abbreviations**

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Services Number
CFR	Code of Federal Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
HEPA	High Efficiency Particulate Air
HCS	Hazard Communications Standard
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This safety data sheet was prepared to comply with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

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**Section 1: Product and Company Identification****Product Name**

Gypsum Board Products

**Product Identifiers**

*½" Gypsum Board – Square Edge  
½" Gypsum Board – Tapered Edge  
¼" Gypsum Board – Tapered Edge  
3/8" Gypsum Board – Tapered Edge  
½" FS C Gypsum Board  
5/8" Fire-Shield® Gypsum Board  
5/8" Fire-Shield® C Gypsum Board  
½" Sta-Smooth® Gypsum Board  
½" FS C Sta-Smooth® Gypsum Board  
5/8" FS Sta-Smooth® Gypsum Board  
½" Durabase® Gypsum Board  
5/16" Durabase® Gypsum Board*

*½" High Strength Ceiling Board  
¼" High Flex® Gypsum Board  
½" Foil Back Gypsum Board  
5/8" FS Foil Back Gypsum Board  
½" High Strength LITE Gypsum Board  
5/8" High Strength Fire-Shield LITE Gypsum Board  
5/8" High Strength Fire-Shield LITE 30 Gypsum Board  
¾" Ultra-Shield™ Gypsum Board  
¾" Ultra-Shield™ XP® Gypsum Board  
½" MMR  
½" ThermalFOIL® Gypsum Board  
Gypsum Board Reclaim*

**Other means of identification**

Wallboard, Gypsum Board

**Recommended Use**

Gypsum Board products are designed for specific applications that require properties such as: fire resistance, moisture resistance, abrasion resistance, sag resistance and other properties required for applications in walls and ceiling assemblies. Use per manufacturer's recommendations.

**Restrictions on Use**

Use in well-ventilated area and avoid breathing dust.  
Avoid skin contact.

**Manufacturer/Supplier Details**

National Gypsum Company  
2001 Rexford Road  
Charlotte, NC 28211

**Emergency Telephone Number**

Director Quality Services  
(704) 551-5820 - 24 Hour Emergency Response  
Website: [www.nationalgypsum.com](http://www.nationalgypsum.com)

**Section 2: Hazards Identification****United States (US)**

According to OSHA 29CFR 1910.1200 (HCS)

**GHS Classification of the substance or mixture**

Not classified

**GHS Label Elements**

<b>Pictogram</b>	None
<b>Signal Word</b>	None
<b>Hazard Statements</b>	None

**Precautionary Statements****Prevention**

Do not breathe dust.

Use personal protective equipment as required. (See Section 8)

Use engineering controls and wet methods to minimize dust.

**Response**

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

If on skin, wash with plenty of soap and water.

If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Get medical attention if exposed or concerned.

**Storage**

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

**Disposal**

Dispose of material in accordance with federal, state, and local regulations

**Section 3: Composition/Information on Ingredients**

Chemical Name	Common name/ Synonym	Identifiers CAS Number	% (weight)	Impurities
Calcium Sulfate Dihydrate	Gypsum	13397-24-5	85-95	Crystalline silica (CAS # 14808-60-7)
Cellulose	Paper Fiber	9004-34-6	5-15	
And may contain:				
Mixture-calcium, aluminum silicates, amorphous silica	Fiberglass, synthetic, vitreous, continuous	65997-17-3	<1	

**Section 4: First-Aid Measures**

**Inhalation** Remove exposed individual to fresh air immediately. If breathing difficulty persists, seek medical attention.

**Eye contact** Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes.

Remove contact lenses (if applicable). Seek medical attention if irritation persists.

**Skin contact** Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present.

Seek medical attention if irritation persists.

**Ingestion** This product is not expected to be hazardous and no harmful effects are expected upon ingestion of small amounts. Larger amounts may cause abdominal discomfort or possible obstruction of the digestive tract.

Seek medical attention if problems persist.

**Medical Conditions aggravated by exposure**

Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

**Section 5: Fire-Fighting Measures****Extinguishing Media**

Dry chemical, foam, water, or extinguishing media appropriate for surrounding fire.

**Unusual Fire and Explosion Hazards**

Mixture poses no fire-related hazard.

**Special hazards arising from the mixture**

None known. Above 1450°C, material can decompose and release sulfur dioxide (SO<sub>2</sub>) and oxides of carbon.

**Special Protective Equipment and Precautions for Firefighters**

A SCBA is recommended to limit exposures to combustion products when fighting any fire.

## Section 6: Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures

No special precautions required.

General recommendations:

Wear appropriate Personal Protective Equipment. (See Section 8)

Maintain proper ventilation.

### Environmental precautions

This product does not present an ecological hazard to the environment.

Dispose of in accordance with applicable federal, state, and local regulations.

### Methods and materials for containment and cleaning up

Pick-up larger pieces to avoid a tripping hazard. Return large pieces of damaged/scraped material for recycling. Sweep or vacuum remaining material into a waste container for disposal. Use a light water spray to minimize dust generation. Maintain proper ventilation to minimize dust.

## Section 7: Handling and Storage

### Precautions for safe handling

Avoid breathing dust.

Minimize generation of dust.

Provide appropriate exhaust ventilation at places where dust is formed.

Avoid contact with eyes, skin and clothing.

Wear recommended personal protective equipment when handling. (See Section 8)

### Conditions for safe storage, including any incompatibilities

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

Store panels flat to minimize damage and warping.

Do not stack panels too high when storing to minimize the risk of falling.

## Section 8: Exposure Controls/Personal Protection

### Control Parameters

Component	Exposure Limits	
	OSHA PEL (mg/m <sup>3</sup> )	ACGIH TLV (mg/m <sup>3</sup> )
Calcium Sulfate Dihydrate	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Crystalline Silica <sup>1</sup>	$\left[\frac{(10)}{(\%SiO_2+2)}\right]^{(R)}$ $\left[\frac{(30)}{(\%SiO_2+2)}\right]^{(T)}$	0.025 <sup>(R)</sup>
Cellulose	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Fiberglas, synthetic, vitreous, continuous	15 <sup>(T)</sup> 5 <sup>(R)</sup>	1 f/cc <sup>(R)</sup>

T- Total Dust

R-Respirable Dust

1-Present as an impurity in raw materials

### Exposure Controls

#### Appropriate Engineering Controls

Work/Hygiene Practices: Utilize methods to minimize dust production. Utilize wet methods, when appropriate, to reduce generation of dust.

Ventilation: Provide local and general exhaust ventilation sufficient to maintain a dust level below the PEL/TLV.

#### Personal Protective Equipment

##### Respiratory Protection

A NIOSH approved particulate respirator is recommended in poorly ventilated areas or if the PEL/TLV is exceeded. OSHA's 29 CFR 1910.134 (Respiratory Protection Standard) must be followed whenever work conditions require respirator use.

##### Eye Protection

Safety glasses or goggles.

##### Skin

Gloves, protective clothing and/or barrier creams may be utilized if conditions warrant.

## Section 9: Physical and Chemical Properties

- (a) **Appearance:** A white/gray gypsum core wrapped with paper. Surface finish will vary with product.
- (b) **Odor:** None
- (c) **Odor threshold:** Not available
- (d) **pH :** ~7
- (e) **Melting point/freezing point:** Not Available
- (f) **Initial boiling point and boiling range:** Not Available
- (g) **Flash point:** Not available
- (h) **Evaporation rate:** Not available
- (i) **Flammability (solid, gas):** Not flammable
- (j) **Upper/lower flammability or explosive limits:** Not available
- (k) **Vapor pressure:** Not available
- (l) **Vapor density:** Not available
- (m) **Relative density:** 2.3 g/cc
- (n) **Solubility(ies):** 2.1 g/L @ 20° C
- (o) **Partition coefficient: n-octanol/water:** Not available
- (p) **Auto-ignition temperature:** Not available
- (q) **Decomposition temperature:** 1450°C
- (r) **Viscosity:** Not available
- (s) **Volatile organic compound (VOC) content:** None

## Section 10: Stability and Reactivity

- (a) **Reactivity:** No data available
- (b) **Chemical stability:** Stable in dry environments
- (c) **Possibility of hazardous reactions:** None known
- (d) **Conditions to avoid (e.g., static discharge, shock, or vibration):** None known
- (e) **Incompatible materials:** None
- (f) **Hazardous decomposition products:** None known. Above 1450° C gypsum will decompose to calcium oxide (CaO), with releases of sulfur dioxide (SO<sub>2</sub>) and various oxides of carbon.

## Section 11: Toxicological Information

### Information on Toxicological effects

#### Information on likely routes of exposure

- Ingestion** Not a likely route of exposure. May result in obstruction or temporary irritation of the digestive tract.
- Inhalation** Dust may irritate respiratory system. Chronic exposure may result in lung disease. (See below)
- Skin contact** May cause irritation, itching, rash and/or redness, dry skin or dermatitis.
- Eye contact** May cause mechanical irritation.

#### Symptoms related to the physical, chemical and toxicological characteristics

Acute exposure to airborne dust concentrations in excess of the PEL/TLV may result in coughing, dyspnea, wheezing, and a burning irritation of the nose, throat, and upper respiratory tract, along with possible impaired pulmonary function. Chronic exposure to crystalline silica (a naturally occurring contaminant) in the respirable size has been shown to cause silicosis, a debilitating lung disease, and lung cancer.

Continued and prolonged contact may result in dry skin. Contact with dust and/or fiberglass may produce itching, rash and/or redness. Repeated or prolonged exposure may result in dermatitis.

#### Toxicological data

No toxicological data is available for this product. Toxicological information for components of this product listed below.

- Acute toxicity** Gypsum: [OECD TG 420, Fixed dose procedure] Oral LD50 > 2,000-mg/kg b.w. for female rats (Sprague-Dawley)

**Skin corrosion/irritation** Gypsum was not irritating to the skin of rabbits at 1, 24, 48 and 72 hours after removal of test patches [OECD TG 404]

**Serious eye damage/eye irritation** Not available

**Skin sensitization** There is no indication of skin sensitization in guinea pigs [OECD TG 406].

**Respiratory sensitization** Not available

**Sensitization** Not available

**Mutagenicity** No evidence of mutagenicity on Ames Test.

**Carcinogenicity** Not available

This product contains crystalline silica (quartz) as a naturally occurring impurity in some of the raw materials. The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen.

Exposures to respirable crystalline silica are not expected during the recommended use of this product. Industrial hygiene monitoring to date has not identified any detectable respirable crystalline silica in dust sampling conducted utilizing recommended application procedures. However, actual levels must be determined by workplace hygiene testing.

**Reproductive effects** Not available

**Specific target organ toxicity – single exposure** Not available

**Aspiration toxicity** Not available

## Section 12: Ecological Information

**(a) Ecotoxicity (aquatic and terrestrial, where available):** This product does not present an ecological hazard to the environment.

**(b) Persistence and degradability:** Unknown

**(c) Bioaccumulative potential:** Gypsum is a naturally occurring mineral. Biodegradation and/or bioaccumulation potential is not applicable.

**(d) Mobility in soil:** Unknown

**(e) Other adverse effects (such as hazardous to the ozone layer):** None known

## Section 13: Disposal Considerations

This material is not considered a hazardous waste. Dispose of according to Local, State, Federal, and Provincial Environmental Regulations.

## Section 14: Transport Information

This product is not a DOT hazardous material

Shipping Name: Same as product name

ICAO/IATA/IMO: Not applicable

## Section 15: Regulatory Information

All ingredients are included on the TSCA inventory.

### Federal Regulations

**SARA Title III:** Not listed under Sections 302, 304, and 313

**CERCLA:** Not listed

**RCRA:** Not listed

**OSHA:** Dust and potential respirable crystalline silica generated during product use may be hazardous.

### State Regulations

California Prop 65: Respirable crystalline silica is known to the state of California to cause cancer. Industrial hygiene monitoring during recommended use of this product failed to identify any respirable crystalline silica.

### Canada WHMIS

All components of this product are included in the Canadian Domestic Substances List (DSL).

Crystalline silica: WHMIS Classification D2A

## Section 16: Other Information

**SDS Prepared by:** National Gypsum Company  
2001 Rexford Road  
Charlotte, NC 28211  
**Phone Number:** (704) 551-5820

**Date of Preparation:** April 20, 2015

### Revision indicators and Date

**Effective Date Change:** 6/1/2015 **Supersedes:** April 1, 2015  
**Format Changes:** Conforms to OSHA 29CFR 1910.1200 (HCS)

### Key to Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Services Number
CFR	Code of Federal Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
HEPA	High Efficiency Particulate Air
HCS	Hazard Communications Standard
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This safety data sheet was prepared to comply with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

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**Section 1: Product and Company Identification****Product Name**

PermaBase® BRAND Cement Board Products

**Product Identifiers****PermaBase****PermaBase UltraBacker****PermaBase DEK****PermaBase Flex****PermaBase Plus****Other means of identification**

Tile Backer Board, Cementitious Backer Board (CBU)

**Recommended Use**

Underlayment for ceramic tile on floors, countertops, EIFS systems. Use per manufacturer's recommendations.

**Restrictions on Use**

Use in well-ventilated area and avoid breathing dust.

Avoid skin contact.

**Manufacturer/Supplier Details**

National Gypsum Company

2001 Rexford Road

Charlotte, NC 28211

**In Canada:**

UNIFIX INC. A subsidiary of National Gypsum Company

35, Unifix Street

Bromont, QC J2L 1N5 CANADA

**Emergency Telephone Number**

Director Quality Services

(704) 551-5820 - 24 Hour Emergency Response

Website: [www.nationalgypsum.com](http://www.nationalgypsum.com)

1-450-534-0955 or toll free 1-800-461-0955 (8h00 -17h00)

e-mail: [info@unifixinc.com](mailto:info@unifixinc.com)Website: [www.unifixinc.com](http://www.unifixinc.com)**Section 2: Hazards Identification****United States (US)**

According to OSHA 29CFR 1910.1200 (HCS)

**GHS Classification of the substance or mixture**

Carcinogenicity - Category 1A - (H-350)

Specific target organ toxicity, repeated exposure – Category 1 (H-372)

Acute toxicity, inhalation - Category 4 (H-332)

Skin corrosion/irritation Category 2 (H315)

Serious eye irritation – Category 2A (H-319)

**GHS Label Elements****Pictogram****Signal Word****Danger****Hazard Statements**

H-350

H-332, 372

May cause cancer.

Harmful if inhaled. Causes damage to organs (lungs) through prolonged or repeated exposure.

H-315, 319

Causes skin irritation and serious eye irritation

**Precautionary Statements****Prevention**

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Do not breathe dust.

Use personal protective equipment as required. (See Section 8)

Use engineering controls and wet methods to minimize dust.

## Section 2: Hazards Identification (Continued)

### Response

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

If on skin, wash with plenty of soap and water. If skin irritation occurs, get medical attention.

If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if exposed or concerned.

### Storage

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

### Disposal

Dispose of material in accordance with federal, state, and local regulations.

## Section 3: Composition/Information on Ingredients

Chemical Name	Common name/ Synonym	Identifiers CAS Number	% (weight)	Impurities
Silicon Dioxide (SiO <sub>2</sub> )	Sand, quartz	14808-60-7	<50	
In CANADA- Calcium Carbonate	Limestone, industrial sand	1317-65-3	<50	Crystalline silica (CAS # 14808-60-7)
Mixture-calcium and aluminum silicates	Portland Cement	65997-15-1	<25	Crystalline silica (CAS # 14808-60-7)
Mixture-silicates, aluminates	Pozzolan, fly ash	68131-74-8	<25	Crystalline silica (CAS # 14808-60-7)
Mixture-calcium aluminates	High Alumina Cement	65997-16-2	<6	Crystalline silica (CAS # 14808-60-7)
Mixture-calcium, aluminum silicates, amorphous silica	Fiberglass scrim or fiberglass mat laminate	65997-17-3	<5	
Calcium Hydroxide	Hydrated lime	1305-62-0	<2	Crystalline silica (CAS # 14808-60-7)

## Section 4: First-Aid Measures

**Inhalation** Remove exposed individual to fresh air immediately. If breathing difficulty persists, seek medical attention.

**Eye contact** Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes.

Remove contact lenses (if applicable). Seek medical attention if irritation persists.

**Skin contact** Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present. Seek medical attention if irritation persists.

**Ingestion** This product is not expected to be hazardous and no harmful effects are expected upon ingestion of small amounts. Larger amounts may cause abdominal discomfort or possible obstruction of the digestive tract. Seek medical attention if problems persist.

### Medical Conditions aggravated by exposure

Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

**Most important symptoms/effects, acute and delayed:** See Section 11. (Toxicological Information)

## Section 5: Fire-Fighting Measures

### Extinguishing Media

Dry chemical, foam, water, or extinguishing media appropriate for surrounding fire.

### Unusual Fire and Explosion Hazards

Mixture poses no fire-related hazard.

### Special hazards arising from the mixture

None known

### Special Protective Equipment and Precautions for Firefighters

A SCBA is recommended to limit exposures to combustion products when fighting any fire.

## Section 6: Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures

Product is an article composite.

General recommendations:

Wear appropriate Personal Protective Equipment. (See Section 8)

Maintain proper ventilation.

### Environmental precautions

This product could be toxic to fish due to its high alkalinity from the Portland Cement.

Dispose of in accordance with applicable federal, state, and local regulations.

### Methods and materials for containment and cleaning up

Pick-up larger pieces to avoid a tripping hazard.

Sweep or vacuum remaining material into a waste container for disposal.

Use a light water spray to minimize dust generation.

## Section 7: Handling and Storage

### Precautions for safe handling

Avoid breathing dust.

Minimize generation of dust.

Provide appropriate exhaust ventilation at places where dust is formed.

Avoid contact with eyes, skin and clothing.

Wear recommended personal protective equipment when handling. (See Section 8)

### Conditions for safe storage, including any incompatibilities

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

Store panels flat to minimize damage.

Do not stack panels too high when storing to minimize the risk of falling.

Avoid contact with strong acids.

## Section 8: Exposure Controls/Personal Protection

### Control Parameters

	Exposure Limits	
Component	OSHA PEL (mg/m <sup>3</sup> )	ACGIH TLV (mg/m <sup>3</sup> )
Portland Cement	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
High Alumina Cement	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Pozzolan	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Sand	$\left[\frac{(10)}{(30)} / (\%SiO_2+2)\right]^{(R)}$ ; $\left[\frac{(10)}{(30)} / (\%SiO_2+2)\right]^{(T)}$	0.025 <sup>(R)</sup>
Crystalline Silica (Quartz) <sup>1</sup>	$\left[\frac{(10)}{(30)} / (\%SiO_2+2)\right]^{(R)}$ ; $\left[\frac{(10)}{(30)} / (\%SiO_2+2)\right]^{(T)}$	0.025 <sup>(R)</sup>
Fiberglass Scrim	15 <sup>(T)</sup> 5 <sup>(R)</sup>	1 f/cc <sup>(R)</sup>
Calcium Hydroxide (Hydrated Lime)	15 <sup>(T)</sup> 5 <sup>(R)</sup>	5 <sup>(R)</sup>
Calcium Carbonate	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>

1 – Present as an impurity in raw materials

T- Total Dust

R- Respirable Dust

**Exposure Controls****Appropriate Engineering Controls**

Work/Hygiene Practices: Utilize methods to minimize dust production. Utilize wet methods, when appropriate, to reduce generation of dust.

Ventilation: Provide local and general exhaust ventilation sufficient to maintain a dust level below the PEL/TLV.

**Personal Protective Equipment****Respiratory Protection**

A NIOSH approved particulate respirator is recommended in poorly ventilated areas or if the PEL/TLV is exceeded. OSHA's 29 CFR 1910.134 (Respiratory Protection Standard) must be followed whenever work conditions require respirator use.

**Eye Protection**

Safety glasses or goggles.

**Skin**

Gloves, protective clothing and/or barrier creams may be utilized if conditions warrant.

**Section 9: Physical and Chemical Properties**

- (a) **Appearance:** Gray solid
- (b) **Odor:** Slight organic odor upon opening that dissipates quickly.
- (c) **Odor threshold:** Not available
- (d) **pH :** ~12
- (e) **Melting point/freezing point:** Not Available
- (f) **Initial boiling point and boiling range:** Not Available
- (g) **Flash point:** Not available
- (h) **Evaporation rate:** Not available
- (i) **Flammability (solid, gas):** Not flammable
- (j) **Upper/lower flammability or explosive limits:** Not available
- (k) **Vapor pressure:** Not available
- (l) **Vapor density:** Not available
- (m) **Relative density:** ~1.2
- (n) **Solubility(ies):** Slightly soluble in water
- (o) **Partition coefficient: n-octanol/water:** Not available
- (p) **Auto-ignition temperature:** Not available
- (q) **Decomposition temperature:** Unknown
- (r) **Viscosity:** Not available
- (s) **VOC (Volatile Organic Compound):** N/A

**Section 10: Stability and Reactivity**

- (a) **Reactivity:** No data available
- (b) **Chemical stability:** Stable in dry environments
- (c) **Possibility of hazardous reactions:** None known
- (d) **Conditions to avoid (e.g., static discharge, shock, or vibration):** Contact with strong acids.
- (e) **Incompatible materials:** Strong acids
- (f) **Hazardous decomposition products:** None known.

**Section 11: Toxicological Information****Information on Toxicological effects****Information on likely routes of exposure**

- |                     |  |
|---------------------|--|
| <b>Ingestion</b>    | May cause gastrointestinal irritation.   |
| <b>Inhalation</b>   | Dust may irritate respiratory system. Chronic exposure may result in lung disease. (See below) |
| <b>Skin contact</b> | May cause irritation, itching or dermatitis. (See below)                                       |
| <b>Eye contact</b>  | Contact with dust may cause mechanical irritation.   |

**Symptoms related to the physical, chemical and toxicological characteristics**

Acute exposure to airborne dust concentrations in excess of the PEL/TLV may result in coughing, dyspnea, wheezing, and a burning irritation of the nose, throat, and upper respiratory tract, along with possible impaired pulmonary function. Chronic exposures may result in lung disease. (Silicosis and/or lung cancer)

Contact with wet Portland Cement may cause severe irritation, redness, and possible burns. Continued and prolonged contact may result in drying of the skin. Contact with dust or glass fibers may produce itching, rash and/or redness. Repeated or prolonged exposure may result in dermatitis.

**Toxicological data**

No toxicological data is available for this product. Toxicological information for components of this product listed below.

<b>Acute toxicity</b>	Not available
<b>Skin corrosion/irritation</b>	Not available
<b>Serious eye damage/eye irritation</b>	Not available
<b>Skin sensitization</b>	Not available
<b>Respiratory sensitization</b>	Not available
<b>Sensitization</b>	Not available
<b>Mutagenicity</b>	Not available
<b>Carcinogenicity</b>	Not available

This product contains crystalline silica. (quartz) The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen.

<b>Reproductive effects</b>	Not available
<b>Specific target organ toxicity – single exposure</b>	Not available
<b>Aspiration toxicity</b>	Not available

**Section 12: Ecological Information**

**(a) Ecotoxicity (aquatic and terrestrial, where available):** This product could be toxic to fish due to its high alkalinity from the Portland Cement. No studies are available.

**(b) Persistence and degradability:** Unknown

**(c) Bioaccumulative potential:** Unknown.

**(d) Mobility in soil:** Unknown

**(e) Other adverse effects (such as hazardous to the ozone layer):** None known

**Section 13: Disposal Considerations**

This material is not considered a hazardous waste. Dispose of according to Local, State, Federal, and Provincial Environmental Regulations.

**Section 14: Transport Information**

This product is not a DOT hazardous material

Shipping Name: Same as product name

ICAO/IATA/IMO: Not applicable

**Section 15: Regulatory Information**

All ingredients are included on the TSCA inventory.

**Federal Regulations**

**SARA Title III:** Not listed under Sections 302, 304, and 313

**CERCLA:** Not listed

**RCRA:** Not listed

**OSHA:** Dust and potential respirable crystalline silica generated during product use may be hazardous.

**State Regulations**

California Prop 65: Respirable crystalline silica is known to the state of California to cause cancer.

**Canada WHMIS**

All components of this product are included in the Canadian Domestic Substances List (DSL).

Crystalline silica: WHMIS Classification D2A

**Section 16: Other Information**

**SDS Prepared by:** National Gypsum Company  
2001 Rexford Road  
Charlotte, NC 28211

**Phone Number:** (704) 551-5820

**Date of Preparation:** July 16, 2015

**Revision indicators and Date**

Effective Date Change: 7/16/2015

Supersedes: 6/1/2015

Format Changes: Conforms to OSHA 29CFR 1910.1200 (HCS)  
Compliant with the 2015 Canadian Workplace Hazardous Materials Information System (WHMIS 2015), the Canadian Hazardous Products Act, and the Controlled Products Regulations. (CPR)

**Key to Abbreviations**

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Services Number
CFR	Code of Federal Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
HEPA	High Efficiency Particulate Air
HCS	Hazard Communications Standard
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This safety data sheet was prepared to comply with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

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**Section 1: Product and Company Identification****Product Name**

SoundBreak® XP® Gypsum Board

**Product Identifiers**

*1/2" SoundBreak® XP® Gypsum Board*

*5/8" SoundBreak® XP® Gypsum Board*

*5/16" XP® Fire-Rated Radius Wall Gypsum Board*

**Other means of identification**

Wallboard, Gypsum Board, Plasterboard, Drywall

**Recommended Use**

Construction of high STC wall systems. Use per manufacturer's recommendations.

**Restrictions on Use**

Use in well-ventilated area and avoid breathing dust.

Avoid skin contact.

**Manufacturer/Supplier Details**

National Gypsum Company

2001 Rexford Road

Charlotte, NC 28211

**Emergency Telephone Number**

Director Quality Services

(704) 551-5820 - 24 Hour Emergency Response

Website: [www.nationalgypsum.com](http://www.nationalgypsum.com)

**Section 2: Hazards Identification****United States (US)**

According to OSHA 29CFR 1910.1200 (HCS)

**GHS Classification of the substance or mixture**

Not classified

**GHS Label Elements**

**Pictogram** None

**Signal Word** None

**Hazard Statements** None

**Precautionary Statements****Prevention**

Do not breathe dust.

Use personal protective equipment as required. (See Section 8)

Use engineering controls and wet methods to minimize dust.

**Response**

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

If on skin, wash with plenty of soap and water.

If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Get medical attention if exposed or concerned.

**Storage**

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

**Disposal**

Dispose of material in accordance with federal, state, and local regulations

### Section 3: Composition/Information on Ingredients

Chemical Name	Common name/ Synonym	Identifiers CAS Number	% (weight)	Impurities
Calcium Sulfate Dihydrate	Gypsum	13397-24-5	85-95	Crystalline silica (CAS # 14808-60-7)
Cellulose	Paper Fiber	9004-34-6	5-15	
Mixture-Proprietary Polymer Additives			2-3	
And may contain:				
Mixture-calcium, aluminum silicates, amorphous silica	Fiberglass, synthetic, vitreous, continuous	65997-17-3	<1	

### Section 4: First-Aid Measures

<b>Inhalation</b>	Remove exposed individual to fresh air immediately. If breathing difficulty persists, seek medical attention.
<b>Eye contact</b>	Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes. Remove contact lenses (if applicable). Seek medical attention if irritation persists.
<b>Skin contact</b>	Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present. Seek medical attention if irritation persists.
<b>Ingestion</b>	This product is not expected to be hazardous and no harmful effects are expected upon ingestion of small amounts. Larger amounts may cause abdominal discomfort or possible obstruction of the digestive tract. Seek medical attention if problems persist.

#### Medical Conditions aggravated by exposure

Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

### Section 5: Fire-Fighting Measures

#### Extinguishing Media

Dry chemical, foam, water, or extinguishing media appropriate for surrounding fire.

#### Unusual Fire and Explosion Hazards

Mixture poses no fire-related hazard.

#### Special hazards arising from the mixture

None known. Above 1450°C, material can decompose and release sulfur dioxide (SO<sub>2</sub>) and oxides of carbon.

#### Special Protective Equipment and Precautions for Firefighters

A SCBA is recommended to limit exposures to combustion products when fighting any fire.

### Section 6: Accidental Release Measures

#### Personal precautions, protective equipment and emergency procedures

No special precautions required.

General recommendations:

Wear appropriate Personal Protective Equipment. (See Section 8)

Maintain proper ventilation.

#### Environmental precautions

This product does not present an ecological hazard to the environment.

Dispose of in accordance with applicable federal, state, and local regulations.



### Methods and materials for containment and cleaning up

Pick-up larger pieces to avoid a tripping hazard. Return large pieces of damaged/scraped material for recycling. Sweep or vacuum remaining material into a waste container for disposal. Use a light water spray to minimize dust generation. Maintain proper ventilation to minimize dust.

## Section 7: Handling and Storage

### Precautions for safe handling

Avoid breathing dust.

Minimize generation of dust.

Provide appropriate exhaust ventilation at places where dust is formed.

Avoid contact with eyes, skin and clothing.

Wear recommended personal protective equipment when handling. (See Section 8)

### Conditions for safe storage, including any incompatibilities

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

Store panels flat to minimize damage and warping.

Do not stack panels too high when storing to minimize the risk of falling.

## Section 8: Exposure Controls/Personal Protection

### Control Parameters

Component	Exposure Limits	
	OSHA PEL (mg/m3)	ACGIH TLV (mg/m3)
Calcium Sulfate Dihydrate	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Crystalline Silica <sup>1</sup>	$[(10) / (\%SiO_2+2)]^{(R)}$ ; $[(30) / (\%SiO_2+2)]^{(T)}$	0.025 <sup>(R)</sup>
Cellulose	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Fiberglas, synthetic, vitreous, continuous	15 <sup>(T)</sup> 5 <sup>(R)</sup>	1 f/cc <sup>(R)</sup>

T- Total Dust

R-Respirable Dust

1-Present as an impurity in raw materials

### Exposure Controls

#### Appropriate Engineering Controls

Work/Hygiene Practices: Utilize methods to minimize dust production. Utilize wet methods, when appropriate, to reduce generation of dust.

Ventilation: Provide local and general exhaust ventilation sufficient to maintain a dust level below the PEL/TLV.

### Personal Protective Equipment

#### Respiratory Protection

A NIOSH approved particulate respirator is recommended in poorly ventilated areas or if the PEL/TLV is exceeded. OSHA's 29 CFR 1910.134 (Respiratory Protection Standard) must be followed whenever work conditions require respirator use.

#### Eye Protection

Safety glasses or goggles.

#### Skin

Gloves, protective clothing and/or barrier creams may be utilized if conditions warrant.

## Section 9: Physical and Chemical Properties

- (a) **Appearance:** Paper faced gypsum board with white/gray core
- (b) **Odor:** None
- (c) **Odor threshold:** Not available
- (d) **pH :** ~7
- (e) **Melting point/freezing point:** Not Available
- (f) **Initial boiling point and boiling range:** Not Available
- (g) **Flash point:** Not available
- (h) **Evaporation rate:** Not available
- (i) **Flammability (solid, gas):** Not flammable
- (j) **Upper/lower flammability or explosive limits:** Not available
- (k) **Vapor pressure:** Not available
- (l) **Vapor density:** Not available
- (m) **Relative density:** 2.3 g/cc
- (n) **Solubility(ies):** 2.1 g/L @ 20° C
- (o) **Partition coefficient: n-octanol/water:** Not available
- (p) **Auto-ignition temperature:** Not available
- (q) **Decomposition temperature:** 1450°C
- (r) **Viscosity:** Not available
- (s) **Volatile organic compound (VOC) content:** None

## Section 10: Stability and Reactivity

- (a) **Reactivity:** No data available
- (b) **Chemical stability:** Stable in dry environments
- (c) **Possibility of hazardous reactions:** None known
- (d) **Conditions to avoid (e.g., static discharge, shock, or vibration):** None known
- (e) **Incompatible materials:** None
- (f) **Hazardous decomposition products:** None known. Above 1450° C gypsum will decompose to calcium oxide (CaO), with releases of sulfur dioxide (SO<sub>2</sub>) and various oxides of carbon.

## Section 11: Toxicological Information

### Information on Toxicological effects

#### Information on likely routes of exposure

- Ingestion** Not a likely route of exposure. May result in obstruction or temporary irritation of the digestive tract.
- Inhalation** Dust may irritate respiratory system. Chronic exposure may result in lung disease. (See below)
- Skin contact** May cause irritation, itching, rash and/or redness, dry skin or dermatitis.
- Eye contact** May cause mechanical irritation.

#### Symptoms related to the physical, chemical and toxicological characteristics

Acute exposure to airborne dust concentrations in excess of the PEL/TLV may result in coughing, dyspnea, wheezing, and a burning irritation of the nose, throat, and upper respiratory tract, along with possible impaired pulmonary function. Chronic exposure to crystalline silica (a naturally occurring contaminant) in the respirable size has been shown to cause silicosis, a debilitating lung disease, and lung cancer.

Continued and prolonged contact may result in dry skin. Contact with dust and/or fiberglass may produce itching, rash and/or redness. Repeated or prolonged exposure may result in dermatitis.

#### Toxicological data

No toxicological data is available for this product. Toxicological information for components of this product listed below.

- Acute toxicity** Gypsum: [OECD TG 420, Fixed dose procedure] Oral LD50 > 2,000-mg/kg b.w. for female rats (Sprague-Dawley)

**Skin corrosion/irritation** Gypsum was not irritating to the skin of rabbits at 1, 24, 48 and 72 hours after removal of test patches [OECD TG 404]

**Serious eye damage/eye irritation** Not available

**Skin sensitization** There is no indication of skin sensitization in guinea pigs [OECD TG 406].

**Respiratory sensitization** Not available

**Sensitization** Not available

**Mutagenicity** No evidence of mutagenicity on Ames Test.

**Carcinogenicity** Not available

This product contains crystalline silica (quartz) as a naturally occurring impurity in some of the raw materials. The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen.

Exposures to respirable crystalline silica are not expected during the recommended use of this product. Industrial hygiene monitoring to date has not identified any detectable respirable crystalline silica in dust sampling conducted utilizing recommended application procedures. However, actual levels must be determined by workplace hygiene testing.

**Reproductive effects** Not available

**Specific target organ toxicity – single exposure** Not available

**Aspiration toxicity** Not available

## Section 12: Ecological Information

**(a) Ecotoxicity (aquatic and terrestrial, where available):** This product does not present an ecological hazard to the environment.

**(b) Persistence and degradability:** Unknown

**(c) Bioaccumulative potential:** Gypsum is a naturally occurring mineral. Biodegradation and/or bioaccumulation potential is not applicable.

**(d) Mobility in soil:** Unknown

**(e) Other adverse effects (such as hazardous to the ozone layer):** None known

## Section 13: Disposal Considerations

This material is not considered a hazardous waste. Dispose of according to Local, State, Federal, and Provincial Environmental Regulations.

## Section 14: Transport Information

This product is not a DOT hazardous material

Shipping Name: Same as product name

ICAO/IATA/IMO: Not applicable

## Section 15: Regulatory Information

All ingredients are included on the TSCA inventory.

### Federal Regulations

**SARA Title III:** Not listed under Sections 302, 304, and 313

**CERCLA:** Not listed

**RCRA:** Not listed

**OSHA:** Dust and potential respirable crystalline silica generated during product use may be hazardous.

### State Regulations

California Prop 65: Respirable crystalline silica is known to the state of California to cause cancer. Industrial hygiene monitoring during recommended use of this product failed to identify any respirable crystalline silica.

### Canada WHMIS

All components of this product are included in the Canadian Domestic Substances List (DSL).

Crystalline silica: WHMIS Classification D2A

## Section 16: Other Information

**SDS Prepared by:** National Gypsum Company  
2001 Rexford Road  
Charlotte, NC 28211  
**Phone Number:** (704) 551-5820

**Date of Preparation:** April 24, 2015

### Revision indicators and Date

Effective Date Change: 7/8/2015 Supersedes: June 1, 2015

Format Changes: Added 5/16" XP Radius product

### Key to Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Services Number
CFR	Code of Federal Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
HEPA	High Efficiency Particulate Air
HCS	Hazard Communications Standard
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This safety data sheet was prepared to comply with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

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**Section 1: Product and Company Identification****Product Name**

Gypsum Board Products - Factory Built Housing

**Product Identifiers**

*5/16" Seaspray® MVR Ceiling Panels*

*½" Seaspray® MVR Ceiling Panels*

*½" Regular Gypsum Board*

*½" Regular 54" Gypsum Board*

*High Strength Ceiling Board*

*Durabase® Gypsum Board*

*5/8" Fire-Shield® Gypsum Board*

**Other means of identification**

Wallboard, Gypsum Board, Plasterboard, Drywall

**Recommended Use**

**Seaspray products** - Fire resistant gypsum board with white textured finish containing code approved Moisture Vapor Retarder (MVR).

**High Strength Ceiling Panels** - designed to resist sag when installed on 24" centers.

**Durabase Gypsum Board** - designed to receive a decorative laminate for wall panels.

Use per manufacturer's recommendations.

**Restrictions on Use**

Use in well-ventilated area and avoid breathing dust.

Avoid skin contact.

**Manufacturer/Supplier Details**

National Gypsum Company

2001 Rexford Road

Charlotte, NC 28211

**Emergency Telephone Number**

Director Quality Services

(704) 551-5820 - 24 Hour Emergency Response

Website: [www.nationalgypsum.com](http://www.nationalgypsum.com)

**Section 2: Hazards Identification****United States (US)**

According to OSHA 29CFR 1910.1200 (HCS)

**GHS Classification of the substance or mixture**

Not classified

**GHS Label Elements**

<b>Pictogram</b>	None
<b>Signal Word</b>	None
<b>Hazard Statements</b>	None

**Precautionary Statements****Prevention**

Do not breathe dust.

Use personal protective equipment as required. (See Section 8)

Use engineering controls and wet methods to minimize dust.

**Section 2: Hazards Identification (Continued)****Response**

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

If on skin, wash with plenty of soap and water.

If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Get medical attention if exposed or concerned.

**Storage**

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

**Disposal**

Dispose of material in accordance with federal, state, and local regulations

**Section 3: Composition/Information on Ingredients**

Chemical Name	Common name/ Synonym	Identifiers CAS Number	% (weight)	Impurities
Calcium Sulfate Dihydrate	Gypsum	13397-24-5	>85	Crystalline silica (CAS # 14808-60-7)
Cellulose	Paper Fiber	9004-34-6	<10	

**Section 4: First-Aid Measures**

**Inhalation** Remove exposed individual to fresh air immediately. If breathing difficulty persists, seek medical attention.

**Eye contact** Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes.

Remove contact lenses (if applicable). Seek medical attention if irritation persists.

**Skin contact** Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present.

Seek medical attention if irritation persists.

**Ingestion** This product is not expected to be hazardous and no harmful effects are expected upon ingestion of small amounts. Larger amounts may cause abdominal discomfort or possible obstruction of the digestive tract.

Seek medical attention if problems persist.

**Medical Conditions aggravated by exposure**

Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

**Section 5: Fire-Fighting Measures****Extinguishing Media**

Dry chemical, foam, water, or extinguishing media appropriate for surrounding fire.

**Unusual Fire and Explosion Hazards**

Mixture poses no fire-related hazard.

**Special hazards arising from the mixture**

None known. Above 1450°C, material can decompose and release sulfur dioxide (SO<sub>2</sub>) and oxides of carbon.

**Special Protective Equipment and Precautions for Firefighters**

A SCBA is recommended to limit exposures to combustion products when fighting any fire.

**Section 6: Accidental Release Measures****Personal precautions, protective equipment and emergency procedures**

No special precautions required.

General recommendations:

Wear appropriate Personal Protective Equipment. (See Section 8)

Maintain proper ventilation.

### Environmental precautions

This product does not present an ecological hazard to the environment.  
Dispose of in accordance with applicable federal, state, and local regulations.

### Methods and materials for containment and cleaning up

Pick-up larger pieces to avoid a tripping hazard. Return large pieces of damaged/scraped material for recycling. Sweep or vacuum remaining material into a waste container for disposal. Use a light water spray to minimize dust generation. Maintain proper ventilation to minimize dust.

## Section 7: Handling and Storage

### Precautions for safe handling

Avoid breathing dust.  
Minimize generation of dust.  
Provide appropriate exhaust ventilation at places where dust is formed.  
Avoid contact with eyes, skin and clothing.  
Wear recommended personal protective equipment when handling. (See Section 8)

### Conditions for safe storage, including any incompatibilities

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.  
Store panels flat to minimize damage and warping.  
Do not stack panels too high when storing to minimize the risk of falling.

## Section 8: Exposure Controls/Personal Protection

### Control Parameters

Component	Exposure Limits	
	OSHA PEL (mg/m <sup>3</sup> )	ACGIH TLV (mg/m <sup>3</sup> )
Calcium Sulfate Dihydrate	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Crystalline Silica <sup>1</sup>	$[(10) / (\%SiO_2+2)]^{(R)}$ ; $[(30) / (\%SiO_2+2)]^{(T)}$	0.025 <sup>(R)</sup>
Cellulose	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>

T-Total Dust

R-Respirable Dust

1-Present as an impurity in raw materials

### Exposure Controls

#### Appropriate Engineering Controls

Work/Hygiene Practices: Utilize methods to minimize dust production. Utilize wet methods, when appropriate, to reduce generation of dust.

Ventilation: Provide local and general exhaust ventilation sufficient to maintain a dust level below the PEL/TLV.

#### Personal Protective Equipment

##### Respiratory Protection

A NIOSH approved particulate respirator is recommended in poorly ventilated areas or if the PEL/TLV is exceeded. OSHA's 29 CFR 1910.134 (Respiratory Protection Standard) must be followed whenever work conditions require respirator use.

##### Eye Protection

Safety glasses or goggles.

##### Skin

Gloves, protective clothing and/or barrier creams may be utilized if conditions warrant.

**Section 9: Physical and Chemical Properties**

- (a) **Appearance:** Paper-faced gypsum board with white/gray core  
(b) **Odor:** None  
(c) **Odor threshold:** Not available  
(d) **pH :** ~7  
(e) **Melting point/freezing point:** Not Available  
(f) **Initial boiling point and boiling range:** Not Available  
(g) **Flash point:** Not available  
(h) **Evaporation rate:** Not available  
(i) **Flammability (solid, gas):** Not flammable  
(j) **Upper/lower flammability or explosive limits:** Not available  
(k) **Vapor pressure:** Not available  
(l) **Vapor density:** Not available  
(m) **Relative density:** 2.3 g/cc  
(n) **Solubility(ies):** 2.1 g/L @ 20° C  
(o) **Partition coefficient: n-octanol/water:** Not available  
(p) **Auto-ignition temperature:** Not available  
(q) **Decomposition temperature:** 1450°C  
(r) **Viscosity:** Not available  
(s) **Volatile organic compound (VOC) content:** None

**Section 10: Stability and Reactivity**

- (a) **Reactivity:** No data available  
(b) **Chemical stability:** Stable in dry environments  
(c) **Possibility of hazardous reactions:** None known  
(d) **Conditions to avoid (e.g., static discharge, shock, or vibration):** None known  
(e) **Incompatible materials:** None  
(f) **Hazardous decomposition products:** None known. Above 1450° C gypsum will decompose to calcium oxide (CaO), with releases of sulfur dioxide (SO<sub>2</sub>) and various oxides of carbon.

**Section 11: Toxicological Information****Information on Toxicological effects****Information on likely routes of exposure**

- Ingestion** Not a likely route of exposure. May result in obstruction or temporary irritation of the digestive tract.  
**Inhalation** Dust may irritate respiratory system. Chronic exposure may result in lung disease. (See below)  
**Skin contact** May cause irritation, dry skin or dermatitis.  
**Eye contact** May cause mechanical irritation.

**Symptoms related to the physical, chemical and toxicological characteristics**

Acute exposure to airborne dust concentrations in excess of the PEL/TLV may result in coughing, dyspnea, wheezing, and a burning irritation of the nose, throat, and upper respiratory tract, along with possible impaired pulmonary function. Chronic exposure to crystalline silica (a naturally occurring contaminant) in the respirable size has been shown to cause silicosis, a debilitating lung disease, and lung cancer.

Continued and prolonged contact may result in dry skin. Contact with dust and/or fiberglass may produce itching, rash and/or redness. Repeated or prolonged exposure may result in dermatitis.

**Toxicological data**

No toxicological data is available for this product. Toxicological information for components of this product listed below.

- Acute toxicity** Gypsum: [OECD TG 420, Fixed dose procedure] Oral LD50 > 2,000-mg/kg b.w. for female rats (Sprague-Dawley)  
**Skin corrosion/irritation** Gypsum was not irritating to the skin of rabbits at 1, 24, 48 and 72 hours after removal of test patches [OECD TG 404]  
**Serious eye damage/eye irritation** Not available



## Section 11: Toxicological Information (Continued)

<b>Skin sensitization</b>	There is no indication of skin sensitization in guinea pigs [OECD TG 406].
<b>Respiratory sensitization</b>	Not available
<b>Sensitization</b>	Not available
<b>Mutagenicity</b>	No evidence of mutagenicity on Ames Test.
<b>Carcinogenicity</b>	Not available

This product contains crystalline silica (quartz) as a naturally occurring impurity in some of the raw materials. The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen.

Exposures to respirable crystalline silica are not expected during the recommended use of this product. Industrial hygiene monitoring to date has not identified any detectable respirable crystalline silica in dust sampling conducted utilizing recommended application procedures. However, actual levels must be determined by workplace hygiene testing.

<b>Reproductive effects</b>	Not available
<b>Specific target organ toxicity – single exposure</b>	Not available
<b>Aspiration toxicity</b>	Not available

## Section 12: Ecological Information

**(a) Ecotoxicity (aquatic and terrestrial, where available):** This product does not present an ecological hazard to the environment.

**(b) Persistence and degradability:** Unknown

**(c) Bioaccumulative potential:** Gypsum is a naturally occurring mineral. Biodegradation and/or bioaccumulation potential is not applicable.

**(d) Mobility in soil:** Unknown

**(e) Other adverse effects (such as hazardous to the ozone layer):** None known

## Section 13: Disposal Considerations

This material is not considered a hazardous waste. Dispose of according to Local, State, Federal, and Provincial Environmental Regulations.

## Section 14: Transport Information

This product is not a DOT hazardous material

Shipping Name: Same as product name

ICAO/IATA/IMO: Not applicable

## Section 15: Regulatory Information

All ingredients are included on the TSCA inventory.

### Federal Regulations

**SARA Title III:** Not listed under Sections 302, 304, and 313

**CERCLA:** Not listed

**RCRA:** Not listed

**OSHA:** Dust and potential respirable crystalline silica generated during product use may be hazardous.

### State Regulations

California Prop 65: Respirable crystalline silica is known to the state of California to cause cancer. Industrial hygiene monitoring during recommended use of this product failed to identify any respirable crystalline silica.

### Canada WHMIS

All components of this product are included in the Canadian Domestic Substances List (DSL).

Crystalline silica: WHMIS Classification D2A

**Section 16: Other Information**

**SDS Prepared by:** National Gypsum Company  
2001 Rexford Road  
Charlotte, NC 28211

**Phone Number:** (704) 551-5820

**Date of Preparation:** April 24, 2015

**Revision indicators and Date**

Effective Date Change: 6/1/2015                      Supersedes: July 1, 2009

Format Changes: Conforms to OSHA 29CFR 1910.1200 (HCS)

**Key to Abbreviations**

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Services Number
CFR	Code of Federal Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
HEPA	High Efficiency Particulate Air
HCS	Hazard Communications Standard
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This safety data sheet was prepared to comply with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

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**Section 1: Product and Company Identification****Product Name**

Gypsum Board Products-Plaster Base

**Product Identifiers**

*½" Kal-Kore® LITE®*

*5/8" Fire-Shield® Kal-Kore®*

*5/8" Fire-Shield® Kal-Kore® C*

**Other means of identification**

Wallboard, Gypsum Board. Plasterboard, Drywall

**Recommended Use**

Gypsum Board designed for use as a base for veneer plaster. This board can also be used as a base for conventional basecoat plasters, such as Gypsolite® or Two-Way Hardwall. Use per manufacturer's recommendations.

**Restrictions on Use**

Use in well-ventilated area and avoid breathing dust.

Avoid skin contact.

**Manufacturer/Supplier Details**

National Gypsum Company

2001 Rexford Road

Charlotte, NC 28211

**Emergency Telephone Number**

Director Quality Services

(704) 551-5820 - 24 Hour Emergency Response

Website: [www.nationalgypsum.com](http://www.nationalgypsum.com)

**Section 2: Hazards Identification****United States (US)**

According to OSHA 29CFR 1910.1200 (HCS)

**GHS Classification of the substance or mixture**

Not classified

**GHS Label Elements**

**Pictogram** None

**Signal Word** None

**Hazard Statements** None

**Precautionary Statements****Prevention**

Do not breathe dust.

Use personal protective equipment as required. (See Section 8)

Use engineering controls and wet methods to minimize dust.

**Response**

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

If on skin, wash with plenty of soap and water.

If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Get medical attention if exposed or concerned.

**Section 2: Hazards Identification (Continued)****Storage**

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

**Disposal**

Dispose of material in accordance with federal, state, and local regulations

**Section 3: Composition/Information on Ingredients**

Chemical Name	Common name/ Synonym	Identifiers CAS Number	% (weight)	Impurities
Calcium Sulfate Dihydrate	Gypsum	13397-24-5	>85	Crystalline silica (CAS # 14808-60-7)
Cellulose	Paper Fiber	9004-34-6	<10	

**Section 4: First-Aid Measures**

<b>Inhalation</b>	Remove exposed individual to fresh air immediately. If breathing difficulty persists, seek medical attention.
<b>Eye contact</b>	Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes.  Remove contact lenses (if applicable). Seek medical attention if irritation persists.
<b>Skin contact</b>	Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present. Seek medical attention if irritation persists.
<b>Ingestion</b>	This product is not expected to be hazardous and no harmful effects are expected upon ingestion of small amounts. Larger amounts may cause abdominal discomfort or possible obstruction of the digestive tract. Seek medical attention if problems persist.

**Medical Conditions aggravated by exposure**

Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

**Section 5: Fire-Fighting Measures****Extinguishing Media**

Dry chemical, foam, water, or extinguishing media appropriate for surrounding fire.

**Unusual Fire and Explosion Hazards**

Mixture poses no fire-related hazard.

**Special hazards arising from the mixture**

None known. Above 1450°C, material can decompose and release sulfur dioxide (SO<sub>2</sub>) and oxides of carbon.

**Special Protective Equipment and Precautions for Firefighters**

A SCBA is recommended to limit exposures to combustion products when fighting any fire.

**Section 6: Accidental Release Measures****Personal precautions, protective equipment and emergency procedures**

No special precautions required.

General recommendations:

Wear appropriate Personal Protective Equipment. (See Section 8)

Maintain proper ventilation.

**Environmental precautions**

This product does not present an ecological hazard to the environment.  
Dispose of in accordance with applicable federal, state, and local regulations.

**Methods and materials for containment and cleaning up**

Pick-up larger pieces to avoid a tripping hazard. Return large pieces of damaged/scraped material for recycling. Sweep or vacuum remaining material into a waste container for disposal. Use a light water spray to minimize dust generation. Maintain proper ventilation to minimize dust.

**Section 7: Handling and Storage****Precautions for safe handling**

Avoid breathing dust.  
Minimize generation of dust.  
Provide appropriate exhaust ventilation at places where dust is formed.  
Avoid contact with eyes, skin and clothing.  
Wear recommended personal protective equipment when handling. (See Section 8)

**Conditions for safe storage, including any incompatibilities**

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.  
Store panels flat to minimize damage and warping.  
Do not stack panels too high when storing to minimize the risk of falling.

**Section 8: Exposure Controls/Personal Protection****Control Parameters**

Component	Exposure Limits	
	OSHA PEL (mg/m <sup>3</sup> )	ACGIH TLV (mg/m <sup>3</sup> )
Calcium Sulfate Dihydrate	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Crystalline Silica <sup>1</sup>	$[(10) / (\%SiO_2 + 2)]^{(R)}$ ; $[(30) / (\%SiO_2 + 2)]^{(T)}$	0.025 <sup>(R)</sup>
Cellulose	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>

T- Total Dust

R-Respirable Dust

1-Present as an impurity in raw materials

**Exposure Controls****Appropriate Engineering Controls**

Work/Hygiene Practices: Utilize methods to minimize dust production. Utilize wet methods, when appropriate, to reduce generation of dust.

Ventilation: Provide local and general exhaust ventilation sufficient to maintain a dust level below the PEL/TLV.

**Personal Protective Equipment****Respiratory Protection**

A NIOSH approved particulate respirator is recommended in poorly ventilated areas or if the PEL/TLV is exceeded. OSHA's 29 CFR 1910.134 (Respiratory Protection Standard) must be followed whenever work conditions require respirator use.

**Eye Protection**

Safety glasses or goggles.

**Skin**

Gloves, protective clothing and/or barrier creams may be utilized if conditions warrant.

**Section 9: Physical and Chemical Properties**

- (a) **Appearance:** Paper faced gypsum board with white/gray core
- (b) **Odor:** None
- (c) **Odor threshold:** Not available
- (d) **pH :** ~7
- (e) **Melting point/freezing point:** Not Available
- (f) **Initial boiling point and boiling range:** Not Available
- (g) **Flash point:** Not available
- (h) **Evaporation rate:** Not available
- (i) **Flammability (solid, gas):** Not flammable
- (j) **Upper/lower flammability or explosive limits:** Not available
- (k) **Vapor pressure:** Not available
- (l) **Vapor density:** Not available
- (m) **Relative density:** 2.3 g/cc
- (n) **Solubility(ies):** 2.1 g/L @ 20° C
- (o) **Partition coefficient: n-octanol/water:** Not available
- (p) **Auto-ignition temperature:** Not available
- (q) **Decomposition temperature:** 1450°C
- (r) **Viscosity:** Not available
- (s) **Volatile organic compound (VOC) content:** None

**Section 10: Stability and Reactivity**

- (a) **Reactivity:** No data available
- (b) **Chemical stability:** Stable in dry environments
- (c) **Possibility of hazardous reactions:** None known
- (d) **Conditions to avoid (e.g., static discharge, shock, or vibration):** None known
- (e) **Incompatible materials:** None
- (f) **Hazardous decomposition products:** None known. Above 1450° C gypsum will decompose to calcium oxide (CaO), with releases of sulfur dioxide (SO<sub>2</sub>) and various oxides of carbon.

**Section 11: Toxicological Information****Information on Toxicological effects****Information on likely routes of exposure**

- |                     |   |
|---------------------|---|
| <b>Ingestion</b>    | Not a likely route of exposure. May result in obstruction or temporary irritation of the digestive tract. |
| <b>Inhalation</b>   | Dust may irritate respiratory system. Chronic exposure may result in lung disease. (See below)            |
| <b>Skin contact</b> | May cause irritation, itching, rash and/or redness, dry skin or dermatitis.                               |
| <b>Eye contact</b>  | May cause mechanical irritation.  |

**Symptoms related to the physical, chemical and toxicological characteristics**

Acute exposure to airborne dust concentrations in excess of the PEL/TLV may result in coughing, dyspnea, wheezing, and a burning irritation of the nose, throat, and upper respiratory tract, along with possible impaired pulmonary function. Chronic exposure to crystalline silica (a naturally occurring contaminant) in the respirable size has been shown to cause silicosis, a debilitating lung disease, and lung cancer.

Continued and prolonged contact may result in dry skin. Contact with dust and/or fiberglass may produce itching, rash and/or redness. Repeated or prolonged exposure may result in dermatitis.

**Toxicological data**

No toxicological data is available for this product. Toxicological information for components of this product listed below.

- |                       |   |
|-----------------------|---|
| <b>Acute toxicity</b> | Gypsum: [OECD TG 420, Fixed dose procedure] Oral LD50 > 2,000-mg/kg b.w. for female rats (Sprague-Dawley) |
|-----------------------|---|

**Section 11: Toxicological Information (Continued)**

<b>Skin corrosion/irritation</b>	Gypsum was not irritating to the skin of rabbits at 1, 24, 48 and 72 hours after removal of test patches [OECD TG 404]
<b>Serious eye damage/eye irritation</b>	Not available
<b>Skin sensitization</b>	There is no indication of skin sensitization in guinea pigs [OECD TG 406].
<b>Respiratory sensitization</b>	Not available
<b>Sensitization</b>	Not available
<b>Mutagenicity</b>	No evidence of mutagenicity on Ames Test.
<b>Carcinogenicity</b>	Not available

This product contains crystalline silica (quartz) as a naturally occurring impurity in some of the raw materials. The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen. Exposures to respirable crystalline silica are not expected during the recommended use of this product. Industrial hygiene monitoring to date has not identified any detectable respirable crystalline silica in dust sampling conducted utilizing recommended application procedures. However, actual levels must be determined by workplace hygiene testing.

<b>Reproductive effects</b>	Not available
<b>Specific target organ toxicity – single exposure</b>	Not available
<b>Aspiration toxicity</b>	Not available

**Section 12: Ecological Information**

- (a) **Ecotoxicity (aquatic and terrestrial, where available):** This product does not present an ecological hazard to the environment.
- (b) **Persistence and degradability:** Unknown
- (c) **Bioaccumulative potential:** Gypsum is a naturally occurring mineral. Biodegradation and/or bioaccumulation potential is not applicable.
- (d) **Mobility in soil:** Unknown
- (e) **Other adverse effects (such as hazardous to the ozone layer):** None known

**Section 13: Disposal Considerations**

This material is not considered a hazardous waste. Dispose of according to Local, State, Federal, and Provincial Environmental Regulations.

**Section 14: Transport Information**

This product is not a DOT hazardous material  
Shipping Name: Same as product name  
ICAO/IATA/IMO: Not applicable

**Section 15: Regulatory Information**

All ingredients are included on the TSCA inventory.

**Federal Regulations**

**SARA Title III:** Not listed under Sections 302, 304, and 313

**CERCLA:** Not listed

**RCRA:** Not listed

**OSHA:** Dust and potential respirable crystalline silica generated during product use may be hazardous.

**State Regulations**

California Prop 65: Respirable crystalline silica is known to the state of California to cause cancer. Industrial hygiene monitoring during recommended use of this product failed to identify any respirable crystalline silica.

**Canada WHMIS**

All components of this product are included in the Canadian Domestic Substances List (DSL).

Crystalline silica: WHMIS Classification D2A

**Section 16: Other Information**

**SDS Prepared by:** National Gypsum Company  
2001 Rexford Road  
Charlotte, NC 28211

**Phone Number:** (704) 551-5820

**Date of Preparation:** April 23, 2015

**Revision indicators and Date**

**Effective Date Change:** 6/1/2015 **Supersedes:** March 4, 2015

**Format Changes:** Conforms to OSHA 29CFR 1910.1200 (HCS)

**Key to Abbreviations**

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Services Number
CFR	Code of Federal Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
HEPA	High Efficiency Particulate Air
HCS	Hazard Communications Standard
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

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## 1. Identification

<b>Product identifier</b>	<b>DUROCK® Cement Board Next Gen</b>
<b>Other means of identification</b>	
<b>SDS number</b>	14000010001
<b>Synonyms</b>	Cement Underlayment Board, Cement Panels
<b>Recommended use</b>	Interior use.
<b>Recommended restrictions</b>	Use in accordance with manufacturer's recommendations.

### Manufacturer / Importer / Supplier / Distributor information

<b>Company name</b>	United States Gypsum Company
<b>Address</b>	550 West Adams Street Chicago, Illinois 60661-3637
<b>Telephone</b>	1-800-874-4968
<b>Website</b>	www.usg.com
<b>Emergency phone number</b>	1-800-507-8899

## 2. Hazard(s) identification

<b>Physical hazards</b>	Not classified.	
<b>Health hazards</b>	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 1
	Sensitization, skin	Category 1
	Carcinogenicity	Category 1A
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation
<b>Environmental hazards</b>	Not classified.	
<b>OSHA defined hazards</b>	Not classified.	

### Label elements



<b>Signal word</b>	Danger
<b>Hazard statement</b>	Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. May cause cancer. May cause respiratory irritation.
<b>Precautionary statement</b>	
<b>Prevention</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.
<b>Response</b>	If exposed or concerned: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor.
<b>Storage</b>	Store locked up. Store in a well-ventilated place. Keep container tightly closed.
<b>Disposal</b>	Dispose of in accordance with local, state, and federal regulations.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	Not applicable.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Portland Cement	65997-15-1	< 50
Class C Fly ash	68131-74-8	< 15
Calcium sulfate dihydrate (alternative CAS 10101-41-4)	13397-24-5	< 10
Perlite	93763-70-3	< 10
Continuous filament glass fiber	65997-17-3	< 5

#### Impurities

Chemical name	CAS number	%
Crystalline silica (Quartz)	14808-60-7	< 0.5

#### Composition comments

All concentrations are in percent by weight unless ingredient is a gas.

Raw materials in this product contain respirable crystalline silica as an impurity. The weight percent of respirable crystalline silica found in this product is < 0.5%. Exposures to respirable crystalline silica during the normal use of this product must be determined by workplace hygiene testing.

## 4. First-aid measures

#### Inhalation

Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

#### Skin contact

Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

#### Eye contact

Dust in eyes: Flush with cold tap water for at least 15 minutes. If irritation persists, seek medical attention immediately.

#### Ingestion

Rinse mouth. Get medical attention if symptoms occur.

#### Most important symptoms/effects, acute and delayed

Dust may cause skin, eye, throat and respiratory system irritation and cause coughing.

#### Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically.

#### General information

Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

#### Suitable extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

#### Unsuitable extinguishing media

Not applicable.

#### Specific hazards arising from the chemical

Not a fire hazard.

#### Special protective equipment and precautions for firefighters

Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

#### Fire-fighting equipment/instructions

Use standard firefighting procedures and consider the hazards of other involved materials.

#### Specific methods

Cool material exposed to heat with water spray and remove it if no risk is involved.

## 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

See Section 8 of the SDS for Personal Protective Equipment.

#### Methods and materials for containment and cleaning up

No specific clean-up procedure noted. For waste disposal, see Section 13 of the SDS.

#### Environmental precautions

Avoid discharge to drains, sewers, and other water systems.

## 7. Handling and storage

#### Precautions for safe handling

Use work methods which minimize dust production. Avoid inhalation of dust and contact with skin and eyes. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	PEL	5 mg/m3	Respirable fraction.
Portland Cement (CAS 65997-15-1)	PEL	15 mg/m3 5 mg/m3	Total dust. Respirable fraction.
		15 mg/m3	Total dust.

#### US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Class C Fly ash (CAS 68131-74-8)	TWA	0.8 mg/m3	
Portland Cement (CAS 65997-15-1)	TWA	20 mppcf 50 mppcf	
Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.3 mg/m3	Total dust.
		0.1 mg/m3 2.4 mppcf	Respirable. Respirable.

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	10 mg/m3	Inhalable fraction.
Continuous filament glass fiber (CAS 65997-17-3)	TWA	1 fibers/cm3	Respirable fibers (length > 5 µm & aspect ratio ≥ 3:1)
Portland Cement (CAS 65997-15-1)	TWA	5 mg/m3 1 mg/m3	Inhalable fraction. Respirable fraction.
Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	5 mg/m3	Respirable.
Class C Fly ash (CAS 68131-74-8)	TWA	10 mg/m3 6 mg/m3	Total
Continuous filament glass fiber (CAS 65997-17-3)	TWA	3 fibers/cm3	Respirable fibers (≤ 3.5 µm in diameter & ≥ 10 µm in length)
Perlite (CAS 93763-70-3)	TWA	5 mg/m3 5 mg/m3 10 mg/m3	Fiber, total Respirable. Total
Portland Cement (CAS 65997-15-1)	TWA	5 mg/m3	Respirable.
Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	10 mg/m3 0.05 mg/m3	Total Respirable dust.

<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Appropriate engineering controls</b>	Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Wear approved safety goggles.
<b>Skin protection</b>	
<b>Hand protection</b>	It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.
<b>Other</b>	Normal work clothing (long sleeved shirts and long pants) is recommended.
<b>Respiratory protection</b>	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.
<b>Thermal hazards</b>	None.
<b>General hygiene considerations</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Observe any medical surveillance requirements.

## 9. Physical and chemical properties

<b>Appearance</b>	
<b>Physical state</b>	Solid.
<b>Form</b>	Board.
<b>Color</b>	Gray.
<b>Odor</b>	Low to no odor.
<b>Odor threshold</b>	Not applicable.
<b>pH</b>	12
<b>Melting point/freezing point</b>	Not applicable.
<b>Initial boiling point and boiling range</b>	Not applicable.
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not applicable.
<b>Flammability limit - upper (%)</b>	Not applicable.
<b>Explosive limit - lower (%)</b>	Not applicable.
<b>Explosive limit - upper (%)</b>	Not applicable.
<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	0.8 - 1.2 (H <sub>2</sub> O=1)
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Insoluble.
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition temperature</b>	Not applicable.
<b>Viscosity</b>	Not applicable.
<b>Other information</b>	
<b>Bulk density</b>	60 - 65 lb/ft <sup>3</sup>
<b>VOC (Weight %)</b>	0 %

## 10. Stability and reactivity

<b>Reactivity</b>	Not available.
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<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Calcium oxides. Sulfur oxides.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	Ingestion may cause irritation and stomach discomfort.
<b>Inhalation</b>	Inhalation of dusts may cause respiratory irritation. Prolonged and repeated exposure to airborne respirable crystalline silica can cause silicosis and/or lung cancer.
<b>Skin contact</b>	Dust can be irritating to skin.
<b>Eye contact</b>	Dust can cause eye irritation.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Dust may irritate eyes, skin, throat and upper respiratory system and cause coughing.

### Information on toxicological effects

<b>Acute toxicity</b>	Not expected to be a hazard under normal conditions of intended use.
<b>Skin corrosion/irritation</b>	Dust can cause skin irritation.
<b>Serious eye damage/eye irritation</b>	Dust can cause eye irritation.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not a sensitizer.
<b>Skin sensitization</b>	Not expected to be a skin sensitizer.
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	Repeated and prolonged exposure to high levels of respirable crystalline silica may cause cancer.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

Class C Fly ash (CAS 68131-74-8)	3 Not classifiable as to carcinogenicity to humans.
Crystalline silica (Quartz) (CAS 14808-60-7)	1 Carcinogenic to humans.

#### NTP Report on Carcinogens

Crystalline silica (Quartz) (CAS 14808-60-7)	Known To Be Human Carcinogen.
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<b>Reproductive toxicity</b>	Not expected to be a reproductive hazard.
<b>Specific target organ toxicity - single exposure</b>	May cause respiratory irritation.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified. For detailed information, see section 16.
<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.
<b>Chronic effects</b>	Prolonged and routine inhalation of high levels of respirable crystalline silica particles can lead to the lung disease known as silicosis. Some studies show excess numbers of cases of scleroderma, connective tissue disorders, lupus, rheumatoid arthritis, chronic kidney diseases and end-stage kidney disease in workers exposed to respirable crystalline silica. Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

## 12. Ecological information

<b>Ecotoxicity</b>	The product is not expected to be hazardous to the environment.
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Components	Species	Test Results
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours
<b>Persistence and degradability</b>	No data is available on the degradability of this product.	
<b>Bioaccumulative potential</b>	Bioaccumulation is not expected.	
<b>Mobility in soil</b>	No data available.	
<b>Other adverse effects</b>	None expected.	

### 13. Disposal considerations

<b>Disposal instructions</b>	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.
<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.

### 14. Transport information

#### DOT

Not regulated as dangerous goods.

#### IATA

Not regulated as dangerous goods.

#### IMDG

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

### 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### **TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

#### **US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

#### **CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.

#### **Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories** Immediate Hazard - Yes  
Delayed Hazard - Yes  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

#### **SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical** Yes

**SARA 313 (TRI reporting)**  
Not regulated.

#### **Other federal regulations**

##### **Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

##### **Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

#### **US state regulations**

##### **US. Massachusetts RTK - Substance List**

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)  
Class C Fly ash (CAS 68131-74-8)  
Crystalline silica (Quartz) (CAS 14808-60-7)  
Perlite (CAS 93763-70-3)  
Portland Cement (CAS 65997-15-1)

##### **US. New Jersey Worker and Community Right-to-Know Act**

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)  
Class C Fly ash (CAS 68131-74-8)  
Crystalline silica (Quartz) (CAS 14808-60-7)  
Perlite (CAS 93763-70-3)  
Portland Cement (CAS 65997-15-1)

## US. Pennsylvania Worker and Community Right-to-Know Law

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)

Class C Fly ash (CAS 68131-74-8)

Crystalline silica (Quartz) (CAS 14808-60-7)

Perlite (CAS 93763-70-3)

Portland Cement (CAS 65997-15-1)

## US. Rhode Island RTK

Not regulated.

## US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

### US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Crystalline silica (Quartz) (CAS 14808-60-7)

## International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

Issue date	05-March-2014
Revision date	-
Version #	01
Further information	Crystalline silica: Raw materials in this product may contain respirable crystalline silica. Exposures to respirable crystalline silica are not expected during the normal use of this product. However, actual levels must be determined by workplace hygiene testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.

The International Agency for Research on Cancer (IARC) in June, 1987, categorized continuous filament glass fibers as not classifiable with respect to human carcinogenicity (Group 3). The evidence from human as well as animal studies was evaluated by IARC as insufficient to classify continuous filament glass fiber as a possible, probable, or confirmed cancer causing material.

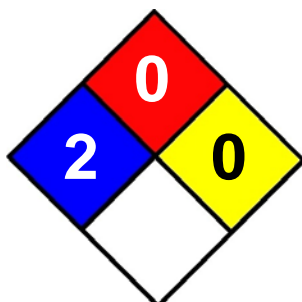
The ACGIH has established a TLV (Threshold Limit Value or recommended exposure limit) for continuous filament glass fiber of 1 fiber per cubic centimeter of air for respirable fibers and 5 mg per cubic meter of air for inhalable glass fiber dust. These levels were established to prevent mechanical irritation of the upper airways. IARC, NTP (US National Toxicology Program) and OSHA (US Occupational Safety and Health Administration) do not list continuous filament glass fibers as a carcinogen.

As manufactured, continuous filament glass fibers in this product are not respirable. Continuous filament glass products that are chopped, crushed or severely mechanically processed during manufacturing or use may contain a very small amount of respirable particulate, some of which may be glass shards.

NFPA Ratings:  
Health: 2  
Flammability: 0  
Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

## NFPA Ratings



## Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



# SAFETY DATA SHEET

## 1. Identification

Product identifier	FIBEROCK® Aqua-Tough™ Interior Panels
Other means of identification	
SDS number	56000000003
Synonyms	Fiber-Reinforced Gypsum Panels, Gypsum Fiber Panels (GFP), Gypsum Panels, Drywall, Plasterboard, Wallboard
Recommended use	Interior use.
Recommended restrictions	Use in accordance with manufacturer's recommendations.
Manufacturer/Importer/Supplier/Distributor information	
Company name	United States Gypsum Company
Address	550 West Adams Street Chicago, Illinois 60661-3637
Telephone	1-800-874-4968
Website	www.usg.com
Emergency phone number	1-800-507-8899

## 2. Hazard(s) identification

Physical hazards	Not classified.
Health Hazards	Not classified.
OSHA defined hazards	Not classified.
Label elements	
Hazard symbol	None.
Signal word	None.
Hazard statement	None.
Precautionary statement	
Prevention	Observe good industrial hygiene practices.
Response	Get medical attention/advice if you feel unwell.
Storage	Store as indicated in Section 7.
Disposal	Dispose of in accordance with local, state, and federal regulations.
Hazard(s) not otherwise classified (HNOC)	None known.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Calcium sulfate dihydrate (alternative CAS 10101-41-4)	13397-24-5	> 90
Cellulose	9004-34-6	< 10

Composition comments	All concentrations are in percent by weight unless ingredient is a gas.  Results of an industrial hygiene study found no airborne respirable crystalline silica in the breathing zones of workers during the normal activities associated with the use of this product. However, job site air monitoring should be conducted when permissible exposure limits may be exceeded.
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## 4. First-aid measures

Inhalation	Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.
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<b>Skin contact</b>	Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.
<b>Eye contact</b>	Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.
<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Under normal conditions of intended use, this material does not pose a risk to health. Dust may irritate throat and respiratory system and cause coughing.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	Not applicable.
<b>Specific hazards arising from the chemical</b>	Not a fire hazard.
<b>Special protective equipment and precautions for firefighters</b>	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>Specific methods</b>	Cool material exposed to heat with water spray and remove it if no risk is involved.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	See Section 8 of the SDS for Personal Protective Equipment.
<b>Methods and materials for containment and cleaning up</b>	No specific clean-up procedure noted. For waste disposal, see Section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge to drains, sewers, and other water systems.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Use work methods like "score and snap" to minimize dust production. Avoid inhalation of dust and contact with skin and eyes. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices. When moving board with a forklift or similar equipment, it is essential that the equipment be rated capable of handling the loads. The forks should always be long enough to extend completely through the width of the load. Fork spacing between supports should be one half the length of the panels or base being handled so that a maximum of 3' extends beyond the supports on either end.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Protect product from physical damage. Protect from weather and prevent exposure to sustained moisture. FIBEROCK® panels should be stored flat.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	PEL	5 mg/m3	Respirable fraction.
Cellulose (CAS 9004-34-6)	PEL	15 mg/m3	Total dust.
		5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

## US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	10 mg/m3	Inhalable fraction.
Cellulose (CAS 9004-34-6)	TWA	10 mg/m3	

## US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	5 mg/m3	Respirable.
Cellulose (CAS 9004-34-6)	TWA	10 mg/m3	Total
		5 mg/m3	Respirable.
		10 mg/m3	Total

<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Appropriate engineering controls</b>	Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Wear approved safety goggles.
<b>Skin protection</b>	
<b>Hand protection</b>	It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.
<b>Other</b>	Normal work clothing (long sleeved shirts and long pants) is recommended.
<b>Respiratory protection</b>	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use. Observe any medical surveillance requirements.
<b>Thermal hazards</b>	None.
<b>General hygiene considerations</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash. Observe any medical surveillance requirements.

## 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	Solid.
<b>Form</b>	Panel.
<b>Color</b>	Off-white to tan.
<b>Odor</b>	Low to no odor.
<b>Odor threshold</b>	Not applicable.
<b>pH</b>	6 - 8
<b>Melting point/freezing point</b>	Not applicable.
<b>Initial boiling point and boiling range</b>	Not applicable.
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Not applicable.

### Upper/lower flammability or explosive limits

<b>Flammability limit - lower (%)</b>	Not applicable.
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<b>Flammability limit - upper (%)</b>	Not applicable.
<b>Explosive limit - lower (%)</b>	Not applicable.
<b>Explosive limit - upper (%)</b>	Not applicable.
<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	0.9 - 1 (Gypsum) (H <sub>2</sub> O=1)
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Insoluble
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition temperature</b>	2642 °F (1450 °C)
<b>Viscosity</b>	Not applicable.
<b>Other information</b>	
<b>Bulk density</b>	54 - 62 lb/ft <sup>3</sup>
<b>Particle size</b>	Varies.
<b>VOC (Weight %)</b>	0 %

## 10. Stability and reactivity

<b>Reactivity</b>	Not available.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents. Strong acids.
<b>Hazardous decomposition products</b>	Calcium oxides, carbon dioxide, and carbon monoxide.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Inhalation of dusts may cause respiratory irritation.
<b>Skin contact</b>	Under normal conditions of intended use, this material does not pose a skin hazard.
<b>Eye contact</b>	Mechanical processing may generate dust. Direct contact with eyes may cause temporary irritation (1).
<b>Ingestion</b>	Not likely, due to the form of the product.

**Symptoms related to the physical, chemical and toxicological characteristics** Under normal conditions of intended use, this material does not pose a risk to health.

### Information on toxicological effects

**Acute toxicity** Not expected to be a hazard under normal conditions of intended use.

Components	Species	Test Results
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)		
<b>Acute</b>		
<i>Inhalation</i>		
LC50	Rat	> 3.26 mg/l, 4 Hours
<i>Oral</i>		
LD50	Rat	> 1581 mg/kg

\* Estimates for product may be based on additional component data not shown.

<b>Skin corrosion/irritation</b>	Gypsum was not found to be a skin irritant.
<b>Serious eye damage/eye irritation</b>	Gypsum does not cause serious eye damage or irritation.

## Respiratory or skin sensitization

**Respiratory sensitization** No data available, but based on results from the skin sensitization study, calcium sulfate is not expected to be a respiratory sensitizer.

**Skin sensitization** Not a skin sensitizer (2).

**Germ cell mutagenicity** No evidence of mutagenic potential exists (3,4,5).

**Carcinogenicity** No evidence of carcinogenic potential exists (6).

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

**Reproductive toxicity** No evidence of reproductive toxicity exists (2).

**Specific target organ toxicity - single exposure** No data available, but none expected.

**Specific target organ toxicity - repeated exposure** No data available, but none expected.

**Aspiration hazard** Due to the physical form of the product it is not an aspiration hazard.

**Chronic effects** No specific acute or chronic health impact noted.

## 12. Ecological information

**Ecotoxicity** The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours
<b>Persistence and degradability</b>	Not applicable for the salt of inorganic compounds. Calcium sulfate dissolves in water without undergoing chemical degradation.	
<b>Bioaccumulative potential</b>	Bioaccumulation is not expected.	
<b>Mobility in soil</b>	Calcium sulfate has a low potential for adsorption to soil. If water is applied, gypsum dissolves and the calcium and sulfate ions are mobile and penetrate the subsoil (6).	
<b>Other adverse effects</b>	None expected.	

## 13. Disposal considerations

**Disposal instructions** Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.

**Local disposal regulations** Dispose of in accordance with local regulations.

**Hazardous waste code** Not regulated.

**Waste from residues / unused products** Dispose of in accordance with local regulations.

**Contaminated packaging** Dispose of in accordance with local regulations.

## 14. Transport information

### DOT

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

## 15. Regulatory information

**US federal regulations** This product is not hazardous according to OSHA 29CFR 1910.1200.

### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

<b>Hazard categories</b>	Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
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**SARA 302 Extremely hazardous substance**

Not listed.

<b>SARA 311/312 Hazardous chemical</b>	No
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**SARA 313 (TRI reporting)**

Not regulated.

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

<b>Safe Drinking Water Act (SDWA)</b>	Not regulated.
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**US state regulations****US. Massachusetts RTK - Substance List**Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)  
Cellulose (CAS 9004-34-6)**US. New Jersey Worker and Community Right-to-Know Act**Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)  
Cellulose (CAS 9004-34-6)**US. Pennsylvania Worker and Community Right-to-Know Law**Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)  
Cellulose (CAS 9004-34-6)**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

WARNING: This product contains a chemical known to the State of California to cause cancer.

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Not listed.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

<b>Issue date</b>	12-February-2014
<b>Revision date</b>	-
<b>Version #</b>	01

**Further information**

Crystalline silica: Raw materials in this product may contain respirable crystalline silica. Exposures to respirable crystalline silica are not expected during the normal use of this product. However, actual levels must be determined by workplace hygiene testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.

NFPA Ratings:

Health: 1

Flammability: 0

Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

**NFPA ratings****List of abbreviations**

NFPA: National Fire Protection Association.

**References**

1. US National Library of Medicine (NLM) (1998). Hazardous Substances Data Bank (HSDB).
2. Tested by LG Life Science/Toxicology Center, Korea (2002). National Institute of Environmental Research (NIER).
3. Dopp E et al. (1995). Environ. Health Perspect. 103(3), 268-271.
4. Cremer H.H. et al. (1988). Wiss. Umwelt. 4, 202-205.
5. Fujita H et al. (1988). Kenkya Nenpo-Tokyo-Toritsu Eisei Kenkynsho. 39, 343-350.
6. Shainberg et al. (1989). Advanced Soil Sci. 9, 1-111.

**Disclaimer**

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



# SAFETY DATA SHEET

## 1. Identification

Product identifier	FIBEROCK® Abuse-Resistant Interior Panels
Other means of identification	
SDS number	56000000001
Synonyms	Fiber-Reinforced Gypsum Panels, Gypsum Fiber Panels (GFP), Gypsum Panels, Drywall, Plasterboard, Wallboard
Recommended use	Interior use.
Recommended restrictions	Use in accordance with manufacturer's recommendations.
Manufacturer / Importer / Supplier / Distributor information	
Company name	United States Gypsum Company
Address	550 West Adams Street Chicago, Illinois 60661-3637
Telephone	1-800-874-4968
Website	www.usg.com
Emergency phone number	1-800-507-8899

## 2. Hazard(s) identification

Physical hazards	Not classified.
Health hazards	Not classified.
OSHA defined hazards	Not classified.
Label elements	
Hazard symbol	None.
Signal word	None.
Hazard statement	None.
Precautionary statement	
Prevention	Observe good industrial hygiene practices.
Response	Get medical attention/advice if you feel unwell.
Storage	Store as indicated in Section 7.
Disposal	Dispose of in accordance with local, state, and federal regulations.
Hazard(s) not otherwise classified (HNOC)	None known.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Calcium sulfate dihydrate (alternative CAS 10101-41-4)	13397-24-5	> 90
Cellulose	9004-34-6	< 10

Composition comments	All concentrations are in percent by weight unless ingredient is a gas.  Results of an industrial hygiene study found no airborne respirable crystalline silica in the breathing zones of workers during the normal activities associated with the use of this product. However, job site air monitoring should be conducted when permissible exposure limits may be exceeded.
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## 4. First-aid measures

Inhalation	Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.
Skin contact	Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.
Eye contact	Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.

<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Under normal conditions of intended use, this material does not pose a risk to health. Dust may irritate throat and respiratory system and cause coughing.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	Not applicable.
<b>Specific hazards arising from the chemical</b>	Not a fire hazard.
<b>Special protective equipment and precautions for firefighters</b>	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>Specific methods</b>	Cool material exposed to heat with water spray and remove it if no risk is involved.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	See Section 8 of the SDS for Personal Protective Equipment.
<b>Methods and materials for containment and cleaning up</b>	No specific clean-up procedure noted. For waste disposal, see Section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge to drains, sewers, and other water systems.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Use work methods like "score and snap" to minimize dust production. Avoid inhalation of dust and contact with skin and eyes. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices. When moving board with a forklift or similar equipment, it is essential that the equipment be rated capable of handling the loads. The forks should always be long enough to extend completely through the width of the load. Fork spacing between supports should be one half the length of the panels or base being handled so that a maximum of 3' extends beyond the supports on either end.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Protect product from physical damage. Protect from weather and prevent exposure to sustained moisture. FIBEROCK® panels should be stored flat.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	PEL	5 mg/m3	Respirable fraction.
Cellulose (CAS 9004-34-6)	PEL	15 mg/m3 5 mg/m3 15 mg/m3	Total dust. Respirable fraction. Total dust.

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	10 mg/m3	Inhalable fraction.
Cellulose (CAS 9004-34-6)	TWA	10 mg/m3	



## US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	5 mg/m3	Respirable.
Cellulose (CAS 9004-34-6)	TWA	10 mg/m3 5 mg/m3 10 mg/m3	Total Respirable. Total
<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).		
<b>Appropriate engineering controls</b>	Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.		
<b>Individual protection measures, such as personal protective equipment</b>			
<b>Eye/face protection</b>	Wear approved safety goggles.		
<b>Skin protection</b>			
<b>Hand protection</b>	It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.		
<b>Other</b>	Normal work clothing (long sleeved shirts and long pants) is recommended.		
<b>Respiratory protection</b>	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use. Observe any medical surveillance requirements.		
<b>Thermal hazards</b>	None.		
<b>General hygiene considerations</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash. Observe any medical surveillance requirements.		

## 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	Solid.
<b>Form</b>	Panel.
<b>Color</b>	Off-white to tan.
<b>Odor</b>	Low to no odor.
<b>Odor threshold</b>	Not applicable.
<b>pH</b>	6 - 8
<b>Melting point/freezing point</b>	Not applicable.
<b>Initial boiling point and boiling range</b>	Not applicable.
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not applicable.
<b>Flammability limit - upper (%)</b>	Not applicable.
<b>Explosive limit - lower (%)</b>	Not applicable.
<b>Explosive limit - upper (%)</b>	Not applicable.
<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	0.9 - 1 (Gypsum) (H2O=1)
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Insoluble
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.

<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition temperature</b>	2642 °F (1450 °C)
<b>Viscosity</b>	Not applicable.
<b>Other information</b>	
<b>Bulk density</b>	53 - 65 lb/ft³
<b>Particle size</b>	Varies.
<b>VOC (Weight %)</b>	0 %

## 10. Stability and reactivity

<b>Reactivity</b>	Not available.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents. Strong acids.
<b>Hazardous decomposition products</b>	Calcium oxides, carbon dioxide, and carbon monoxide.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	Not likely, due to the form of the product.
<b>Inhalation</b>	Inhalation of dusts may cause respiratory irritation.
<b>Skin contact</b>	Under normal conditions of intended use, this material does not pose a skin hazard.
<b>Eye contact</b>	Mechanical processing may generate dust. Direct contact with eyes may cause temporary irritation (1).

<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Under normal conditions of intended use, this material does not pose a risk to health.
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### Information on toxicological effects

<b>Acute toxicity</b>	Not expected to be a hazard under normal conditions of intended use.
<b>Skin corrosion/irritation</b>	Gypsum was not found to be a skin irritant.
<b>Serious eye damage/eye irritation</b>	Gypsum does not cause serious eye damage or irritation.

### Respiratory or skin sensitization

<b>Respiratory sensitization</b>	No data available, but based on results from the skin sensitization study, calcium sulfate is not expected to be a respiratory sensitizer.
<b>Skin sensitization</b>	Not a skin sensitizer (2).
<b>Germ cell mutagenicity</b>	No evidence of mutagenic potential exists (3,4,5).
<b>Carcinogenicity</b>	No evidence of carcinogenic potential exists (6).
<b>Reproductive toxicity</b>	No evidence of reproductive toxicity exists (2).
<b>Specific target organ toxicity - single exposure</b>	No data available, but none expected.
<b>Specific target organ toxicity - repeated exposure</b>	No data available, but none expected.
<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.
<b>Chronic effects</b>	No specific acute or chronic health impact noted.

## 12. Ecological information

<b>Ecotoxicity</b>	The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
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Components	Species	Test Results
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours
<b>Persistence and degradability</b>	Not applicable for the salt of inorganic compounds. Calcium sulfate dissolves in water without undergoing chemical degradation.	
<b>Bioaccumulative potential</b>	Bioaccumulation is not expected.	

<b>Mobility in soil</b>	Calcium sulfate has a low potential for adsorption to soil. If water is applied, gypsum dissolves and the calcium and sulfate ions are mobile and penetrate the subsoil (6).
<b>Other adverse effects</b>	None expected.

### 13. Disposal considerations

<b>Disposal instructions</b>	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.
<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.

### 14. Transport information

<b>DOT</b>	Not regulated as dangerous goods.
<b>IATA</b>	Not regulated as dangerous goods.
<b>IMDG</b>	Not regulated as dangerous goods.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

### 15. Regulatory information

<b>US federal regulations</b>	This product is not hazardous according to OSHA 29CFR 1910.1200.
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#### **TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

#### **US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

#### **CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.

#### **Superfund Amendments and Reauthorization Act of 1986 (SARA)**

<b>Hazard categories</b>	Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
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#### **SARA 302 Extremely hazardous substance**

Not listed.

<b>SARA 311/312 Hazardous chemical</b>	No
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#### **SARA 313 (TRI reporting)**

Not regulated.

#### **Other federal regulations**

##### **Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

##### **Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

<b>Safe Drinking Water Act (SDWA)</b>	Not regulated.
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#### **US state regulations**

##### **US. Massachusetts RTK - Substance List**

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)  
Cellulose (CAS 9004-34-6)

##### **US. New Jersey Worker and Community Right-to-Know Act**

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)  
Cellulose (CAS 9004-34-6)

##### **US. Pennsylvania Worker and Community Right-to-Know Law**

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)  
Cellulose (CAS 9004-34-6)

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

WARNING: This product contains a chemical known to the State of California to cause cancer.

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Not listed.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

**Issue date** 12-February-2014

**Revision date** -

**Version #** 01

**Further information** Crystalline silica: Raw materials in this product may contain respirable crystalline silica. Exposures to respirable crystalline silica are not expected during the normal use of this product. However, actual levels must be determined by workplace hygiene testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.

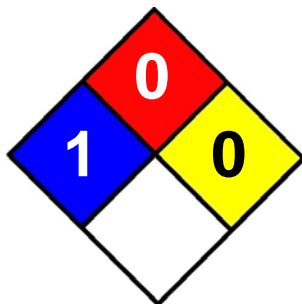
NFPA Ratings:

Health: 1

Flammability: 0

Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

**NFPA Ratings****List of abbreviations**

NFPA: National Fire Protection Association.

**References**

1. US National Library of Medicine (NLM) (1998). Hazardous Substances Data Bank (HSDB).
2. Tested by LG Life Science/Toxicology Center, Korea (2002). National Institute of Environmental Research (NIER).
3. Dopp E et al. (1995). Environ. Health Perspect. 103(3), 268-271.
4. Cremer H.H. et al. (1988). Wiss. Umwelt. 4, 202-205.
5. Fujita H et al. (1988). Kenkya Nenpo-Tokyo-Toritsu Eisei Kenkynsho. 39, 343-350.
6. Shainberg et al. (1989). Advanced Soil Sci. 9, 1-111.

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# SAFETY DATA SHEET

## 1. Identification

Product identifier	FIBEROCK® Abuse-Resistant Interior Panels
Other means of identification	
SDS number	56000000001
Synonyms	Fiber-Reinforced Gypsum Panels, Gypsum Fiber Panels (GFP), Gypsum Panels, Drywall, Plasterboard, Wallboard
Recommended use	Interior use.
Recommended restrictions	Use in accordance with manufacturer's recommendations.
Manufacturer / Importer / Supplier / Distributor information	
Company name	United States Gypsum Company
Address	550 West Adams Street Chicago, Illinois 60661-3637
Telephone	1-800-874-4968
Website	www.usg.com
Emergency phone number	1-800-507-8899

## 2. Hazard(s) identification

Physical hazards	Not classified.
Health hazards	Not classified.
OSHA defined hazards	Not classified.
Label elements	
Hazard symbol	None.
Signal word	None.
Hazard statement	None.
Precautionary statement	
Prevention	Observe good industrial hygiene practices.
Response	Get medical attention/advice if you feel unwell.
Storage	Store as indicated in Section 7.
Disposal	Dispose of in accordance with local, state, and federal regulations.
Hazard(s) not otherwise classified (HNOC)	None known.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Calcium sulfate dihydrate (alternative CAS 10101-41-4)	13397-24-5	> 90
Cellulose	9004-34-6	< 10

Composition comments	All concentrations are in percent by weight unless ingredient is a gas.  Results of an industrial hygiene study found no airborne respirable crystalline silica in the breathing zones of workers during the normal activities associated with the use of this product. However, job site air monitoring should be conducted when permissible exposure limits may be exceeded.
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## 4. First-aid measures

Inhalation	Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.
Skin contact	Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.
Eye contact	Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.

<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Under normal conditions of intended use, this material does not pose a risk to health. Dust may irritate throat and respiratory system and cause coughing.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	Not applicable.
<b>Specific hazards arising from the chemical</b>	Not a fire hazard.
<b>Special protective equipment and precautions for firefighters</b>	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>Specific methods</b>	Cool material exposed to heat with water spray and remove it if no risk is involved.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	See Section 8 of the SDS for Personal Protective Equipment.
<b>Methods and materials for containment and cleaning up</b>	No specific clean-up procedure noted. For waste disposal, see Section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge to drains, sewers, and other water systems.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Use work methods like "score and snap" to minimize dust production. Avoid inhalation of dust and contact with skin and eyes. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices. When moving board with a forklift or similar equipment, it is essential that the equipment be rated capable of handling the loads. The forks should always be long enough to extend completely through the width of the load. Fork spacing between supports should be one half the length of the panels or base being handled so that a maximum of 3' extends beyond the supports on either end.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Protect product from physical damage. Protect from weather and prevent exposure to sustained moisture. FIBEROCK® panels should be stored flat.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	PEL	5 mg/m3	Respirable fraction.
Cellulose (CAS 9004-34-6)	PEL	15 mg/m3 5 mg/m3 15 mg/m3	Total dust. Respirable fraction. Total dust.

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	10 mg/m3	Inhalable fraction.
Cellulose (CAS 9004-34-6)	TWA	10 mg/m3	

## US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	5 mg/m3	Respirable.
Cellulose (CAS 9004-34-6)	TWA	10 mg/m3 5 mg/m3 10 mg/m3	Total Respirable. Total
Biological limit values	No biological exposure limits noted for the ingredient(s).		
Appropriate engineering controls	Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.		
Individual protection measures, such as personal protective equipment			
Eye/face protection	Wear approved safety goggles.		
Skin protection			
Hand protection	It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.		
Other	Normal work clothing (long sleeved shirts and long pants) is recommended.		
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use. Observe any medical surveillance requirements.		
Thermal hazards	None.		
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash. Observe any medical surveillance requirements.		

## 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	Solid.
<b>Form</b>	Panel.
<b>Color</b>	Off-white to tan.
<b>Odor</b>	Low to no odor.
<b>Odor threshold</b>	Not applicable.
<b>pH</b>	6 - 8
<b>Melting point/freezing point</b>	Not applicable.
<b>Initial boiling point and boiling range</b>	Not applicable.
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not applicable.
<b>Flammability limit - upper (%)</b>	Not applicable.
<b>Explosive limit - lower (%)</b>	Not applicable.
<b>Explosive limit - upper (%)</b>	Not applicable.
<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	0.9 - 1 (Gypsum) (H2O=1)
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Insoluble
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.

Auto-ignition temperature	Not applicable.
Decomposition temperature	2642 °F (1450 °C)
Viscosity	Not applicable.
Other information	
Bulk density	53 - 65 lb/ft³
Particle size	Varies.
VOC (Weight %)	0 %

## 10. Stability and reactivity

Reactivity	Not available.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Strong acids.
Hazardous decomposition products	Calcium oxides, carbon dioxide, and carbon monoxide.

## 11. Toxicological information

### Information on likely routes of exposure

Ingestion	Not likely, due to the form of the product.
Inhalation	Inhalation of dusts may cause respiratory irritation.
Skin contact	Under normal conditions of intended use, this material does not pose a skin hazard.
Eye contact	Mechanical processing may generate dust. Direct contact with eyes may cause temporary irritation (1).

Symptoms related to the physical, chemical and toxicological characteristics	Under normal conditions of intended use, this material does not pose a risk to health.
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### Information on toxicological effects

Acute toxicity	Not expected to be a hazard under normal conditions of intended use.
Skin corrosion/irritation	Gypsum was not found to be a skin irritant.
Serious eye damage/eye irritation	Gypsum does not cause serious eye damage or irritation.

### Respiratory or skin sensitization

Respiratory sensitization	No data available, but based on results from the skin sensitization study, calcium sulfate is not expected to be a respiratory sensitizer.
Skin sensitization	Not a skin sensitizer (2).
Germ cell mutagenicity	No evidence of mutagenic potential exists (3,4,5).
Carcinogenicity	No evidence of carcinogenic potential exists (6).
Reproductive toxicity	No evidence of reproductive toxicity exists (2).
Specific target organ toxicity - single exposure	No data available, but none expected.
Specific target organ toxicity - repeated exposure	No data available, but none expected.
Aspiration hazard	Due to the physical form of the product it is not an aspiration hazard.
Chronic effects	No specific acute or chronic health impact noted.

## 12. Ecological information

Ecotoxicity	The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
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Components	Species	Test Results
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours
Persistence and degradability	Not applicable for the salt of inorganic compounds. Calcium sulfate dissolves in water without undergoing chemical degradation.	
Bioaccumulative potential	Bioaccumulation is not expected.	



<b>Mobility in soil</b>	Calcium sulfate has a low potential for adsorption to soil. If water is applied, gypsum dissolves and the calcium and sulfate ions are mobile and penetrate the subsoil (6).
<b>Other adverse effects</b>	None expected.

### 13. Disposal considerations

<b>Disposal instructions</b>	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.
<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.

### 14. Transport information

<b>DOT</b>	Not regulated as dangerous goods.
<b>IATA</b>	Not regulated as dangerous goods.
<b>IMDG</b>	Not regulated as dangerous goods.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

### 15. Regulatory information

<b>US federal regulations</b>	This product is not hazardous according to OSHA 29CFR 1910.1200.
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#### **TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

#### **US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

#### **CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.

#### **Superfund Amendments and Reauthorization Act of 1986 (SARA)**

<b>Hazard categories</b>	Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
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#### **SARA 302 Extremely hazardous substance**

Not listed.

<b>SARA 311/312 Hazardous chemical</b>	No
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#### **SARA 313 (TRI reporting)**

Not regulated.

#### **Other federal regulations**

##### **Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

##### **Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

<b>Safe Drinking Water Act (SDWA)</b>	Not regulated.
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#### **US state regulations**

##### **US. Massachusetts RTK - Substance List**

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)  
Cellulose (CAS 9004-34-6)

##### **US. New Jersey Worker and Community Right-to-Know Act**

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)  
Cellulose (CAS 9004-34-6)

##### **US. Pennsylvania Worker and Community Right-to-Know Law**

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)  
Cellulose (CAS 9004-34-6)

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

WARNING: This product contains a chemical known to the State of California to cause cancer.

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Not listed.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

**Issue date** 12-February-2014

**Revision date** -

**Version #** 01

**Further information** Crystalline silica: Raw materials in this product may contain respirable crystalline silica. Exposures to respirable crystalline silica are not expected during the normal use of this product. However, actual levels must be determined by workplace hygiene testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.

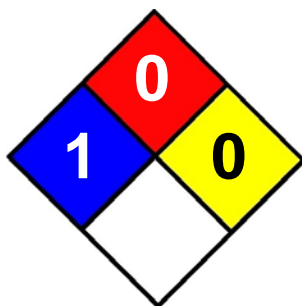
NFPA Ratings:

Health: 1

Flammability: 0

Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

**NFPA Ratings****List of abbreviations**

NFPA: National Fire Protection Association.

**References**

1. US National Library of Medicine (NLM) (1998). Hazardous Substances Data Bank (HSDB).
2. Tested by LG Life Science/Toxicology Center, Korea (2002). National Institute of Environmental Research (NIER).
3. Dopp E et al. (1995). Environ. Health Perspect. 103(3), 268-271.
4. Cremer H.H. et al. (1988). Wiss. Umwelt. 4, 202-205.
5. Fujita H et al. (1988). Kenkya Nenpo-Tokyo-Toritsu Eisei Kenkynsho. 39, 343-350.
6. Shainberg et al. (1989). Advanced Soil Sci. 9, 1-111.

**Disclaimer**

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



# MATERIAL SAFETY DATA SHEET

## IMPERIAL Gypsum Base, ABUSE-RESISTANT

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### SECTION 1

#### CHEMICAL PRODUCT AND IDENTIFICATION

United States Gypsum Company  
550 West Adams Street  
Chicago, Illinois 60661-3637  
A Subsidiary of USG Corporation

Product Safety: 1 (800) 507-8899  
[www.usg.com](http://www.usg.com)  
Version Date: January 1, 2011  
Version: 4

**PRODUCT(S)** IMPERIAL Gypsum Base, ABUSE-RESISTANT

**CHEMICAL FAMILY /  
GENERAL CATEGORY** Wallboard

**SYNONYMS** Gypsum Panels, Drywall

### SECTION 2

#### HAZARD IDENTIFICATION

##### EMERGENCY OVERVIEW:

##### ΔWARNING!

This product is not expected to produce any unusual hazards during normal use. Exposure to high dust levels may irritate the skin, eyes, nose, throat, or upper respiratory tract. This product does not present an inhalation, ingestion, or contact health hazard unless subjected to operations such as sawing, sanding or machining which result in the generation of airborne particulate. This product contains quartz (crystalline silica) as a naturally occurring contaminant.

##### POTENTIAL HEALTH EFFECTS (See Section 11 for more information)

##### ACUTE :

Inhalation	Exposure to dust generated during the handling or use of the product may cause temporary irritation to eyes, skin, nose, throat, and upper respiratory tract. Persons subjected to large amounts of this dust will be forced to leave area because of nuisance conditions such as coughing, sneezing and nasal irritation. Labored breathing may occur after excessive inhalation. If respiratory symptoms persist, consult physician.
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Eyes	Dust can cause temporary mechanical irritation of eyes. If burning, redness, itching, pain or other symptoms persist or develop, consult physician.
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Skin	None known.
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Ingestion	None known.
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##### CHRONIC:

Inhalation	<p>The concentration of respirable crystalline silica measured in bulk samples of USG gypsum was less than 0.1 Wt.%. Industrial hygiene testing, following the NIOSH Method 7500, did not detect respirable crystalline silica in dust created during the cutting of USG gypsum wallboard panels by both the recommended score and snap technique and with the use of a power saw in a 10ft by 10ft room.</p> <p>Panels do not release respirable dust in their installed state and therefore do not present any known health hazards when installed and properly maintained. Exposures to respirable crystalline silica are not expected during the normal use of this product; however, actual levels must be determined by workplace hygiene testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer. The development of silicosis may increase the risks of additional health effects. The risk of developing silicosis is dependent upon the exposure intensity and duration.</p>
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Eyes	None known.
Skin	None known.
Ingestion	None known.

**TARGET ORGANS:** Eyes, skin and respiratory system.**PRIMARY ROUTES OF ENTRY:** Inhalation, eyes and skin contact.

**CARCINOGENICITY CLASSIFICATION OF INGREDIENT(S)** All substances listed are associated with the nature of the raw materials used in the manufacture of this product and are not independent components of the product formulation. All substances, if present, are at levels well below regulatory limits. See Section 11: Toxicology Information for detailed information.

MATERIAL	IARC	NTP	ACGIH	CAL- 65
Crystalline silica	1	1	A2	Listed
FibrousGlass/Continuous Filament	3	2	A4	Not Listed

IARC - International Agency for Research on Cancer: 1- Carcinogenic to humans; 2A – Probably carcinogenic to humans; 2B – Possibly carcinogenic to humans; 3 - Not classifiable as a carcinogen; 4 – Probably not a carcinogen

NTP – National Toxicology Program (Health and Human Services Dept., Public Health Service, NIH/NIEHS): 1- Known to be carcinogen; 2- Anticipated to be carcinogens

ACGIH – American Conference of Governmental Industrial Hygienists: A1 – Confirmed human carcinogen; A2 – Suspected human carcinogen; A3 – Animal carcinogen; A4 - Not classifiable as a carcinogen; A5 – Not suspected as a human carcinogen

CAL-65 – California Proposition 65 “Chemicals known to the State of California to Cause Cancer”

Respirable crystalline silica: IARC: Group 1 carcinogen, NTP: Known human carcinogen. The weight percent of crystalline silica given represents total quartz and not the respirable fraction. The weight percent of respirable silica has not been measured in this product.

**POTENTIAL ENVIRONMENTAL EFFECTS:** Toxicity studies of gypsum performed with fish, aquatic invertebrates and aquatic plants showed no toxic effect. (See Section 12 for more information.)

### SECTION 3

#### COMPOSITION, INFORMATION ON INGREDIENTS

MATERIAL	WT%	CAS #
Gypsum or Calcium Sulfate Dihydrate (CaSO <sub>4</sub> •2H <sub>2</sub> O)	>85	13397-24-5/10101-41-4
Cellulose	<10	9004-34-6
Starch	<3	9005-25-8
Crystalline Silica	<5	14808-60-7^
May Contain:		[ ]
Fibrous Glass (Continuous Filament)	<1	65997-17-3#

All ingredients of this product are included in the U.S. Environmental Protection Agency's Toxic Substances Control Act Chemical Substance Inventory and the Canadian Domestic Substances List (DSL).

^The weight percent for silica represents total quartz and not the respirable fraction.

#As manufactured, continuous filament glass fibers are not respirable. Continuous filaments that are chopped, crushed, or severely mechanically processed during manufacture or use may contain very small amounts of respirable particulates.



# MATERIAL SAFETY DATA SHEET

## IMPERIAL Gypsum Base, ABUSE-RESISTANT

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### SECTION 4 FIRST AID MEASURES

#### FIRST AID PROCEDURES

Inhalation	Remove to fresh air. Leave the area of exposure and remain away until coughing and other symptoms subside. Other measures are usually not necessary, however if conditions warrant, contact physician.
Eyes	In case of contact, do not rub or scratch your eyes. To prevent mechanical irritation, flush thoroughly with water for 15 minutes. If irritation persists, consult physician.
Skin	Wash with mild soap and water. If irritation persists, consult physician.
Ingestion	This product is not intended to be ingested or eaten. If gastric disturbance occurs, call physician.

**MEDICAL CONDITIONS WHICH MAY BE AGGRAVATED:** Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

**NOTES TO PHYSICIAN:** Treatment should be directed at the control of symptoms and the clinical condition.

### SECTION 5 FIRE FIGHTING MEASURES

General Fire Hazards	None known		
Extinguishing Media	Water or use extinguishing media appropriate for surrounding fire.		
Special Fire Fighting Procedures	Wear appropriate personal protective equipment. See section 8.		
Unusual Fire/ Explosion Hazards	None known		
Hazardous Combustion Products	None known		
Flash Point	Not Determined	Auto Ignition	Not Applicable
Method Used	Not Applicable	Flammability Classification	Not Applicable
Upper Flammable Limit (UFL)	Not Determined		
Lower Flammable Limit (LFL)	Not Determined	Rate of Burning	Not Applicable

### SECTION 6 ACCIDENTAL RELEASE MEASURES

**CONTAINMENT:** Collect panels from spillage and if not damaged or contaminated by foreign material, panels may be reclaimed.

**CLEAN-UP:** Use normal clean up procedures. No special precautions.

**DISPOSAL:** Follow all local, state, provincial and federal regulations. Never discharge large releases directly into sewers or surface waters.



# MATERIAL SAFETY DATA SHEET

## IMPERIAL Gypsum Base, ABUSE-RESISTANT

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### SECTION 7 HANDLING AND STORAGE

**HANDLING:** Avoid dust contact with eyes and skin. Wear the appropriate eye and skin protection against dust (See Section 8). Minimize dust generation and accumulation. Avoid breathing dust. Wear the appropriate respiratory protection against dust in poorly ventilated areas and if TLV is exceeded (see Sections 2 and 8). Use good safety and industrial hygiene practices. When moving board with a forklift or similar equipment, it is essential that the equipment be rated capable of handling the loads. The forks should always be long enough to extend completely through the width of the load. Fork spacing between supports should be one half the length of the panels or base being handled so that a maximum of 4' extends beyond the supports on either end.

Follow traditional building practices; such as management of water away from the interior of the structure to avoid the growth of mold, mildew and fungus. Remove any building products suspected of being exposed to sustained moisture and considered conducive to mold growth from the jobsite.

Gypsum panels are very heavy awkward loads posing the risk of severe back injury. Use proper lifting techniques.

**STORAGE:** Store in a cool, dry, ventilated area away from sources of heat, moisture and incompatibilities (see Section 10). Protect product from physical damage.

Protect from weather and prevent exposure to sustained moisture.

Gypsum Association literature recommends storing board flat to avoid damaging edges, warping the board and the potential safety hazards of the board falling over. However, in other situations, storing the board flat may cause a tripping hazard or exceed floor limit loads. If stacking board vertically, leave at least 4 inches from the wall to decrease the risk of falling board and no more than 6 inches to avoid too much lateral weight against the wall.

### SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

MATERIAL	WT%	TLV (mg/m <sup>3</sup> )	PEL (mg/m <sup>3</sup> )
Gypsum or Calcium Sulfate Dihydrate (CaSO <sub>4</sub> •2H <sub>2</sub> O)	>85	10	15 (T) / 5 (R)
Cellulose	<10	10	15 (T) / 5 (R)
Starch	<3	10	15 (T) / 5 (R)
Crystalline Silica	<5	0.025 (R)	0.1 (R)
May Contain:		[	]
Fibrous Glass (Continuous Filament)	<1	1 f/cc (R) *	15 (T) / 5 (R)

(T)—Total; (R)—Respirable; (NE)—Not Established; (C)—Ceiling; (STEL)—Short-term exposure limit

(F)—Fume; (Du)—Dust; (M)—Mist

ppm—part per million; f/cc—fiber per cubic centimeter; mppcf—million particles per cubic foot

\*ACGIH: 1 fiber/cubic centimeter air for fibers longer than 5 micrometers and thinner than 3 micrometers. Continuous filaments that are chopped, crushed, or severely mechanically processed during manufacture or use may contain very small amounts of respirable particulates [PEL = 5 mg/m<sup>3</sup>(R)].

**ENGINEERING CONTROLS:** Provide ventilation sufficient to control airborne dust levels. If user operations generate airborne dust, use ventilation to keep dust concentrations below permissible exposure limits. Where general ventilation is inadequate, use process enclosures, local exhaust ventilation, or other engineering controls to control dust levels below permissible exposure limits.



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**RESPIRATORY PROTECTION:** Wear a NIOSH/MSHA-approved respirator equipped with particulate cartridges when dusty in poorly ventilated areas, and if TLV is exceeded. A respiratory program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. If engineering controls are not possible, wear a properly fitted NIOSH/MSHA-approved particulate respirator.

### OTHER PERSONAL PROTECTIVE EQUIPMENT:

Eye/Face	Wear eye protection, safety glasses or goggles, to avoid possible eye contact.
Skin	Wear gloves and protective clothing to prevent repeated or prolonged skin contact.
General	Selection of Personal Protective Equipment will depend on environmental working conditions and operations.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Paper with gray to off white core	Vapor Density (Air = 1)	Not Applicable
Odor	Low to no odor	Specific Gravity (H <sub>2</sub> O = 1)	2.32 – 2.96
Odor Threshold	Not Determined	Solubility in water (g/100g)	0.26/100g
Physical State	Solid	Partition Coefficient	Not Applicable
pH @ 25 ° C	~ 7	Auto-ignition Temp	Not Determined
Melting Point	Not Applicable	Decomposition Temp	2650°F/1450°C
Freezing Point	Not Applicable	Viscosity	Not Applicable
Boiling Point	Not Applicable	Particle Size	Varies
Flash Point	Not Determined	Bulk Density	~ 55 lb/ft <sup>3</sup>
Evaporation Rate (BuAc = 1)	Not Applicable	Molecular Weight	~ 172
Upper Flammable Limit (UFL)	Not Determined	VOC Content	Zero g/L
Lower Flammable Limit (LFL)	Not Determined	Percent Volatile	Zero
Vapor Pressure (mm Hg)	Not Applicable		

## SECTION 10 CHEMICAL STABILITY AND REACTIVITY

STABILITY	Stable.
CONDITIONS TO AVOID	Contact with incompatibles (see below).
INCOMPATIBILITY	None known.
HAZARDOUS POLYMERIZATION	None known.
HAZARDOUS DECOMPOSITION	None known.

## SECTION 11 TOXICOLOGICAL INFORMATION



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**ACUTE EFFECTS:** The acute oral toxicity study [OECD TG 420] of calcium sulfate dihydrate showed that this chemical did not cause any changes even at 2,000 mg/kg b.w. Therefore, the oral LD50 value was more than 2,000-mg/kg b.w. for female rats. Gypsum paste applied experimentally to the eyes of rabbits was not an irritant. Gypsum dust particulate has shown an irritant action on mucous membranes of the respiratory tract and eyes. The sulfate ion has caused gastro-intestinal disturbance in humans following large oral doses. Limited studies involving the repeated inhalation of an (unspecified) calcium sulfate failed to identify any particular target organs in monkeys, rats and hamsters. No evidence of mutagenicity was found in Ames bacterial tests.

**CHRONIC EFFECTS / CARCINOGENICITY:** Panels do not release respirable dust in their installed state and therefore do not present any known health hazards when installed and properly maintained.

**Crystalline Silica:** Exposures to respirable crystalline silica are not expected during the normal use of this product; however, actual levels must be determined by workplace hygiene testing. The weight percent of respirable crystalline silica may not have been measured in this product. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer. The development of silicosis may increase the risks of additional health effects. Smoking in combination with silica exposures increases the risk of cancer. The risk of developing silicosis is dependent upon the exposure intensity and duration.

In June, 1997, IARC classified crystalline silica (quartz and cristobalite) as a human carcinogen. In making the overall evaluation, the IARC Working Group noted that carcinogenicity in humans was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs.

IARC states that crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1).

## SECTION 12 ECOLOGICAL INFORMATION

**ENVIRONMENTAL TOXICITY:** This product has no known adverse effect on ecology. Toxicity studies of gypsum performed with fish, aquatic invertebrates and aquatic plants showed no toxic effect.

<b>Ecotoxicity value</b>	Not determined.
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## SECTION 13 DISPOSAL CONSIDERATIONS

**WASTE DISPOSAL METHOD:** Dispose of material in accordance with federal, state, and local regulations. Never discharge directly into sewers or surface waters. Consult with environmental regulatory agencies for guidance on acceptable disposal practices.

## SECTION 14 TRANSPORT INFORMATION

**U.S. DOT INFORMATION:** Not a hazardous material per DOT shipping requirements. Not classified or regulated.

<b>Shipping Name</b>	Same as product name.
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<b>Hazard Class</b>	Not classified.
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UN/NA #	None. Not classified.
Packing Group	None.
Label (s) Required	Not applicable.
GGVSec/MDG-Code	Not classified.
ICAO/IATA-DGR	Not applicable.
RID/ADR	None.
ADNR	None.

### SECTION 15 REGULATORY INFORMATION

#### UNITED STATES REGULATIONS

All ingredients of this product are included in the U.S. Environmental Protection Agency's Toxic Substances Control Act Chemical Substance Inventory.

MATERIAL	WT%	302	304	313	CERCLA	CAA Sec. 112	RCRA Code
Gypsum or Calcium Sulfate Dihydrate (CaSO <sub>4</sub> •2H <sub>2</sub> O)	>85	NL	NL	NL	NL	NL	NL
Cellulose	<10	NL	NL	NL	NL	NL	NL
Starch	<3	NL	NL	NL	NL	NL	NL
Crystalline Silica	<5	NL	NL	NL	NL	NL	NL
May Contain:		[					]
Fibrous Glass (Continuous Filament)	<1	NL	NL	NL	NL	NL	NL

Key: NL = Not Listed

SARA Title III Section 302 (EPCRA) Extremely Hazardous Substances: Threshold Planning Quantity (TPQ)

SARA Title III Section 304 (EPCRA) Extremely Hazardous Substances: Reportable Quantity (RQ)

SARA Title III Section 313 (EPCRA) Toxic Chemicals: X= Subject to reporting under section 313

CERCLA Hazardous Substances: Reportable Quantity (RQ)

CAA Section 112 (r) Regulated Chemicals for Accidental Release Prevention: Threshold Quantities(TQ)

RCRA Hazardous Waste: RCRA hazardous waste code

#### CANADIAN REGULATIONS

This product has been classified in accordance with the hazard criteria of Controlled Product regulations and the MSDS contains all the information required by the Controlled Products Regulations. All ingredients of this product are included in the Canadian Domestic Substances List (DSL).

MATERIAL	WT%	IDL Item #	WHMIS Classification
Gypsum or Calcium Sulfate Dihydrate (CaSO <sub>4</sub> •2H <sub>2</sub> O)	>85	Not Listed	Not Listed
Cellulose	<10	Not Listed	Not Listed
Starch	<3	Not Listed	Not Listed
Crystalline Silica	<5	1406	D2A
May Contain:		[	]
Fibrous Glass (Continuous Filament)	<1	Not Listed	Not Listed



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IDL Item#: Canadian Hazardous Products Act – Ingredient Disclosure List Item #

WHMIS Classification: Workplace Hazardous Material Information System

**Risk and Safety Phrases defined by European Union Directive 67/548/EEC (Annex III and IV)**

R-Phrase(s): R36/37/38

S-Phrase(s): S51 S38 S39


### SECTION 16

### OTHER INFORMATION

**Label Information****Δ WARNING!**

Dust can cause irritation to eyes, skin and respiratory tract. Wear eye, skin and respiratory protection as necessary per working conditions. If eye contact occurs flush with water for 15 minutes. Do not ingest. If ingested, call physician. If cutting board with a power tool, use a wet or vacuum saw to reduce the amount of dust generated. Panels are heavy and can fall over, causing serious injury or death. Avoid creating a tripping hazard and do not exceed floor limit loads. Product safety information: 800-507-8899 or usg.com. Customer Service: 800 USG-4-YOU (800 874-4968). KEEP OUT OF REACH OF CHILDREN.

**INFORMATION FOR HANDLING AND IDENTIFICATION OF CHEMICAL HAZARDS**

NFPA Ratings:			HMIS Ratings:		<table><tr><td>HEALTH</td><td>*</td><td>1</td></tr><tr><td>FLAMMABILITY</td><td></td><td>0</td></tr><tr><td>PHYSICAL HAZARD</td><td></td><td>0</td></tr><tr><td>PERSONAL PROTECTION</td><td></td><td>E</td></tr></table>	HEALTH	*	1	FLAMMABILITY		0	PHYSICAL HAZARD		0	PERSONAL PROTECTION		E	0 = Minimal Hazard
HEALTH	*		1															
FLAMMABILITY			0															
PHYSICAL HAZARD			0															
PERSONAL PROTECTION		E																
Health:	1	Health:	1	1 = Slight Hazard														
Fire:	0	Fire:	0	2 = Moderate Hazard														
Reactivity:	0	Reactivity:	0	3 = Serious Hazard														
					4 = Severe Hazard													

E – Safety glasses, gloves and dust respirator; \* - Contains silica

**Key/Legend**

ANSI	American National Standards Institute
ACGIH	American Conference of Governmental Industrial Hygienists
CAA	Clean Air Act
CAS	Chemical Abstracts Service (Registry Number)
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CFR	Code of Federal Regulations
DOT	United States Department of Transportation
DSL	Canadian Domestic Substances List
EPA	United States Environmental Protection Agency
EPCRA	Emergency Planning & Community Right-to-know Act
HMIS	Hazardous Materials Identification System
IARC	International Agency for Research on Cancer
MSHA	Mine Safety and Health Administration
NDSL	Canadian Non-Domestic Substances List
NFPA	National Fire Protection Association



# MATERIAL SAFETY DATA SHEET

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NIOSH	National Institute for Occupational Safety and Health
OSHA	Occupational Health and Safety Administration
PEL	Permissible Exposure Limit
PPE	Personal Protection Equipment
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization Act of 1986
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
UN/NA#	United Nations/North America number
WHMIS	Workplace Hazardous Material Information System

Prepared by:  
Product Safety  
USG Corporation  
550 West Adams Street  
Chicago, IL 60661-3637

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for his/her own particular use.

**END**



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** IMPERIAL® Gypsum Base FIRECODE® Core

**Other means of identification**

**SDS number** 54000001001

**Synonyms** Gypsum Panels, Drywall, Plasterboard, Wallboard

**Recommended use** Interior use.

**Recommended restrictions** Use in accordance with manufacturer's recommendations.

### Manufacturer / Importer / Supplier / Distributor information

**Company name** United States Gypsum Company

**Address** 550 West Adams Street  
Chicago, Illinois 60661-3637

**Telephone** 1-800-874-4968

**Website** www.usg.com

**Emergency phone number** 1-800-507-8899

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Not classified.

**OSHA defined hazards** Not classified.

### Label elements

**Hazard symbol** None.

**Signal word** None.

**Hazard statement** None.

### Precautionary statement

**Prevention** Observe good industrial hygiene practices.

**Response** Get medical attention/advice if you feel unwell.

**Storage** Store as indicated in Section 7.

**Disposal** Dispose of in accordance with local, state, and federal regulations.

**Hazard(s) not otherwise classified (HNOC)** Not classified.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Calcium sulfate dihydrate (alternative CAS 10101-41-4)	13397-24-5	≥ 85
Cellulose	9004-34-6	< 5

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas.

The gypsum used to manufacture these panels contains respirable crystalline silica ranging up to 0.56 percent by weight, depending on source, as indicated by bulk sampling methods. Industrial hygiene testing using both personal and area sampling measured no detectable respirable crystalline silica when cutting the product by "score and snap," rotary saw, or circular saw. Good work practices which minimize the extent of dust generation should be followed.

## 4. First-aid measures

**Inhalation** Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

**Skin contact** Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

**Eye contact** Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.

<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Under normal conditions of intended use, this material does not pose a risk to health. Dust may irritate throat and respiratory system and cause coughing.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	Not applicable.
<b>Specific hazards arising from the chemical</b>	Not a fire hazard.
<b>Special protective equipment and precautions for firefighters</b>	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>Specific methods</b>	Cool material exposed to heat with water spray and remove it if no risk is involved.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	See Section 8 of the SDS for Personal Protective Equipment.
<b>Methods and materials for containment and cleaning up</b>	No specific clean-up procedure noted. For waste disposal, see Section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge to drains, sewers, and other water systems.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Use work methods which minimize dust production. Avoid inhalation of dust and contact with skin and eyes. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices. When moving board with a forklift or similar equipment, it is essential that the equipment be rated capable of handling the loads. The forks should always be long enough to extend completely through the width of the load. Fork spacing between supports should be one half the length of the panels or base being handled so that a maximum of 4' extends beyond the supports on either end.
	Follow traditional building practices; such as management of water away from the interior of the structure to avoid the growth of mold, mildew and fungus. Remove any building products suspected of being exposed to sustained moisture and considered conducive to mold growth from the job site. Gypsum panels are very heavy, awkward loads posing the risk of severe back injury. Use proper lifting techniques.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Protect product from physical damage. Protect from weather and prevent exposure to sustained moisture. Gypsum Association literature (GA-801-07) recommends storing board flat to avoid damaging edges, warping the board and the potential safety hazards of the board falling over. However, in other situations, storing the board flat may cause a tripping hazard or exceed floor limit loads. If stacking board vertically, leave at least 4 inches from the wall to decrease the risk of falling board and no more than 6 inches to avoid too much lateral weight against the wall.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Cellulose (CAS 9004-34-6)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

## US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	10 mg/m3	Inhalable fraction.
Cellulose (CAS 9004-34-6)	TWA	10 mg/m3	

## US NIOSH Pocket Guide to Chemical Hazards: Recommended exposure limit (REL)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	5 mg/m3	Respirable.
Cellulose (CAS 9004-34-6)	TWA	10 mg/m3	Total
		5 mg/m3	Respirable.
		10 mg/m3	Total

### Biological limit values

No biological exposure limits noted for the ingredient(s).

### Appropriate engineering controls

Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Wear approved safety goggles.

#### Skin protection

##### Hand protection

It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

##### Other

Normal work clothing (long sleeved shirts and long pants) is recommended.

#### Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use. Observe any medical surveillance requirements.

#### Thermal hazards

None.

### General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Observe any medical surveillance requirements.

## 9. Physical and chemical properties

### Appearance

Paper faced with gypsum core.

#### Physical state

Solid.

#### Form

Panel.

#### Color

Gray to off-white.

### Odor

Low to no odor.

### Odor threshold

Not applicable.

### pH

6 - 8

### Melting point/freezing point

Not applicable.

### Initial boiling point and boiling range

Not applicable.

### Flash point

Not applicable.

### Evaporation rate

Not applicable.

### Flammability (solid, gas)

Not applicable.

### Upper/lower flammability or explosive limits

#### Flammability limit - lower (%)

Not applicable.

#### Flammability limit - upper (%)

Not applicable.

#### Explosive limit - lower (%)

Not applicable.

#### Explosive limit - upper (%)

Not applicable.

<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	2.32 (Gypsum) (H <sub>2</sub> O=1)
<b>Solubility(ies)</b>	0.26 g/100 g (H <sub>2</sub> O)
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition temperature</b>	2642 °F (1450 °C)
<b>Viscosity</b>	Not applicable.
<b>Other information</b>	
<b>Bulk density</b>	44 lb/ft <sup>3</sup>
<b>Particle size</b>	Varies.
<b>VOC (Weight %)</b>	0 %

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents. Strong acids.
<b>Hazardous decomposition products</b>	Calcium oxides, carbon dioxide, and carbon monoxide.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	Not likely, due to the form of the product.
<b>Inhalation</b>	Mechanical processing may generate dust. Gypsum dust has an irritant action on mucous membranes of the upper respiratory tract and eyes (1).
<b>Skin contact</b>	Under normal conditions of intended use, this material does not pose a skin hazard. Gypsum was not found to be a skin irritant (2).
<b>Eye contact</b>	Mechanical processing may generate dust. Direct contact with eyes may cause temporary irritation (1).

<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Under normal conditions of intended use, this material does not pose a risk to health.
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### Information on toxicological effects

<b>Acute toxicity</b>	Low hazard.
<b>Skin corrosion/irritation</b>	Gypsum was not found to be a skin irritant.
<b>Serious eye damage/eye irritation</b>	Gypsum does not cause serious eye damage or irritation.
<b>Respiratory sensitization</b>	No data available, but based on results from the skin sensitization study, calcium sulfate is not expected to be a respiratory sensitizer.
<b>Skin sensitization</b>	Not a skin sensitizer (2).
<b>Germ cell mutagenicity</b>	No evidence of mutagenic potential exists (3,4,5).
<b>Carcinogenicity</b>	No evidence of carcinogenic potential exists (6).
<b>Reproductive toxicity</b>	No evidence of reproductive toxicity exists (2).
<b>Specific target organ toxicity - single exposure</b>	Not toxic to lung tissue.
<b>Specific target organ toxicity - repeated exposure</b>	Not toxic to lung tissue (6).
<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.
<b>Further information</b>	Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure.

## 12. Ecological information

### Ecotoxicity

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours
<b>Persistence and degradability</b>	Not applicable for the salt of inorganic compounds. Calcium sulfate dissolves in water without undergoing chemical degradation.	
<b>Bioaccumulative potential</b>	Bioaccumulation is not expected.	
<b>Mobility in soil</b>	Calcium sulfate has a low potential for adsorption to soil. If water is applied, gypsum dissolves and the calcium and sulfate ions are mobile and penetrate the subsoil (7).	
<b>Other adverse effects</b>	None expected.	

## 13. Disposal considerations

<b>Disposal instructions</b>	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.
<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.

## 14. Transport information

<b>DOT</b>	Not regulated as a hazardous material by DOT.
<b>IATA</b>	Not regulated as a dangerous good.
<b>IMDG</b>	Not regulated as a dangerous good.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

## 15. Regulatory information

<b>US federal regulations</b>	This product is not hazardous according to OSHA 29CFR 1910.1200.
<b>TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)</b>	Not regulated.
<b>US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	Not listed.
<b>CERCLA Hazardous Substance List (40 CFR 302.4)</b>	Not listed.
<b>Superfund Amendments and Reauthorization Act of 1986 (SARA)</b>	
<b>Hazard categories</b>	Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
<b>SARA 302 Extremely hazardous substance</b>	No
<b>SARA 311/312 Hazardous chemical</b>	No
<b>SARA 313 (TRI reporting)</b>	Not regulated.
<b>Other federal regulations</b>	
<b>Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List</b>	Not regulated.
<b>Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)</b>	Not regulated.



Safe Drinking Water Act (SDWA) Not regulated.

Food and Drug Administration (FDA) Not regulated.

US state regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

**US. Massachusetts RTK - Substance List**

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)  
Cellulose (CAS 9004-34-6)

**US. New Jersey Worker and Community Right-to-Know Act**

Not regulated.

**US. Pennsylvania RTK - Hazardous Substances**

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)  
Cellulose (CAS 9004-34-6)

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Not listed.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

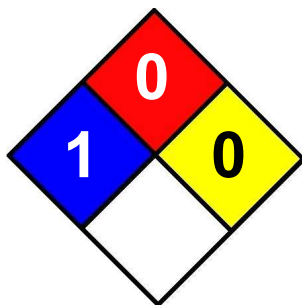
Issue date 17-December-2013

Revision date -

Version # 01

Further information NFPA Ratings:  
Health: 1  
Flammability: 0  
Physical hazard: 0  
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

**NFPA Ratings**



**List of abbreviations**

NFPA: National Fire Protection Association.

**References**

1. US National Library of Medicine (NLM) (1998). Hazardous Substances Data Bank (HSDB).
2. Tested by LG Life Science/Toxicology Center, Korea (2002). National Institute of Environmental Research (NIER).
3. Dopp E et al. (1995). Environ. Health Perspect. 103(3), 268-271.
4. Cremer H.H. et al. (1988). Wiss. Umwelt. 4, 202-205.
5. Fujita H et al. (1988). Kenkyu Nenpo-Tokyo-Toritsu Eisei Kenkyunsho. 39, 343-350.
6. Clouter et al. (1998). Inhal. Toxicol. 10, 3-14.
7. Shainberg et al. (1989). Advanced Soil Sci. 9, 1-111.

**Disclaimer**

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** IMPERIAL® Gypsum Base FIRECODE® C Core

**Other means of identification**

**SDS number** 54000001006

**Synonyms** Gypsum Panels, Drywall, Plasterboard, Wallboard

**Recommended use** Interior use.

**Recommended restrictions** Use in accordance with manufacturer's recommendations.

### Manufacturer / Importer / Supplier / Distributor information

**Company name** United States Gypsum Company

**Address** 550 West Adams Street  
Chicago, Illinois 60661-3637

**Telephone** 1-800-874-4968

**Website** www.usg.com

**Emergency phone number** 1-800-507-8899

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Not classified.

**OSHA defined hazards** Not classified.

### Label elements

**Hazard symbol** None.

**Signal word** None.

**Hazard statement** None.

### Precautionary statement

**Prevention** Observe good industrial hygiene practices.

**Response** Get medical attention/advice if you feel unwell.

**Storage** Store as indicated in Section 7.

**Disposal** Dispose of in accordance with local, state, and federal regulations.

**Hazard(s) not otherwise classified (HNOC)** Not classified.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Calcium sulfate dihydrate (alternative CAS 10101-41-4)	13397-24-5	≥ 85
Cellulose	9004-34-6	< 5

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas.

The gypsum used to manufacture these panels contains respirable crystalline silica ranging up to 0.56 percent by weight, depending on source, as indicated by bulk sampling methods. Industrial hygiene testing using both personal and area sampling measured no detectable respirable crystalline silica when cutting the product by "score and snap," rotary saw, or circular saw. Good work practices which minimize the extent of dust generation should be followed.

## 4. First-aid measures

**Inhalation** Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

**Skin contact** Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

**Eye contact** Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.

<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Under normal conditions of intended use, this material does not pose a risk to health. Dust may irritate throat and respiratory system and cause coughing.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	Not applicable.
<b>Specific hazards arising from the chemical</b>	Not a fire hazard.
<b>Special protective equipment and precautions for firefighters</b>	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>Specific methods</b>	Cool material exposed to heat with water spray and remove it if no risk is involved.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	See Section 8 of the SDS for Personal Protective Equipment.
<b>Methods and materials for containment and cleaning up</b>	No specific clean-up procedure noted. For waste disposal, see Section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge to drains, sewers, and other water systems.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Use work methods which minimize dust production. Avoid inhalation of dust and contact with skin and eyes. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices. When moving board with a forklift or similar equipment, it is essential that the equipment be rated capable of handling the loads. The forks should always be long enough to extend completely through the width of the load. Fork spacing between supports should be one half the length of the panels or base being handled so that a maximum of 4' extends beyond the supports on either end.
	Follow traditional building practices; such as management of water away from the interior of the structure to avoid the growth of mold, mildew and fungus. Remove any building products suspected of being exposed to sustained moisture and considered conducive to mold growth from the job site. Gypsum panels are very heavy, awkward loads posing the risk of severe back injury. Use proper lifting techniques.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Protect product from physical damage. Protect from weather and prevent exposure to sustained moisture. Gypsum Association literature (GA-801-07) recommends storing board flat to avoid damaging edges, warping the board and the potential safety hazards of the board falling over. However, in other situations, storing the board flat may cause a tripping hazard or exceed floor limit loads. If stacking board vertically, leave at least 4 inches from the wall to decrease the risk of falling board and no more than 6 inches to avoid too much lateral weight against the wall.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Cellulose (CAS 9004-34-6)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

## US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	10 mg/m3	Inhalable fraction.
Cellulose (CAS 9004-34-6)	TWA	10 mg/m3	

## US NIOSH Pocket Guide to Chemical Hazards: Recommended exposure limit (REL)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	5 mg/m3	Respirable.
Cellulose (CAS 9004-34-6)	TWA	10 mg/m3	Total
		5 mg/m3	Respirable.
		10 mg/m3	Total

### Biological limit values

No biological exposure limits noted for the ingredient(s).

### Appropriate engineering controls

Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Wear approved safety goggles.

#### Skin protection

##### Hand protection

It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

##### Other

Normal work clothing (long sleeved shirts and long pants) is recommended.

#### Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use. Observe any medical surveillance requirements.

#### Thermal hazards

None.

### General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Observe any medical surveillance requirements.

## 9. Physical and chemical properties

### Appearance

Paper faced with gypsum core.

#### Physical state

Solid.

#### Form

Panel.

#### Color

Gray to off-white.

### Odor

Low to no odor.

### Odor threshold

Not applicable.

### pH

6 - 8

### Melting point/freezing point

Not applicable.

### Initial boiling point and boiling range

Not applicable.

### Flash point

Not applicable.

### Evaporation rate

Not applicable.

### Flammability (solid, gas)

Not applicable.

### Upper/lower flammability or explosive limits

#### Flammability limit - lower (%)

Not applicable.

#### Flammability limit - upper (%)

Not applicable.

#### Explosive limit - lower (%)

Not applicable.

#### Explosive limit - upper (%)

Not applicable.

<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	2.32 (Gypsum) (H <sub>2</sub> O=1)
<b>Solubility(ies)</b>	0.26 g/100 g (H <sub>2</sub> O)
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition temperature</b>	2642 °F (1450 °C)
<b>Viscosity</b>	Not applicable.
<b>Other information</b>	
<b>Bulk density</b>	46 - 48 lb/ft <sup>3</sup>
<b>Particle size</b>	Varies.
<b>VOC (Weight %)</b>	0 %

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents. Strong acids.
<b>Hazardous decomposition products</b>	Calcium oxides, carbon dioxide, and carbon monoxide.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	Not likely, due to the form of the product.
<b>Inhalation</b>	Mechanical processing may generate dust. Gypsum dust has an irritant action on mucous membranes of the upper respiratory tract and eyes (1).
<b>Skin contact</b>	Under normal conditions of intended use, this material does not pose a skin hazard. Gypsum was not found to be a skin irritant (2).
<b>Eye contact</b>	Mechanical processing may generate dust. Direct contact with eyes may cause temporary irritation (1).

<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Under normal conditions of intended use, this material does not pose a risk to health.
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### Information on toxicological effects

<b>Acute toxicity</b>	Low hazard.
<b>Skin corrosion/irritation</b>	Gypsum was not found to be a skin irritant.
<b>Serious eye damage/eye irritation</b>	Gypsum does not cause serious eye damage or irritation.
<b>Respiratory sensitization</b>	No data available, but based on results from the skin sensitization study, calcium sulfate is not expected to be a respiratory sensitizer.
<b>Skin sensitization</b>	Not a skin sensitizer (2).
<b>Germ cell mutagenicity</b>	No evidence of mutagenic potential exists (3,4,5).
<b>Carcinogenicity</b>	No evidence of carcinogenic potential exists (6).
<b>Reproductive toxicity</b>	No evidence of reproductive toxicity exists (2).
<b>Specific target organ toxicity - single exposure</b>	Not toxic to lung tissue.
<b>Specific target organ toxicity - repeated exposure</b>	Not toxic to lung tissue (6).
<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.
<b>Further information</b>	Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure.

## 12. Ecological information

### Ecotoxicity

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours
<b>Persistence and degradability</b>	Not applicable for the salt of inorganic compounds. Calcium sulfate dissolves in water without undergoing chemical degradation.	
<b>Bioaccumulative potential</b>	Bioaccumulation is not expected.	
<b>Mobility in soil</b>	Calcium sulfate has a low potential for adsorption to soil. If water is applied, gypsum dissolves and the calcium and sulfate ions are mobile and penetrate the subsoil (7).	
<b>Other adverse effects</b>	None expected.	

## 13. Disposal considerations

<b>Disposal instructions</b>	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.
<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.

## 14. Transport information

<b>DOT</b>	Not regulated as a hazardous material by DOT.
<b>IATA</b>	Not regulated as a dangerous good.
<b>IMDG</b>	Not regulated as a dangerous good.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

## 15. Regulatory information

<b>US federal regulations</b>	This product is not hazardous according to OSHA 29CFR 1910.1200.
<b>TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)</b>	Not regulated.
<b>US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	Not listed.
<b>CERCLA Hazardous Substance List (40 CFR 302.4)</b>	Not listed.
<b>Superfund Amendments and Reauthorization Act of 1986 (SARA)</b>	
<b>Hazard categories</b>	Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
<b>SARA 302 Extremely hazardous substance</b>	No
<b>SARA 311/312 Hazardous chemical</b>	No
<b>SARA 313 (TRI reporting)</b>	Not regulated.
<b>Other federal regulations</b>	
<b>Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List</b>	Not regulated.
<b>Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)</b>	Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

Food and Drug Administration (FDA) Not regulated.

US state regulations This product does not contain a chemical known to the State of California to cause cancer birth defects or other reproductive harm.

**US. Massachusetts RTK - Substance List**

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)  
Cellulose (CAS 9004-34-6)

**US. New Jersey Worker and Community Right-to-Know Act**

Not regulated.

**US. Pennsylvania RTK - Hazardous Substances**

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)  
Cellulose (CAS 9004-34-6)

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Not listed.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

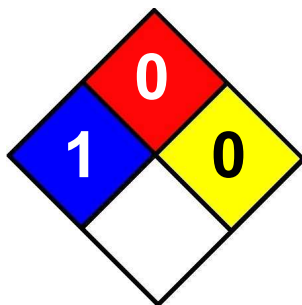
Issue date 17-December-2013

Revision date -

Version # 01

Further information NFPA Ratings:  
Health: 1  
Flammability: 0  
Physical hazard: 0  
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

**NFPA Ratings**



**List of abbreviations**

NFPA: National Fire Protection Association.

**References**

1. US National Library of Medicine (NLM) (1998). Hazardous Substances Data Bank (HSDB).
2. Tested by LG Life Science/Toxicology Center, Korea (2002). National Institute of Environmental Research (NIER).
3. Dopp E et al. (1995). Environ. Health Perspect. 103(3), 268-271.
4. Cremer H.H. et al. (1988). Wiss. Umwelt. 4, 202-205.
5. Fujita H et al. (1988). Kenkyu Nenpo-Tokyo-Toritsu Eisei Kenkyunsho. 39, 343-350.
6. Clouter et al. (1998). Inhal. Toxicol. 10, 3-14.
7. Shainberg et al. (1989). Advanced Soil Sci. 9, 1-111.

**Disclaimer**

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** SHEETROCK® Brand AR Gypsum Panels FIRECODE® Core

### Other means of identification

**SDS number** 54000002006

**Synonyms** Gypsum Panels, Drywall, Plasterboard, Wallboard

**Recommended use** Interior use.

**Recommended restrictions** Use in accordance with manufacturer's recommendations.

### Manufacturer / Importer / Supplier / Distributor information

**Company name** United States Gypsum Company

**Address** 550 West Adams Street  
Chicago, Illinois 60661-3637

**Telephone** 1-800-874-4968

**Website** www.usg.com

**Emergency phone number** 1-800-507-8899

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Not classified.

**OSHA defined hazards** Not classified.

### Label elements

**Hazard symbol** None.

**Signal word** None.

**Hazard statement** None.

### Precautionary statement

**Prevention** Observe good industrial hygiene practices.

**Response** Get medical attention/advice if you feel unwell.

**Storage** Store as indicated in Section 7.

**Disposal** Dispose of in accordance with local, state, and federal regulations.

**Hazard(s) not otherwise classified (HNOC)** Not classified.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Calcium sulfate dihydrate (alternative CAS 10101-41-4)	13397-24-5	≥ 85
Cellulose	9004-34-6	< 5

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas.

The gypsum used to manufacture these panels contains respirable crystalline silica ranging up to 0.56 percent by weight, depending on source, as indicated by bulk sampling methods. Industrial hygiene testing using both personal and area sampling measured no detectable respirable crystalline silica when cutting the product by "score and snap," rotary saw, or circular saw. Good work practices which minimize the extent of dust generation should be followed.

## 4. First-aid measures

**Inhalation** Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

**Skin contact** Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

**Eye contact** Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.



<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Under normal conditions of intended use, this material does not pose a risk to health. Dust may irritate throat and respiratory system and cause coughing.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	Not applicable.
<b>Specific hazards arising from the chemical</b>	Not a fire hazard.
<b>Special protective equipment and precautions for firefighters</b>	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>Specific methods</b>	Cool material exposed to heat with water spray and remove it if no risk is involved.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	See Section 8 of the SDS for Personal Protective Equipment.
<b>Methods and materials for containment and cleaning up</b>	No specific clean-up procedure noted. For waste disposal, see Section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge to drains, sewers, and other water systems.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Use work methods which minimize dust production. Avoid inhalation of dust and contact with skin and eyes. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices. When moving board with a forklift or similar equipment, it is essential that the equipment be rated capable of handling the loads. The forks should always be long enough to extend completely through the width of the load. Fork spacing between supports should be one half the length of the panels or base being handled so that a maximum of 4' extends beyond the supports on either end.  Follow traditional building practices; such as management of water away from the interior of the structure to avoid the growth of mold, mildew and fungus. Remove any building products suspected of being exposed to sustained moisture and considered conducive to mold growth from the job site. Gypsum panels are very heavy, awkward loads posing the risk of severe back injury. Use proper lifting techniques.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Protect product from physical damage. Protect from weather and prevent exposure to sustained moisture. Gypsum Association literature (GA-801-07) recommends storing board flat to avoid damaging edges, warping the board and the potential safety hazards of the board falling over. However, in other situations, storing the board flat may cause a tripping hazard or exceed floor limit loads. If stacking board vertically, leave at least 4 inches from the wall to decrease the risk of falling board and no more than 6 inches to avoid too much lateral weight against the wall.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	PEL	5 mg/m3	Respirable fraction.
Cellulose (CAS 9004-34-6)	PEL	15 mg/m3 5 mg/m3 15 mg/m3	Total dust. Respirable fraction. Total dust.

## US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	10 mg/m3	Inhalable fraction.
Cellulose (CAS 9004-34-6)	TWA	10 mg/m3	

## US NIOSH Pocket Guide to Chemical Hazards: Recommended exposure limit (REL)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	5 mg/m3	Respirable.
Cellulose (CAS 9004-34-6)	TWA	10 mg/m3	Total
		5 mg/m3	Respirable.
		10 mg/m3	Total

### Biological limit values

No biological exposure limits noted for the ingredient(s).

### Appropriate engineering controls

Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Wear approved safety goggles.

#### Skin protection

##### Hand protection

It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

##### Other

Normal work clothing (long sleeved shirts and long pants) is recommended.

#### Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use. Observe any medical surveillance requirements.

#### Thermal hazards

None.

### General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Observe any medical surveillance requirements.

## 9. Physical and chemical properties

### Appearance

Paper faced with gypsum core.

#### Physical state

Solid.

#### Form

Panel.

#### Color

Gray to off-white.

### Odor

Low to no odor.

### Odor threshold

Not applicable.

### pH

6 - 8

### Melting point/freezing point

Not applicable.

### Initial boiling point and boiling range

Not applicable.

### Flash point

Not applicable.

### Evaporation rate

Not applicable.

### Flammability (solid, gas)

Not applicable.

### Upper/lower flammability or explosive limits

#### Flammability limit - lower (%)

Not applicable.

#### Flammability limit - upper (%)

Not applicable.

#### Explosive limit - lower (%)

Not applicable.

#### Explosive limit - upper (%)

Not applicable.

<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	2.32 (Gypsum) (H <sub>2</sub> O=1)
<b>Solubility(ies)</b>	0.26 g/100 g (H <sub>2</sub> O)
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition temperature</b>	2642 °F (1450 °C)
<b>Viscosity</b>	Not applicable.
<b>Other information</b>	
<b>Bulk density</b>	46 lb/ft <sup>3</sup>
<b>Particle size</b>	Varies.
<b>VOC (Weight %)</b>	0 %

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents. Strong acids.
<b>Hazardous decomposition products</b>	Calcium oxides, carbon dioxide, and carbon monoxide.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	Not likely, due to the form of the product.
<b>Inhalation</b>	Mechanical processing may generate dust. Gypsum dust has an irritant action on mucous membranes of the upper respiratory tract and eyes (1).
<b>Skin contact</b>	Under normal conditions of intended use, this material does not pose a skin hazard. Gypsum was not found to be a skin irritant (2).
<b>Eye contact</b>	Mechanical processing may generate dust. Direct contact with eyes may cause temporary irritation (1).

<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Under normal conditions of intended use, this material does not pose a risk to health.
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### Information on toxicological effects

<b>Acute toxicity</b>	Low hazard.
<b>Skin corrosion/irritation</b>	Gypsum was not found to be a skin irritant.
<b>Serious eye damage/eye irritation</b>	Gypsum does not cause serious eye damage or irritation.
<b>Respiratory sensitization</b>	No data available, but based on results from the skin sensitization study, calcium sulfate is not expected to be a respiratory sensitizer.
<b>Skin sensitization</b>	Not a skin sensitizer (2).
<b>Germ cell mutagenicity</b>	No evidence of mutagenic potential exists (3,4,5).
<b>Carcinogenicity</b>	No evidence of carcinogenic potential exists (6).
<b>Reproductive toxicity</b>	No evidence of reproductive toxicity exists (2).
<b>Specific target organ toxicity - single exposure</b>	Not toxic to lung tissue.
<b>Specific target organ toxicity - repeated exposure</b>	Not toxic to lung tissue (6).
<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.
<b>Further information</b>	Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure.

## 12. Ecological information

### Ecotoxicity

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours
<b>Persistence and degradability</b>	Not applicable for the salt of inorganic compounds. Calcium sulfate dissolves in water without undergoing chemical degradation.	
<b>Bioaccumulative potential</b>	Bioaccumulation is not expected.	
<b>Mobility in soil</b>	Calcium sulfate has a low potential for adsorption to soil. If water is applied, gypsum dissolves and the calcium and sulfate ions are mobile and penetrate the subsoil (7).	
<b>Other adverse effects</b>	None expected.	

## 13. Disposal considerations

<b>Disposal instructions</b>	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.
<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.

## 14. Transport information

<b>DOT</b>	Not regulated as a hazardous material by DOT.
<b>IATA</b>	Not regulated as a dangerous good.
<b>IMDG</b>	Not regulated as a dangerous good.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

## 15. Regulatory information

<b>US federal regulations</b>	This product is not hazardous according to OSHA 29CFR 1910.1200.
<b>TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)</b>	Not regulated.
<b>US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	Not listed.
<b>CERCLA Hazardous Substance List (40 CFR 302.4)</b>	Not listed.
<b>Superfund Amendments and Reauthorization Act of 1986 (SARA)</b>	
<b>Hazard categories</b>	Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
<b>SARA 302 Extremely hazardous substance</b>	No
<b>SARA 311/312 Hazardous chemical</b>	No
<b>SARA 313 (TRI reporting)</b>	Not regulated.
<b>Other federal regulations</b>	
<b>Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List</b>	Not regulated.
<b>Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)</b>	Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

**Food and Drug Administration (FDA)** Not regulated.

**US state regulations** This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

**US. Massachusetts RTK - Substance List**

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)  
Cellulose (CAS 9004-34-6)

**US. New Jersey Worker and Community Right-to-Know Act**

Not regulated.

**US. Pennsylvania RTK - Hazardous Substances**

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)  
Cellulose (CAS 9004-34-6)

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Not listed.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

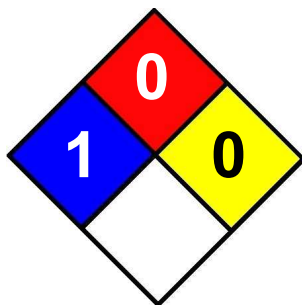
**Issue date** 17-December-2013

**Revision date** -

**Version #** 01

**Further information** NFPA Ratings:  
Health: 1  
Flammability: 0  
Physical hazard: 0  
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

**NFPA Ratings**



**List of abbreviations**

NFPA: National Fire Protection Association.

**References**

1. US National Library of Medicine (NLM) (1998). Hazardous Substances Data Bank (HSDB).
2. Tested by LG Life Science/Toxicology Center, Korea (2002). National Institute of Environmental Research (NIER).
3. Dopp E et al. (1995). Environ. Health Perspect. 103(3), 268-271.
4. Cremer H.H. et al. (1988). Wiss. Umwelt. 4, 202-205.
5. Fujita H et al. (1988). Kenkyu Nenpo-Tokyo-Toritsu Eisei Kenkyunsho. 39, 343-350.
6. Clouter et al. (1998). Inhal. Toxicol. 10, 3-14.
7. Shainberg et al. (1989). Advanced Soil Sci. 9, 1-111.

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This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



# SAFETY DATA SHEET

## 1. Identification

Product identifier	<b>SHEETROCK® Brand FIRECODE® C Core Gypsum Panels</b>
Other means of identification	
SDS number	54000002501
Synonyms	Gypsum Panels, Drywall, Plasterboard, Wallboard
Recommended use	Interior use.
Recommended restrictions	Use in accordance with manufacturer's recommendations.
Manufacturer / Importer / Supplier / Distributor information	
Company name	United States Gypsum Company
Address	550 West Adams Street Chicago, Illinois 60661-3637
Telephone	1-800-874-4968
Website	www.usg.com
Emergency phone number	1-800-507-8899

## 2. Hazard(s) identification

Physical hazards	Not classified.
Health hazards	Not classified.
OSHA defined hazards	Not classified.
Label elements	
Hazard symbol	None.
Signal word	None.
Hazard statement	None.
Precautionary statement	
Prevention	Observe good industrial hygiene practices.
Response	Get medical attention/advice if you feel unwell.
Storage	Store as indicated in Section 7.
Disposal	Dispose of in accordance with local, state, and federal regulations.
Hazard(s) not otherwise classified (HNOC)	Not classified.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Calcium sulfate dihydrate (alternative CAS 10101-41-4)	13397-24-5	≥ 85
Cellulose	9004-34-6	< 5

Composition comments	All concentrations are in percent by weight unless ingredient is a gas.  The gypsum used to manufacture these panels contains respirable crystalline silica ranging up to 0.56 percent by weight, depending on source, as indicated by bulk sampling methods. Industrial hygiene testing using both personal and area sampling measured no detectable respirable crystalline silica when cutting the product by "score and snap," rotary saw, or circular saw. Good work practices which minimize the extent of dust generation should be followed.
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## 4. First-aid measures

Inhalation	Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.
Skin contact	Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.
Eye contact	Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.

<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Under normal conditions of intended use, this material does not pose a risk to health. Dust may irritate throat and respiratory system and cause coughing.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	Not applicable.
<b>Specific hazards arising from the chemical</b>	Not a fire hazard.
<b>Special protective equipment and precautions for firefighters</b>	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>Specific methods</b>	Cool material exposed to heat with water spray and remove it if no risk is involved.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	See Section 8 of the SDS for Personal Protective Equipment.
<b>Methods and materials for containment and cleaning up</b>	No specific clean-up procedure noted. For waste disposal, see Section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge to drains, sewers, and other water systems.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Use work methods which minimize dust production. Avoid inhalation of dust and contact with skin and eyes. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices. When moving board with a forklift or similar equipment, it is essential that the equipment be rated capable of handling the loads. The forks should always be long enough to extend completely through the width of the load. Fork spacing between supports should be one half the length of the panels or base being handled so that a maximum of 4' extends beyond the supports on either end.
	Follow traditional building practices; such as management of water away from the interior of the structure to avoid the growth of mold, mildew and fungus. Remove any building products suspected of being exposed to sustained moisture and considered conducive to mold growth from the job site. Gypsum panels are very heavy, awkward loads posing the risk of severe back injury. Use proper lifting techniques.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Protect product from physical damage. Protect from weather and prevent exposure to sustained moisture. Gypsum Association literature (GA-801-07) recommends storing board flat to avoid damaging edges, warping the board and the potential safety hazards of the board falling over. However, in other situations, storing the board flat may cause a tripping hazard or exceed floor limit loads. If stacking board vertically, leave at least 4 inches from the wall to decrease the risk of falling board and no more than 6 inches to avoid too much lateral weight against the wall.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Cellulose (CAS 9004-34-6)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

## US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	10 mg/m3	Inhalable fraction.
Cellulose (CAS 9004-34-6)	TWA	10 mg/m3	

## US NIOSH Pocket Guide to Chemical Hazards: Recommended exposure limit (REL)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	5 mg/m3	Respirable.
Cellulose (CAS 9004-34-6)	TWA	10 mg/m3	Total
		5 mg/m3	Respirable.
		10 mg/m3	Total

<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Appropriate engineering controls</b>	Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Wear approved safety goggles.
<b>Skin protection</b>	
<b>Hand protection</b>	It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.
<b>Other</b>	Normal work clothing (long sleeved shirts and long pants) is recommended.
<b>Respiratory protection</b>	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use. Observe any medical surveillance requirements.
<b>Thermal hazards</b>	None.
<b>General hygiene considerations</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Observe any medical surveillance requirements.

## 9. Physical and chemical properties

<b>Appearance</b>	Paper faced with gypsum core.
<b>Physical state</b>	Solid.
<b>Form</b>	Panel.
<b>Color</b>	Gray to off-white.
<b>Odor</b>	Low to no odor.
<b>Odor threshold</b>	Not applicable.
<b>pH</b>	6 - 8
<b>Melting point/freezing point</b>	Not applicable.
<b>Initial boiling point and boiling range</b>	Not applicable.
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not applicable.
<b>Flammability limit - upper (%)</b>	Not applicable.
<b>Explosive limit - lower (%)</b>	Not applicable.
<b>Explosive limit - upper (%)</b>	Not applicable.



<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	2.32 (Gypsum) (H <sub>2</sub> O=1)
<b>Solubility(ies)</b>	0.26 g/100 g (H <sub>2</sub> O)
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition temperature</b>	2642 °F (1450 °C)
<b>Viscosity</b>	Not applicable.
<b>Other information</b>	
<b>Bulk density</b>	46 - 48 lb/ft <sup>3</sup>
<b>Particle size</b>	Varies.
<b>VOC (Weight %)</b>	0 %

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents. Strong acids.
<b>Hazardous decomposition products</b>	Calcium oxides, carbon dioxide, and carbon monoxide.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	Not likely, due to the form of the product.
<b>Inhalation</b>	Mechanical processing may generate dust. Gypsum dust has an irritant action on mucous membranes of the upper respiratory tract and eyes (1).
<b>Skin contact</b>	Under normal conditions of intended use, this material does not pose a skin hazard. Gypsum was not found to be a skin irritant (2).
<b>Eye contact</b>	Mechanical processing may generate dust. Direct contact with eyes may cause temporary irritation (1).

<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Under normal conditions of intended use, this material does not pose a risk to health.
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### Information on toxicological effects

<b>Acute toxicity</b>	Low hazard.
<b>Skin corrosion/irritation</b>	Gypsum was not found to be a skin irritant.
<b>Serious eye damage/eye irritation</b>	Gypsum does not cause serious eye damage or irritation.
<b>Respiratory sensitization</b>	No data available, but based on results from the skin sensitization study, calcium sulfate is not expected to be a respiratory sensitizer.
<b>Skin sensitization</b>	Not a skin sensitizer (2).
<b>Germ cell mutagenicity</b>	No evidence of mutagenic potential exists (3,4,5).
<b>Carcinogenicity</b>	No evidence of carcinogenic potential exists (6).
<b>Reproductive toxicity</b>	No evidence of reproductive toxicity exists (2).
<b>Specific target organ toxicity - single exposure</b>	Not toxic to lung tissue.
<b>Specific target organ toxicity - repeated exposure</b>	Not toxic to lung tissue (6).
<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.
<b>Further information</b>	Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure.

## 12. Ecological information

### Ecotoxicity

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours
<b>Persistence and degradability</b>	Not applicable for the salt of inorganic compounds. Calcium sulfate dissolves in water without undergoing chemical degradation.	
<b>Bioaccumulative potential</b>	Bioaccumulation is not expected.	
<b>Mobility in soil</b>	Calcium sulfate has a low potential for adsorption to soil. If water is applied, gypsum dissolves and the calcium and sulfate ions are mobile and penetrate the subsoil (7).	
<b>Other adverse effects</b>	None expected.	

## 13. Disposal considerations

<b>Disposal instructions</b>	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.
<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.

## 14. Transport information

<b>DOT</b>	Not regulated as a hazardous material by DOT.
<b>IATA</b>	Not regulated as a dangerous good.
<b>IMDG</b>	Not regulated as a dangerous good.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

## 15. Regulatory information

<b>US federal regulations</b>	This product is not hazardous according to OSHA 29CFR 1910.1200.
<b>TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)</b>	Not regulated.
<b>US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	Not listed.
<b>CERCLA Hazardous Substance List (40 CFR 302.4)</b>	Not listed.
<b>Superfund Amendments and Reauthorization Act of 1986 (SARA)</b>	
<b>Hazard categories</b>	Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
<b>SARA 302 Extremely hazardous substance</b>	No
<b>SARA 311/312 Hazardous chemical</b>	No
<b>SARA 313 (TRI reporting)</b>	Not regulated.
<b>Other federal regulations</b>	
<b>Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List</b>	Not regulated.
<b>Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)</b>	Not regulated.

<b>Safe Drinking Water Act (SDWA)</b>	Not regulated.
<b>Food and Drug Administration (FDA)</b>	Not regulated.
<b>US state regulations</b>	This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

**US. Massachusetts RTK - Substance List**

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)  
Cellulose (CAS 9004-34-6)

**US. New Jersey Worker and Community Right-to-Know Act**

Not regulated.

**US. Pennsylvania RTK - Hazardous Substances**

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)  
Cellulose (CAS 9004-34-6)

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Not listed.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

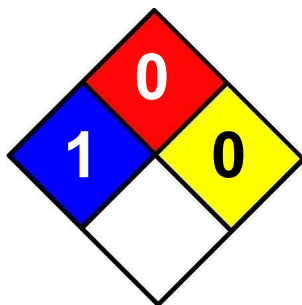
\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

<b>Issue date</b>	17-December-2013
<b>Revision date</b>	-
<b>Version #</b>	01
<b>Further information</b>	NFPA Ratings: Health: 1 Flammability: 0 Physical hazard: 0 Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

**NFPA Ratings**



**List of abbreviations**

NFPA: National Fire Protection Association.

**References**

1. US National Library of Medicine (NLM) (1998). Hazardous Substances Data Bank (HSDB).
2. Tested by LG Life Science/Toxicology Center, Korea (2002). National Institute of Environmental Research (NIER).
3. Dopp E et al. (1995). Environ. Health Perspect. 103(3), 268-271.
4. Cremer H.H. et al. (1988). Wiss. Umwelt. 4, 202-205.
5. Fujita H et al. (1988). Kenkyu Nenpo-Tokyo-Toritsu Eisei Kenkyunsho. 39, 343-350.
6. Clouter et al. (1998). Inhal. Toxicol. 10, 3-14.
7. Shainberg et al. (1989). Advanced Soil Sci. 9, 1-111.

**Disclaimer**

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** SHEETROCK® Brand FIRECODE® C Core Gypsum Panels (Foil-Backed)

**Other means of identification**

**SDS number** 54000002503

**Synonyms** Gypsum Panels, Drywall, Plasterboard, Wallboard

**Recommended use** Interior use.

**Recommended restrictions** Use in accordance with manufacturer's recommendations.

**Manufacturer / Importer / Supplier / Distributor information**

**Company name** United States Gypsum Company

**Address** 550 West Adams Street  
Chicago, Illinois 60661-3637

**Telephone** 1-800-874-4968

**Website** www.usg.com

**Emergency phone number** 1-800-507-8899

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Not classified.

**OSHA defined hazards** Not classified.

**Label elements**

**Hazard symbol** None.

**Signal word** None.

**Hazard statement** None.

**Precautionary statement**

**Prevention** Observe good industrial hygiene practices.

**Response** Get medical attention/advice if you feel unwell.

**Storage** Store as indicated in Section 7.

**Disposal** Dispose of in accordance with local, state, and federal regulations.

**Hazard(s) not otherwise classified (HNOC)** Not classified.

## 3. Composition/information on ingredients

**Mixtures**

Chemical name	CAS number	%
Calcium sulfate dihydrate (alternative CAS 10101-41-4)	13397-24-5	≥ 85
Cellulose	9004-34-6	< 5

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas.

The gypsum used to manufacture these panels contains respirable crystalline silica ranging up to 0.56 percent by weight, depending on source, as indicated by bulk sampling methods. Industrial hygiene testing using both personal and area sampling measured no detectable respirable crystalline silica when cutting the product by "score and snap," rotary saw, or circular saw. Good work practices which minimize the extent of dust generation should be followed.

## 4. First-aid measures

**Inhalation** Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

**Skin contact** Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

**Eye contact** Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.

<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Under normal conditions of intended use, this material does not pose a risk to health. Dust may irritate throat and respiratory system and cause coughing.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	Not applicable.
<b>Specific hazards arising from the chemical</b>	Not a fire hazard.
<b>Special protective equipment and precautions for firefighters</b>	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>Specific methods</b>	Cool material exposed to heat with water spray and remove it if no risk is involved.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	See Section 8 of the SDS for Personal Protective Equipment.
<b>Methods and materials for containment and cleaning up</b>	No specific clean-up procedure noted. For waste disposal, see Section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge to drains, sewers, and other water systems.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Use work methods which minimize dust production. Avoid inhalation of dust and contact with skin and eyes. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices. When moving board with a forklift or similar equipment, it is essential that the equipment be rated capable of handling the loads. The forks should always be long enough to extend completely through the width of the load. Fork spacing between supports should be one half the length of the panels or base being handled so that a maximum of 4' extends beyond the supports on either end.  Follow traditional building practices; such as management of water away from the interior of the structure to avoid the growth of mold, mildew and fungus. Remove any building products suspected of being exposed to sustained moisture and considered conducive to mold growth from the job site. Gypsum panels are very heavy, awkward loads posing the risk of severe back injury. Use proper lifting techniques.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Protect product from physical damage. Protect from weather and prevent exposure to sustained moisture. Gypsum Association literature (GA-801-07) recommends storing board flat to avoid damaging edges, warping the board and the potential safety hazards of the board falling over. However, in other situations, storing the board flat may cause a tripping hazard or exceed floor limit loads. If stacking board vertically, leave at least 4 inches from the wall to decrease the risk of falling board and no more than 6 inches to avoid too much lateral weight against the wall.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	PEL	5 mg/m3	Respirable fraction.
Cellulose (CAS 9004-34-6)	PEL	15 mg/m3 5 mg/m3 15 mg/m3	Total dust. Respirable fraction. Total dust.

## US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	10 mg/m3	Inhalable fraction.
Cellulose (CAS 9004-34-6)	TWA	10 mg/m3	

## US NIOSH Pocket Guide to Chemical Hazards: Recommended exposure limit (REL)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	5 mg/m3	Respirable.
Cellulose (CAS 9004-34-6)	TWA	10 mg/m3	Total
		5 mg/m3	Respirable.
		10 mg/m3	Total

<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Appropriate engineering controls</b>	Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Wear approved safety goggles.
<b>Skin protection</b>	
<b>Hand protection</b>	It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.
<b>Other</b>	Normal work clothing (long sleeved shirts and long pants) is recommended.
<b>Respiratory protection</b>	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use. Observe any medical surveillance requirements.
<b>Thermal hazards</b>	None.
<b>General hygiene considerations</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Observe any medical surveillance requirements.

## 9. Physical and chemical properties

<b>Appearance</b>	Paper faced with gypsum core.
<b>Physical state</b>	Solid.
<b>Form</b>	Panel.
<b>Color</b>	Gray to off-white.
<b>Odor</b>	Low to no odor.
<b>Odor threshold</b>	Not applicable.
<b>pH</b>	6 - 8
<b>Melting point/freezing point</b>	Not applicable.
<b>Initial boiling point and boiling range</b>	Not applicable.
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not applicable.
<b>Flammability limit - upper (%)</b>	Not applicable.
<b>Explosive limit - lower (%)</b>	Not applicable.
<b>Explosive limit - upper (%)</b>	Not applicable.

<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	2.32 (Gypsum) (H <sub>2</sub> O=1)
<b>Solubility(ies)</b>	0.26 g/100 g (H <sub>2</sub> O)
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition temperature</b>	2642 °F (1450 °C)
<b>Viscosity</b>	Not applicable.
<b>Other information</b>	
<b>Bulk density</b>	46 - 48 lb/ft <sup>3</sup>
<b>Particle size</b>	Varies.
<b>VOC (Weight %)</b>	0 %

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents. Strong acids.
<b>Hazardous decomposition products</b>	Calcium oxides, carbon dioxide, and carbon monoxide.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	Not likely, due to the form of the product.
<b>Inhalation</b>	Mechanical processing may generate dust. Gypsum dust has an irritant action on mucous membranes of the upper respiratory tract and eyes (1).
<b>Skin contact</b>	Under normal conditions of intended use, this material does not pose a skin hazard. Gypsum was not found to be a skin irritant (2).
<b>Eye contact</b>	Mechanical processing may generate dust. Direct contact with eyes may cause temporary irritation (1).

<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Under normal conditions of intended use, this material does not pose a risk to health.
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### Information on toxicological effects

<b>Acute toxicity</b>	Low hazard.
<b>Skin corrosion/irritation</b>	Gypsum was not found to be a skin irritant.
<b>Serious eye damage/eye irritation</b>	Gypsum does not cause serious eye damage or irritation.
<b>Respiratory sensitization</b>	No data available, but based on results from the skin sensitization study, calcium sulfate is not expected to be a respiratory sensitizer.
<b>Skin sensitization</b>	Not a skin sensitizer (2).
<b>Germ cell mutagenicity</b>	No evidence of mutagenic potential exists (3,4,5).
<b>Carcinogenicity</b>	No evidence of carcinogenic potential exists (6).
<b>Reproductive toxicity</b>	No evidence of reproductive toxicity exists (2).
<b>Specific target organ toxicity - single exposure</b>	Not toxic to lung tissue.
<b>Specific target organ toxicity - repeated exposure</b>	Not toxic to lung tissue (6).
<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.
<b>Further information</b>	Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure.

## 12. Ecological information

### Ecotoxicity

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours
<b>Persistence and degradability</b>	Not applicable for the salt of inorganic compounds. Calcium sulfate dissolves in water without undergoing chemical degradation.	
<b>Bioaccumulative potential</b>	Bioaccumulation is not expected.	
<b>Mobility in soil</b>	Calcium sulfate has a low potential for adsorption to soil. If water is applied, gypsum dissolves and the calcium and sulfate ions are mobile and penetrate the subsoil (7).	
<b>Other adverse effects</b>	None expected.	

## 13. Disposal considerations

<b>Disposal instructions</b>	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.
<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.

## 14. Transport information

<b>DOT</b>	Not regulated as a hazardous material by DOT.
<b>IATA</b>	Not regulated as a dangerous good.
<b>IMDG</b>	Not regulated as a dangerous good.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

## 15. Regulatory information

<b>US federal regulations</b>	This product is not hazardous according to OSHA 29CFR 1910.1200.
<b>TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)</b>	Not regulated.
<b>US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	Not listed.
<b>CERCLA Hazardous Substance List (40 CFR 302.4)</b>	Not listed.
<b>Superfund Amendments and Reauthorization Act of 1986 (SARA)</b>	
<b>Hazard categories</b>	Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
<b>SARA 302 Extremely hazardous substance</b>	No
<b>SARA 311/312 Hazardous chemical</b>	No
<b>SARA 313 (TRI reporting)</b>	Not regulated.
<b>Other federal regulations</b>	
<b>Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List</b>	Not regulated.
<b>Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)</b>	Not regulated.



Safe Drinking Water Act (SDWA) Not regulated.

Food and Drug Administration (FDA) Not regulated.

US state regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

**US. Massachusetts RTK - Substance List**

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)  
Cellulose (CAS 9004-34-6)

**US. New Jersey Worker and Community Right-to-Know Act**

Not regulated.

**US. Pennsylvania RTK - Hazardous Substances**

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)  
Cellulose (CAS 9004-34-6)

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Not listed.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

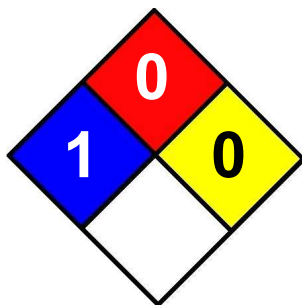
Issue date 17-December-2013

Revision date -

Version # 01

Further information NFPA Ratings:  
Health: 1  
Flammability: 0  
Physical hazard: 0  
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

**NFPA Ratings**



List of abbreviations NFPA: National Fire Protection Association.

References

1. US National Library of Medicine (NLM) (1998). Hazardous Substances Data Bank (HSDB).
2. Tested by LG Life Science/Toxicology Center, Korea (2002). National Institute of Environmental Research (NIER).
3. Dopp E et al. (1995). Environ. Health Perspect. 103(3), 268-271.
4. Cremer H.H. et al. (1988). Wiss. Umwelt. 4, 202-205.
5. Fujita H et al. (1988). Kenkyu Nenpo-Tokyo-Toritsu Eisei Kenkyunsho. 39, 343-350.
6. Clouter et al. (1998). Inhal. Toxicol. 10, 3-14.
7. Shainberg et al. (1989). Advanced Soil Sci. 9, 1-111.

Disclaimer This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** SHEETROCK® Brand FIRECODE® Core Gypsum Panels

### Other means of identification

**SDS number** 54000002001

**Synonyms** Gypsum Panels, Drywall, Plasterboard, Wallboard

**Recommended use** Interior use.

**Recommended restrictions** Use in accordance with manufacturer's recommendations.

### Manufacturer / Importer / Supplier / Distributor information

**Company name** United States Gypsum Company

**Address** 550 West Adams Street  
Chicago, Illinois 60661-3637

**Telephone** 1-800-874-4968

**Website** www.usg.com

**Emergency phone number** 1-800-507-8899

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Not classified.

**OSHA defined hazards** Not classified.

### Label elements

**Hazard symbol** None.

**Signal word** None.

**Hazard statement** None.

### Precautionary statement

**Prevention** Observe good industrial hygiene practices.

**Response** Get medical attention/advice if you feel unwell.

**Storage** Store as indicated in Section 7.

**Disposal** Dispose of in accordance with local, state, and federal regulations.

**Hazard(s) not otherwise classified (HNOC)** Not classified.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Calcium sulfate dihydrate (alternative CAS 10101-41-4)	13397-24-5	≥ 85
Cellulose	9004-34-6	< 5
Kaolin	1332-58-7	< 5

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas.

The gypsum used to manufacture these panels contains respirable crystalline silica ranging up to 0.56 percent by weight, depending on source, as indicated by bulk sampling methods. Industrial hygiene testing using both personal and area sampling measured no detectable respirable crystalline silica when cutting the product by "score and snap," rotary saw, or circular saw. Good work practices which minimize the extent of dust generation should be followed.

## 4. First-aid measures

**Inhalation** Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

**Skin contact** Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

<b>Eye contact</b>	Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.
<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Under normal conditions of intended use, this material does not pose a risk to health. Dust may irritate throat and respiratory system and cause coughing.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	Not applicable.
<b>Specific hazards arising from the chemical</b>	Not a fire hazard.
<b>Special protective equipment and precautions for firefighters</b>	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>Specific methods</b>	Cool material exposed to heat with water spray and remove it if no risk is involved.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	See Section 8 of the SDS for Personal Protective Equipment.
<b>Methods and materials for containment and cleaning up</b>	No specific clean-up procedure noted. For waste disposal, see Section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge to drains, sewers, and other water systems.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Use work methods which minimize dust production. Avoid inhalation of dust and contact with skin and eyes. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices. When moving board with a forklift or similar equipment, it is essential that the equipment be rated capable of handling the loads. The forks should always be long enough to extend completely through the width of the load. Fork spacing between supports should be one half the length of the panels or base being handled so that a maximum of 4' extends beyond the supports on either end.  Follow traditional building practices; such as management of water away from the interior of the structure to avoid the growth of mold, mildew and fungus. Remove any building products suspected of being exposed to sustained moisture and considered conducive to mold growth from the job site. Gypsum panels are very heavy, awkward loads posing the risk of severe back injury. Use proper lifting techniques.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Protect product from physical damage. Protect from weather and prevent exposure to sustained moisture. Gypsum Association literature (GA-801-07) recommends storing board flat to avoid damaging edges, warping the board and the potential safety hazards of the board falling over. However, in other situations, storing the board flat may cause a tripping hazard or exceed floor limit loads. If stacking board vertically, leave at least 4 inches from the wall to decrease the risk of falling board and no more than 6 inches to avoid too much lateral weight against the wall.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	PEL	5 mg/m3	Respirable fraction.
Cellulose (CAS 9004-34-6)	PEL	15 mg/m3	Total dust.
		5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Components	Type	Value	Form
Kaolin (CAS 1332-58-7)	PEL	5 mg/m3 15 mg/m3	Respirable fraction. Total dust.

**US. ACGIH Threshold Limit Values**

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	10 mg/m3	Inhalable fraction.
Cellulose (CAS 9004-34-6)	TWA	10 mg/m3	
Kaolin (CAS 1332-58-7)	TWA	2 mg/m3	Respirable fraction.

**US NIOSH Pocket Guide to Chemical Hazards: Recommended exposure limit (REL)**

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Cellulose (CAS 9004-34-6)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Kaolin (CAS 1332-58-7)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total

**Biological limit values**

No biological exposure limits noted for the ingredient(s).

**Appropriate engineering controls**

Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

**Individual protection measures, such as personal protective equipment****Eye/face protection**

Wear approved safety goggles.

**Skin protection****Hand protection**

It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

**Other**

Normal work clothing (long sleeved shirts and long pants) is recommended.

**Respiratory protection**

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use. Observe any medical surveillance requirements.

**Thermal hazards**

None.

**General hygiene considerations**

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Observe any medical surveillance requirements.

**9. Physical and chemical properties****Appearance**

Paper faced with gypsum core.

**Physical state**

Solid.

**Form**

Panel.

**Color**

Gray to off-white.

**Odor**

Low to no odor.

**Odor threshold**

Not applicable.

**pH**

6 - 8

**Melting point/freezing point**

Not applicable.

**Initial boiling point and boiling range**

Not applicable.

Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
Flammability limit - lower (%)	Not applicable.
Flammability limit - upper (%)	Not applicable.
Explosive limit - lower (%)	Not applicable.
Explosive limit - upper (%)	Not applicable.
Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative density	2.32 (Gypsum) (H2O=1)
Solubility(ies)	0.26 g/100 g (H2O)
Partition coefficient (n-octanol/water)	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition temperature	2642 °F (1450 °C)
Viscosity	Not applicable.
<b>Other information</b>	
Bulk density	42 lb/ft³
Particle size	Varies.
VOC (Weight %)	0 %

## 10. Stability and reactivity

Reactivity	The product is stable and non reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Strong acids.
Hazardous decomposition products	Calcium oxides, carbon dioxide, and carbon monoxide.

## 11. Toxicological information

### Information on likely routes of exposure

Ingestion	Not likely, due to the form of the product.
Inhalation	Mechanical processing may generate dust. Gypsum dust has an irritant action on mucous membranes of the upper respiratory tract and eyes (1).
Skin contact	Under normal conditions of intended use, this material does not pose a skin hazard. Gypsum was not found to be a skin irritant (2).
Eye contact	Mechanical processing may generate dust. Direct contact with eyes may cause temporary irritation (1).

Symptoms related to the physical, chemical and toxicological characteristics	Under normal conditions of intended use, this material does not pose a risk to health.
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### Information on toxicological effects

Acute toxicity	Low hazard.
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Components	Species	Test Results
Kaolin (CAS 1332-58-7)		
Acute		
Dermal		
LD50	Rat	> 5000 mg/kg

Components	Species	Test Results
Oral LD50	Rat	> 5000 mg/kg
* Estimates for product may be based on additional component data not shown.		
<b>Skin corrosion/irritation</b>	Gypsum was not found to be a skin irritant.	
<b>Serious eye damage/eye irritation</b>	Gypsum does not cause serious eye damage or irritation.	
<b>Respiratory sensitization</b>	No data available, but based on results from the skin sensitization study, calcium sulfate is not expected to be a respiratory sensitizer.	
<b>Skin sensitization</b>	Not a skin sensitizer (2).	
<b>Germ cell mutagenicity</b>	No evidence of mutagenic potential exists (3,4,5).	
<b>Carcinogenicity</b>	No evidence of carcinogenic potential exists (6).	
<b>Reproductive toxicity</b>	No evidence of reproductive toxicity exists (2).	
<b>Specific target organ toxicity - single exposure</b>	Not toxic to lung tissue.	
<b>Specific target organ toxicity - repeated exposure</b>	Not toxic to lung tissue (6).	
<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.	
<b>Further information</b>	Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure.	

## 12. Ecological information

<b>Ecotoxicity</b>	The product contains a substance which is very toxic to aquatic organisms.	
Components	Species	Test Results
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours
<b>Persistence and degradability</b>	Not applicable for the salt of inorganic compounds. Calcium sulfate dissolves in water without undergoing chemical degradation.	
<b>Bioaccumulative potential</b>	Bioaccumulation is not expected.	
<b>Mobility in soil</b>	Calcium sulfate has a low potential for adsorption to soil. If water is applied, gypsum dissolves and the calcium and sulfate ions are mobile and penetrate the subsoil (7).	
<b>Other adverse effects</b>	None expected.	

## 13. Disposal considerations

<b>Disposal instructions</b>	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.
<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.

## 14. Transport information

<b>DOT</b>	Not regulated as a hazardous material by DOT.
<b>IATA</b>	Not regulated as a dangerous good.
<b>IMDG</b>	Not regulated as a dangerous good.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

## 15. Regulatory information

<b>US federal regulations</b>	This product is not hazardous according to OSHA 29CFR 1910.1200.
<b>TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)</b>	Not regulated.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

<b>Hazard categories</b>	Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
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<b>SARA 302 Extremely hazardous substance</b>	No
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<b>SARA 311/312 Hazardous chemical</b>	No
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<b>SARA 313 (TRI reporting)</b>	Not regulated.
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**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

<b>Safe Drinking Water Act (SDWA)</b>	Not regulated.
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<b>Food and Drug Administration (FDA)</b>	Not regulated.
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<b>US state regulations</b>	This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.
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**US. Massachusetts RTK - Substance List**

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)  
Cellulose (CAS 9004-34-6)  
Kaolin (CAS 1332-58-7)

**US. New Jersey Worker and Community Right-to-Know Act**

Not regulated.

**US. Pennsylvania RTK - Hazardous Substances**

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)  
Cellulose (CAS 9004-34-6)  
Kaolin (CAS 1332-58-7)

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65****US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Not listed.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

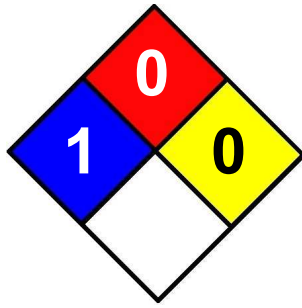
<b>Issue date</b>	17-December-2013
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<b>Revision date</b>	-
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<b>Version #</b>	01
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<b>Further information</b>	NFPA Ratings: Health: 1 Flammability: 0 Physical hazard: 0 Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe
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## NFPA Ratings



## List of abbreviations

## References

NFPA: National Fire Protection Association.

1. US National Library of Medicine (NLM) (1998). Hazardous Substances Data Bank (HSDB).
2. Tested by LG Life Science/Toxicology Center, Korea (2002). National Institute of Environmental Research (NIER).
3. Dopp E et al. (1995). Environ. Health Perspect. 103(3), 268-271.
4. Cremer H.H. et al. (1988). Wiss. Umwelt. 4, 202-205.
5. Fujita H et al. (1988). Kenkyu Nenpo-Tokyo-Toritsu Eisei Kenkynsho. 39, 343-350.
6. Clouter et al. (1998). Inhal. Toxicol. 10, 3-14.
7. Shainberg et al. (1989). Advanced Soil Sci. 9, 1-111.

## Disclaimer

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# SAFETY DATA SHEET

## 1. Identification

**Product identifier** SHEETROCK® Brand Flexible Gypsum Panels

**Other means of identification**

**SDS number** 54000000007

**Synonyms** Gypsum Panels, Drywall, Plasterboard, Wallboard

**Recommended use** Interior use.

**Recommended restrictions** Use in accordance with manufacturer's recommendations.

### Manufacturer / Importer / Supplier / Distributor information

**Company name** United States Gypsum Company

**Address** 550 West Adams Street  
Chicago, Illinois 60661-3637

**Telephone** 1-800-874-4968

**Website** www.usg.com

**Emergency phone number** 1-800-507-8899

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Not classified.

**OSHA defined hazards** Not classified.

### Label elements

**Hazard symbol** None.

**Signal word** None.

**Hazard statement** None.

### Precautionary statement

**Prevention** Observe good industrial hygiene practices.

**Response** Get medical attention/advice if you feel unwell.

**Storage** Store as indicated in Section 7.

**Disposal** Dispose of in accordance with local, state, and federal regulations.

**Hazard(s) not otherwise classified (HNOC)** Not classified.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Calcium sulfate dihydrate (alternative CAS 10101-41-4)	13397-24-5	≥ 85
Cellulose	9004-34-6	< 10

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas.

The gypsum used to manufacture these panels contains respirable crystalline silica ranging up to 0.56 percent by weight, depending on source, as indicated by bulk sampling methods. Industrial hygiene testing using both personal and area sampling measured no detectable respirable crystalline silica when cutting the product by "score and snap," rotary saw, or circular saw. Good work practices which minimize the extent of dust generation should be followed.

## 4. First-aid measures

**Inhalation** Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

**Skin contact** Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

**Eye contact** Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.

<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Under normal conditions of intended use, this material does not pose a risk to health. Dust may irritate throat and respiratory system and cause coughing.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	Not applicable.
<b>Specific hazards arising from the chemical</b>	Not a fire hazard.
<b>Special protective equipment and precautions for firefighters</b>	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>Specific methods</b>	Cool material exposed to heat with water spray and remove it if no risk is involved.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	See Section 8 of the SDS for Personal Protective Equipment.
<b>Methods and materials for containment and cleaning up</b>	No specific clean-up procedure noted. For waste disposal, see Section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge to drains, sewers, and other water systems.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Use work methods which minimize dust production. Avoid inhalation of dust and contact with skin and eyes. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices. When moving board with a forklift or similar equipment, it is essential that the equipment be rated capable of handling the loads. The forks should always be long enough to extend completely through the width of the load. Fork spacing between supports should be one half the length of the panels or base being handled so that a maximum of 4' extends beyond the supports on either end.
	Follow traditional building practices; such as management of water away from the interior of the structure to avoid the growth of mold, mildew and fungus. Remove any building products suspected of being exposed to sustained moisture and considered conducive to mold growth from the job site. Gypsum panels are very heavy, awkward loads posing the risk of severe back injury. Use proper lifting techniques.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Protect product from physical damage. Protect from weather and prevent exposure to sustained moisture. Gypsum Association literature (GA-801-07) recommends storing board flat to avoid damaging edges, warping the board and the potential safety hazards of the board falling over. However, in other situations, storing the board flat may cause a tripping hazard or exceed floor limit loads. If stacking board vertically, leave at least 4 inches from the wall to decrease the risk of falling board and no more than 6 inches to avoid too much lateral weight against the wall.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Cellulose (CAS 9004-34-6)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

## US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	10 mg/m3	Inhalable fraction.
Cellulose (CAS 9004-34-6)	TWA	10 mg/m3	

## US NIOSH Pocket Guide to Chemical Hazards: Recommended exposure limit (REL)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	5 mg/m3	Respirable.
Cellulose (CAS 9004-34-6)	TWA	10 mg/m3	Total
		5 mg/m3	Respirable.
		10 mg/m3	Total

### Biological limit values

No biological exposure limits noted for the ingredient(s).

### Appropriate engineering controls

Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Wear approved safety goggles.

#### Skin protection

##### Hand protection

It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

##### Other

Normal work clothing (long sleeved shirts and long pants) is recommended.

#### Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use. Observe any medical surveillance requirements.

#### Thermal hazards

None.

### General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Observe any medical surveillance requirements.

## 9. Physical and chemical properties

### Appearance

Paper faced with gypsum core.

#### Physical state

Solid.

#### Form

Panel.

#### Color

Gray to off-white.

### Odor

Low to no odor.

### Odor threshold

Not applicable.

### pH

6 - 8

### Melting point/freezing point

Not applicable.

### Initial boiling point and boiling range

Not applicable.

### Flash point

Not applicable.

### Evaporation rate

Not applicable.

### Flammability (solid, gas)

Not applicable.

### Upper/lower flammability or explosive limits

#### Flammability limit - lower (%)

Not applicable.

#### Flammability limit - upper (%)

Not applicable.

#### Explosive limit - lower (%)

Not applicable.

#### Explosive limit - upper (%)

Not applicable.

<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	2.32 (Gypsum) (H <sub>2</sub> O=1)
<b>Solubility(ies)</b>	0.26 g/100 g (H <sub>2</sub> O)
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition temperature</b>	2642 °F (1450 °C)
<b>Viscosity</b>	Not applicable.
<b>Other information</b>	
<b>Bulk density</b>	58 lb/ft <sup>3</sup>
<b>Particle size</b>	Varies.
<b>VOC (Weight %)</b>	0 %

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents. Strong acids.
<b>Hazardous decomposition products</b>	Calcium oxides, carbon dioxide, and carbon monoxide.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	Not likely, due to the form of the product.
<b>Inhalation</b>	Mechanical processing may generate dust. Gypsum dust has an irritant action on mucous membranes of the upper respiratory tract and eyes (1).
<b>Skin contact</b>	Under normal conditions of intended use, this material does not pose a skin hazard. Gypsum was not found to be a skin irritant (2).
<b>Eye contact</b>	Mechanical processing may generate dust. Direct contact with eyes may cause temporary irritation (1).

<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Under normal conditions of intended use, this material does not pose a risk to health.
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### Information on toxicological effects

<b>Acute toxicity</b>	Low hazard.
<b>Skin corrosion/irritation</b>	Gypsum was not found to be a skin irritant.
<b>Serious eye damage/eye irritation</b>	Gypsum does not cause serious eye damage or irritation.
<b>Respiratory sensitization</b>	No data available, but based on results from the skin sensitization study, calcium sulfate is not expected to be a respiratory sensitizer.
<b>Skin sensitization</b>	Not a skin sensitizer (2).
<b>Germ cell mutagenicity</b>	No evidence of mutagenic potential exists (3,4,5).
<b>Carcinogenicity</b>	No evidence of carcinogenic potential exists (6).
<b>Reproductive toxicity</b>	No evidence of reproductive toxicity exists (2).
<b>Specific target organ toxicity - single exposure</b>	Not toxic to lung tissue.
<b>Specific target organ toxicity - repeated exposure</b>	Not toxic to lung tissue (6).
<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.
<b>Further information</b>	Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure.

## 12. Ecological information

### Ecotoxicity

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours
<b>Persistence and degradability</b>	Not applicable for the salt of inorganic compounds. Calcium sulfate dissolves in water without undergoing chemical degradation.	
<b>Bioaccumulative potential</b>	Bioaccumulation is not expected.	
<b>Mobility in soil</b>	Calcium sulfate has a low potential for adsorption to soil. If water is applied, gypsum dissolves and the calcium and sulfate ions are mobile and penetrate the subsoil (7).	
<b>Other adverse effects</b>	None expected.	

## 13. Disposal considerations

<b>Disposal instructions</b>	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.
<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.

## 14. Transport information

<b>DOT</b>	Not regulated as a hazardous material by DOT.
<b>IATA</b>	Not regulated as a dangerous good.
<b>IMDG</b>	Not regulated as a dangerous good.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

## 15. Regulatory information

<b>US federal regulations</b>	This product is not hazardous according to OSHA 29CFR 1910.1200.
<b>TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)</b>	Not regulated.
<b>US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	Not listed.
<b>CERCLA Hazardous Substance List (40 CFR 302.4)</b>	Not listed.
<b>Superfund Amendments and Reauthorization Act of 1986 (SARA)</b>	
<b>Hazard categories</b>	Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
<b>SARA 302 Extremely hazardous substance</b>	No
<b>SARA 311/312 Hazardous chemical</b>	No
<b>SARA 313 (TRI reporting)</b>	Not regulated.
<b>Other federal regulations</b>	
<b>Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List</b>	Not regulated.
<b>Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)</b>	Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

**Food and Drug Administration (FDA)** Not regulated.

**US state regulations** This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

**US. Massachusetts RTK - Substance List**

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)  
Cellulose (CAS 9004-34-6)

**US. New Jersey Worker and Community Right-to-Know Act**

Not regulated.

**US. Pennsylvania RTK - Hazardous Substances**

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)  
Cellulose (CAS 9004-34-6)

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Not listed.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

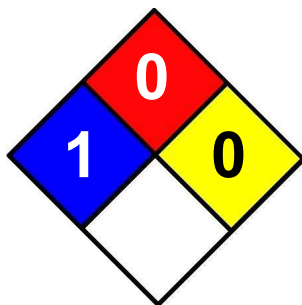
**Issue date** 17-December-2013

**Revision date** -

**Version #** 01

**Further information** NFPA Ratings:  
Health: 1  
Flammability: 0  
Physical hazard: 0  
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

**NFPA Ratings**



**List of abbreviations**

NFPA: National Fire Protection Association.

**References**

1. US National Library of Medicine (NLM) (1998). Hazardous Substances Data Bank (HSDB).
2. Tested by LG Life Science/Toxicology Center, Korea (2002). National Institute of Environmental Research (NIER).
3. Dopp E et al. (1995). Environ. Health Perspect. 103(3), 268-271.
4. Cremer H.H. et al. (1988). Wiss. Umwelt. 4, 202-205.
5. Fujita H et al. (1988). Kenkyu Nenpo-Tokyo-Toritsu Eisei Kenkyunsho. 39, 343-350.
6. Clouter et al. (1998). Inhal. Toxicol. 10, 3-14.
7. Shainberg et al. (1989). Advanced Soil Sci. 9, 1-111.

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This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** SHEETROCK® Brand Glass-Mat Liner Panels

**Other means of identification**

**SDS number** 54000004001

**Synonyms** Gypsum Panels, Drywall, Plasterboard, Wallboard

**Recommended use** Interior use.

**Recommended restrictions** Use in accordance with manufacturer's recommendations.

### Manufacturer / Importer / Supplier / Distributor information

**Company name** United States Gypsum Company

**Address** 550 West Adams Street  
Chicago, Illinois 60661-3637

**Telephone** 1-800-874-4968

**Website** www.usg.com

**Emergency phone number** 1-800-507-8899

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Not classified.

**OSHA defined hazards** Not classified.

### Label elements

**Hazard symbol** None.

**Signal word** None.

**Hazard statement** None.

### Precautionary statement

**Prevention** Observe good industrial hygiene practices.

**Response** Get medical attention/advice if you feel unwell.

**Storage** Store as indicated in Section 7.

**Disposal** Dispose of in accordance with local, state, and federal regulations.

**Hazard(s) not otherwise classified (HNOC)** Not classified.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Calcium sulfate dihydrate (alternative CAS 10101-41-4)	13397-24-5	≥ 85
Continuous filament glass fiber	65997-17-3	< 5
Sodium pyrithione	3811-73-2	< 0.25

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas.

The gypsum used to manufacture these panels contains respirable crystalline silica ranging up to 0.56 percent by weight, depending on source, as indicated by bulk sampling methods. Industrial hygiene testing using both personal and area sampling measured no detectable respirable crystalline silica when cutting the product by "score and snap," rotary saw, or circular saw. Good work practices which minimize the extent of dust generation should be followed.

## 4. First-aid measures

**Inhalation** Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

**Skin contact** Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

<b>Eye contact</b>	Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.
<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Under normal conditions of intended use, this material does not pose a risk to health. Dust may irritate throat and respiratory system and cause coughing.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	Not applicable.
<b>Specific hazards arising from the chemical</b>	Not a fire hazard.
<b>Special protective equipment and precautions for firefighters</b>	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>Specific methods</b>	Cool material exposed to heat with water spray and remove it if no risk is involved.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	See Section 8 of the SDS for Personal Protective Equipment.
<b>Methods and materials for containment and cleaning up</b>	No specific clean-up procedure noted. For waste disposal, see Section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge to drains, sewers, and other water systems.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Use work methods which minimize dust production. Avoid inhalation of dust and contact with skin and eyes. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices. When moving board with a forklift or similar equipment, it is essential that the equipment be rated capable of handling the loads. The forks should always be long enough to extend completely through the width of the load. Fork spacing between supports should be one half the length of the panels or base being handled so that a maximum of 4' extends beyond the supports on either end.  Follow traditional building practices; such as management of water away from the interior of the structure to avoid the growth of mold, mildew and fungus. Remove any building products suspected of being exposed to sustained moisture and considered conducive to mold growth from the job site. Gypsum panels are very heavy, awkward loads posing the risk of severe back injury. Use proper lifting techniques.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Protect product from physical damage. Protect from weather and prevent exposure to sustained moisture. Gypsum Association literature (GA-801-07) recommends storing board flat to avoid damaging edges, warping the board and the potential safety hazards of the board falling over. However, in other situations, storing the board flat may cause a tripping hazard or exceed floor limit loads. If stacking board vertically, leave at least 4 inches from the wall to decrease the risk of falling board and no more than 6 inches to avoid too much lateral weight against the wall.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.



## US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	10 mg/m3	Inhalable fraction.
Continuous filament glass fiber (CAS 65997-17-3)	TWA	1 fibers/cm3	Respirable fibers (length > 5 µm & aspect ratio ≥ 3:1)
		5 mg/m3	Inhalable fraction.

## US NIOSH Pocket Guide to Chemical Hazards: Recommended exposure limit (REL)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	5 mg/m3	Respirable.
Continuous filament glass fiber (CAS 65997-17-3)	TWA	10 mg/m3 3 fibers/cm3	Total Respirable fibers (≤ 3.5 µm in diameter & ≥ 10 µm in length)
		5 mg/m3	Fiber, total

<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Appropriate engineering controls</b>	Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Wear approved safety goggles.
<b>Skin protection</b>	
<b>Hand protection</b>	It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.
<b>Other</b>	Normal work clothing (long sleeved shirts and long pants) is recommended.
<b>Respiratory protection</b>	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use. Observe any medical surveillance requirements.
<b>Thermal hazards</b>	None.
<b>General hygiene considerations</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Observe any medical surveillance requirements.

## 9. Physical and chemical properties

<b>Appearance</b>	Paper faced with gypsum core.
<b>Physical state</b>	Solid.
<b>Form</b>	Panel.
<b>Color</b>	Gray to off-white.
<b>Odor</b>	Low to no odor.
<b>Odor threshold</b>	Not applicable.
<b>pH</b>	6 - 8
<b>Melting point/freezing point</b>	Not applicable.
<b>Initial boiling point and boiling range</b>	Not applicable.
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not applicable.

<b>Flammability limit - upper (%)</b>	Not applicable.
<b>Explosive limit - lower (%)</b>	Not applicable.
<b>Explosive limit - upper (%)</b>	Not applicable.
<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	2.32 (Gypsum) (H <sub>2</sub> O=1)
<b>Solubility(ies)</b>	0.26 g/100 g (H <sub>2</sub> O)
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition temperature</b>	2642 °F (1450 °C)
<b>Viscosity</b>	Not applicable.
<b>Other information</b>	
<b>Bulk density</b>	48 lb/ft <sup>3</sup>
<b>Particle size</b>	Varies.
<b>VOC (Weight %)</b>	0 %

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents. Strong acids.
<b>Hazardous decomposition products</b>	Calcium oxides, carbon dioxide, and carbon monoxide.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	Not likely, due to the form of the product.
<b>Inhalation</b>	Mechanical processing may generate dust. Gypsum dust has an irritant action on mucous membranes of the upper respiratory tract and eyes (1).
<b>Skin contact</b>	Under normal conditions of intended use, this material does not pose a skin hazard. Gypsum was not found to be a skin irritant (2).
<b>Eye contact</b>	Mechanical processing may generate dust. Direct contact with eyes may cause temporary irritation (1).

<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Under normal conditions of intended use, this material does not pose a risk to health.
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### Information on toxicological effects

<b>Acute toxicity</b>	Low hazard.
<b>Skin corrosion/irritation</b>	Gypsum was not found to be a skin irritant.
<b>Serious eye damage/eye irritation</b>	Gypsum does not cause serious eye damage or irritation.
<b>Respiratory sensitization</b>	No data available, but based on results from the skin sensitization study, calcium sulfate is not expected to be a respiratory sensitizer.
<b>Skin sensitization</b>	Not a skin sensitizer (2).
<b>Germ cell mutagenicity</b>	No evidence of mutagenic potential exists (3,4,5).
<b>Carcinogenicity</b>	No evidence of carcinogenic potential exists (6).

#### IARC Monographs. Overall Evaluation of Carcinogenicity

Continuous filament glass fiber (CAS 65997-17-3)	3 Not classifiable as to carcinogenicity to humans.
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#### NTP Report on Carcinogens

Continuous filament glass fiber (CAS 65997-17-3)	Reasonably Anticipated to be a Human Carcinogen.
--	--

<b>Reproductive toxicity</b>	No evidence of reproductive toxicity exists (2).
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<b>Specific target organ toxicity - single exposure</b>	Not toxic to lung tissue.
<b>Specific target organ toxicity - repeated exposure</b>	Not toxic to lung tissue (6).
<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.
<b>Further information</b>	Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure.

## 12. Ecological information

<b>Ecotoxicity</b>	The product contains a substance which is very toxic to aquatic organisms.		
<b>Components</b>	<b>Species</b>	<b>Test Results</b>	
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)			
<b>Aquatic</b>			
Fish	LC50	Fathead minnow ( <i>Pimephales promelas</i> )	> 1970 mg/l, 96 hours
<b>Persistence and degradability</b>	Not applicable for the salt of inorganic compounds. Calcium sulfate dissolves in water without undergoing chemical degradation.		
<b>Bioaccumulative potential</b>	Bioaccumulation is not expected.		
<b>Mobility in soil</b>	Calcium sulfate has a low potential for adsorption to soil. If water is applied, gypsum dissolves and the calcium and sulfate ions are mobile and penetrate the subsoil (7).		
<b>Other adverse effects</b>	None expected.		

## 13. Disposal considerations

<b>Disposal instructions</b>	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.
<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.

## 14. Transport information

<b>DOT</b>	Not regulated as a hazardous material by DOT.
<b>IATA</b>	Not regulated as a dangerous good.
<b>IMDG</b>	Not regulated as a dangerous good.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

## 15. Regulatory information

<b>US federal regulations</b>	This product is not hazardous according to OSHA 29CFR 1910.1200.
<b>TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)</b>	Not regulated.
<b>US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	Not listed.
<b>CERCLA Hazardous Substance List (40 CFR 302.4)</b>	Not listed.
<b>Superfund Amendments and Reauthorization Act of 1986 (SARA)</b>	
<b>Hazard categories</b>	Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
<b>SARA 302 Extremely hazardous substance</b>	No
<b>SARA 311/312 Hazardous chemical</b>	No
<b>SARA 313 (TRI reporting)</b>	Not regulated.

## Other federal regulations

### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

### Safe Drinking Water Act (SDWA)

Not regulated.

### Food and Drug Administration (FDA)

Not regulated.

## US state regulations

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

### US. Massachusetts RTK - Substance List

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)

### US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

### US. Pennsylvania RTK - Hazardous Substances

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)

### US. Rhode Island RTK

Not regulated.

## US. California Proposition 65

### US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Not listed.

## International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

**Issue date** 19-December-2013

**Revision date** -

**Version #** 01

### Further information

The International Agency for Research on Cancer (IARC) in June, 1987, categorized continuous filament glass fibers as not classifiable with respect to human carcinogenicity (Group 3). The evidence from human as well as animal studies was evaluated by IARC as insufficient to classify continuous filament glass fiber as a possible, probable, or confirmed cancer causing material.

The ACGIH has established a TLV (Threshold Limit Value or recommended exposure limit) for continuous filament glass fiber of 1 fiber per cubic centimeter of air for respirable fibers and 5 mg per cubic meter of air for inhalable glass fiber dust. These levels were established to prevent mechanical irritation of the upper airways. IARC, NTP (US National Toxicology Program) and OSHA (US Occupational Safety and Health Administration) do not list continuous filament glass fibers as a carcinogen.

As manufactured, continuous filament glass fibers in this product are not respirable. Continuous filament glass products that are chopped, crushed or severely mechanically processed during manufacturing or use may contain a very small amount of respirable particulate, some of which may be glass shards.

NFPA Ratings:

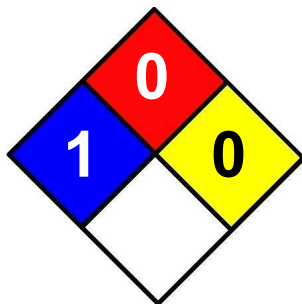
Health: 1

Flammability: 0

Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

## NFPA Ratings



**List of abbreviations**

NFPA: National Fire Protection Association.

**References**

1. US National Library of Medicine (NLM) (1998). Hazardous Substances Data Bank (HSDB).
2. Tested by LG Life Science/Toxicology Center, Korea (2002). National Institute of Environmental Research (NIER).
3. Dopp E et al. (1995). Environ. Health Perspect. 103(3), 268-271.
4. Cremer H.H. et al. (1988). Wiss. Umwelt. 4, 202-205.
5. Fujita H et al. (1988). Kenkya Nenpo-Tokyo-Toritsu Eisei Kenkynsho. 39, 343-350.
6. Clouter et al. (1998). Inhal. Toxicol. 10, 3-14.
7. Shainberg et al. (1989). Advanced Soil Sci. 9, 1-111.

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This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** SHEETROCK® Brand Mold Tough® Gypsum Liner Panels

### Other means of identification

**SDS number** 54000003004

**Synonyms** Gypsum Panels, Drywall, Plasterboard, Wallboard

**Recommended use** Interior use.

**Recommended restrictions** Use in accordance with manufacturer's recommendations.

### Manufacturer / Importer / Supplier / Distributor information

**Company name** United States Gypsum Company

**Address** 550 West Adams Street  
Chicago, Illinois 60661-3637

**Telephone** 1-800-874-4968

**Website** www.usg.com

**Emergency phone number** 1-800-507-8899

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Not classified.

**OSHA defined hazards** Not classified.

### Label elements

**Hazard symbol** None.

**Signal word** None.

**Hazard statement** None.

### Precautionary statement

**Prevention** Observe good industrial hygiene practices.

**Response** Get medical attention/advice if you feel unwell.

**Storage** Store as indicated in Section 7.

**Disposal** Dispose of in accordance with local, state, and federal regulations.

**Hazard(s) not otherwise classified (HNOC)** Not classified.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Calcium sulfate dihydrate (alternative CAS 10101-41-4)	13397-24-5	≥ 85
Cellulose	9004-34-6	< 5
Sodium pyrithione	3811-73-2	< 0.25

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas.

The gypsum used to manufacture these panels contains respirable crystalline silica ranging up to 0.56 percent by weight, depending on source, as indicated by bulk sampling methods. Industrial hygiene testing using both personal and area sampling measured no detectable respirable crystalline silica when cutting the product by "score and snap," rotary saw, or circular saw. Good work practices which minimize the extent of dust generation should be followed.

## 4. First-aid measures

**Inhalation** Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

**Skin contact** Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

<b>Eye contact</b>	Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.
<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Under normal conditions of intended use, this material does not pose a risk to health. Dust may irritate throat and respiratory system and cause coughing.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	Not applicable.
<b>Specific hazards arising from the chemical</b>	Not a fire hazard.
<b>Special protective equipment and precautions for firefighters</b>	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>Specific methods</b>	Cool material exposed to heat with water spray and remove it if no risk is involved.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	See Section 8 of the SDS for Personal Protective Equipment.
<b>Methods and materials for containment and cleaning up</b>	No specific clean-up procedure noted. For waste disposal, see Section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge to drains, sewers, and other water systems.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Use work methods which minimize dust production. Avoid inhalation of dust and contact with skin and eyes. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices. When moving board with a forklift or similar equipment, it is essential that the equipment be rated capable of handling the loads. The forks should always be long enough to extend completely through the width of the load. Fork spacing between supports should be one half the length of the panels or base being handled so that a maximum of 4' extends beyond the supports on either end.  Follow traditional building practices; such as management of water away from the interior of the structure to avoid the growth of mold, mildew and fungus. Remove any building products suspected of being exposed to sustained moisture and considered conducive to mold growth from the job site. Gypsum panels are very heavy, awkward loads posing the risk of severe back injury. Use proper lifting techniques.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Protect product from physical damage. Protect from weather and prevent exposure to sustained moisture. Gypsum Association literature (GA-801-07) recommends storing board flat to avoid damaging edges, warping the board and the potential safety hazards of the board falling over. However, in other situations, storing the board flat may cause a tripping hazard or exceed floor limit loads. If stacking board vertically, leave at least 4 inches from the wall to decrease the risk of falling board and no more than 6 inches to avoid too much lateral weight against the wall.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	PEL	5 mg/m3	Respirable fraction.
Cellulose (CAS 9004-34-6)	PEL	15 mg/m3	Total dust.
		5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

## US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	10 mg/m3	Inhalable fraction.
Cellulose (CAS 9004-34-6)	TWA	10 mg/m3	

## US NIOSH Pocket Guide to Chemical Hazards: Recommended exposure limit (REL)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	5 mg/m3	Respirable.
Cellulose (CAS 9004-34-6)	TWA	10 mg/m3	Total
		5 mg/m3	Respirable.
		10 mg/m3	Total

### Biological limit values

No biological exposure limits noted for the ingredient(s).

### Appropriate engineering controls

Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Wear approved safety goggles.

#### Skin protection

##### Hand protection

It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

##### Other

Normal work clothing (long sleeved shirts and long pants) is recommended.

#### Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use. Observe any medical surveillance requirements.

#### Thermal hazards

None.

### General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Observe any medical surveillance requirements.

## 9. Physical and chemical properties

### Appearance

Paper faced with gypsum core.

#### Physical state

Solid.

#### Form

Panel.

#### Color

Gray to off-white.

### Odor

Low to no odor.

### Odor threshold

Not applicable.

### pH

6 - 8

### Melting point/freezing point

Not applicable.

### Initial boiling point and boiling range

Not applicable.

### Flash point

Not applicable.

### Evaporation rate

Not applicable.

### Flammability (solid, gas)

Not applicable.

### Upper/lower flammability or explosive limits

#### Flammability limit - lower (%)

Not applicable.

#### Flammability limit - upper (%)

Not applicable.

#### Explosive limit - lower (%)

Not applicable.

#### Explosive limit - upper (%)

Not applicable.



<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	2.32 (Gypsum) (H <sub>2</sub> O=1)
<b>Solubility(ies)</b>	0.26 g/100 g (H <sub>2</sub> O)
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition temperature</b>	2642 °F (1450 °C)
<b>Viscosity</b>	Not applicable.
<b>Other information</b>	
<b>Bulk density</b>	48 lb/ft <sup>3</sup>
<b>Particle size</b>	Varies.
<b>VOC (Weight %)</b>	0 %

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents. Strong acids.
<b>Hazardous decomposition products</b>	Calcium oxides, carbon dioxide, and carbon monoxide.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	Not likely, due to the form of the product.
<b>Inhalation</b>	Mechanical processing may generate dust. Gypsum dust has an irritant action on mucous membranes of the upper respiratory tract and eyes (1).
<b>Skin contact</b>	Under normal conditions of intended use, this material does not pose a skin hazard. Gypsum was not found to be a skin irritant (2).
<b>Eye contact</b>	Mechanical processing may generate dust. Direct contact with eyes may cause temporary irritation (1).

<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Under normal conditions of intended use, this material does not pose a risk to health.
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### Information on toxicological effects

<b>Acute toxicity</b>	Low hazard.
<b>Skin corrosion/irritation</b>	Gypsum was not found to be a skin irritant.
<b>Serious eye damage/eye irritation</b>	Gypsum does not cause serious eye damage or irritation.
<b>Respiratory sensitization</b>	No data available, but based on results from the skin sensitization study, calcium sulfate is not expected to be a respiratory sensitizer.
<b>Skin sensitization</b>	Not a skin sensitizer (2).
<b>Germ cell mutagenicity</b>	No evidence of mutagenic potential exists (3,4,5).
<b>Carcinogenicity</b>	No evidence of carcinogenic potential exists (6).
<b>Reproductive toxicity</b>	No evidence of reproductive toxicity exists (2).
<b>Specific target organ toxicity - single exposure</b>	Not toxic to lung tissue.
<b>Specific target organ toxicity - repeated exposure</b>	Not toxic to lung tissue (6).
<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.
<b>Further information</b>	Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure.

## 12. Ecological information

<b>Ecotoxicity</b>	The product contains a substance which is very toxic to aquatic organisms.		
<b>Components</b>	<b>Species</b>	<b>Test Results</b>	
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)			
<b>Aquatic</b>			
Fish	LC50	Fathead minnow (Pimephales promelas)	> 1970 mg/l, 96 hours
<b>Persistence and degradability</b>	Not applicable for the salt of inorganic compounds. Calcium sulfate dissolves in water without undergoing chemical degradation.		
<b>Bioaccumulative potential</b>	Bioaccumulation is not expected.		
<b>Mobility in soil</b>	Calcium sulfate has a low potential for adsorption to soil. If water is applied, gypsum dissolves and the calcium and sulfate ions are mobile and penetrate the subsoil (7).		
<b>Other adverse effects</b>	None expected.		

## 13. Disposal considerations

<b>Disposal instructions</b>	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.
<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.

## 14. Transport information

<b>DOT</b>	Not regulated as a hazardous material by DOT.
<b>IATA</b>	Not regulated as a dangerous good.
<b>IMDG</b>	Not regulated as a dangerous good.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

## 15. Regulatory information

<b>US federal regulations</b>	This product is not hazardous according to OSHA 29CFR 1910.1200.		
<b>TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)</b>	Not regulated.		
<b>US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	Not listed.		
<b>CERCLA Hazardous Substance List (40 CFR 302.4)</b>	Not listed.		
<b>Superfund Amendments and Reauthorization Act of 1986 (SARA)</b>			
<b>Hazard categories</b>	Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No		
<b>SARA 302 Extremely hazardous substance</b>	No		
<b>SARA 311/312 Hazardous chemical</b>	No		
<b>SARA 313 (TRI reporting)</b>	Not regulated.		
<b>Other federal regulations</b>			
<b>Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List</b>	Not regulated.		
<b>Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)</b>	Not regulated.		
<b>Safe Drinking Water Act (SDWA)</b>	Not regulated.		

**Food and Drug  
Administration (FDA)**

Not regulated.

**US state regulations**

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

**US. Massachusetts RTK - Substance List**

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)  
Cellulose (CAS 9004-34-6)

**US. New Jersey Worker and Community Right-to-Know Act**

Not regulated.

**US. Pennsylvania RTK - Hazardous Substances**

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)  
Cellulose (CAS 9004-34-6)

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Not listed.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

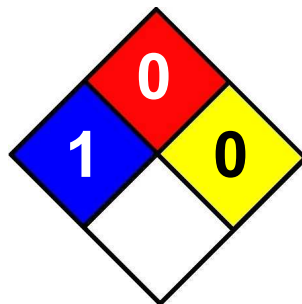
**Issue date** 18-December-2013

**Revision date** -

**Version #** 01

**Further information** NFPA Ratings:  
Health: 1  
Flammability: 0  
Physical hazard: 0  
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

**NFPA Ratings**



**List of abbreviations**

NFPA: National Fire Protection Association.

**References**

1. US National Library of Medicine (NLM) (1998). Hazardous Substances Data Bank (HSDB).
2. Tested by LG Life Science/Toxicology Center, Korea (2002). National Institute of Environmental Research (NIER).
3. Dopp E et al. (1995). Environ. Health Perspect. 103(3), 268-271.
4. Cremer H.H. et al. (1988). Wiss. Umwelt. 4, 202-205.
5. Fujita H et al. (1988). Kenkya Nenpo-Tokyo-Toritsu Eisei Kenkynsho. 39, 343-350.
6. Clouter et al. (1998). Inhal. Toxicol. 10, 3-14.
7. Shainberg et al. (1989). Advanced Soil Sci. 9, 1-111.

**Disclaimer**

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



# SAFETY DATA SHEET

## 1. Identification

Product identifier	<b>SHEETROCK® Brand Mold Tough® Gypsum Panels</b>
Other means of identification	
SDS number	54000003001
Synonyms	Gypsum Panels, Drywall, Plasterboard, Wallboard
Recommended use	Interior use.
Recommended restrictions	Use in accordance with manufacturer's recommendations.
<b>Manufacturer / Importer / Supplier / Distributor information</b>	
Company name	United States Gypsum Company
Address	550 West Adams Street Chicago, Illinois 60661-3637
Telephone	1-800-874-4968
Website	www.usg.com
Emergency phone number	1-800-507-8899

## 2. Hazard(s) identification

Physical hazards	Not classified.
Health hazards	Not classified.
OSHA defined hazards	Not classified.
<b>Label elements</b>	
Hazard symbol	None.
Signal word	None.
Hazard statement	None.
<b>Precautionary statement</b>	
Prevention	Observe good industrial hygiene practices.
Response	Get medical attention/advice if you feel unwell.
Storage	Store as indicated in Section 7.
Disposal	Dispose of in accordance with local, state, and federal regulations.
Hazard(s) not otherwise classified (HNOC)	Not classified.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Calcium sulfate dihydrate (alternative CAS 10101-41-4)	13397-24-5	≥ 85
Cellulose	9004-34-6	< 10
Sodium pyrithione	3811-73-2	< 0.25

<b>Composition comments</b>	All concentrations are in percent by weight unless ingredient is a gas.
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The gypsum used to manufacture these panels contains respirable crystalline silica ranging up to 0.56 percent by weight, depending on source, as indicated by bulk sampling methods. Industrial hygiene testing using both personal and area sampling measured no detectable respirable crystalline silica when cutting the product by "score and snap," rotary saw, or circular saw. Good work practices which minimize the extent of dust generation should be followed.

## 4. First-aid measures

Inhalation	Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.
Skin contact	Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

<b>Eye contact</b>	Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.
<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Under normal conditions of intended use, this material does not pose a risk to health. Dust may irritate throat and respiratory system and cause coughing.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	Not applicable.
<b>Specific hazards arising from the chemical</b>	Not a fire hazard.
<b>Special protective equipment and precautions for firefighters</b>	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>Specific methods</b>	Cool material exposed to heat with water spray and remove it if no risk is involved.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	See Section 8 of the SDS for Personal Protective Equipment.
<b>Methods and materials for containment and cleaning up</b>	No specific clean-up procedure noted. For waste disposal, see Section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge to drains, sewers, and other water systems.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Use work methods which minimize dust production. Avoid inhalation of dust and contact with skin and eyes. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices. When moving board with a forklift or similar equipment, it is essential that the equipment be rated capable of handling the loads. The forks should always be long enough to extend completely through the width of the load. Fork spacing between supports should be one half the length of the panels or base being handled so that a maximum of 4' extends beyond the supports on either end.  Follow traditional building practices; such as management of water away from the interior of the structure to avoid the growth of mold, mildew and fungus. Remove any building products suspected of being exposed to sustained moisture and considered conducive to mold growth from the job site. Gypsum panels are very heavy, awkward loads posing the risk of severe back injury. Use proper lifting techniques.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Protect product from physical damage. Protect from weather and prevent exposure to sustained moisture. Gypsum Association literature (GA-801-07) recommends storing board flat to avoid damaging edges, warping the board and the potential safety hazards of the board falling over. However, in other situations, storing the board flat may cause a tripping hazard or exceed floor limit loads. If stacking board vertically, leave at least 4 inches from the wall to decrease the risk of falling board and no more than 6 inches to avoid too much lateral weight against the wall.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	PEL	5 mg/m3	Respirable fraction.
Cellulose (CAS 9004-34-6)	PEL	15 mg/m3	Total dust.
		5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

## US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	10 mg/m3	Inhalable fraction.
Cellulose (CAS 9004-34-6)	TWA	10 mg/m3	

## US NIOSH Pocket Guide to Chemical Hazards: Recommended exposure limit (REL)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	5 mg/m3	Respirable.
Cellulose (CAS 9004-34-6)	TWA	10 mg/m3	Total
		5 mg/m3	Respirable.
		10 mg/m3	Total

### Biological limit values

No biological exposure limits noted for the ingredient(s).

### Appropriate engineering controls

Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Wear approved safety goggles.

#### Skin protection

##### Hand protection

It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

##### Other

Normal work clothing (long sleeved shirts and long pants) is recommended.

#### Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use. Observe any medical surveillance requirements.

#### Thermal hazards

None.

### General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Observe any medical surveillance requirements.

## 9. Physical and chemical properties

### Appearance

Paper faced with gypsum core.

#### Physical state

Solid.

#### Form

Panel.

#### Color

Gray to off-white.

### Odor

Low to no odor.

### Odor threshold

Not applicable.

### pH

6 - 8

### Melting point/freezing point

Not applicable.

### Initial boiling point and boiling range

Not applicable.

### Flash point

Not applicable.

### Evaporation rate

Not applicable.

### Flammability (solid, gas)

Not applicable.

### Upper/lower flammability or explosive limits

#### Flammability limit - lower (%)

Not applicable.

#### Flammability limit - upper (%)

Not applicable.

#### Explosive limit - lower (%)

Not applicable.

#### Explosive limit - upper (%)

Not applicable.

<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	2.32 (Gypsum) (H <sub>2</sub> O=1)
<b>Solubility(ies)</b>	0.26 g/100 g (H <sub>2</sub> O)
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition temperature</b>	2642 °F (1450 °C)
<b>Viscosity</b>	Not applicable.
<b>Other information</b>	
<b>Bulk density</b>	43 lb/ft <sup>3</sup>
<b>Particle size</b>	Varies.
<b>VOC (Weight %)</b>	0 %

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents. Strong acids.
<b>Hazardous decomposition products</b>	Calcium oxides, carbon dioxide, and carbon monoxide.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	Not likely, due to the form of the product.
<b>Inhalation</b>	Mechanical processing may generate dust. Gypsum dust has an irritant action on mucous membranes of the upper respiratory tract and eyes (1).
<b>Skin contact</b>	Under normal conditions of intended use, this material does not pose a skin hazard. Gypsum was not found to be a skin irritant (2).
<b>Eye contact</b>	Mechanical processing may generate dust. Direct contact with eyes may cause temporary irritation (1).

<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Under normal conditions of intended use, this material does not pose a risk to health.
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### Information on toxicological effects

<b>Acute toxicity</b>	Low hazard.
<b>Skin corrosion/irritation</b>	Gypsum was not found to be a skin irritant.
<b>Serious eye damage/eye irritation</b>	Gypsum does not cause serious eye damage or irritation.
<b>Respiratory sensitization</b>	No data available, but based on results from the skin sensitization study, calcium sulfate is not expected to be a respiratory sensitizer.
<b>Skin sensitization</b>	Not a skin sensitizer (2).
<b>Germ cell mutagenicity</b>	No evidence of mutagenic potential exists (3,4,5).
<b>Carcinogenicity</b>	No evidence of carcinogenic potential exists (6).
<b>Reproductive toxicity</b>	No evidence of reproductive toxicity exists (2).
<b>Specific target organ toxicity - single exposure</b>	Not toxic to lung tissue.
<b>Specific target organ toxicity - repeated exposure</b>	Not toxic to lung tissue (6).
<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.
<b>Further information</b>	Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure.

## 12. Ecological information

<b>Ecotoxicity</b>	The product contains a substance which is very toxic to aquatic organisms.		
<b>Components</b>	<b>Species</b>	<b>Test Results</b>	
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)			
<b>Aquatic</b>			
Fish	LC50	Fathead minnow (Pimephales promelas)	> 1970 mg/l, 96 hours
<b>Persistence and degradability</b>	Not applicable for the salt of inorganic compounds. Calcium sulfate dissolves in water without undergoing chemical degradation.		
<b>Bioaccumulative potential</b>	Bioaccumulation is not expected.		
<b>Mobility in soil</b>	Calcium sulfate has a low potential for adsorption to soil. If water is applied, gypsum dissolves and the calcium and sulfate ions are mobile and penetrate the subsoil (7).		
<b>Other adverse effects</b>	None expected.		

## 13. Disposal considerations

<b>Disposal instructions</b>	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.
<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.

## 14. Transport information

<b>DOT</b>	Not regulated as a hazardous material by DOT.
<b>IATA</b>	Not regulated as a dangerous good.
<b>IMDG</b>	Not regulated as a dangerous good.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

## 15. Regulatory information

<b>US federal regulations</b>	This product is not hazardous according to OSHA 29CFR 1910.1200.
<b>TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)</b>	Not regulated.
<b>US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	Not listed.
<b>CERCLA Hazardous Substance List (40 CFR 302.4)</b>	Not listed.
<b>Superfund Amendments and Reauthorization Act of 1986 (SARA)</b>	
<b>Hazard categories</b>	Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
<b>SARA 302 Extremely hazardous substance</b>	No
<b>SARA 311/312 Hazardous chemical</b>	No
<b>SARA 313 (TRI reporting)</b>	Not regulated.
<b>Other federal regulations</b>	
<b>Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List</b>	Not regulated.
<b>Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)</b>	Not regulated.
<b>Safe Drinking Water Act (SDWA)</b>	Not regulated.



<b>Food and Drug Administration (FDA)</b>	Not regulated.
<b>US state regulations</b>	This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.
<b>US. Massachusetts RTK - Substance List</b>	
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	
Cellulose (CAS 9004-34-6)	
<b>US. New Jersey Worker and Community Right-to-Know Act</b>	
Not regulated.	
<b>US. Pennsylvania RTK - Hazardous Substances</b>	
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	
Cellulose (CAS 9004-34-6)	
<b>US. Rhode Island RTK</b>	
Not regulated.	
<b>US. California Proposition 65</b>	
<b>US - California Proposition 65 - Carcinogens &amp; Reproductive Toxicity (CRT): Listed substance</b>	
Not listed.	

#### International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

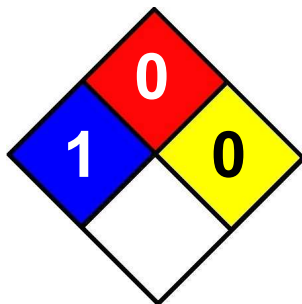
\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

<b>Issue date</b>	18-December-2013
<b>Revision date</b>	-
<b>Version #</b>	01
<b>Further information</b>	NFPA Ratings: Health: 1 Flammability: 0 Physical hazard: 0 Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

#### NFPA Ratings



#### List of abbreviations

NFPA: National Fire Protection Association.

#### References

1. US National Library of Medicine (NLM) (1998). Hazardous Substances Data Bank (HSDB).
2. Tested by LG Life Science/Toxicology Center, Korea (2002). National Institute of Environmental Research (NIER).
3. Dopp E et al. (1995). Environ. Health Perspect. 103(3), 268-271.
4. Cremer H.H. et al. (1988). Wiss. Umwelt. 4, 202-205.
5. Fujita H et al. (1988). Kenkya Nenpo-Tokyo-Toritsu Eisei Kenkynsho. 39, 343-350.
6. Clouter et al. (1998). Inhal. Toxicol. 10, 3-14.
7. Shainberg et al. (1989). Advanced Soil Sci. 9, 1-111.

#### Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



# SAFETY DATA SHEET

## 1. Identification

Product identifier	<b>SHEETROCK® Brand UltraLight Panels FIRECODE® 30</b>
Other means of identification	
SDS number	54000000503
Synonyms	Gypsum Panels, Drywall, Plasterboard, Wallboard
Recommended use	Interior use.
Recommended restrictions	Use in accordance with manufacturer's recommendations.
Manufacturer / Importer / Supplier / Distributor information	
Company name	United States Gypsum Company
Address	550 West Adams Street Chicago, Illinois 60661-3637
Telephone	1-800-874-4968
Website	www.usg.com
Emergency phone number	1-800-507-8899

## 2. Hazard(s) identification

Physical hazards	Not classified.
Health hazards	Not classified.
OSHA defined hazards	Not classified.
Label elements	
Hazard symbol	None.
Signal word	None.
Hazard statement	None.
Precautionary statement	
Prevention	Observe good industrial hygiene practices.
Response	Get medical attention/advice if you feel unwell.
Storage	Store as indicated in Section 7.
Disposal	Dispose of in accordance with local, state, and federal regulations.
Hazard(s) not otherwise classified (HNOC)	Not classified.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Calcium sulfate dihydrate (alternative CAS 10101-41-4)	13397-24-5	≥ 85
Cellulose	9004-34-6	< 10

Composition comments	All concentrations are in percent by weight unless ingredient is a gas.  The gypsum used to manufacture these panels contains respirable crystalline silica ranging up to 0.56 percent by weight, depending on source, as indicated by bulk sampling methods. Industrial hygiene testing using both personal and area sampling measured no detectable respirable crystalline silica when cutting the product by "score and snap," rotary saw, or circular saw. Good work practices which minimize the extent of dust generation should be followed.
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## 4. First-aid measures

Inhalation	Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.
Skin contact	Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.
Eye contact	Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.

<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Under normal conditions of intended use, this material does not pose a risk to health. Dust may irritate throat and respiratory system and cause coughing.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	Not applicable.
<b>Specific hazards arising from the chemical</b>	Not a fire hazard.
<b>Special protective equipment and precautions for firefighters</b>	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>Specific methods</b>	Cool material exposed to heat with water spray and remove it if no risk is involved.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	See Section 8 of the SDS for Personal Protective Equipment.
<b>Methods and materials for containment and cleaning up</b>	No specific clean-up procedure noted. For waste disposal, see Section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge to drains, sewers, and other water systems.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Use work methods which minimize dust production. Avoid inhalation of dust and contact with skin and eyes. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices. When moving board with a forklift or similar equipment, it is essential that the equipment be rated capable of handling the loads. The forks should always be long enough to extend completely through the width of the load. Fork spacing between supports should be one half the length of the panels or base being handled so that a maximum of 4' extends beyond the supports on either end.  Follow traditional building practices; such as management of water away from the interior of the structure to avoid the growth of mold, mildew and fungus. Remove any building products suspected of being exposed to sustained moisture and considered conducive to mold growth from the job site. Gypsum panels are very heavy, awkward loads posing the risk of severe back injury. Use proper lifting techniques.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Protect product from physical damage. Protect from weather and prevent exposure to sustained moisture. Gypsum Association literature (GA-801-07) recommends storing board flat to avoid damaging edges, warping the board and the potential safety hazards of the board falling over. However, in other situations, storing the board flat may cause a tripping hazard or exceed floor limit loads. If stacking board vertically, leave at least 4 inches from the wall to decrease the risk of falling board and no more than 6 inches to avoid too much lateral weight against the wall.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	PEL	5 mg/m3	Respirable fraction.
Cellulose (CAS 9004-34-6)	PEL	15 mg/m3	Total dust.
		5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

## US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	10 mg/m3	Inhalable fraction.
Cellulose (CAS 9004-34-6)	TWA	10 mg/m3	

## US NIOSH Pocket Guide to Chemical Hazards: Recommended exposure limit (REL)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Cellulose (CAS 9004-34-6)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total

### Biological limit values

No biological exposure limits noted for the ingredient(s).

### Appropriate engineering controls

Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Wear approved safety goggles.

#### Skin protection

##### Hand protection

It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

##### Other

Normal work clothing (long sleeved shirts and long pants) is recommended.

#### Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use. Observe any medical surveillance requirements.

#### Thermal hazards

None.

### General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Observe any medical surveillance requirements.

## 9. Physical and chemical properties

### Appearance

Paper faced with gypsum core.

#### Physical state

Solid.

#### Form

Panel.

#### Color

Gray to off-white.

### Odor

Low to no odor.

### Odor threshold

Not applicable.

### pH

6 - 8

### Melting point/freezing point

Not applicable.

### Initial boiling point and boiling range

Not applicable.

### Flash point

Not applicable.

### Evaporation rate

Not applicable.

### Flammability (solid, gas)

Not applicable.

### Upper/lower flammability or explosive limits

#### Flammability limit - lower (%)

Not applicable.

#### Flammability limit - upper (%)

Not applicable.

#### Explosive limit - lower (%)

Not applicable.

#### Explosive limit - upper (%)

Not applicable.

<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	2.32 (Gypsum) (H <sub>2</sub> O=1)
<b>Solubility(ies)</b>	0.26 g/100 g (H <sub>2</sub> O)
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition temperature</b>	2642 °F (1450 °C)
<b>Viscosity</b>	Not applicable.
<b>Other information</b>	
<b>Bulk density</b>	32 lb/ft <sup>3</sup>
<b>Particle size</b>	Varies.
<b>VOC (Weight %)</b>	0 %

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents. Strong acids.
<b>Hazardous decomposition products</b>	Calcium oxides, carbon dioxide, and carbon monoxide.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	Not likely, due to the form of the product.
<b>Inhalation</b>	Mechanical processing may generate dust. Gypsum dust has an irritant action on mucous membranes of the upper respiratory tract and eyes (1).
<b>Skin contact</b>	Under normal conditions of intended use, this material does not pose a skin hazard. Gypsum was not found to be a skin irritant (2).
<b>Eye contact</b>	Mechanical processing may generate dust. Direct contact with eyes may cause temporary irritation (1).

<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Under normal conditions of intended use, this material does not pose a risk to health.
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### Information on toxicological effects

<b>Acute toxicity</b>	Low hazard.
<b>Skin corrosion/irritation</b>	Gypsum was not found to be a skin irritant.
<b>Serious eye damage/eye irritation</b>	Gypsum does not cause serious eye damage or irritation.
<b>Respiratory sensitization</b>	No data available, but based on results from the skin sensitization study, calcium sulfate is not expected to be a respiratory sensitizer.
<b>Skin sensitization</b>	Not a skin sensitizer (2).
<b>Germ cell mutagenicity</b>	No evidence of mutagenic potential exists (3,4,5).
<b>Carcinogenicity</b>	No evidence of carcinogenic potential exists (6).
<b>Reproductive toxicity</b>	No evidence of reproductive toxicity exists (2).
<b>Specific target organ toxicity - single exposure</b>	Not toxic to lung tissue.
<b>Specific target organ toxicity - repeated exposure</b>	Not toxic to lung tissue (6).
<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.
<b>Further information</b>	Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure.

## 12. Ecological information

### Ecotoxicity

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Product	Species		Test Results
SHEETROCK® Brand UltraLight Panels FIRECODE® 30 (CAS Mixture)			
Aquatic			
Crustacea	EC50	Daphnia	10806.512 mg/l, 48 hours, estimated
Components	Species		Test Results
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	> 1970 mg/l, 96 hours

### Persistence and degradability

Not applicable for the salt of inorganic compounds. Calcium sulfate dissolves in water without undergoing chemical degradation.

### Bioaccumulative potential

Bioaccumulation is not expected.

### Mobility in soil

Calcium sulfate has a low potential for adsorption to soil. If water is applied, gypsum dissolves and the calcium and sulfate ions are mobile and penetrate the subsoil (7).

### Other adverse effects

None expected.

## 13. Disposal considerations

### Disposal instructions

Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.

### Local disposal regulations

Dispose of in accordance with local regulations.

### Hazardous waste code

Not regulated.

### Waste from residues / unused products

Dispose of in accordance with local regulations.

### Contaminated packaging

Dispose of in accordance with local regulations.

## 14. Transport information

### DOT

Not regulated as a hazardous material by DOT.

### IATA

Not regulated as a dangerous good.

### IMDG

Not regulated as a dangerous good.

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

## 15. Regulatory information

### US federal regulations

This product is not hazardous according to OSHA 29CFR 1910.1200.

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

#### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### Hazard categories

Immediate Hazard - No  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

#### SARA 302 Extremely hazardous substance

No

#### SARA 311/312 Hazardous chemical

No

#### SARA 313 (TRI reporting)

Not regulated.

## Other federal regulations

### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

**Food and Drug Administration (FDA)** Not regulated.

**US state regulations** This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

### US. Massachusetts RTK - Substance List

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)

Cellulose (CAS 9004-34-6)

### US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

### US. Pennsylvania RTK - Hazardous Substances

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)

Cellulose (CAS 9004-34-6)

### US. Rhode Island RTK

Not regulated.

### US. California Proposition 65

#### US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Not listed.

## International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

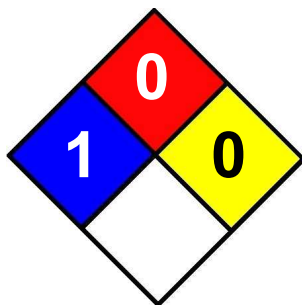
**Issue date** 18-December-2013

**Revision date** -

**Version #** 01

**Further information** NFPA Ratings:  
Health: 1  
Flammability: 0  
Physical hazard: 0  
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

### NFPA Ratings



### List of abbreviations

NFPA: National Fire Protection Association.

### References

1. US National Library of Medicine (NLM) (1998). Hazardous Substances Data Bank (HSDB).
2. Tested by LG Life Science/Toxicology Center, Korea (2002). National Institute of Environmental Research (NIER).
3. Dopp E et al. (1995). Environ. Health Perspect. 103(3), 268-271.
4. Cremer H.H. et al. (1988). Wiss. Umwelt. 4, 202-205.
5. Fujita H et al. (1988). Kenkyu Nenpo-Tokyo-Toritsu Eisei Kenkyunsho. 39, 343-350.
6. Clouter et al. (1998). Inhal. Toxicol. 10, 3-14.
7. Shainberg et al. (1989). Advanced Soil Sci. 9, 1-111.

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# SAFETY DATA SHEET

## 1. Identification

<b>Product identifier</b>	<b>Paper Faced Gypsum Panels</b>
<b>Other means of identification</b>	
<b>Product code</b>	GP-71A
<b>Synonyms</b>	See Product List found in Section 16
<b>Recommended use</b>	Products accommodate wide range of wall, floor and ceiling applications and soffit treatments.
<b>Recommended restrictions</b>	Workers (and your customers or users in the case of resale) should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

### Manufacturer/Importer/Supplier/Distributor information

<b>Company name</b>	Georgia-Pacific Gypsum LLC		
<b>Address</b>	133 Peachtree Street, NE Atlanta, GA 30303		
<b>Telephone</b>	Technical Information	800.225.6119	
	(M)SDS Request	404.652.5119	
<b>E-mail</b>	Not available.		
<b>Emergency phone number</b>	Chemtrec - Emergency	800.424.9300	

## 2. Hazard(s) identification

Emergency overview	This product is not hazardous in the form in which it is shipped by the manufacturer but may become hazardous by downstream activities such as cutting, sanding, or otherwise working with this product that generate large amount of dusts. Those hazards associated with large amount of dusts are described below.		
Physical hazards	Not classified.		
Health hazards	Serious eye damage/eye irritation	Category 2B	
Environmental hazards	Not classified.		
OSHA defined hazards	Not classified.		
Label elements			
Hazard symbol	None.		
Signal word	Warning		
Hazard statement	Causes eye irritation.		
Precautionary statement			
Prevention	Observe good industrial hygiene practices. Wash thoroughly after handling.		
Response	Wash hands after handling. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.		
Storage	Store away from strong acids.		
Disposal	Dispose of waste and residues in accordance with local authority requirements.		
Hazard(s) not otherwise classified (HNOC)	None known.		
Supplemental information	None.		

## 3. Composition/information on ingredients

### Mixtures

Chemical name	Common name and synonyms	CAS number	%
CALCIUM SULFATE DIHYDRATE		10101-41-4	60 - 100
VERMICULITE****		1318-00-9	0 - 3
CRYSTALLINE SILICA (QUARTZ)*		14808-60-7	0.1 - 1



Chemical name	Common name and synonyms	CAS number	%
BORIC ACID**		10043-35-3	0 - 1
CONTINUOUS FILAMENT GLASS FIBERS***		65997-17-3	0 - 1

#### Composition comments

\*\* Found in products in List B, C and F, Section 16 of this SDS.

\*\*\* Found in products in List C, D, E and F, Section 16 of this SDS.

\*\*\*\* Found in products in List E and F, Section 16 of this SDS.

Gypsum (calcium sulfate, dihydrate) contains naturally occurring silica crystalline (quartz), which is listed as a lung carcinogen. See Section 8 for exposure information.

\*The weight percent for crystalline silica represents total crystalline silica and not the respirable fraction. Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

\*\*Testing conducted by Georgia-Pacific did not detect boric acid during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

## 4. First-aid measures

#### Inhalation

If dust from the material is inhaled, remove the affected person immediately to fresh air. Call a physician if symptoms develop or persist.

#### Skin contact

For skin contact, wash immediately with soap and water. Get medical attention if irritation develops and persists.

#### Eye contact

Do not rub the eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

#### Ingestion

Rinse mouth. May result in obstruction and irritation if ingested. Get medical attention.

#### Most important symptoms/effects, acute and delayed

Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.

#### Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

#### General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## 5. Fire-fighting measures

#### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### Unsuitable extinguishing media

None known.

#### Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

#### Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

#### Fire-fighting equipment/instructions

Firefighters should wear full protective clothing including self contained breathing apparatus.

#### Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

#### General fire hazards

No unusual fire or explosion hazards noted.

## 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

Use personal protection recommended in Section 8. Keep unnecessary personnel away. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.

#### Methods and materials for containment and cleaning up

Minimize dust generation. Sweep up or gather material and place in an appropriate container for disposal. Utilize wet methods, if appropriate, to minimize dust. For waste disposal, see section 13 of the SDS.

#### Environmental precautions

Keep out of drains, sewers, ditches, and waterways.

## 7. Handling and storage

### Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed. Minimize dust generation and accumulation. Do not breathe dust. Do not get this material in contact with eyes. Do not taste or swallow. Avoid prolonged exposure. Observe good industrial hygiene practices. Use only in well-ventilated areas. Wear appropriate NIOSH approved dust mask or filtering facepiece if dust is generated. Do not eat or drink while using the product. Wash hands before eating, drinking, or smoking.

### Conditions for safe storage, including any incompatibilities

Store level and keep dry. Dewpoint or other conditions causing the presence of moisture can damage the product during storage. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US OSHA Table Z-3: Calculated Time Weighted Average (TWA) (mg/m3)

Components	Type	Value	Form
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	8.6 mg/m3	Total dust.
		2.9 mg/m3	Respirable.

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	PEL	5 mg/m3	Respirable fraction.
VERMICULITE**** (CAS 1318-00-9)	PEL	15 mg/m3	Total dust.
		5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

#### US ACGIH Threshold Limit Values: Short Term Exposure Limit (STEL): mg/m3

Components	Type	Value	Form
BORIC ACID** (CAS 10043-35-3)	STEL	6 mg/m3	Inhalable fraction.

#### US ACGIH Threshold Limit Values: Time Weighted Average (TWA): mg/m3, non-standard units

Components	Type	Value	Form
BORIC ACID** (CAS 10043-35-3)	TWA	2 mg/m3	Inhalable fraction.
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	TWA	10 mg/m3	Inhalable fraction.
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	TWA	5 mg/m3	Respirable.
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	10 mg/m3 0.05 mg/m3	Total Respirable dust.

### Biological limit values

No biological exposure limits noted for the ingredient(s).

<b>Exposure guidelines</b>	Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled. Exposure limits for CRYSTALLINE SILICA - The US OSHA exposure limits 8 hour TWA for CRYSTALLINE SILICA (QUARTZ) are calculated from the following equations: $30/(\%SiO_2+2)$ mg/m <sup>3</sup> for total dust; and $10/(\%SiO_2+2)$ mg/m <sup>3</sup> for the respirable fraction.  *Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.  **Testing conducted by Georgia-Pacific did not detect boric acid during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.
<b>Appropriate engineering controls</b>	Score and snap method recommended. When using product, provide local and general exhaust ventilation to keep airborne dust concentrations below exposure limits. Use wet methods, if appropriate, to reduce the generation of dust. Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Safety glasses or goggles are recommended when using this product. Ensure compliance with OSHA's PPE standard (29 CFR 1910.132 and .133) for eye and face protection.
<b>Skin protection</b>	
<b>Hand protection</b>	For prolonged or repeated skin contact use suitable protective gloves.
<b>Other</b>	Impervious protective clothing and gloves recommended to prevent drying or irritation of skin. Ensure compliance with OSHA's PPE standards (29 CFR 1910.132 (general) and 138 (hand protection)). Safety shower/eye wash fountain is recommended in the workplace area (29 CFR 1910.151 (c)).
<b>Respiratory protection</b>	A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).
<b>Thermal hazards</b>	Not applicable.
<b>General hygiene considerations</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

<b>Appearance</b>	Paper faced gypsum boards
<b>Physical state</b>	Solid.
<b>Form</b>	Solid.
<b>Color</b>	Facing color varies
<b>Odor</b>	Odorless
<b>Odor threshold</b>	Not available.
<b>pH</b>	7
<b>Melting point/freezing point</b>	2642 °F (1450 °C) estimated
<b>Initial boiling point and boiling range</b>	Not applicable
<b>Flash point</b>	Not applicable
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not applicable
<b>Flammability limit - upper (%)</b>	Not applicable
<b>Explosive limit - lower (%)</b>	Not available.

<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	Not applicable
<b>Vapor density</b>	Not applicable
<b>Relative density</b>	2.2 - 2.4 g/cm3
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	0.2 % @ 22°C
<b>Partition coefficient (n-octanol/water)</b>	Not applicable
<b>Auto-ignition temperature</b>	Not applicable
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not applicable
<b>Other information</b>	
<b>Flash point class</b>	Not flammable
<b>Specific gravity</b>	2.2 - 2.4

## 10. Stability and reactivity

<b>Reactivity</b>	Contact with strong acids produces carbon dioxide.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Contact with incompatible materials. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).
<b>Incompatible materials</b>	Strong acids.
<b>Hazardous decomposition products</b>	May include and are not limited to: calcium oxide and sulfur dioxide.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	Not applicable under normal conditions of use. May cause gastrointestinal irritation if ingested.
<b>Inhalation</b>	Inhalation of dusts may cause respiratory irritation.
<b>Skin contact</b>	Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
<b>Eye contact</b>	Dust in the eyes will cause irritation.

**Symptoms related to the physical, chemical and toxicological characteristics** Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.

### Information on toxicological effects

#### Acute toxicity

Components	Species	Test Results
BORIC ACID** (CAS 10043-35-3)		
<b>Acute</b>		
<i>Inhalation</i>		
LC50	Rat	> 2 mg/l, 4 Hours
<i>Oral</i>		
LD50	Rat	2660 mg/kg
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)		
<b>Acute</b>		
<i>Oral</i>		
LD50	Rat	> 1581 mg/kg

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation.

**Serious eye damage/eye irritation** Dust in the eyes will cause irritation.

### Respiratory or skin sensitization

<b>Respiratory sensitization</b>	Not likely to cause respiratory sensitization.
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<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.
<b>Germ cell mutagenicity</b>	Not classified.
<b>Carcinogenicity</b>	Not expected to be hazardous by OSHA criteria.

Exposure to respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by IARC and NTP as a lung carcinogen. Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given exposure to a respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of respirable crystalline silica exposure and the length of time (usually years) of exposure.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7) 1 Carcinogenic to humans.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

#### US. National Toxicology Program (NTP) Report on Carcinogens

CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7) Known To Be Human Carcinogen.

<b>Reproductive toxicity</b>	Not classified.
<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not classified.
<b>Chronic effects</b>	Not hazardous under normal conditions of use.

## 12. Ecological information

<b>Ecotoxicity</b>	Not considered to be harmful to aquatic life.
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Product		Species	Test Results
Paper Faced Gypsum Panels			
<b>Aquatic</b>			
<i>Acute</i>			
Fish	LC50	Fish	2049.4597 mg/l, 96 hours estimated
Components		Species	Test Results
BORIC ACID** (CAS 10043-35-3)			
<b>Aquatic</b>			
Crustacea	EC50	Daphnia	766.5 mg/L, 48 Hours
Fish	LC50	Razorback sucker (Xyrauchen texanus)	> 100 mg/l, 96 hours
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)			
<b>Aquatic</b>			
<i>Acute</i>			
Fish	LC50	Fathead minnow (Pimephales promelas)	> 1970 mg/l, 96 hours
CONTINUOUS FILAMENT GLASS FIBERS*** (CAS 65997-17-3)			
<b>Aquatic</b>			
<i>Acute</i>			
Fish	LC50	Zebra danio (Danio rerio)	> 1000 mg/l, 96 hours ECHA
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)			
<b>Aquatic</b>			
<i>Acute</i>			
Fish	LC50	Zebra danio (Danio rerio)	> 10000 mg/l, 96 Hours OECD SIDS

<b>Persistence and degradability</b>	No data is available on the degradability of this product.
<b>Bioaccumulative potential</b>	No data available.
<b>Mobility in soil</b>	No data available.
<b>Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

### 13. Disposal considerations

<b>Disposal instructions</b>	Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Not available.

### 14. Transport information

<b>DOT</b>	Not regulated as dangerous goods.
<b>IATA</b>	Not regulated as dangerous goods.
<b>IMDG</b>	Not regulated as dangerous goods.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable.

### 15. Regulatory information

<b>US federal regulations</b>	This product is not hazardous in the form in which it is sold and shipped by the manufacturer. However, the large amount of dusts generated by downstream activities such as cutting, sanding, or otherwise working with this product is considered hazardous and is regulated under the Hazard Communication Standard 29 CFR 1910.1200.  All components are on the U.S. EPA TSCA Inventory List.
<b>TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)</b>	Not regulated.
<b>CERCLA Hazardous Substance List (40 CFR 302.4)</b>	Not listed.
<b>SARA 304 Emergency release notification</b>	Not regulated.
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	Not listed.
<b>Superfund Amendments and Reauthorization Act of 1986 (SARA)</b>	
<b>Hazard categories</b>	Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
<b>SARA 302 Extremely hazardous substance</b>	Not listed.
<b>SARA 311/312 Hazardous chemical</b>	Yes
<b>SARA 313 (TRI reporting)</b>	Not regulated.
<b>Other federal regulations</b>	
<b>Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List</b>	Not regulated.
<b>Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)</b>	Not regulated.
<b>Safe Drinking Water Act (SDWA)</b>	Not regulated.

## US state regulations

### US. Massachusetts RTK - Substance List

CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)  
CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)

### US. New Jersey Worker and Community Right-to-Know Act

CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)  
CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)

### US. Pennsylvania Worker and Community Right-to-Know Law

CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)  
CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)

### US. Rhode Island RTK

Not regulated.

### US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

## International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

### Product list

Product List A  
ToughRock® Veneer Plaster Base (Blueboard)  
ToughRock® Flexroc® Gypsum Board  
ToughRock® Mold-Guard™ Gypsum Board  
ToughRock® Basement Board® Gypsum Board  
ToughRock® Sound Deadening Gypsum Board  
ToughRock® Stretch 54® Gypsum Board  
ToughRock® Soffit Board  
.....  
Product List B  
ToughRock® Gypsum Board  
.....  
Product List C  
ToughRock® Span 24® Lite-Weight Ceiling Board  
ToughRock® Stretch 54® Lite-Weight Gypsum Board  
ToughRock® Lite-Weight Gypsum Board  
ToughRock® MH Ceiling Board  
ToughRock® Fireguard X™ Gypsum Board  
.....  
Product List D  
ToughRock® Gypsum Sheathing  
ToughRock® Span 24® Ceiling Board  
ToughRock® Fireguard X™ Gypsum Sheathing  
ToughRock® Fireguard X™ Stretch 54® Gypsum Board  
ToughRock® Fireguard X™ Mold-Guard™ Abuse-Resistant Gypsum  
ToughRock® Fireguard X™ Veneer Plaster Board  
ToughRock® Fireguard X™ Soffit Board  
ToughRock® Fireguard X™ Abuse-Resistant Gypsum Board  
ToughRock® Fireguard X™ Mold-Guard™ Gypsum Board  
.....  
Product List E  
ToughRock® Shaftliner  
ToughRock® Fireguard C® Soffit Board  
ToughRock® Fireguard C® Stretch 54® Gypsum Board  
ToughRock® Lite-Weight Fire-Rated Gypsum Board  
.....  
Product List F  
ToughRock® Fireguard C® Gypsum Board

### Issue date

March-13-2015

### Revision date

13-Mar-2015

<b>Version #</b>	01
<b>HMIS® ratings</b>	Health: 1 Flammability: 0 Physical hazard: 0
<b>NFPA ratings</b>	Health: 1 Flammability: 0 Instability: 0
<b>Disclaimer</b>	<p>This SDS is intended to quickly provide useful information to the user(s) of this material or product. It is not intended to serve as a comprehensive discussion of all possible risks or hazards, and it assumes a reasonable use of the product. The information contained in this SDS is believed to be accurate as of the date of preparation of this SDS and has been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. The user or handler (or their employer) should consider the specific conditions in which this material will be used, handled, or stored and determine what specific safety or other precautions are required. Employers should ensure that their employees, agents, contractors, and customers who will use the product receive adequate warnings and safe handling procedures, including a current SDS. Product users or handlers (or their employer) who are unsure of what specific precautions are required should consult their employer, product supplier, or safety or health professionals before handling or working with this product. Please notify us immediately if you believe this SDS or other safety and health information about this product is inaccurate or incomplete.</p>
<b>Revision Information</b>	Product and Company Identification: Synonyms Composition / Information on Ingredients: Ingredients Physical & Chemical Properties: Multiple Properties Toxicological Information: Toxicological Data Ecological Information: Ecotoxicity Regulatory Information: United States HazReg Data: North America Index: United States GHS: Classification



# SAFETY DATA SHEET

## 1. Identification

<b>Product identifier</b>	<b>Paper Faced Gypsum Panels</b>
<b>Other means of identification</b>	
<b>Product code</b>	GP-71A
<b>Synonyms</b>	See Product List found in Section 16
<b>Recommended use</b>	Products accommodate wide range of wall, floor and ceiling applications and soffit treatments.
<b>Recommended restrictions</b>	Workers (and your customers or users in the case of resale) should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

### Manufacturer/Importer/Supplier/Distributor information

<b>Company name</b>	Georgia-Pacific Gypsum LLC		
<b>Address</b>	133 Peachtree Street, NE Atlanta, GA 30303		
<b>Telephone</b>	Technical Information	800.225.6119	
	(M)SDS Request	404.652.5119	
<b>E-mail</b>	Not available.		
<b>Emergency phone number</b>	Chemtrec - Emergency	800.424.9300	

## 2. Hazard(s) identification

Emergency overview	This product is not hazardous in the form in which it is shipped by the manufacturer but may become hazardous by downstream activities such as cutting, sanding, or otherwise working with this product that generate large amount of dusts. Those hazards associated with large amount of dusts are described below.		
Physical hazards	Not classified.		
Health hazards	Serious eye damage/eye irritation	Category 2B	
Environmental hazards	Not classified.		
OSHA defined hazards	Not classified.		
Label elements			
Hazard symbol	None.		
Signal word	Warning		
Hazard statement	Causes eye irritation.		
Precautionary statement			
Prevention	Observe good industrial hygiene practices. Wash thoroughly after handling.		
Response	Wash hands after handling. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.		
Storage	Store away from strong acids.		
Disposal	Dispose of waste and residues in accordance with local authority requirements.		
Hazard(s) not otherwise classified (HNOC)	None known.		
Supplemental information	None.		

## 3. Composition/information on ingredients

### Mixtures

Chemical name	Common name and synonyms	CAS number	%
CALCIUM SULFATE DIHYDRATE		10101-41-4	60 - 100
VERMICULITE****		1318-00-9	0 - 3
CRYSTALLINE SILICA (QUARTZ)*		14808-60-7	0.1 - 1

Chemical name	Common name and synonyms	CAS number	%
BORIC ACID**		10043-35-3	0 - 1
CONTINUOUS FILAMENT GLASS FIBERS***		65997-17-3	0 - 1

#### Composition comments

\*\* Found in products in List B, C and F, Section 16 of this SDS.

\*\*\* Found in products in List C, D, E and F, Section 16 of this SDS.

\*\*\*\* Found in products in List E and F, Section 16 of this SDS.

Gypsum (calcium sulfate, dihydrate) contains naturally occurring silica crystalline (quartz), which is listed as a lung carcinogen. See Section 8 for exposure information.

\*The weight percent for crystalline silica represents total crystalline silica and not the respirable fraction. Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

\*\*Testing conducted by Georgia-Pacific did not detect boric acid during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

## 4. First-aid measures

#### Inhalation

If dust from the material is inhaled, remove the affected person immediately to fresh air. Call a physician if symptoms develop or persist.

#### Skin contact

For skin contact, wash immediately with soap and water. Get medical attention if irritation develops and persists.

#### Eye contact

Do not rub the eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

#### Ingestion

Rinse mouth. May result in obstruction and irritation if ingested. Get medical attention.

#### Most important symptoms/effects, acute and delayed

Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.

#### Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

#### General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## 5. Fire-fighting measures

#### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### Unsuitable extinguishing media

None known.

#### Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

#### Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

#### Fire-fighting equipment/instructions

Firefighters should wear full protective clothing including self contained breathing apparatus.

#### Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

#### General fire hazards

No unusual fire or explosion hazards noted.

## 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

Use personal protection recommended in Section 8. Keep unnecessary personnel away. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.

#### Methods and materials for containment and cleaning up

Minimize dust generation. Sweep up or gather material and place in an appropriate container for disposal. Utilize wet methods, if appropriate, to minimize dust. For waste disposal, see section 13 of the SDS.

#### Environmental precautions

Keep out of drains, sewers, ditches, and waterways.

## 7. Handling and storage

### Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed. Minimize dust generation and accumulation. Do not breathe dust. Do not get this material in contact with eyes. Do not taste or swallow. Avoid prolonged exposure. Observe good industrial hygiene practices. Use only in well-ventilated areas. Wear appropriate NIOSH approved dust mask or filtering facepiece if dust is generated. Do not eat or drink while using the product. Wash hands before eating, drinking, or smoking.

### Conditions for safe storage, including any incompatibilities

Store level and keep dry. Dewpoint or other conditions causing the presence of moisture can damage the product during storage. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US OSHA Table Z-3: Calculated Time Weighted Average (TWA) (mg/m3)

Components	Type	Value	Form
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	8.6 mg/m3	Total dust.
		2.9 mg/m3	Respirable.

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	PEL	5 mg/m3	Respirable fraction.
VERMICULITE**** (CAS 1318-00-9)	PEL	15 mg/m3	Total dust.
		5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

#### US ACGIH Threshold Limit Values: Short Term Exposure Limit (STEL): mg/m3

Components	Type	Value	Form
BORIC ACID** (CAS 10043-35-3)	STEL	6 mg/m3	Inhalable fraction.

#### US ACGIH Threshold Limit Values: Time Weighted Average (TWA): mg/m3, non-standard units

Components	Type	Value	Form
BORIC ACID** (CAS 10043-35-3)	TWA	2 mg/m3	Inhalable fraction.
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	TWA	10 mg/m3	Inhalable fraction.
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	TWA	5 mg/m3	Respirable.
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	10 mg/m3 0.05 mg/m3	Total Respirable dust.

### Biological limit values

No biological exposure limits noted for the ingredient(s).

<b>Exposure guidelines</b>	Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled. Exposure limits for CRYSTALLINE SILICA - The US OSHA exposure limits 8 hour TWA for CRYSTALLINE SILICA (QUARTZ) are calculated from the following equations: $30/(\%SiO_2+2)$ mg/m <sup>3</sup> for total dust; and $10/(\%SiO_2+2)$ mg/m <sup>3</sup> for the respirable fraction.  *Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.  **Testing conducted by Georgia-Pacific did not detect boric acid during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.
<b>Appropriate engineering controls</b>	Score and snap method recommended. When using product, provide local and general exhaust ventilation to keep airborne dust concentrations below exposure limits. Use wet methods, if appropriate, to reduce the generation of dust. Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Safety glasses or goggles are recommended when using this product. Ensure compliance with OSHA's PPE standard (29 CFR 1910.132 and .133) for eye and face protection.
<b>Skin protection</b>	
<b>Hand protection</b>	For prolonged or repeated skin contact use suitable protective gloves.
<b>Other</b>	Impervious protective clothing and gloves recommended to prevent drying or irritation of skin. Ensure compliance with OSHA's PPE standards (29 CFR 1910.132 (general) and 138 (hand protection)). Safety shower/eye wash fountain is recommended in the workplace area (29 CFR 1910.151 (c)).
<b>Respiratory protection</b>	A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).
<b>Thermal hazards</b>	Not applicable.
<b>General hygiene considerations</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

<b>Appearance</b>	Paper faced gypsum boards
<b>Physical state</b>	Solid.
<b>Form</b>	Solid.
<b>Color</b>	Facing color varies
<b>Odor</b>	Odorless
<b>Odor threshold</b>	Not available.
<b>pH</b>	7
<b>Melting point/freezing point</b>	2642 °F (1450 °C) estimated
<b>Initial boiling point and boiling range</b>	Not applicable
<b>Flash point</b>	Not applicable
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not applicable
<b>Flammability limit - upper (%)</b>	Not applicable
<b>Explosive limit - lower (%)</b>	Not available.

<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	Not applicable
<b>Vapor density</b>	Not applicable
<b>Relative density</b>	2.2 - 2.4 g/cm3
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	0.2 % @ 22°C
<b>Partition coefficient (n-octanol/water)</b>	Not applicable
<b>Auto-ignition temperature</b>	Not applicable
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not applicable
<b>Other information</b>	
<b>Flash point class</b>	Not flammable
<b>Specific gravity</b>	2.2 - 2.4

## 10. Stability and reactivity

<b>Reactivity</b>	Contact with strong acids produces carbon dioxide.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Contact with incompatible materials. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).
<b>Incompatible materials</b>	Strong acids.
<b>Hazardous decomposition products</b>	May include and are not limited to: calcium oxide and sulfur dioxide.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	Not applicable under normal conditions of use. May cause gastrointestinal irritation if ingested.
<b>Inhalation</b>	Inhalation of dusts may cause respiratory irritation.
<b>Skin contact</b>	Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
<b>Eye contact</b>	Dust in the eyes will cause irritation.

**Symptoms related to the physical, chemical and toxicological characteristics** Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.

### Information on toxicological effects

#### Acute toxicity

Components	Species	Test Results
BORIC ACID** (CAS 10043-35-3)		
<b>Acute</b>		
<i>Inhalation</i>		
LC50	Rat	> 2 mg/l, 4 Hours
<i>Oral</i>		
LD50	Rat	2660 mg/kg
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)		
<b>Acute</b>		
<i>Oral</i>		
LD50	Rat	> 1581 mg/kg

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation.

**Serious eye damage/eye irritation** Dust in the eyes will cause irritation.

#### Respiratory or skin sensitization

<b>Respiratory sensitization</b>	Not likely to cause respiratory sensitization.
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<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.
<b>Germ cell mutagenicity</b>	Not classified.
<b>Carcinogenicity</b>	Not expected to be hazardous by OSHA criteria.

Exposure to respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by IARC and NTP as a lung carcinogen. Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given exposure to a respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of respirable crystalline silica exposure and the length of time (usually years) of exposure.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7) 1 Carcinogenic to humans.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

#### US. National Toxicology Program (NTP) Report on Carcinogens

CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7) Known To Be Human Carcinogen.

<b>Reproductive toxicity</b>	Not classified.
<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not classified.
<b>Chronic effects</b>	Not hazardous under normal conditions of use.

## 12. Ecological information

<b>Ecotoxicity</b>	Not considered to be harmful to aquatic life.
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Product		Species	Test Results
Paper Faced Gypsum Panels			
<b>Aquatic</b>			
<i>Acute</i>			
Fish	LC50	Fish	2049.4597 mg/l, 96 hours estimated
Components		Species	Test Results
BORIC ACID** (CAS 10043-35-3)			
<b>Aquatic</b>			
Crustacea	EC50	Daphnia	766.5 mg/L, 48 Hours
Fish	LC50	Razorback sucker (Xyrauchen texanus)	> 100 mg/l, 96 hours
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)			
<b>Aquatic</b>			
<i>Acute</i>			
Fish	LC50	Fathead minnow (Pimephales promelas)	> 1970 mg/l, 96 hours
CONTINUOUS FILAMENT GLASS FIBERS*** (CAS 65997-17-3)			
<b>Aquatic</b>			
<i>Acute</i>			
Fish	LC50	Zebra danio (Danio rerio)	> 1000 mg/l, 96 hours ECHA
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)			
<b>Aquatic</b>			
<i>Acute</i>			
Fish	LC50	Zebra danio (Danio rerio)	> 10000 mg/l, 96 Hours OECD SIDS

<b>Persistence and degradability</b>	No data is available on the degradability of this product.
<b>Bioaccumulative potential</b>	No data available.
<b>Mobility in soil</b>	No data available.
<b>Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

### 13. Disposal considerations

<b>Disposal instructions</b>	Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Not available.

### 14. Transport information

<b>DOT</b>	Not regulated as dangerous goods.
<b>IATA</b>	Not regulated as dangerous goods.
<b>IMDG</b>	Not regulated as dangerous goods.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable.

### 15. Regulatory information

<b>US federal regulations</b>	This product is not hazardous in the form in which it is sold and shipped by the manufacturer. However, the large amount of dusts generated by downstream activities such as cutting, sanding, or otherwise working with this product is considered hazardous and is regulated under the Hazard Communication Standard 29 CFR 1910.1200.  All components are on the U.S. EPA TSCA Inventory List.
<b>TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)</b>	Not regulated.
<b>CERCLA Hazardous Substance List (40 CFR 302.4)</b>	Not listed.
<b>SARA 304 Emergency release notification</b>	Not regulated.
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	Not listed.
<b>Superfund Amendments and Reauthorization Act of 1986 (SARA)</b>	
<b>Hazard categories</b>	Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
<b>SARA 302 Extremely hazardous substance</b>	Not listed.
<b>SARA 311/312 Hazardous chemical</b>	Yes
<b>SARA 313 (TRI reporting)</b>	Not regulated.
<b>Other federal regulations</b>	
<b>Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List</b>	Not regulated.
<b>Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)</b>	Not regulated.
<b>Safe Drinking Water Act (SDWA)</b>	Not regulated.

## US state regulations

### US. Massachusetts RTK - Substance List

CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)  
CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)

### US. New Jersey Worker and Community Right-to-Know Act

CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)  
CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)

### US. Pennsylvania Worker and Community Right-to-Know Law

CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)  
CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)

### US. Rhode Island RTK

Not regulated.

### US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

## International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

### Product list

Product List A  
ToughRock® Veneer Plaster Base (Blueboard)  
ToughRock® Flexroc® Gypsum Board  
ToughRock® Mold-Guard™ Gypsum Board  
ToughRock® Basement Board® Gypsum Board  
ToughRock® Sound Deadening Gypsum Board  
ToughRock® Stretch 54® Gypsum Board  
ToughRock® Soffit Board  
.....  
Product List B  
ToughRock® Gypsum Board  
.....  
Product List C  
ToughRock® Span 24® Lite-Weight Ceiling Board  
ToughRock® Stretch 54® Lite-Weight Gypsum Board  
ToughRock® Lite-Weight Gypsum Board  
ToughRock® MH Ceiling Board  
ToughRock® Fireguard X™ Gypsum Board  
.....  
Product List D  
ToughRock® Gypsum Sheathing  
ToughRock® Span 24® Ceiling Board  
ToughRock® Fireguard X™ Gypsum Sheathing  
ToughRock® Fireguard X™ Stretch 54® Gypsum Board  
ToughRock® Fireguard X™ Mold-Guard™ Abuse-Resistant Gypsum  
ToughRock® Fireguard X™ Veneer Plaster Board  
ToughRock® Fireguard X™ Soffit Board  
ToughRock® Fireguard X™ Abuse-Resistant Gypsum Board  
ToughRock® Fireguard X™ Mold-Guard™ Gypsum Board  
.....  
Product List E  
ToughRock® Shaftliner  
ToughRock® Fireguard C® Soffit Board  
ToughRock® Fireguard C® Stretch 54® Gypsum Board  
ToughRock® Lite-Weight Fire-Rated Gypsum Board  
.....  
Product List F  
ToughRock® Fireguard C® Gypsum Board

### Issue date

March-13-2015

### Revision date

13-Mar-2015



<b>Version #</b>	01
<b>HMIS® ratings</b>	Health: 1 Flammability: 0 Physical hazard: 0
<b>NFPA ratings</b>	Health: 1 Flammability: 0 Instability: 0
<b>Disclaimer</b>	<p>This SDS is intended to quickly provide useful information to the user(s) of this material or product. It is not intended to serve as a comprehensive discussion of all possible risks or hazards, and it assumes a reasonable use of the product. The information contained in this SDS is believed to be accurate as of the date of preparation of this SDS and has been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. The user or handler (or their employer) should consider the specific conditions in which this material will be used, handled, or stored and determine what specific safety or other precautions are required. Employers should ensure that their employees, agents, contractors, and customers who will use the product receive adequate warnings and safe handling procedures, including a current SDS. Product users or handlers (or their employer) who are unsure of what specific precautions are required should consult their employer, product supplier, or safety or health professionals before handling or working with this product. Please notify us immediately if you believe this SDS or other safety and health information about this product is inaccurate or incomplete.</p>
<b>Revision Information</b>	Product and Company Identification: Synonyms Composition / Information on Ingredients: Ingredients Physical & Chemical Properties: Multiple Properties Toxicological Information: Toxicological Data Ecological Information: Ecotoxicity Regulatory Information: United States HazReg Data: North America Index: United States GHS: Classification

# SAFETY DATA SHEET

## 1. Identification

### Product identifier

#### Product list

### Glass Mat Faced Gypsum Panels

#### Product List A

DensArmor Plus® High Performance Interior Panel  
DensArmor Plus® Fireguard® Abuse-Resistant Panels  
DensArmor Plus® Fireguard® Impact-Resistant Panels  
DensArmor Plus® Fireguard® Interior Panels  
DensDeck® Prime Roof Board  
DensDeck® Roof Board  
DensDeck® Prime Fireguard® Roof Board  
DensDeck® Fireguard® Roof Board  
DensElement™ Sheathing  
DensGlass® Fireguard® Sheathing  
DensGlass® Shaftliner  
DensGlass® Sheathing  
DensShield® Fireguard® Tile Backer  
DensShield® Tile Backer  
Fire-Rated GreenGlass® Prime Roof Board  
Fire-Rated GreenGlass® Sheathing  
Fire-Rated GreenGlass® Tile Backer  
Fire-Rated GreenGlass® Roof Board  
Fire-Rated GreenGlass® Interior Panels  
GreenGlass® Prime Roof Board  
GreenGlass® Roof Board  
GreenGlass® Sheathing  
GreenGlass® Tile Backer  
GreenGlass® Interior Panels

#### Product List B

DensArmor Plus® Fireguard C® High-Performance Interior Panels  
GreenGlass® Shaftliner

### Other means of identification

#### Product code

GP-71C

### Recommended use

Products accommodate a wide range of wall, floor, ceiling and roof applications.

### Recommended restrictions

Workers (and your customers or users in the case of resale) should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

### Manufacturer/Importer/Supplier/Distributor information

#### Company name

Georgia-Pacific Gypsum LLC

#### Address

133 Peachtree Street, NE  
Atlanta, GA 30303

#### Telephone

Technical Information 800.225.6119  
(M)SDS Request 404.652.5119

#### E-mail

Not available.

#### Emergency phone number

Chemtrec - Emergency 800.424.9300

## 2. Hazard(s) identification

### Emergency overview

This product is not hazardous in the form in which it is shipped by the manufacturer but may become hazardous by downstream activities such as cutting, sanding, or otherwise working with this product that generate large amount of dusts. Those hazards associated with large amount of dusts are described below.

### Physical hazards

Not classified.

### Health hazards

Serious eye damage/eye irritation

Category 2B

<b>Environmental hazards</b>	Not classified.
<b>OSHA defined hazards</b>	Not classified.
<b>Label elements</b>	
<b>Hazard symbol</b>	None.
<b>Signal word</b>	Warning
<b>Hazard statement</b>	Causes eye irritation.
<b>Precautionary statement</b>	
<b>Prevention</b>	Observe good industrial hygiene practices. Wash thoroughly after handling.
<b>Response</b>	Wash hands after handling. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>Storage</b>	Store away from strong acids.
<b>Disposal</b>	Dispose of waste and residues in accordance with local authority requirements.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	None.

### 3. Composition/information on ingredients

#### Mixtures

Chemical name	Common name and synonyms	CAS number	%
CALCIUM SULFATE DIHYDRATE		10101-41-4	60 - 100
VERMICULITE**		1318-00-9	0 - 7
CONTINUOUS FILAMENT GLASS FIBER		65997-17-3	1 - 5
CRYSTALLINE SILICA (QUARTZ)*		14808-60-7	1 - 5

**Composition comments**      \*\* Found in products in List B, Section 16 of this SDS.

Gypsum (calcium sulfate, dihydrate) and vermiculite contain naturally occurring crystalline silica (quartz) which is listed as a lung carcinogen. See Section 8 for exposure information.

\*The weight percent for crystalline silica represents total crystalline silica and not the respirable fraction. Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

### 4. First-aid measures

<b>Inhalation</b>	If dust from the material is inhaled, remove the affected person immediately to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	For skin contact, wash immediately with soap and water. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Do not rub the eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>Ingestion</b>	Rinse mouth. May result in obstruction and irritation if ingested. Get medical attention.
<b>Most important symptoms/effects, acute and delayed</b>	Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
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<b>Unsuitable extinguishing media</b>	None known.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Firefighters should wear full protective clothing including self contained breathing apparatus.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Use personal protection recommended in Section 8. Keep unnecessary personnel away. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.
<b>Methods and materials for containment and cleaning up</b>	Sweep up or gather material and place in an appropriate container for disposal. Minimize dust generation. Utilize wet methods, if appropriate, to minimize dust. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions</b>	Keep out of drains, sewers, ditches, and waterways.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Provide appropriate exhaust ventilation at places where dust is formed. Minimize dust generation and accumulation. Do not breathe dust. Do not get this material in contact with eyes. Do not taste or swallow. Avoid prolonged exposure. Observe good industrial hygiene practices. Use only in well-ventilated areas. Wear appropriate NIOSH approved dust mask or filtering facepiece if dust is generated. Do not eat or drink while using the product. Wash hands before eating, drinking, or smoking.
<b>Conditions for safe storage, including any incompatibilities</b>	Store level and keep dry. Dewpoint or other conditions causing the presence of moisture can damage the product during storage. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US OSHA Table Z-3: Calculated Time Weighted Average (TWA) (mg/m3)

Components	Type	Value	Form
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	4.29 mg/m3	Total dust.
		1.43 mg/m3	Respirable.

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	PEL	5 mg/m3	Respirable fraction.
VERMICULITE** (CAS 1318-00-9)	PEL	15 mg/m3 5 mg/m3	Total dust. Respirable fraction.
		15 mg/m3	Total dust.

#### US ACGIH Threshold Limit Values: Time Weighted Average (TWA): mg/m3, non-standard units

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	TWA	10 mg/m3	Inhalable fraction.
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

**US. NIOSH: Pocket Guide to Chemical Hazards**

OSHA 309: Product Labels for Chemical Hazards			
Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	TWA	5 mg/m3	Respirable.
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	10 mg/m3 0.05 mg/m3	Total Respirable dust.
Biological limit values	No biological exposure limits noted for the ingredient(s).		
Exposure guidelines	Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled. Exposure limits for CRYSTALLINE SILICA - The US OSHA exposure limits 8 hour TWA for CRYSTALLINE SILICA (QUARTZ) are calculated from the following equations: 30/(%SiO2+2) mg/m3 for total dust; and 10/(%SiO2+2) mg/m3 for the respirable fraction.  *Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.		
Appropriate engineering controls	Score and snap method recommended. When using product, provide local and general exhaust ventilation to keep airborne dust concentrations below exposure limits. Use wet methods, if appropriate, to reduce the generation of dust. Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn.		
Individual protection measures, such as personal protective equipment			
Eye/face protection	Safety glasses or goggles are recommended when using this product. Ensure compliance with OSHA's PPE standard (29 CFR 1910.132 and .133) for eye and face protection.		
Skin protection			
Hand protection	For prolonged or repeated skin contact use suitable protective gloves.		
Other	Impervious protective clothing and gloves recommended to prevent drying or irritation of skin. Ensure compliance with OSHA's PPE standards (29 CFR 1910.132 (general) and 138 (hand protection)). Safety shower/eye wash fountain is recommended in the workplace area (29 CFR 1910.151 (c)).		
Respiratory protection	A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).		
Thermal hazards	Not applicable.		
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.		

**9. Physical and chemical properties**

<b>Appearance</b>	Gypsum boards
<b>Physical state</b>	Solid.
<b>Form</b>	Solid
<b>Color</b>	Facing color varies
<b>Odor</b>	Low odor
<b>Odor threshold</b>	Not available.
<b>pH</b>	6 - 8
<b>Melting point/freezing point</b>	Not applicable.
<b>Initial boiling point and boiling range</b>	Not applicable.
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.

**Upper/lower flammability or explosive limits**

Flammability limit - lower (%) Not applicable.

Flammability limit - upper (%) Not applicable.

Explosive limit - lower (%) Not applicable.

Explosive limit - upper (%) Not applicable.

Vapor pressure Not applicable.

Vapor density Not applicable.

Relative density Not available.

**Solubility(ies)**

Solubility (water) 0.2 % @ 22°C

Partition coefficient (n-octanol/water) Not applicable.

Auto-ignition temperature Not applicable.

Decomposition temperature Not available.

Viscosity Not applicable.

**Other information**

Flash point class Not flammable

Specific gravity 2.2 - 2.4

**10. Stability and reactivity**

Reactivity Contact with strong acids produces carbon dioxide.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.

Conditions to avoid Contact with incompatible materials. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).

Incompatible materials Strong acids.

Hazardous decomposition products May include and are not limited to: calcium oxide and sulfur dioxide.

**11. Toxicological information****Information on likely routes of exposure**

Inhalation Inhalation of dusts may cause respiratory irritation.

Skin contact Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Eye contact Dust in the eyes will cause irritation.

Ingestion Not applicable under normal conditions of use. May cause gastrointestinal irritation if ingested.

Symptoms related to the physical, chemical and toxicological characteristics Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.

**Information on toxicological effects****Acute toxicity**

Product	Species	Test Results
Glass Mat Faced Gypsum Panels		
<u>Acute</u>		
Oral		
LD50	Rat	1731 mg/kg estimated
Components	Species	Test Results
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)		
<u>Acute</u>		
Oral		
LD50	Rat	> 1581 mg/kg

<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.
<b>Serious eye damage/eye irritation</b>	Dust in the eyes will cause irritation.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not likely to cause respiratory sensitization.
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.
<b>Germ cell mutagenicity</b>	Not classified.
<b>Carcinogenicity</b>	Not expected to be hazardous by OSHA criteria.

Exposure to respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by IARC and NTP as a lung carcinogen. Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given exposure to a respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of respirable crystalline silica exposure and the length of time (usually years) of exposure.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7) 1 Carcinogenic to humans.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

#### US. National Toxicology Program (NTP) Report on Carcinogens

CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7) Known To Be Human Carcinogen.

<b>Reproductive toxicity</b>	Not classified.
<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not classified.
<b>Chronic effects</b>	Not hazardous under normal conditions of use.

## 12. Ecological information

<b>Ecotoxicity</b>	Not considered to be harmful to aquatic life.
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Components	Species	Test Results
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50	Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours
CONTINUOUS FILAMENT GLASS FIBER (CAS 65997-17-3)		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50	Zebra danio (Danio rerio) > 1000 mg/l, 96 hours ECHA
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50	Zebra danio (Danio rerio) > 10000 mg/l, 96 Hours OECD SIDS

<b>Persistence and degradability</b>	No data is available on the degradability of this product.
<b>Bioaccumulative potential</b>	No data available.
<b>Mobility in soil</b>	No data available.
<b>Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

<b>Disposal instructions</b>	Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.

<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Not available.

## 14. Transport information

### DOT

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

## 15. Regulatory information

**US federal regulations** This product is not hazardous in the form in which it is sold and shipped by the manufacturer. However, the large amount of dusts generated by downstream activities such as cutting, sanding, or otherwise working with this product is considered hazardous and is regulated under the Hazard Communication Standard 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

### SARA 304 Emergency release notification

Not regulated.

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories** Immediate Hazard - Yes  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312 Hazardous chemical** Yes

### SARA 313 (TRI reporting)

Not regulated.

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

### US state regulations

#### US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

#### US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)



**US. Massachusetts RTK - Substance List**

CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)  
CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)

**US. New Jersey Worker and Community Right-to-Know Act**

CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)  
CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)

**US. Pennsylvania Worker and Community Right-to-Know Law**

CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)  
CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

<b>Issue date</b>	March-13-2015
<b>Revision date</b>	October-02-2015
<b>Version #</b>	04
<b>HMIS® ratings</b>	Health: 1 Flammability: 0 Physical hazard: 0
<b>NFPA ratings</b>	Health: 1 Flammability: 0 Instability: 0
<b>Disclaimer</b>	This SDS is intended to quickly provide useful information to the user(s) of this material or product. It is not intended to serve as a comprehensive discussion of all possible risks or hazards, and it assumes a reasonable use of the product. The information contained in this SDS is believed to be accurate as of the date of preparation of this SDS and has been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. The user or handler (or their employer) should consider the specific conditions in which this material will be used, handled, or stored and determine what specific safety or other precautions are required. Employers should ensure that their employees, agents, contractors, and customers who will use the product receive adequate warnings and safe handling procedures, including a current SDS. Product users or handlers (or their employer) who are unsure of what specific precautions are required should consult their employer, product supplier, or safety or health professionals before handling or working with this product. Please notify us immediately if you believe this SDS or other safety and health information about this product is inaccurate or incomplete.
<b>Revision Information</b>	Product and Company Identification: Product Codes

# SAFETY DATA SHEET

## 1. Identification

### Product identifier

#### Product list

### Glass Mat Faced Gypsum Panels

#### Product List A

DensArmor Plus® High Performance Interior Panel  
DensArmor Plus® Fireguard® Abuse-Resistant Panels  
DensArmor Plus® Fireguard® Impact-Resistant Panels  
DensArmor Plus® Fireguard® Interior Panels  
DensDeck® Prime Roof Board  
DensDeck® Roof Board  
DensDeck® Prime Fireguard® Roof Board  
DensDeck® Fireguard® Roof Board  
DensElement™ Sheathing  
DensGlass® Fireguard® Sheathing  
DensGlass® Shaftliner  
DensGlass® Sheathing  
DensShield® Fireguard® Tile Backer  
DensShield® Tile Backer  
Fire-Rated GreenGlass® Prime Roof Board  
Fire-Rated GreenGlass® Sheathing  
Fire-Rated GreenGlass® Tile Backer  
Fire-Rated GreenGlass® Roof Board  
Fire-Rated GreenGlass® Interior Panels  
GreenGlass® Prime Roof Board  
GreenGlass® Roof Board  
GreenGlass® Sheathing  
GreenGlass® Tile Backer  
GreenGlass® Interior Panels

#### Product List B

DensArmor Plus® Fireguard C® High-Performance Interior Panels  
GreenGlass® Shaftliner

### Other means of identification

#### Product code

GP-71C

### Recommended use

Products accommodate a wide range of wall, floor, ceiling and roof applications.

### Recommended restrictions

Workers (and your customers or users in the case of resale) should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

### Manufacturer/Importer/Supplier/Distributor information

#### Company name

Georgia-Pacific Gypsum LLC

#### Address

133 Peachtree Street, NE  
Atlanta, GA 30303

#### Telephone

Technical Information 800.225.6119  
(M)SDS Request 404.652.5119

#### E-mail

Not available.

#### Emergency phone number

Chemtrec - Emergency 800.424.9300

## 2. Hazard(s) identification

### Emergency overview

This product is not hazardous in the form in which it is shipped by the manufacturer but may become hazardous by downstream activities such as cutting, sanding, or otherwise working with this product that generate large amount of dusts. Those hazards associated with large amount of dusts are described below.

### Physical hazards

Not classified.

### Health hazards

Serious eye damage/eye irritation

Category 2B

<b>Environmental hazards</b>	Not classified.
<b>OSHA defined hazards</b>	Not classified.
<b>Label elements</b>	
<b>Hazard symbol</b>	None.
<b>Signal word</b>	Warning
<b>Hazard statement</b>	Causes eye irritation.
<b>Precautionary statement</b>	
<b>Prevention</b>	Observe good industrial hygiene practices. Wash thoroughly after handling.
<b>Response</b>	Wash hands after handling. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>Storage</b>	Store away from strong acids.
<b>Disposal</b>	Dispose of waste and residues in accordance with local authority requirements.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	None.

### 3. Composition/information on ingredients

#### Mixtures

Chemical name	Common name and synonyms	CAS number	%
CALCIUM SULFATE DIHYDRATE		10101-41-4	60 - 100
VERMICULITE**		1318-00-9	0 - 7
CONTINUOUS FILAMENT GLASS FIBER		65997-17-3	1 - 5
CRYSTALLINE SILICA (QUARTZ)*		14808-60-7	1 - 5

**Composition comments**      \*\* Found in products in List B, Section 16 of this SDS.

Gypsum (calcium sulfate, dihydrate) and vermiculite contain naturally occurring crystalline silica (quartz) which is listed as a lung carcinogen. See Section 8 for exposure information.

\*The weight percent for crystalline silica represents total crystalline silica and not the respirable fraction. Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

### 4. First-aid measures

<b>Inhalation</b>	If dust from the material is inhaled, remove the affected person immediately to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	For skin contact, wash immediately with soap and water. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Do not rub the eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>Ingestion</b>	Rinse mouth. May result in obstruction and irritation if ingested. Get medical attention.
<b>Most important symptoms/effects, acute and delayed</b>	Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### 5. Fire-fighting measures

**Suitable extinguishing media**      Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

<b>Unsuitable extinguishing media</b>	None known.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Firefighters should wear full protective clothing including self contained breathing apparatus.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Use personal protection recommended in Section 8. Keep unnecessary personnel away. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.
<b>Methods and materials for containment and cleaning up</b>	Sweep up or gather material and place in an appropriate container for disposal. Minimize dust generation. Utilize wet methods, if appropriate, to minimize dust. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions</b>	Keep out of drains, sewers, ditches, and waterways.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Provide appropriate exhaust ventilation at places where dust is formed. Minimize dust generation and accumulation. Do not breathe dust. Do not get this material in contact with eyes. Do not taste or swallow. Avoid prolonged exposure. Observe good industrial hygiene practices. Use only in well-ventilated areas. Wear appropriate NIOSH approved dust mask or filtering facepiece if dust is generated. Do not eat or drink while using the product. Wash hands before eating, drinking, or smoking.
<b>Conditions for safe storage, including any incompatibilities</b>	Store level and keep dry. Dewpoint or other conditions causing the presence of moisture can damage the product during storage. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US OSHA Table Z-3: Calculated Time Weighted Average (TWA) (mg/m3)

Components	Type	Value	Form
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	4.29 mg/m3	Total dust.
		1.43 mg/m3	Respirable.

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	PEL	5 mg/m3	Respirable fraction.
VERMICULITE** (CAS 1318-00-9)	PEL	15 mg/m3 5 mg/m3	Total dust. Respirable fraction.
		15 mg/m3	Total dust.

#### US ACGIH Threshold Limit Values: Time Weighted Average (TWA): mg/m3, non-standard units

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	TWA	10 mg/m3	Inhalable fraction.
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

**US. NIOSH: Pocket Guide to Chemical Hazards**

OSHA NIOSH Pocket Guide to Chemical Hazards			
Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	TWA	5 mg/m3	Respirable.
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	10 mg/m3 0.05 mg/m3	Total Respirable dust.
Biological limit values	No biological exposure limits noted for the ingredient(s).		
Exposure guidelines	Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled. Exposure limits for CRYSTALLINE SILICA - The US OSHA exposure limits 8 hour TWA for CRYSTALLINE SILICA (QUARTZ) are calculated from the following equations: 30/(%SiO2+2) mg/m3 for total dust; and 10/(%SiO2+2) mg/m3 for the respirable fraction.  *Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.		
Appropriate engineering controls	Score and snap method recommended. When using product, provide local and general exhaust ventilation to keep airborne dust concentrations below exposure limits. Use wet methods, if appropriate, to reduce the generation of dust. Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn.		
Individual protection measures, such as personal protective equipment			
Eye/face protection	Safety glasses or goggles are recommended when using this product. Ensure compliance with OSHA's PPE standard (29 CFR 1910.132 and .133) for eye and face protection.		
Skin protection			
Hand protection	For prolonged or repeated skin contact use suitable protective gloves.		
Other	Impervious protective clothing and gloves recommended to prevent drying or irritation of skin. Ensure compliance with OSHA's PPE standards (29 CFR 1910.132 (general) and 138 (hand protection)). Safety shower/eye wash fountain is recommended in the workplace area (29 CFR 1910.151 (c)).		
Respiratory protection	A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).		
Thermal hazards	Not applicable.		
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.		

**9. Physical and chemical properties**

<b>Appearance</b>	Gypsum boards
<b>Physical state</b>	Solid.
<b>Form</b>	Solid
<b>Color</b>	Facing color varies
<b>Odor</b>	Low odor
<b>Odor threshold</b>	Not available.
<b>pH</b>	6 - 8
<b>Melting point/freezing point</b>	Not applicable.
<b>Initial boiling point and boiling range</b>	Not applicable.
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.

**Upper/lower flammability or explosive limits**

Flammability limit - lower (%) Not applicable.

Flammability limit - upper (%) Not applicable.

Explosive limit - lower (%) Not applicable.

Explosive limit - upper (%) Not applicable.

Vapor pressure Not applicable.

Vapor density Not applicable.

Relative density Not available.

**Solubility(ies)**

Solubility (water) 0.2 % @ 22°C

Partition coefficient (n-octanol/water) Not applicable.

Auto-ignition temperature Not applicable.

Decomposition temperature Not available.

Viscosity Not applicable.

**Other information**

Flash point class Not flammable

Specific gravity 2.2 - 2.4

**10. Stability and reactivity**

Reactivity Contact with strong acids produces carbon dioxide.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.

Conditions to avoid Contact with incompatible materials. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).

Incompatible materials Strong acids.

Hazardous decomposition products May include and are not limited to: calcium oxide and sulfur dioxide.

**11. Toxicological information****Information on likely routes of exposure**

Inhalation Inhalation of dusts may cause respiratory irritation.

Skin contact Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Eye contact Dust in the eyes will cause irritation.

Ingestion Not applicable under normal conditions of use. May cause gastrointestinal irritation if ingested.

Symptoms related to the physical, chemical and toxicological characteristics Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.

**Information on toxicological effects****Acute toxicity**

Product	Species	Test Results
Glass Mat Faced Gypsum Panels		
<b><u>Acute</u></b>		
<b>Oral</b>		
LD50	Rat	1731 mg/kg estimated
Components	Species	Test Results
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)		
<b><u>Acute</u></b>		
<b>Oral</b>		
LD50	Rat	> 1581 mg/kg

<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.
<b>Serious eye damage/eye irritation</b>	Dust in the eyes will cause irritation.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not likely to cause respiratory sensitization.
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.
<b>Germ cell mutagenicity</b>	Not classified.
<b>Carcinogenicity</b>	Not expected to be hazardous by OSHA criteria.

Exposure to respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by IARC and NTP as a lung carcinogen. Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given exposure to a respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of respirable crystalline silica exposure and the length of time (usually years) of exposure.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7) 1 Carcinogenic to humans.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

#### US. National Toxicology Program (NTP) Report on Carcinogens

CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7) Known To Be Human Carcinogen.

<b>Reproductive toxicity</b>	Not classified.
<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not classified.
<b>Chronic effects</b>	Not hazardous under normal conditions of use.

## 12. Ecological information

<b>Ecotoxicity</b>	Not considered to be harmful to aquatic life.
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Components	Species		Test Results
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)			
Aquatic			
Acute			
Fish	LC50	Fathead minnow (Pimephales promelas)	> 1970 mg/l, 96 hours
CONTINUOUS FILAMENT GLASS FIBER (CAS 65997-17-3)			
Aquatic			
Acute			
Fish	LC50	Zebra danio (Danio rerio)	> 1000 mg/l, 96 hours ECHA
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)			
Aquatic			
Acute			
Fish	LC50	Zebra danio (Danio rerio)	> 10000 mg/l, 96 Hours OECD SIDS

<b>Persistence and degradability</b>	No data is available on the degradability of this product.
<b>Bioaccumulative potential</b>	No data available.
<b>Mobility in soil</b>	No data available.
<b>Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

<b>Disposal instructions</b>	Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.

<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Not available.

## 14. Transport information

### DOT

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

## 15. Regulatory information

**US federal regulations** This product is not hazardous in the form in which it is sold and shipped by the manufacturer. However, the large amount of dusts generated by downstream activities such as cutting, sanding, or otherwise working with this product is considered hazardous and is regulated under the Hazard Communication Standard 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

### SARA 304 Emergency release notification

Not regulated.

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories** Immediate Hazard - Yes  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312 Hazardous chemical** Yes

### SARA 313 (TRI reporting)

Not regulated.

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

### US state regulations

#### US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

#### US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)



**US. Massachusetts RTK - Substance List**

CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)  
CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)

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CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)  
CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)

**US. Pennsylvania Worker and Community Right-to-Know Law**

CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)  
CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

<b>Issue date</b>	March-13-2015
<b>Revision date</b>	October-02-2015
<b>Version #</b>	04
<b>HMIS® ratings</b>	Health: 1 Flammability: 0 Physical hazard: 0
<b>NFPA ratings</b>	Health: 1 Flammability: 0 Instability: 0
<b>Disclaimer</b>	This SDS is intended to quickly provide useful information to the user(s) of this material or product. It is not intended to serve as a comprehensive discussion of all possible risks or hazards, and it assumes a reasonable use of the product. The information contained in this SDS is believed to be accurate as of the date of preparation of this SDS and has been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. The user or handler (or their employer) should consider the specific conditions in which this material will be used, handled, or stored and determine what specific safety or other precautions are required. Employers should ensure that their employees, agents, contractors, and customers who will use the product receive adequate warnings and safe handling procedures, including a current SDS. Product users or handlers (or their employer) who are unsure of what specific precautions are required should consult their employer, product supplier, or safety or health professionals before handling or working with this product. Please notify us immediately if you believe this SDS or other safety and health information about this product is inaccurate or incomplete.
<b>Revision Information</b>	Product and Company Identification: Product Codes

# SAFETY DATA SHEET

## 1. Identification

### Product identifier

#### Product list

### Glass Mat Faced Gypsum Panels

#### Product List A

DensArmor Plus® High Performance Interior Panel  
DensArmor Plus® Fireguard® Abuse-Resistant Panels  
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DensDeck® Fireguard® Roof Board  
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DensGlass® Fireguard® Sheathing  
DensGlass® Shaftliner  
DensGlass® Sheathing  
DensShield® Fireguard® Tile Backer  
DensShield® Tile Backer  
Fire-Rated GreenGlass® Prime Roof Board  
Fire-Rated GreenGlass® Sheathing  
Fire-Rated GreenGlass® Tile Backer  
Fire-Rated GreenGlass® Roof Board  
Fire-Rated GreenGlass® Interior Panels  
GreenGlass® Prime Roof Board  
GreenGlass® Roof Board  
GreenGlass® Sheathing  
GreenGlass® Tile Backer  
GreenGlass® Interior Panels

#### Product List B

DensArmor Plus® Fireguard C® High-Performance Interior Panels  
GreenGlass® Shaftliner

### Other means of identification

#### Product code

GP-71C

### Recommended use

Products accommodate a wide range of wall, floor, ceiling and roof applications.

### Recommended restrictions

Workers (and your customers or users in the case of resale) should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

### Manufacturer/Importer/Supplier/Distributor information

#### Company name

Georgia-Pacific Gypsum LLC

#### Address

133 Peachtree Street, NE  
Atlanta, GA 30303

#### Telephone

Technical Information 800.225.6119  
(M)SDS Request 404.652.5119

#### E-mail

Not available.

#### Emergency phone number

Chemtrec - Emergency 800.424.9300

## 2. Hazard(s) identification

### Emergency overview

This product is not hazardous in the form in which it is shipped by the manufacturer but may become hazardous by downstream activities such as cutting, sanding, or otherwise working with this product that generate large amount of dusts. Those hazards associated with large amount of dusts are described below.

### Physical hazards

Not classified.

### Health hazards

Serious eye damage/eye irritation

Category 2B

<b>Environmental hazards</b>	Not classified.
<b>OSHA defined hazards</b>	Not classified.
<b>Label elements</b>	
<b>Hazard symbol</b>	None.
<b>Signal word</b>	Warning
<b>Hazard statement</b>	Causes eye irritation.
<b>Precautionary statement</b>	
<b>Prevention</b>	Observe good industrial hygiene practices. Wash thoroughly after handling.
<b>Response</b>	Wash hands after handling. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>Storage</b>	Store away from strong acids.
<b>Disposal</b>	Dispose of waste and residues in accordance with local authority requirements.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	None.

### 3. Composition/information on ingredients

#### Mixtures

Chemical name	Common name and synonyms	CAS number	%
CALCIUM SULFATE DIHYDRATE		10101-41-4	60 - 100
VERMICULITE**		1318-00-9	0 - 7
CONTINUOUS FILAMENT GLASS FIBER		65997-17-3	1 - 5
CRYSTALLINE SILICA (QUARTZ)*		14808-60-7	1 - 5

**Composition comments**      \*\* Found in products in List B, Section 16 of this SDS.

Gypsum (calcium sulfate, dihydrate) and vermiculite contain naturally occurring crystalline silica (quartz) which is listed as a lung carcinogen. See Section 8 for exposure information.

\*The weight percent for crystalline silica represents total crystalline silica and not the respirable fraction. Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

### 4. First-aid measures

<b>Inhalation</b>	If dust from the material is inhaled, remove the affected person immediately to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	For skin contact, wash immediately with soap and water. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Do not rub the eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>Ingestion</b>	Rinse mouth. May result in obstruction and irritation if ingested. Get medical attention.
<b>Most important symptoms/effects, acute and delayed</b>	Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### 5. Fire-fighting measures

**Suitable extinguishing media**      Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

<b>Unsuitable extinguishing media</b>	None known.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Firefighters should wear full protective clothing including self contained breathing apparatus.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Use personal protection recommended in Section 8. Keep unnecessary personnel away. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.
<b>Methods and materials for containment and cleaning up</b>	Sweep up or gather material and place in an appropriate container for disposal. Minimize dust generation. Utilize wet methods, if appropriate, to minimize dust. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions</b>	Keep out of drains, sewers, ditches, and waterways.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Provide appropriate exhaust ventilation at places where dust is formed. Minimize dust generation and accumulation. Do not breathe dust. Do not get this material in contact with eyes. Do not taste or swallow. Avoid prolonged exposure. Observe good industrial hygiene practices. Use only in well-ventilated areas. Wear appropriate NIOSH approved dust mask or filtering facepiece if dust is generated. Do not eat or drink while using the product. Wash hands before eating, drinking, or smoking.
<b>Conditions for safe storage, including any incompatibilities</b>	Store level and keep dry. Dewpoint or other conditions causing the presence of moisture can damage the product during storage. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US OSHA Table Z-3: Calculated Time Weighted Average (TWA) (mg/m3)

Components	Type	Value	Form
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	4.29 mg/m3	Total dust.
		1.43 mg/m3	Respirable.

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	PEL	5 mg/m3	Respirable fraction.
VERMICULITE** (CAS 1318-00-9)	PEL	15 mg/m3 5 mg/m3	Total dust. Respirable fraction.
		15 mg/m3	Total dust.

#### US ACGIH Threshold Limit Values: Time Weighted Average (TWA): mg/m3, non-standard units

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	TWA	10 mg/m3	Inhalable fraction.
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

**US. NIOSH: Pocket Guide to Chemical Hazards**

OSHA NIOSH Pocket Guide to Chemical Hazards			
Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	TWA	5 mg/m3	Respirable.
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	10 mg/m3 0.05 mg/m3	Total Respirable dust.
Biological limit values	No biological exposure limits noted for the ingredient(s).		
Exposure guidelines	Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled. Exposure limits for CRYSTALLINE SILICA - The US OSHA exposure limits 8 hour TWA for CRYSTALLINE SILICA (QUARTZ) are calculated from the following equations: 30/(%SiO2+2) mg/m3 for total dust; and 10/(%SiO2+2) mg/m3 for the respirable fraction.  *Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.		
Appropriate engineering controls	Score and snap method recommended. When using product, provide local and general exhaust ventilation to keep airborne dust concentrations below exposure limits. Use wet methods, if appropriate, to reduce the generation of dust. Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn.		
Individual protection measures, such as personal protective equipment			
Eye/face protection	Safety glasses or goggles are recommended when using this product. Ensure compliance with OSHA's PPE standard (29 CFR 1910.132 and .133) for eye and face protection.		
Skin protection			
Hand protection	For prolonged or repeated skin contact use suitable protective gloves.		
Other	Impervious protective clothing and gloves recommended to prevent drying or irritation of skin. Ensure compliance with OSHA's PPE standards (29 CFR 1910.132 (general) and 138 (hand protection)). Safety shower/eye wash fountain is recommended in the workplace area (29 CFR 1910.151 (c)).		
Respiratory protection	A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).		
Thermal hazards	Not applicable.		
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.		

**9. Physical and chemical properties**

<b>Appearance</b>	Gypsum boards
<b>Physical state</b>	Solid.
<b>Form</b>	Solid
<b>Color</b>	Facing color varies
<b>Odor</b>	Low odor
<b>Odor threshold</b>	Not available.
<b>pH</b>	6 - 8
<b>Melting point/freezing point</b>	Not applicable.
<b>Initial boiling point and boiling range</b>	Not applicable.
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.

**Upper/lower flammability or explosive limits**

Flammability limit - lower (%) Not applicable.

Flammability limit - upper (%) Not applicable.

Explosive limit - lower (%) Not applicable.

Explosive limit - upper (%) Not applicable.

Vapor pressure Not applicable.

Vapor density Not applicable.

Relative density Not available.

**Solubility(ies)**

Solubility (water) 0.2 % @ 22°C

Partition coefficient (n-octanol/water) Not applicable.

Auto-ignition temperature Not applicable.

Decomposition temperature Not available.

Viscosity Not applicable.

**Other information**

Flash point class Not flammable

Specific gravity 2.2 - 2.4

**10. Stability and reactivity**

Reactivity Contact with strong acids produces carbon dioxide.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.

Conditions to avoid Contact with incompatible materials. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).

Incompatible materials Strong acids.

Hazardous decomposition products May include and are not limited to: calcium oxide and sulfur dioxide.

**11. Toxicological information****Information on likely routes of exposure**

Inhalation Inhalation of dusts may cause respiratory irritation.

Skin contact Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Eye contact Dust in the eyes will cause irritation.

Ingestion Not applicable under normal conditions of use. May cause gastrointestinal irritation if ingested.

Symptoms related to the physical, chemical and toxicological characteristics Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.

**Information on toxicological effects****Acute toxicity**

Product	Species	Test Results
Glass Mat Faced Gypsum Panels		
<b><u>Acute</u></b>		
<b>Oral</b>		
LD50	Rat	1731 mg/kg estimated
Components	Species	Test Results
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)		
<b><u>Acute</u></b>		
<b>Oral</b>		
LD50	Rat	> 1581 mg/kg

<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.
<b>Serious eye damage/eye irritation</b>	Dust in the eyes will cause irritation.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not likely to cause respiratory sensitization.
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.
<b>Germ cell mutagenicity</b>	Not classified.
<b>Carcinogenicity</b>	Not expected to be hazardous by OSHA criteria.

Exposure to respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by IARC and NTP as a lung carcinogen. Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given exposure to a respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of respirable crystalline silica exposure and the length of time (usually years) of exposure.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7) 1 Carcinogenic to humans.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

#### US. National Toxicology Program (NTP) Report on Carcinogens

CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7) Known To Be Human Carcinogen.

<b>Reproductive toxicity</b>	Not classified.
<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not classified.
<b>Chronic effects</b>	Not hazardous under normal conditions of use.

## 12. Ecological information

<b>Ecotoxicity</b>	Not considered to be harmful to aquatic life.
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Components	Species	Test Results
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50	Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours
CONTINUOUS FILAMENT GLASS FIBER (CAS 65997-17-3)		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50	Zebra danio (Danio rerio) > 1000 mg/l, 96 hours ECHA
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50	Zebra danio (Danio rerio) > 10000 mg/l, 96 Hours OECD SIDS

<b>Persistence and degradability</b>	No data is available on the degradability of this product.
<b>Bioaccumulative potential</b>	No data available.
<b>Mobility in soil</b>	No data available.
<b>Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

<b>Disposal instructions</b>	Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.

<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Not available.

## 14. Transport information

### DOT

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

## 15. Regulatory information

**US federal regulations** This product is not hazardous in the form in which it is sold and shipped by the manufacturer. However, the large amount of dusts generated by downstream activities such as cutting, sanding, or otherwise working with this product is considered hazardous and is regulated under the Hazard Communication Standard 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

### SARA 304 Emergency release notification

Not regulated.

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories** Immediate Hazard - Yes  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312 Hazardous chemical** Yes

### SARA 313 (TRI reporting)

Not regulated.

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

### US state regulations

#### US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

#### US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)



**US. Massachusetts RTK - Substance List**

CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)  
CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)

**US. New Jersey Worker and Community Right-to-Know Act**

CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)  
CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)

**US. Pennsylvania Worker and Community Right-to-Know Law**

CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)  
CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

<b>Issue date</b>	March-13-2015
<b>Revision date</b>	October-02-2015
<b>Version #</b>	04
<b>HMIS® ratings</b>	Health: 1 Flammability: 0 Physical hazard: 0
<b>NFPA ratings</b>	Health: 1 Flammability: 0 Instability: 0
<b>Disclaimer</b>	This SDS is intended to quickly provide useful information to the user(s) of this material or product. It is not intended to serve as a comprehensive discussion of all possible risks or hazards, and it assumes a reasonable use of the product. The information contained in this SDS is believed to be accurate as of the date of preparation of this SDS and has been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. The user or handler (or their employer) should consider the specific conditions in which this material will be used, handled, or stored and determine what specific safety or other precautions are required. Employers should ensure that their employees, agents, contractors, and customers who will use the product receive adequate warnings and safe handling procedures, including a current SDS. Product users or handlers (or their employer) who are unsure of what specific precautions are required should consult their employer, product supplier, or safety or health professionals before handling or working with this product. Please notify us immediately if you believe this SDS or other safety and health information about this product is inaccurate or incomplete.
<b>Revision Information</b>	Product and Company Identification: Product Codes

# SAFETY DATA SHEET

## 1. Identification

### Product identifier

#### Product list

### Glass Mat Faced Gypsum Panels

#### Product List A

DensArmor Plus® High Performance Interior Panel  
DensArmor Plus® Fireguard® Abuse-Resistant Panels  
DensArmor Plus® Fireguard® Impact-Resistant Panels  
DensArmor Plus® Fireguard® Interior Panels  
DensDeck® Prime Roof Board  
DensDeck® Roof Board  
DensDeck® Prime Fireguard® Roof Board  
DensDeck® Fireguard® Roof Board  
DensElement™ Sheathing  
DensGlass® Fireguard® Sheathing  
DensGlass® Shaftliner  
DensGlass® Sheathing  
DensShield® Fireguard® Tile Backer  
DensShield® Tile Backer  
Fire-Rated GreenGlass® Prime Roof Board  
Fire-Rated GreenGlass® Sheathing  
Fire-Rated GreenGlass® Tile Backer  
Fire-Rated GreenGlass® Roof Board  
Fire-Rated GreenGlass® Interior Panels  
GreenGlass® Prime Roof Board  
GreenGlass® Roof Board  
GreenGlass® Sheathing  
GreenGlass® Tile Backer  
GreenGlass® Interior Panels

#### Product List B

DensArmor Plus® Fireguard C® High-Performance Interior Panels  
GreenGlass® Shaftliner

### Other means of identification

#### Product code

GP-71C

### Recommended use

Products accommodate a wide range of wall, floor, ceiling and roof applications.

### Recommended restrictions

Workers (and your customers or users in the case of resale) should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

### Manufacturer/Importer/Supplier/Distributor information

#### Company name

Georgia-Pacific Gypsum LLC

#### Address

133 Peachtree Street, NE  
Atlanta, GA 30303

#### Telephone

Technical Information 800.225.6119  
(M)SDS Request 404.652.5119

#### E-mail

Not available.

#### Emergency phone number

Chemtrec - Emergency 800.424.9300

## 2. Hazard(s) identification

### Emergency overview

This product is not hazardous in the form in which it is shipped by the manufacturer but may become hazardous by downstream activities such as cutting, sanding, or otherwise working with this product that generate large amount of dusts. Those hazards associated with large amount of dusts are described below.

### Physical hazards

Not classified.

### Health hazards

Serious eye damage/eye irritation

Category 2B

<b>Environmental hazards</b>	Not classified.
<b>OSHA defined hazards</b>	Not classified.
<b>Label elements</b>	
<b>Hazard symbol</b>	None.
<b>Signal word</b>	Warning
<b>Hazard statement</b>	Causes eye irritation.
<b>Precautionary statement</b>	
<b>Prevention</b>	Observe good industrial hygiene practices. Wash thoroughly after handling.
<b>Response</b>	Wash hands after handling. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>Storage</b>	Store away from strong acids.
<b>Disposal</b>	Dispose of waste and residues in accordance with local authority requirements.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	None.

### 3. Composition/information on ingredients

#### Mixtures

Chemical name	Common name and synonyms	CAS number	%
CALCIUM SULFATE DIHYDRATE		10101-41-4	60 - 100
VERMICULITE**		1318-00-9	0 - 7
CONTINUOUS FILAMENT GLASS FIBER		65997-17-3	1 - 5
CRYSTALLINE SILICA (QUARTZ)*		14808-60-7	1 - 5

**Composition comments**      \*\* Found in products in List B, Section 16 of this SDS.

Gypsum (calcium sulfate, dihydrate) and vermiculite contain naturally occurring crystalline silica (quartz) which is listed as a lung carcinogen. See Section 8 for exposure information.

\*The weight percent for crystalline silica represents total crystalline silica and not the respirable fraction. Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

### 4. First-aid measures

<b>Inhalation</b>	If dust from the material is inhaled, remove the affected person immediately to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	For skin contact, wash immediately with soap and water. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Do not rub the eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>Ingestion</b>	Rinse mouth. May result in obstruction and irritation if ingested. Get medical attention.
<b>Most important symptoms/effects, acute and delayed</b>	Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
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<b>Unsuitable extinguishing media</b>	None known.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Firefighters should wear full protective clothing including self contained breathing apparatus.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Use personal protection recommended in Section 8. Keep unnecessary personnel away. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.
<b>Methods and materials for containment and cleaning up</b>	Sweep up or gather material and place in an appropriate container for disposal. Minimize dust generation. Utilize wet methods, if appropriate, to minimize dust. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions</b>	Keep out of drains, sewers, ditches, and waterways.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Provide appropriate exhaust ventilation at places where dust is formed. Minimize dust generation and accumulation. Do not breathe dust. Do not get this material in contact with eyes. Do not taste or swallow. Avoid prolonged exposure. Observe good industrial hygiene practices. Use only in well-ventilated areas. Wear appropriate NIOSH approved dust mask or filtering facepiece if dust is generated. Do not eat or drink while using the product. Wash hands before eating, drinking, or smoking.
<b>Conditions for safe storage, including any incompatibilities</b>	Store level and keep dry. Dewpoint or other conditions causing the presence of moisture can damage the product during storage. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US OSHA Table Z-3: Calculated Time Weighted Average (TWA) (mg/m3)

Components	Type	Value	Form
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	4.29 mg/m3	Total dust.
		1.43 mg/m3	Respirable.

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	PEL	5 mg/m3	Respirable fraction.
VERMICULITE** (CAS 1318-00-9)	PEL	15 mg/m3 5 mg/m3	Total dust. Respirable fraction.
		15 mg/m3	Total dust.

#### US ACGIH Threshold Limit Values: Time Weighted Average (TWA): mg/m3, non-standard units

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	TWA	10 mg/m3	Inhalable fraction.
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

**US. NIOSH: Pocket Guide to Chemical Hazards**

OSHA 309: Product Labels for Chemical Hazards			
Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	TWA	5 mg/m3	Respirable.
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	10 mg/m3 0.05 mg/m3	Total Respirable dust.
Biological limit values	No biological exposure limits noted for the ingredient(s).		
Exposure guidelines	Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled. Exposure limits for CRYSTALLINE SILICA - The US OSHA exposure limits 8 hour TWA for CRYSTALLINE SILICA (QUARTZ) are calculated from the following equations: 30/(%SiO2+2) mg/m3 for total dust; and 10/(%SiO2+2) mg/m3 for the respirable fraction.  *Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.		
Appropriate engineering controls	Score and snap method recommended. When using product, provide local and general exhaust ventilation to keep airborne dust concentrations below exposure limits. Use wet methods, if appropriate, to reduce the generation of dust. Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn.		
Individual protection measures, such as personal protective equipment			
Eye/face protection	Safety glasses or goggles are recommended when using this product. Ensure compliance with OSHA's PPE standard (29 CFR 1910.132 and .133) for eye and face protection.		
Skin protection			
Hand protection	For prolonged or repeated skin contact use suitable protective gloves.		
Other	Impervious protective clothing and gloves recommended to prevent drying or irritation of skin. Ensure compliance with OSHA's PPE standards (29 CFR 1910.132 (general) and 138 (hand protection)). Safety shower/eye wash fountain is recommended in the workplace area (29 CFR 1910.151 (c)).		
Respiratory protection	A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).		
Thermal hazards	Not applicable.		
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.		

**9. Physical and chemical properties**

<b>Appearance</b>	Gypsum boards
<b>Physical state</b>	Solid.
<b>Form</b>	Solid
<b>Color</b>	Facing color varies
<b>Odor</b>	Low odor
<b>Odor threshold</b>	Not available.
<b>pH</b>	6 - 8
<b>Melting point/freezing point</b>	Not applicable.
<b>Initial boiling point and boiling range</b>	Not applicable.
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.

**Upper/lower flammability or explosive limits**

Flammability limit - lower (%) Not applicable.

Flammability limit - upper (%) Not applicable.

Explosive limit - lower (%) Not applicable.

Explosive limit - upper (%) Not applicable.

Vapor pressure Not applicable.

Vapor density Not applicable.

Relative density Not available.

**Solubility(ies)**

Solubility (water) 0.2 % @ 22°C

Partition coefficient (n-octanol/water) Not applicable.

Auto-ignition temperature Not applicable.

Decomposition temperature Not available.

Viscosity Not applicable.

**Other information**

Flash point class Not flammable

Specific gravity 2.2 - 2.4

**10. Stability and reactivity**

Reactivity Contact with strong acids produces carbon dioxide.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.

Conditions to avoid Contact with incompatible materials. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).

Incompatible materials Strong acids.

Hazardous decomposition products May include and are not limited to: calcium oxide and sulfur dioxide.

**11. Toxicological information****Information on likely routes of exposure**

Inhalation Inhalation of dusts may cause respiratory irritation.

Skin contact Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Eye contact Dust in the eyes will cause irritation.

Ingestion Not applicable under normal conditions of use. May cause gastrointestinal irritation if ingested.

Symptoms related to the physical, chemical and toxicological characteristics Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.

**Information on toxicological effects****Acute toxicity**

Product	Species	Test Results
Glass Mat Faced Gypsum Panels		
<u>Acute</u>		
Oral		
LD50	Rat	1731 mg/kg estimated
Components	Species	Test Results
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)		
<u>Acute</u>		
Oral		
LD50	Rat	> 1581 mg/kg

<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.
<b>Serious eye damage/eye irritation</b>	Dust in the eyes will cause irritation.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not likely to cause respiratory sensitization.
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.
<b>Germ cell mutagenicity</b>	Not classified.
<b>Carcinogenicity</b>	Not expected to be hazardous by OSHA criteria.

Exposure to respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by IARC and NTP as a lung carcinogen. Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given exposure to a respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of respirable crystalline silica exposure and the length of time (usually years) of exposure.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7) 1 Carcinogenic to humans.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

#### US. National Toxicology Program (NTP) Report on Carcinogens

CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7) Known To Be Human Carcinogen.

<b>Reproductive toxicity</b>	Not classified.
<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not classified.
<b>Chronic effects</b>	Not hazardous under normal conditions of use.

## 12. Ecological information

<b>Ecotoxicity</b>	Not considered to be harmful to aquatic life.
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Components	Species	Test Results
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50	Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours
CONTINUOUS FILAMENT GLASS FIBER (CAS 65997-17-3)		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50	Zebra danio (Danio rerio) > 1000 mg/l, 96 hours ECHA
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50	Zebra danio (Danio rerio) > 10000 mg/l, 96 Hours OECD SIDS

<b>Persistence and degradability</b>	No data is available on the degradability of this product.
<b>Bioaccumulative potential</b>	No data available.
<b>Mobility in soil</b>	No data available.
<b>Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

<b>Disposal instructions</b>	Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.

<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Not available.

## 14. Transport information

### DOT

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

## 15. Regulatory information

**US federal regulations** This product is not hazardous in the form in which it is sold and shipped by the manufacturer. However, the large amount of dusts generated by downstream activities such as cutting, sanding, or otherwise working with this product is considered hazardous and is regulated under the Hazard Communication Standard 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

### SARA 304 Emergency release notification

Not regulated.

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories** Immediate Hazard - Yes  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312 Hazardous chemical** Yes

### SARA 313 (TRI reporting)

Not regulated.

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

### US state regulations

#### US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

#### US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)



**US. Massachusetts RTK - Substance List**

CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)  
CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)

**US. New Jersey Worker and Community Right-to-Know Act**

CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)  
CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)

**US. Pennsylvania Worker and Community Right-to-Know Law**

CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)  
CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

<b>Issue date</b>	March-13-2015
<b>Revision date</b>	October-02-2015
<b>Version #</b>	04
<b>HMIS® ratings</b>	Health: 1 Flammability: 0 Physical hazard: 0
<b>NFPA ratings</b>	Health: 1 Flammability: 0 Instability: 0
<b>Disclaimer</b>	This SDS is intended to quickly provide useful information to the user(s) of this material or product. It is not intended to serve as a comprehensive discussion of all possible risks or hazards, and it assumes a reasonable use of the product. The information contained in this SDS is believed to be accurate as of the date of preparation of this SDS and has been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. The user or handler (or their employer) should consider the specific conditions in which this material will be used, handled, or stored and determine what specific safety or other precautions are required. Employers should ensure that their employees, agents, contractors, and customers who will use the product receive adequate warnings and safe handling procedures, including a current SDS. Product users or handlers (or their employer) who are unsure of what specific precautions are required should consult their employer, product supplier, or safety or health professionals before handling or working with this product. Please notify us immediately if you believe this SDS or other safety and health information about this product is inaccurate or incomplete.
<b>Revision Information</b>	Product and Company Identification: Product Codes

# SAFETY DATA SHEET

## 1. Identification

### Product identifier

#### Product list

### Glass Mat Faced Gypsum Panels

#### Product List A

DensArmor Plus® High Performance Interior Panel  
DensArmor Plus® Fireguard® Abuse-Resistant Panels  
DensArmor Plus® Fireguard® Impact-Resistant Panels  
DensArmor Plus® Fireguard® Interior Panels  
DensDeck® Prime Roof Board  
DensDeck® Roof Board  
DensDeck® Prime Fireguard® Roof Board  
DensDeck® Fireguard® Roof Board  
DensElement™ Sheathing  
DensGlass® Fireguard® Sheathing  
DensGlass® Shaftliner  
DensGlass® Sheathing  
DensShield® Fireguard® Tile Backer  
DensShield® Tile Backer  
Fire-Rated GreenGlass® Prime Roof Board  
Fire-Rated GreenGlass® Sheathing  
Fire-Rated GreenGlass® Tile Backer  
Fire-Rated GreenGlass® Roof Board  
Fire-Rated GreenGlass® Interior Panels  
GreenGlass® Prime Roof Board  
GreenGlass® Roof Board  
GreenGlass® Sheathing  
GreenGlass® Tile Backer  
GreenGlass® Interior Panels

#### Product List B

DensArmor Plus® Fireguard C® High-Performance Interior Panels  
GreenGlass® Shaftliner

### Other means of identification

#### Product code

GP-71C

### Recommended use

Products accommodate a wide range of wall, floor, ceiling and roof applications.

### Recommended restrictions

Workers (and your customers or users in the case of resale) should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

### Manufacturer/Importer/Supplier/Distributor information

#### Company name

Georgia-Pacific Gypsum LLC

#### Address

133 Peachtree Street, NE  
Atlanta, GA 30303

#### Telephone

Technical Information 800.225.6119  
(M)SDS Request 404.652.5119

#### E-mail

Not available.

#### Emergency phone number

Chemtrec - Emergency 800.424.9300

## 2. Hazard(s) identification

### Emergency overview

This product is not hazardous in the form in which it is shipped by the manufacturer but may become hazardous by downstream activities such as cutting, sanding, or otherwise working with this product that generate large amount of dusts. Those hazards associated with large amount of dusts are described below.

### Physical hazards

Not classified.

### Health hazards

Serious eye damage/eye irritation

Category 2B

<b>Environmental hazards</b>	Not classified.
<b>OSHA defined hazards</b>	Not classified.
<b>Label elements</b>	
<b>Hazard symbol</b>	None.
<b>Signal word</b>	Warning
<b>Hazard statement</b>	Causes eye irritation.
<b>Precautionary statement</b>	
<b>Prevention</b>	Observe good industrial hygiene practices. Wash thoroughly after handling.
<b>Response</b>	Wash hands after handling. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>Storage</b>	Store away from strong acids.
<b>Disposal</b>	Dispose of waste and residues in accordance with local authority requirements.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	None.

### 3. Composition/information on ingredients

#### Mixtures

Chemical name	Common name and synonyms	CAS number	%
CALCIUM SULFATE DIHYDRATE		10101-41-4	60 - 100
VERMICULITE**		1318-00-9	0 - 7
CONTINUOUS FILAMENT GLASS FIBER		65997-17-3	1 - 5
CRYSTALLINE SILICA (QUARTZ)*		14808-60-7	1 - 5

**Composition comments**      \*\* Found in products in List B, Section 16 of this SDS.

Gypsum (calcium sulfate, dihydrate) and vermiculite contain naturally occurring crystalline silica (quartz) which is listed as a lung carcinogen. See Section 8 for exposure information.

\*The weight percent for crystalline silica represents total crystalline silica and not the respirable fraction. Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

### 4. First-aid measures

<b>Inhalation</b>	If dust from the material is inhaled, remove the affected person immediately to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	For skin contact, wash immediately with soap and water. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Do not rub the eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>Ingestion</b>	Rinse mouth. May result in obstruction and irritation if ingested. Get medical attention.
<b>Most important symptoms/effects, acute and delayed</b>	Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
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<b>Unsuitable extinguishing media</b>	None known.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Firefighters should wear full protective clothing including self contained breathing apparatus.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Use personal protection recommended in Section 8. Keep unnecessary personnel away. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.
<b>Methods and materials for containment and cleaning up</b>	Sweep up or gather material and place in an appropriate container for disposal. Minimize dust generation. Utilize wet methods, if appropriate, to minimize dust. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions</b>	Keep out of drains, sewers, ditches, and waterways.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Provide appropriate exhaust ventilation at places where dust is formed. Minimize dust generation and accumulation. Do not breathe dust. Do not get this material in contact with eyes. Do not taste or swallow. Avoid prolonged exposure. Observe good industrial hygiene practices. Use only in well-ventilated areas. Wear appropriate NIOSH approved dust mask or filtering facepiece if dust is generated. Do not eat or drink while using the product. Wash hands before eating, drinking, or smoking.
<b>Conditions for safe storage, including any incompatibilities</b>	Store level and keep dry. Dewpoint or other conditions causing the presence of moisture can damage the product during storage. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US OSHA Table Z-3: Calculated Time Weighted Average (TWA) (mg/m3)

Components	Type	Value	Form
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	4.29 mg/m3	Total dust.
		1.43 mg/m3	Respirable.

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	PEL	5 mg/m3	Respirable fraction.
VERMICULITE** (CAS 1318-00-9)	PEL	15 mg/m3 5 mg/m3	Total dust. Respirable fraction.
		15 mg/m3	Total dust.

#### US ACGIH Threshold Limit Values: Time Weighted Average (TWA): mg/m3, non-standard units

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	TWA	10 mg/m3	Inhalable fraction.
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

**US. NIOSH: Pocket Guide to Chemical Hazards**

OSHA 309: Product Labels for Chemical Hazards			
Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	TWA	5 mg/m3	Respirable.
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	10 mg/m3 0.05 mg/m3	Total Respirable dust.
Biological limit values	No biological exposure limits noted for the ingredient(s).		
Exposure guidelines	Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled. Exposure limits for CRYSTALLINE SILICA - The US OSHA exposure limits 8 hour TWA for CRYSTALLINE SILICA (QUARTZ) are calculated from the following equations: 30/(%SiO2+2) mg/m3 for total dust; and 10/(%SiO2+2) mg/m3 for the respirable fraction.  *Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.		
Appropriate engineering controls	Score and snap method recommended. When using product, provide local and general exhaust ventilation to keep airborne dust concentrations below exposure limits. Use wet methods, if appropriate, to reduce the generation of dust. Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn.		
Individual protection measures, such as personal protective equipment			
Eye/face protection	Safety glasses or goggles are recommended when using this product. Ensure compliance with OSHA's PPE standard (29 CFR 1910.132 and .133) for eye and face protection.		
Skin protection			
Hand protection	For prolonged or repeated skin contact use suitable protective gloves.		
Other	Impervious protective clothing and gloves recommended to prevent drying or irritation of skin. Ensure compliance with OSHA's PPE standards (29 CFR 1910.132 (general) and 138 (hand protection)). Safety shower/eye wash fountain is recommended in the workplace area (29 CFR 1910.151 (c)).		
Respiratory protection	A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).		
Thermal hazards	Not applicable.		
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.		

**9. Physical and chemical properties**

<b>Appearance</b>	Gypsum boards
<b>Physical state</b>	Solid.
<b>Form</b>	Solid
<b>Color</b>	Facing color varies
<b>Odor</b>	Low odor
<b>Odor threshold</b>	Not available.
<b>pH</b>	6 - 8
<b>Melting point/freezing point</b>	Not applicable.
<b>Initial boiling point and boiling range</b>	Not applicable.
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.

**Upper/lower flammability or explosive limits**

Flammability limit - lower (%) Not applicable.

Flammability limit - upper (%) Not applicable.

Explosive limit - lower (%) Not applicable.

Explosive limit - upper (%) Not applicable.

Vapor pressure Not applicable.

Vapor density Not applicable.

Relative density Not available.

**Solubility(ies)**

Solubility (water) 0.2 % @ 22°C

Partition coefficient (n-octanol/water) Not applicable.

Auto-ignition temperature Not applicable.

Decomposition temperature Not available.

Viscosity Not applicable.

**Other information**

Flash point class Not flammable

Specific gravity 2.2 - 2.4

**10. Stability and reactivity**

Reactivity Contact with strong acids produces carbon dioxide.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.

Conditions to avoid Contact with incompatible materials. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).

Incompatible materials Strong acids.

Hazardous decomposition products May include and are not limited to: calcium oxide and sulfur dioxide.

**11. Toxicological information****Information on likely routes of exposure**

Inhalation Inhalation of dusts may cause respiratory irritation.

Skin contact Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Eye contact Dust in the eyes will cause irritation.

Ingestion Not applicable under normal conditions of use. May cause gastrointestinal irritation if ingested.

Symptoms related to the physical, chemical and toxicological characteristics Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.

**Information on toxicological effects****Acute toxicity**

Product	Species	Test Results
Glass Mat Faced Gypsum Panels		
<u>Acute</u>		
<u>Oral</u>		
LD50	Rat	1731 mg/kg estimated
Components	Species	Test Results
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)		
<u>Acute</u>		
<u>Oral</u>		
LD50	Rat	> 1581 mg/kg

<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.
<b>Serious eye damage/eye irritation</b>	Dust in the eyes will cause irritation.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not likely to cause respiratory sensitization.
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.
<b>Germ cell mutagenicity</b>	Not classified.
<b>Carcinogenicity</b>	Not expected to be hazardous by OSHA criteria.

Exposure to respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by IARC and NTP as a lung carcinogen. Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given exposure to a respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of respirable crystalline silica exposure and the length of time (usually years) of exposure.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7) 1 Carcinogenic to humans.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

#### US. National Toxicology Program (NTP) Report on Carcinogens

CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7) Known To Be Human Carcinogen.

<b>Reproductive toxicity</b>	Not classified.
<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not classified.
<b>Chronic effects</b>	Not hazardous under normal conditions of use.

## 12. Ecological information

<b>Ecotoxicity</b>	Not considered to be harmful to aquatic life.
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Components	Species	Test Results
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50	Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours
CONTINUOUS FILAMENT GLASS FIBER (CAS 65997-17-3)		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50	Zebra danio (Danio rerio) > 1000 mg/l, 96 hours ECHA
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50	Zebra danio (Danio rerio) > 10000 mg/l, 96 Hours OECD SIDS

<b>Persistence and degradability</b>	No data is available on the degradability of this product.
<b>Bioaccumulative potential</b>	No data available.
<b>Mobility in soil</b>	No data available.
<b>Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

<b>Disposal instructions</b>	Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.

<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Not available.

## 14. Transport information

### DOT

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

## 15. Regulatory information

**US federal regulations** This product is not hazardous in the form in which it is sold and shipped by the manufacturer. However, the large amount of dusts generated by downstream activities such as cutting, sanding, or otherwise working with this product is considered hazardous and is regulated under the Hazard Communication Standard 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

### SARA 304 Emergency release notification

Not regulated.

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories** Immediate Hazard - Yes  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312 Hazardous chemical** Yes

### SARA 313 (TRI reporting)

Not regulated.

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

### US state regulations

#### US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

#### US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)



**US. Massachusetts RTK - Substance List**

CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)  
CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)

**US. New Jersey Worker and Community Right-to-Know Act**

CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)  
CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)

**US. Pennsylvania Worker and Community Right-to-Know Law**

CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)  
CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

<b>Issue date</b>	March-13-2015
<b>Revision date</b>	October-02-2015
<b>Version #</b>	04
<b>HMIS® ratings</b>	Health: 1 Flammability: 0 Physical hazard: 0
<b>NFPA ratings</b>	Health: 1 Flammability: 0 Instability: 0
<b>Disclaimer</b>	This SDS is intended to quickly provide useful information to the user(s) of this material or product. It is not intended to serve as a comprehensive discussion of all possible risks or hazards, and it assumes a reasonable use of the product. The information contained in this SDS is believed to be accurate as of the date of preparation of this SDS and has been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. The user or handler (or their employer) should consider the specific conditions in which this material will be used, handled, or stored and determine what specific safety or other precautions are required. Employers should ensure that their employees, agents, contractors, and customers who will use the product receive adequate warnings and safe handling procedures, including a current SDS. Product users or handlers (or their employer) who are unsure of what specific precautions are required should consult their employer, product supplier, or safety or health professionals before handling or working with this product. Please notify us immediately if you believe this SDS or other safety and health information about this product is inaccurate or incomplete.
<b>Revision Information</b>	Product and Company Identification: Product Codes

# SAFETY DATA SHEET

## 1. Identification

### Product identifier

#### Product list

### Glass Mat Faced Gypsum Panels

#### Product List A

DensArmor Plus® High Performance Interior Panel  
DensArmor Plus® Fireguard® Abuse-Resistant Panels  
DensArmor Plus® Fireguard® Impact-Resistant Panels  
DensArmor Plus® Fireguard® Interior Panels  
DensDeck® Prime Roof Board  
DensDeck® Roof Board  
DensDeck® Prime Fireguard® Roof Board  
DensDeck® Fireguard® Roof Board  
DensElement™ Sheathing  
DensGlass® Fireguard® Sheathing  
DensGlass® Shaftliner  
DensGlass® Sheathing  
DensShield® Fireguard® Tile Backer  
DensShield® Tile Backer  
Fire-Rated GreenGlass® Prime Roof Board  
Fire-Rated GreenGlass® Sheathing  
Fire-Rated GreenGlass® Tile Backer  
Fire-Rated GreenGlass® Roof Board  
Fire-Rated GreenGlass® Interior Panels  
GreenGlass® Prime Roof Board  
GreenGlass® Roof Board  
GreenGlass® Sheathing  
GreenGlass® Tile Backer  
GreenGlass® Interior Panels

#### Product List B

DensArmor Plus® Fireguard C® High-Performance Interior Panels  
GreenGlass® Shaftliner

### Other means of identification

#### Product code

GP-71C

### Recommended use

Products accommodate a wide range of wall, floor, ceiling and roof applications.

### Recommended restrictions

Workers (and your customers or users in the case of resale) should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

### Manufacturer/Importer/Supplier/Distributor information

#### Company name

Georgia-Pacific Gypsum LLC

#### Address

133 Peachtree Street, NE  
Atlanta, GA 30303

#### Telephone

Technical Information 800.225.6119  
(M)SDS Request 404.652.5119

#### E-mail

Not available.

#### Emergency phone number

Chemtrec - Emergency 800.424.9300

## 2. Hazard(s) identification

### Emergency overview

This product is not hazardous in the form in which it is shipped by the manufacturer but may become hazardous by downstream activities such as cutting, sanding, or otherwise working with this product that generate large amount of dusts. Those hazards associated with large amount of dusts are described below.

### Physical hazards

Not classified.

### Health hazards

Serious eye damage/eye irritation

Category 2B

<b>Environmental hazards</b>	Not classified.
<b>OSHA defined hazards</b>	Not classified.
<b>Label elements</b>	
<b>Hazard symbol</b>	None.
<b>Signal word</b>	Warning
<b>Hazard statement</b>	Causes eye irritation.
<b>Precautionary statement</b>	
<b>Prevention</b>	Observe good industrial hygiene practices. Wash thoroughly after handling.
<b>Response</b>	Wash hands after handling. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>Storage</b>	Store away from strong acids.
<b>Disposal</b>	Dispose of waste and residues in accordance with local authority requirements.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	None.

### 3. Composition/information on ingredients

#### Mixtures

Chemical name	Common name and synonyms	CAS number	%
CALCIUM SULFATE DIHYDRATE		10101-41-4	60 - 100
VERMICULITE**		1318-00-9	0 - 7
CONTINUOUS FILAMENT GLASS FIBER		65997-17-3	1 - 5
CRYSTALLINE SILICA (QUARTZ)*		14808-60-7	1 - 5

**Composition comments**      \*\* Found in products in List B, Section 16 of this SDS.

Gypsum (calcium sulfate, dihydrate) and vermiculite contain naturally occurring crystalline silica (quartz) which is listed as a lung carcinogen. See Section 8 for exposure information.

\*The weight percent for crystalline silica represents total crystalline silica and not the respirable fraction. Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

### 4. First-aid measures

<b>Inhalation</b>	If dust from the material is inhaled, remove the affected person immediately to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	For skin contact, wash immediately with soap and water. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Do not rub the eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>Ingestion</b>	Rinse mouth. May result in obstruction and irritation if ingested. Get medical attention.
<b>Most important symptoms/effects, acute and delayed</b>	Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
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<b>Unsuitable extinguishing media</b>	None known.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Firefighters should wear full protective clothing including self contained breathing apparatus.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Use personal protection recommended in Section 8. Keep unnecessary personnel away. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.
<b>Methods and materials for containment and cleaning up</b>	Sweep up or gather material and place in an appropriate container for disposal. Minimize dust generation. Utilize wet methods, if appropriate, to minimize dust. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions</b>	Keep out of drains, sewers, ditches, and waterways.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Provide appropriate exhaust ventilation at places where dust is formed. Minimize dust generation and accumulation. Do not breathe dust. Do not get this material in contact with eyes. Do not taste or swallow. Avoid prolonged exposure. Observe good industrial hygiene practices. Use only in well-ventilated areas. Wear appropriate NIOSH approved dust mask or filtering facepiece if dust is generated. Do not eat or drink while using the product. Wash hands before eating, drinking, or smoking.
<b>Conditions for safe storage, including any incompatibilities</b>	Store level and keep dry. Dewpoint or other conditions causing the presence of moisture can damage the product during storage. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US OSHA Table Z-3: Calculated Time Weighted Average (TWA) (mg/m3)

Components	Type	Value	Form
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	4.29 mg/m3	Total dust.
		1.43 mg/m3	Respirable.

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	PEL	5 mg/m3	Respirable fraction.
VERMICULITE** (CAS 1318-00-9)	PEL	15 mg/m3 5 mg/m3	Total dust. Respirable fraction.
		15 mg/m3	Total dust.

#### US ACGIH Threshold Limit Values: Time Weighted Average (TWA): mg/m3, non-standard units

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	TWA	10 mg/m3	Inhalable fraction.
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

**US. NIOSH: Pocket Guide to Chemical Hazards**

OSHA NIOSH Pocket Guide to Chemical Hazards			
Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	TWA	5 mg/m3	Respirable.
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	10 mg/m3 0.05 mg/m3	Total Respirable dust.
Biological limit values	No biological exposure limits noted for the ingredient(s).		
Exposure guidelines	Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled. Exposure limits for CRYSTALLINE SILICA - The US OSHA exposure limits 8 hour TWA for CRYSTALLINE SILICA (QUARTZ) are calculated from the following equations: 30/(%SiO2+2) mg/m3 for total dust; and 10/(%SiO2+2) mg/m3 for the respirable fraction.  *Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.		
Appropriate engineering controls	Score and snap method recommended. When using product, provide local and general exhaust ventilation to keep airborne dust concentrations below exposure limits. Use wet methods, if appropriate, to reduce the generation of dust. Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn.		
Individual protection measures, such as personal protective equipment			
Eye/face protection	Safety glasses or goggles are recommended when using this product. Ensure compliance with OSHA's PPE standard (29 CFR 1910.132 and .133) for eye and face protection.		
Skin protection			
Hand protection	For prolonged or repeated skin contact use suitable protective gloves.		
Other	Impervious protective clothing and gloves recommended to prevent drying or irritation of skin. Ensure compliance with OSHA's PPE standards (29 CFR 1910.132 (general) and 138 (hand protection)). Safety shower/eye wash fountain is recommended in the workplace area (29 CFR 1910.151 (c)).		
Respiratory protection	A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).		
Thermal hazards	Not applicable.		
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.		

**9. Physical and chemical properties**

<b>Appearance</b>	Gypsum boards
<b>Physical state</b>	Solid.
<b>Form</b>	Solid
<b>Color</b>	Facing color varies
<b>Odor</b>	Low odor
<b>Odor threshold</b>	Not available.
<b>pH</b>	6 - 8
<b>Melting point/freezing point</b>	Not applicable.
<b>Initial boiling point and boiling range</b>	Not applicable.
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.

**Upper/lower flammability or explosive limits**

Flammability limit - lower (%) Not applicable.

Flammability limit - upper (%) Not applicable.

Explosive limit - lower (%) Not applicable.

Explosive limit - upper (%) Not applicable.

Vapor pressure Not applicable.

Vapor density Not applicable.

Relative density Not available.

**Solubility(ies)**

Solubility (water) 0.2 % @ 22°C

Partition coefficient (n-octanol/water) Not applicable.

Auto-ignition temperature Not applicable.

Decomposition temperature Not available.

Viscosity Not applicable.

**Other information**

Flash point class Not flammable

Specific gravity 2.2 - 2.4

**10. Stability and reactivity**

Reactivity Contact with strong acids produces carbon dioxide.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.

Conditions to avoid Contact with incompatible materials. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).

Incompatible materials Strong acids.

Hazardous decomposition products May include and are not limited to: calcium oxide and sulfur dioxide.

**11. Toxicological information****Information on likely routes of exposure**

Inhalation Inhalation of dusts may cause respiratory irritation.

Skin contact Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Eye contact Dust in the eyes will cause irritation.

Ingestion Not applicable under normal conditions of use. May cause gastrointestinal irritation if ingested.

Symptoms related to the physical, chemical and toxicological characteristics Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.

**Information on toxicological effects****Acute toxicity**

Product	Species	Test Results
Glass Mat Faced Gypsum Panels		
<u>Acute</u>		
Oral		
LD50	Rat	1731 mg/kg estimated
Components	Species	Test Results
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)		
<u>Acute</u>		
Oral		
LD50	Rat	> 1581 mg/kg

<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.
<b>Serious eye damage/eye irritation</b>	Dust in the eyes will cause irritation.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not likely to cause respiratory sensitization.
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.
<b>Germ cell mutagenicity</b>	Not classified.
<b>Carcinogenicity</b>	Not expected to be hazardous by OSHA criteria.

Exposure to respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by IARC and NTP as a lung carcinogen. Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given exposure to a respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of respirable crystalline silica exposure and the length of time (usually years) of exposure.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7) 1 Carcinogenic to humans.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

#### US. National Toxicology Program (NTP) Report on Carcinogens

CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7) Known To Be Human Carcinogen.

<b>Reproductive toxicity</b>	Not classified.
<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not classified.
<b>Chronic effects</b>	Not hazardous under normal conditions of use.

## 12. Ecological information

<b>Ecotoxicity</b>	Not considered to be harmful to aquatic life.
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Components	Species	Test Results
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50	Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours
CONTINUOUS FILAMENT GLASS FIBER (CAS 65997-17-3)		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50	Zebra danio (Danio rerio) > 1000 mg/l, 96 hours ECHA
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50	Zebra danio (Danio rerio) > 10000 mg/l, 96 Hours OECD SIDS

<b>Persistence and degradability</b>	No data is available on the degradability of this product.
<b>Bioaccumulative potential</b>	No data available.
<b>Mobility in soil</b>	No data available.
<b>Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

<b>Disposal instructions</b>	Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.

<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Not available.

## 14. Transport information

### DOT

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

## 15. Regulatory information

**US federal regulations** This product is not hazardous in the form in which it is sold and shipped by the manufacturer. However, the large amount of dusts generated by downstream activities such as cutting, sanding, or otherwise working with this product is considered hazardous and is regulated under the Hazard Communication Standard 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

### SARA 304 Emergency release notification

Not regulated.

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories** Immediate Hazard - Yes  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312 Hazardous chemical** Yes

### SARA 313 (TRI reporting)

Not regulated.

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

### US state regulations

#### US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

#### US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)



**US. Massachusetts RTK - Substance List**

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CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)

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CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)

**US. Pennsylvania Worker and Community Right-to-Know Law**

CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)  
CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

<b>Issue date</b>	March-13-2015
<b>Revision date</b>	October-02-2015
<b>Version #</b>	04
<b>HMIS® ratings</b>	Health: 1 Flammability: 0 Physical hazard: 0
<b>NFPA ratings</b>	Health: 1 Flammability: 0 Instability: 0
<b>Disclaimer</b>	This SDS is intended to quickly provide useful information to the user(s) of this material or product. It is not intended to serve as a comprehensive discussion of all possible risks or hazards, and it assumes a reasonable use of the product. The information contained in this SDS is believed to be accurate as of the date of preparation of this SDS and has been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. The user or handler (or their employer) should consider the specific conditions in which this material will be used, handled, or stored and determine what specific safety or other precautions are required. Employers should ensure that their employees, agents, contractors, and customers who will use the product receive adequate warnings and safe handling procedures, including a current SDS. Product users or handlers (or their employer) who are unsure of what specific precautions are required should consult their employer, product supplier, or safety or health professionals before handling or working with this product. Please notify us immediately if you believe this SDS or other safety and health information about this product is inaccurate or incomplete.
<b>Revision Information</b>	Product and Company Identification: Product Codes

# SAFETY DATA SHEET

## 1. Identification

### Product identifier

#### Product list

### Glass Mat Faced Gypsum Panels

#### Product List A

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DensDeck® Fireguard® Roof Board  
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DensGlass® Shaftliner  
DensGlass® Sheathing  
DensShield® Fireguard® Tile Backer  
DensShield® Tile Backer  
Fire-Rated GreenGlass® Prime Roof Board  
Fire-Rated GreenGlass® Sheathing  
Fire-Rated GreenGlass® Tile Backer  
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Fire-Rated GreenGlass® Interior Panels  
GreenGlass® Prime Roof Board  
GreenGlass® Roof Board  
GreenGlass® Sheathing  
GreenGlass® Tile Backer  
GreenGlass® Interior Panels

#### Product List B

DensArmor Plus® Fireguard C® High-Performance Interior Panels  
GreenGlass® Shaftliner

### Other means of identification

#### Product code

GP-71C

### Recommended use

Products accommodate a wide range of wall, floor, ceiling and roof applications.

### Recommended restrictions

Workers (and your customers or users in the case of resale) should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

### Manufacturer/Importer/Supplier/Distributor information

#### Company name

Georgia-Pacific Gypsum LLC

#### Address

133 Peachtree Street, NE  
Atlanta, GA 30303

#### Telephone

Technical Information 800.225.6119  
(M)SDS Request 404.652.5119

#### E-mail

Not available.

#### Emergency phone number

Chemtrec - Emergency 800.424.9300

## 2. Hazard(s) identification

### Emergency overview

This product is not hazardous in the form in which it is shipped by the manufacturer but may become hazardous by downstream activities such as cutting, sanding, or otherwise working with this product that generate large amount of dusts. Those hazards associated with large amount of dusts are described below.

### Physical hazards

Not classified.

### Health hazards

Serious eye damage/eye irritation

Category 2B

<b>Environmental hazards</b>	Not classified.
<b>OSHA defined hazards</b>	Not classified.
<b>Label elements</b>	
<b>Hazard symbol</b>	None.
<b>Signal word</b>	Warning
<b>Hazard statement</b>	Causes eye irritation.
<b>Precautionary statement</b>	
<b>Prevention</b>	Observe good industrial hygiene practices. Wash thoroughly after handling.
<b>Response</b>	Wash hands after handling. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>Storage</b>	Store away from strong acids.
<b>Disposal</b>	Dispose of waste and residues in accordance with local authority requirements.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	None.

### 3. Composition/information on ingredients

#### Mixtures

Chemical name	Common name and synonyms	CAS number	%
CALCIUM SULFATE DIHYDRATE		10101-41-4	60 - 100
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CONTINUOUS FILAMENT GLASS FIBER		65997-17-3	1 - 5
CRYSTALLINE SILICA (QUARTZ)*		14808-60-7	1 - 5

**Composition comments**      \*\* Found in products in List B, Section 16 of this SDS.

Gypsum (calcium sulfate, dihydrate) and vermiculite contain naturally occurring crystalline silica (quartz) which is listed as a lung carcinogen. See Section 8 for exposure information.

\*The weight percent for crystalline silica represents total crystalline silica and not the respirable fraction. Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

### 4. First-aid measures

<b>Inhalation</b>	If dust from the material is inhaled, remove the affected person immediately to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	For skin contact, wash immediately with soap and water. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Do not rub the eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>Ingestion</b>	Rinse mouth. May result in obstruction and irritation if ingested. Get medical attention.
<b>Most important symptoms/effects, acute and delayed</b>	Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
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<b>Unsuitable extinguishing media</b>	None known.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Firefighters should wear full protective clothing including self contained breathing apparatus.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Use personal protection recommended in Section 8. Keep unnecessary personnel away. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.
<b>Methods and materials for containment and cleaning up</b>	Sweep up or gather material and place in an appropriate container for disposal. Minimize dust generation. Utilize wet methods, if appropriate, to minimize dust. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions</b>	Keep out of drains, sewers, ditches, and waterways.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Provide appropriate exhaust ventilation at places where dust is formed. Minimize dust generation and accumulation. Do not breathe dust. Do not get this material in contact with eyes. Do not taste or swallow. Avoid prolonged exposure. Observe good industrial hygiene practices. Use only in well-ventilated areas. Wear appropriate NIOSH approved dust mask or filtering facepiece if dust is generated. Do not eat or drink while using the product. Wash hands before eating, drinking, or smoking.
<b>Conditions for safe storage, including any incompatibilities</b>	Store level and keep dry. Dewpoint or other conditions causing the presence of moisture can damage the product during storage. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US OSHA Table Z-3: Calculated Time Weighted Average (TWA) (mg/m3)

Components	Type	Value	Form
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	4.29 mg/m3	Total dust.
		1.43 mg/m3	Respirable.

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	PEL	5 mg/m3	Respirable fraction.
VERMICULITE** (CAS 1318-00-9)	PEL	15 mg/m3 5 mg/m3	Total dust. Respirable fraction.
		15 mg/m3	Total dust.

#### US ACGIH Threshold Limit Values: Time Weighted Average (TWA): mg/m3, non-standard units

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	TWA	10 mg/m3	Inhalable fraction.
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

**US. NIOSH: Pocket Guide to Chemical Hazards**

OSHA NIOSH Pocket Guide to Chemical Hazards			
Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	TWA	5 mg/m3	Respirable.
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	10 mg/m3 0.05 mg/m3	Total Respirable dust.
Biological limit values	No biological exposure limits noted for the ingredient(s).		
Exposure guidelines	Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled. Exposure limits for CRYSTALLINE SILICA - The US OSHA exposure limits 8 hour TWA for CRYSTALLINE SILICA (QUARTZ) are calculated from the following equations: 30/(%SiO2+2) mg/m3 for total dust; and 10/(%SiO2+2) mg/m3 for the respirable fraction.  *Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.		
Appropriate engineering controls	Score and snap method recommended. When using product, provide local and general exhaust ventilation to keep airborne dust concentrations below exposure limits. Use wet methods, if appropriate, to reduce the generation of dust. Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn.		
Individual protection measures, such as personal protective equipment			
Eye/face protection	Safety glasses or goggles are recommended when using this product. Ensure compliance with OSHA's PPE standard (29 CFR 1910.132 and .133) for eye and face protection.		
Skin protection			
Hand protection	For prolonged or repeated skin contact use suitable protective gloves.		
Other	Impervious protective clothing and gloves recommended to prevent drying or irritation of skin. Ensure compliance with OSHA's PPE standards (29 CFR 1910.132 (general) and 138 (hand protection)). Safety shower/eye wash fountain is recommended in the workplace area (29 CFR 1910.151 (c)).		
Respiratory protection	A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).		
Thermal hazards	Not applicable.		
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.		

**9. Physical and chemical properties**

<b>Appearance</b>	Gypsum boards
<b>Physical state</b>	Solid.
<b>Form</b>	Solid
<b>Color</b>	Facing color varies
<b>Odor</b>	Low odor
<b>Odor threshold</b>	Not available.
<b>pH</b>	6 - 8
<b>Melting point/freezing point</b>	Not applicable.
<b>Initial boiling point and boiling range</b>	Not applicable.
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.

**Upper/lower flammability or explosive limits**

Flammability limit - lower (%) Not applicable.

Flammability limit - upper (%) Not applicable.

Explosive limit - lower (%) Not applicable.

Explosive limit - upper (%) Not applicable.

Vapor pressure Not applicable.

Vapor density Not applicable.

Relative density Not available.

**Solubility(ies)**

Solubility (water) 0.2 % @ 22°C

Partition coefficient (n-octanol/water) Not applicable.

Auto-ignition temperature Not applicable.

Decomposition temperature Not available.

Viscosity Not applicable.

**Other information**

Flash point class Not flammable

Specific gravity 2.2 - 2.4

**10. Stability and reactivity**

Reactivity Contact with strong acids produces carbon dioxide.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.

Conditions to avoid Contact with incompatible materials. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).

Incompatible materials Strong acids.

Hazardous decomposition products May include and are not limited to: calcium oxide and sulfur dioxide.

**11. Toxicological information****Information on likely routes of exposure**

Inhalation Inhalation of dusts may cause respiratory irritation.

Skin contact Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Eye contact Dust in the eyes will cause irritation.

Ingestion Not applicable under normal conditions of use. May cause gastrointestinal irritation if ingested.

Symptoms related to the physical, chemical and toxicological characteristics Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.

**Information on toxicological effects****Acute toxicity**

Product	Species	Test Results
Glass Mat Faced Gypsum Panels		
<u>Acute</u>		
<u>Oral</u>		
LD50	Rat	1731 mg/kg estimated
Components	Species	Test Results
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)		
<u>Acute</u>		
<u>Oral</u>		
LD50	Rat	> 1581 mg/kg

<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.
<b>Serious eye damage/eye irritation</b>	Dust in the eyes will cause irritation.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not likely to cause respiratory sensitization.
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.
<b>Germ cell mutagenicity</b>	Not classified.
<b>Carcinogenicity</b>	Not expected to be hazardous by OSHA criteria.

Exposure to respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by IARC and NTP as a lung carcinogen. Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given exposure to a respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of respirable crystalline silica exposure and the length of time (usually years) of exposure.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7) 1 Carcinogenic to humans.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

#### US. National Toxicology Program (NTP) Report on Carcinogens

CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7) Known To Be Human Carcinogen.

<b>Reproductive toxicity</b>	Not classified.
<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not classified.
<b>Chronic effects</b>	Not hazardous under normal conditions of use.

## 12. Ecological information

<b>Ecotoxicity</b>	Not considered to be harmful to aquatic life.
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Components	Species		Test Results
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)			
Aquatic			
Acute			
Fish	LC50	Fathead minnow (Pimephales promelas)	> 1970 mg/l, 96 hours
CONTINUOUS FILAMENT GLASS FIBER (CAS 65997-17-3)			
Aquatic			
Acute			
Fish	LC50	Zebra danio (Danio rerio)	> 1000 mg/l, 96 hours ECHA
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)			
Aquatic			
Acute			
Fish	LC50	Zebra danio (Danio rerio)	> 10000 mg/l, 96 Hours OECD SIDS

<b>Persistence and degradability</b>	No data is available on the degradability of this product.
<b>Bioaccumulative potential</b>	No data available.
<b>Mobility in soil</b>	No data available.
<b>Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

<b>Disposal instructions</b>	Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.

<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Not available.

## 14. Transport information

### DOT

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

## 15. Regulatory information

**US federal regulations** This product is not hazardous in the form in which it is sold and shipped by the manufacturer. However, the large amount of dusts generated by downstream activities such as cutting, sanding, or otherwise working with this product is considered hazardous and is regulated under the Hazard Communication Standard 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

### SARA 304 Emergency release notification

Not regulated.

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories** Immediate Hazard - Yes  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312 Hazardous chemical** Yes

### SARA 313 (TRI reporting)

Not regulated.

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

### US state regulations

#### US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

#### US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)



**US. Massachusetts RTK - Substance List**

CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)  
CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)

**US. New Jersey Worker and Community Right-to-Know Act**

CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)  
CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)

**US. Pennsylvania Worker and Community Right-to-Know Law**

CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)  
CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

<b>Issue date</b>	March-13-2015
<b>Revision date</b>	October-02-2015
<b>Version #</b>	04
<b>HMIS® ratings</b>	Health: 1 Flammability: 0 Physical hazard: 0
<b>NFPA ratings</b>	Health: 1 Flammability: 0 Instability: 0
<b>Disclaimer</b>	This SDS is intended to quickly provide useful information to the user(s) of this material or product. It is not intended to serve as a comprehensive discussion of all possible risks or hazards, and it assumes a reasonable use of the product. The information contained in this SDS is believed to be accurate as of the date of preparation of this SDS and has been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. The user or handler (or their employer) should consider the specific conditions in which this material will be used, handled, or stored and determine what specific safety or other precautions are required. Employers should ensure that their employees, agents, contractors, and customers who will use the product receive adequate warnings and safe handling procedures, including a current SDS. Product users or handlers (or their employer) who are unsure of what specific precautions are required should consult their employer, product supplier, or safety or health professionals before handling or working with this product. Please notify us immediately if you believe this SDS or other safety and health information about this product is inaccurate or incomplete.
<b>Revision Information</b>	Product and Company Identification: Product Codes

# SAFETY DATA SHEET

## 1. Identification

<b>Product identifier</b>	<b>Paper Faced Gypsum Panels</b>
<b>Other means of identification</b>	
<b>Product code</b>	GP-71A
<b>Synonyms</b>	See Product List found in Section 16
<b>Recommended use</b>	Products accommodate wide range of wall, floor and ceiling applications and soffit treatments.
<b>Recommended restrictions</b>	Workers (and your customers or users in the case of resale) should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

### Manufacturer/Importer/Supplier/Distributor information

<b>Company name</b>	Georgia-Pacific Gypsum LLC		
<b>Address</b>	133 Peachtree Street, NE Atlanta, GA 30303		
<b>Telephone</b>	Technical Information	800.225.6119	
	(M)SDS Request	404.652.5119	
<b>E-mail</b>	Not available.		
<b>Emergency phone number</b>	Chemtrec - Emergency	800.424.9300	

## 2. Hazard(s) identification

Emergency overview	This product is not hazardous in the form in which it is shipped by the manufacturer but may become hazardous by downstream activities such as cutting, sanding, or otherwise working with this product that generate large amount of dusts. Those hazards associated with large amount of dusts are described below.		
Physical hazards	Not classified.		
Health hazards	Serious eye damage/eye irritation	Category 2B	
Environmental hazards	Not classified.		
OSHA defined hazards	Not classified.		
Label elements			
Hazard symbol	None.		
Signal word	Warning		
Hazard statement	Causes eye irritation.		
Precautionary statement			
Prevention	Observe good industrial hygiene practices. Wash thoroughly after handling.		
Response	Wash hands after handling. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.		
Storage	Store away from strong acids.		
Disposal	Dispose of waste and residues in accordance with local authority requirements.		
Hazard(s) not otherwise classified (HNOC)	None known.		
Supplemental information	None.		

## 3. Composition/information on ingredients

### Mixtures

Chemical name	Common name and synonyms	CAS number	%
CALCIUM SULFATE DIHYDRATE		10101-41-4	60 - 100
VERMICULITE****		1318-00-9	0 - 3
CRYSTALLINE SILICA (QUARTZ)*		14808-60-7	0.1 - 1

Chemical name	Common name and synonyms	CAS number	%
BORIC ACID**		10043-35-3	0 - 1
CONTINUOUS FILAMENT GLASS FIBERS***		65997-17-3	0 - 1

#### Composition comments

\*\* Found in products in List B, C and F, Section 16 of this SDS.

\*\*\* Found in products in List C, D, E and F, Section 16 of this SDS.

\*\*\*\* Found in products in List E and F, Section 16 of this SDS.

Gypsum (calcium sulfate, dihydrate) contains naturally occurring silica crystalline (quartz), which is listed as a lung carcinogen. See Section 8 for exposure information.

\*The weight percent for crystalline silica represents total crystalline silica and not the respirable fraction. Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

\*\*Testing conducted by Georgia-Pacific did not detect boric acid during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

## 4. First-aid measures

#### Inhalation

If dust from the material is inhaled, remove the affected person immediately to fresh air. Call a physician if symptoms develop or persist.

#### Skin contact

For skin contact, wash immediately with soap and water. Get medical attention if irritation develops and persists.

#### Eye contact

Do not rub the eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

#### Ingestion

Rinse mouth. May result in obstruction and irritation if ingested. Get medical attention.

#### Most important symptoms/effects, acute and delayed

Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.

#### Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

#### General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## 5. Fire-fighting measures

#### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### Unsuitable extinguishing media

None known.

#### Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

#### Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

#### Fire-fighting equipment/instructions

Firefighters should wear full protective clothing including self contained breathing apparatus.

#### Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

#### General fire hazards

No unusual fire or explosion hazards noted.

## 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

Use personal protection recommended in Section 8. Keep unnecessary personnel away. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.

#### Methods and materials for containment and cleaning up

Minimize dust generation. Sweep up or gather material and place in an appropriate container for disposal. Utilize wet methods, if appropriate, to minimize dust. For waste disposal, see section 13 of the SDS.

#### Environmental precautions

Keep out of drains, sewers, ditches, and waterways.

## 7. Handling and storage

### Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed. Minimize dust generation and accumulation. Do not breathe dust. Do not get this material in contact with eyes. Do not taste or swallow. Avoid prolonged exposure. Observe good industrial hygiene practices. Use only in well-ventilated areas. Wear appropriate NIOSH approved dust mask or filtering facepiece if dust is generated. Do not eat or drink while using the product. Wash hands before eating, drinking, or smoking.

### Conditions for safe storage, including any incompatibilities

Store level and keep dry. Dewpoint or other conditions causing the presence of moisture can damage the product during storage. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US OSHA Table Z-3: Calculated Time Weighted Average (TWA) (mg/m3)

Components	Type	Value	Form
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	8.6 mg/m3	Total dust.
		2.9 mg/m3	Respirable.

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	PEL	5 mg/m3	Respirable fraction.
VERMICULITE**** (CAS 1318-00-9)	PEL	15 mg/m3	Total dust.
		5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

#### US ACGIH Threshold Limit Values: Short Term Exposure Limit (STEL): mg/m3

Components	Type	Value	Form
BORIC ACID** (CAS 10043-35-3)	STEL	6 mg/m3	Inhalable fraction.

#### US ACGIH Threshold Limit Values: Time Weighted Average (TWA): mg/m3, non-standard units

Components	Type	Value	Form
BORIC ACID** (CAS 10043-35-3)	TWA	2 mg/m3	Inhalable fraction.
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	TWA	10 mg/m3	Inhalable fraction.
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	TWA	5 mg/m3	Respirable.
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	10 mg/m3 0.05 mg/m3	Total Respirable dust.

### Biological limit values

No biological exposure limits noted for the ingredient(s).

<b>Exposure guidelines</b>	Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled. Exposure limits for CRYSTALLINE SILICA - The US OSHA exposure limits 8 hour TWA for CRYSTALLINE SILICA (QUARTZ) are calculated from the following equations: $30/(\%SiO_2+2)$ mg/m <sup>3</sup> for total dust; and $10/(\%SiO_2+2)$ mg/m <sup>3</sup> for the respirable fraction.  *Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.  **Testing conducted by Georgia-Pacific did not detect boric acid during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.
<b>Appropriate engineering controls</b>	Score and snap method recommended. When using product, provide local and general exhaust ventilation to keep airborne dust concentrations below exposure limits. Use wet methods, if appropriate, to reduce the generation of dust. Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Safety glasses or goggles are recommended when using this product. Ensure compliance with OSHA's PPE standard (29 CFR 1910.132 and .133) for eye and face protection.
<b>Skin protection</b>	
<b>Hand protection</b>	For prolonged or repeated skin contact use suitable protective gloves.
<b>Other</b>	Impervious protective clothing and gloves recommended to prevent drying or irritation of skin. Ensure compliance with OSHA's PPE standards (29 CFR 1910.132 (general) and 138 (hand protection)). Safety shower/eye wash fountain is recommended in the workplace area (29 CFR 1910.151 (c)).
<b>Respiratory protection</b>	A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).
<b>Thermal hazards</b>	Not applicable.
<b>General hygiene considerations</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

<b>Appearance</b>	Paper faced gypsum boards
<b>Physical state</b>	Solid.
<b>Form</b>	Solid.
<b>Color</b>	Facing color varies
<b>Odor</b>	Odorless
<b>Odor threshold</b>	Not available.
<b>pH</b>	7
<b>Melting point/freezing point</b>	2642 °F (1450 °C) estimated
<b>Initial boiling point and boiling range</b>	Not applicable
<b>Flash point</b>	Not applicable
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not applicable
<b>Flammability limit - upper (%)</b>	Not applicable
<b>Explosive limit - lower (%)</b>	Not available.

<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	Not applicable
<b>Vapor density</b>	Not applicable
<b>Relative density</b>	2.2 - 2.4 g/cm3
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	0.2 % @ 22°C
<b>Partition coefficient (n-octanol/water)</b>	Not applicable
<b>Auto-ignition temperature</b>	Not applicable
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not applicable
<b>Other information</b>	
<b>Flash point class</b>	Not flammable
<b>Specific gravity</b>	2.2 - 2.4

## 10. Stability and reactivity

<b>Reactivity</b>	Contact with strong acids produces carbon dioxide.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Contact with incompatible materials. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).
<b>Incompatible materials</b>	Strong acids.
<b>Hazardous decomposition products</b>	May include and are not limited to: calcium oxide and sulfur dioxide.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	Not applicable under normal conditions of use. May cause gastrointestinal irritation if ingested.
<b>Inhalation</b>	Inhalation of dusts may cause respiratory irritation.
<b>Skin contact</b>	Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
<b>Eye contact</b>	Dust in the eyes will cause irritation.

**Symptoms related to the physical, chemical and toxicological characteristics** Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.

### Information on toxicological effects

#### Acute toxicity

Components	Species	Test Results
BORIC ACID** (CAS 10043-35-3)		
<b>Acute</b>		
<i>Inhalation</i>		
LC50	Rat	> 2 mg/l, 4 Hours
<i>Oral</i>		
LD50	Rat	2660 mg/kg
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)		
<b>Acute</b>		
<i>Oral</i>		
LD50	Rat	> 1581 mg/kg

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation.

**Serious eye damage/eye irritation** Dust in the eyes will cause irritation.

### Respiratory or skin sensitization

<b>Respiratory sensitization</b>	Not likely to cause respiratory sensitization.
----------------------------------	--

<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.
<b>Germ cell mutagenicity</b>	Not classified.
<b>Carcinogenicity</b>	Not expected to be hazardous by OSHA criteria.

Exposure to respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by IARC and NTP as a lung carcinogen. Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given exposure to a respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of respirable crystalline silica exposure and the length of time (usually years) of exposure.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7) 1 Carcinogenic to humans.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

#### US. National Toxicology Program (NTP) Report on Carcinogens

CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7) Known To Be Human Carcinogen.

<b>Reproductive toxicity</b>	Not classified.
<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not classified.
<b>Chronic effects</b>	Not hazardous under normal conditions of use.

## 12. Ecological information

<b>Ecotoxicity</b>	Not considered to be harmful to aquatic life.
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Product		Species	Test Results
Paper Faced Gypsum Panels			
<b>Aquatic</b>			
<i>Acute</i>			
Fish	LC50	Fish	2049.4597 mg/l, 96 hours estimated
Components		Species	Test Results
BORIC ACID** (CAS 10043-35-3)			
<b>Aquatic</b>			
Crustacea	EC50	Daphnia	766.5 mg/L, 48 Hours
Fish	LC50	Razorback sucker (Xyrauchen texanus)	> 100 mg/l, 96 hours
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)			
<b>Aquatic</b>			
<i>Acute</i>			
Fish	LC50	Fathead minnow (Pimephales promelas)	> 1970 mg/l, 96 hours
CONTINUOUS FILAMENT GLASS FIBERS*** (CAS 65997-17-3)			
<b>Aquatic</b>			
<i>Acute</i>			
Fish	LC50	Zebra danio (Danio rerio)	> 1000 mg/l, 96 hours ECHA
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)			
<b>Aquatic</b>			
<i>Acute</i>			
Fish	LC50	Zebra danio (Danio rerio)	> 10000 mg/l, 96 Hours OECD SIDS

<b>Persistence and degradability</b>	No data is available on the degradability of this product.
<b>Bioaccumulative potential</b>	No data available.
<b>Mobility in soil</b>	No data available.
<b>Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

### 13. Disposal considerations

<b>Disposal instructions</b>	Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Not available.

### 14. Transport information

<b>DOT</b>	Not regulated as dangerous goods.
<b>IATA</b>	Not regulated as dangerous goods.
<b>IMDG</b>	Not regulated as dangerous goods.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable.

### 15. Regulatory information

<b>US federal regulations</b>	This product is not hazardous in the form in which it is sold and shipped by the manufacturer. However, the large amount of dusts generated by downstream activities such as cutting, sanding, or otherwise working with this product is considered hazardous and is regulated under the Hazard Communication Standard 29 CFR 1910.1200.  All components are on the U.S. EPA TSCA Inventory List.
<b>TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)</b>	Not regulated.
<b>CERCLA Hazardous Substance List (40 CFR 302.4)</b>	Not listed.
<b>SARA 304 Emergency release notification</b>	Not regulated.
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	Not listed.
<b>Superfund Amendments and Reauthorization Act of 1986 (SARA)</b>	
<b>Hazard categories</b>	Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
<b>SARA 302 Extremely hazardous substance</b>	Not listed.
<b>SARA 311/312 Hazardous chemical</b>	Yes
<b>SARA 313 (TRI reporting)</b>	Not regulated.
<b>Other federal regulations</b>	
<b>Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List</b>	Not regulated.
<b>Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)</b>	Not regulated.
<b>Safe Drinking Water Act (SDWA)</b>	Not regulated.



## US state regulations

### US. Massachusetts RTK - Substance List

CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)  
CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)

### US. New Jersey Worker and Community Right-to-Know Act

CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)  
CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)

### US. Pennsylvania Worker and Community Right-to-Know Law

CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)  
CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)

### US. Rhode Island RTK

Not regulated.

### US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

## International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

### Product list

Product List A  
ToughRock® Veneer Plaster Base (Blueboard)  
ToughRock® Flexroc® Gypsum Board  
ToughRock® Mold-Guard™ Gypsum Board  
ToughRock® Basement Board® Gypsum Board  
ToughRock® Sound Deadening Gypsum Board  
ToughRock® Stretch 54® Gypsum Board  
ToughRock® Soffit Board  
.....  
Product List B  
ToughRock® Gypsum Board  
.....  
Product List C  
ToughRock® Span 24® Lite-Weight Ceiling Board  
ToughRock® Stretch 54® Lite-Weight Gypsum Board  
ToughRock® Lite-Weight Gypsum Board  
ToughRock® MH Ceiling Board  
ToughRock® Fireguard X™ Gypsum Board  
.....  
Product List D  
ToughRock® Gypsum Sheathing  
ToughRock® Span 24® Ceiling Board  
ToughRock® Fireguard X™ Gypsum Sheathing  
ToughRock® Fireguard X™ Stretch 54® Gypsum Board  
ToughRock® Fireguard X™ Mold-Guard™ Abuse-Resistant Gypsum  
ToughRock® Fireguard X™ Veneer Plaster Board  
ToughRock® Fireguard X™ Soffit Board  
ToughRock® Fireguard X™ Abuse-Resistant Gypsum Board  
ToughRock® Fireguard X™ Mold-Guard™ Gypsum Board  
.....  
Product List E  
ToughRock® Shaftliner  
ToughRock® Fireguard C® Soffit Board  
ToughRock® Fireguard C® Stretch 54® Gypsum Board  
ToughRock® Lite-Weight Fire-Rated Gypsum Board  
.....  
Product List F  
ToughRock® Fireguard C® Gypsum Board

### Issue date

March-13-2015

### Revision date

13-Mar-2015

<b>Version #</b>	01
<b>HMIS® ratings</b>	Health: 1 Flammability: 0 Physical hazard: 0
<b>NFPA ratings</b>	Health: 1 Flammability: 0 Instability: 0
<b>Disclaimer</b>	<p>This SDS is intended to quickly provide useful information to the user(s) of this material or product. It is not intended to serve as a comprehensive discussion of all possible risks or hazards, and it assumes a reasonable use of the product. The information contained in this SDS is believed to be accurate as of the date of preparation of this SDS and has been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. The user or handler (or their employer) should consider the specific conditions in which this material will be used, handled, or stored and determine what specific safety or other precautions are required. Employers should ensure that their employees, agents, contractors, and customers who will use the product receive adequate warnings and safe handling procedures, including a current SDS. Product users or handlers (or their employer) who are unsure of what specific precautions are required should consult their employer, product supplier, or safety or health professionals before handling or working with this product. Please notify us immediately if you believe this SDS or other safety and health information about this product is inaccurate or incomplete.</p>
<b>Revision Information</b>	Product and Company Identification: Synonyms Composition / Information on Ingredients: Ingredients Physical & Chemical Properties: Multiple Properties Toxicological Information: Toxicological Data Ecological Information: Ecotoxicity Regulatory Information: United States HazReg Data: North America Index: United States GHS: Classification



2-13-2015

**Section 1 - Identification****Company:** Specialty Composites Group Limited/DBA – Waco Composites**Contact Phone:** 254-752-3622**Manufacturer:** Waco Composites**Address:** 302 S. 27<sup>th</sup> Street**Product:** ARMORCORE/Bullet Resistant Fiberglass Panels

P.O. Box 20008

**Uses:** Anti-Ballistic sheathing in millwork, walls or vehicles

Waco Texas 76702

**Section 2 – Hazards Identification****Warning**

When product is sawed, drilled or cut in any manner that creates dust, skin irritation can occur.

**Dust** can irritate eyes and cause skin irritation and itching.

Respiratory mask recommended when creating dust to avoid a respiratory tract irritation.

See section 7 for handling product.

Panel sheet may be heavy, mechanical means maybe required to move this product.

Panels vary in size, thickness and weight. Leather gloves are recommended for handling.

**Section 3 – Composition/Information on Ingredients**

Chemical Identity	Concentration	CAS	PIN Number	LD 50 Species	LC 50 Species
				Route	Route
Continuous Filament Fiber Glass	76%		N/A	N/A	N/A
Cured Polyester Thermosetting Resin	24%		N/A	N/A	N/A

**Section 4 – First-Aid Measures****Eye contact** – Flush eyes with water for 15 minutes, if irritation persists seek medical attention.**Ingestion** – If swallowed seek medical attention.**Skin contact** – Rinse contact areas with water, then wash with mild soap.**Inhalation** – If irritation persists, seek medical attention.**Section 5 – Fire-Fighting Measures****Fire:** Extinguish with water/CO<sub>2</sub>, Dry chemical extinguishers.**Special Firefighting:** Self-contained breathing apparatus (SCBA) and full fire-fighting protective clothing.**Explosion Sensitivity** – None**Upper or Lower Flammable Limit** – None**Flashpoint** (“C) Method – None**Auto Ignition Temperature** (“C)-- None**Section 6 – Accidental Release Measures****Solid Product - Panel Sheets.**

Able to be picked up, swept up and dispose in accordance to laws and regulations.

**Section 7 – Handling and Storage****Handling procedures and equipment** – Leather gloves or work gloves. When creating dust from this product wear respirator mask, safety glasses or goggles and protective clothing. Larger panels may require mechanical means to move.**Storage requirements** – Stack on pallets inside under cover. For outside storage place on pallets and cover, keep panels out of direct sunlight and prevent long-term exposure to U/V rays.**Waste Disposal** – Inert solid product.**Disposal should be in accordance with applicable regional, national and local laws and regulations.**



2-13-2015

**Section 8 – Exposure Controls/Personal Protection****Personal Protective Equipment** – When creating dust, Tyvek suit, dust/particle mask, leather gloves, safety glasses.**Respiratory** – Particle Mask or Mist Respirator**Footwear** – Boots or shoes**Section 9 – Physical and Chemical Properties****Physical State** - Solid Product**Specific Gravity** - 1.6 – 2.08**Appearance** – White/Light Green**Odor** - Little or no odor**Vapor Density** – Solid**Vapor Pressure** – Solid**Particle Size** – Varies**Solubility in Water** - Insoluble**Melting Point** - N/A**Freezing Point** – N/A**Boiling Point** – N/A**Evaporation Rate** – N/A**Flash Point** – N/A**Section 10 – Stability and Reactivity****Stability** - Stable-Solid material**Incompatible Materials** – Oxidizers, strong acids and bases**Conditions of Reactivity** – Stable at normal storage conditions. Avoid heating above 450 F degrees**Hazardous Decomposition Products** – Combustion may produce carbon monoxide, carbon dioxide and irritating or toxic vapors and gases.**Section 11 – Toxicological Information****Route of Entry** – Primary route is inhalation of fibrous dust. **Skin and eye contact** – Irritant **Inhalation** – Negligible**Skin Absorption or Ingestion** – None **Dust Exposure** – Causes irritation to the eyes, itching and dryness of the skin.**Exposure Limits** – Protect Skin**Irritancy to Product** – None known**Synergistic Products** N/A**Section 12 – Ecological Information**

No known significant effects or critical hazards.

**Section 13 – Disposal Considerations**

No special disposal requirements/inert solid waste

**Disposal should be in accordance with applicable regional, national and local laws and regulations.****Section 14 – Transport Information**

Make sure product is tied in and secured to shipping bed and covered to protect from sunlight.

**Section 15 – Regulatory Information**

All components are listed. Product becomes inert prior to sales. See section 2-7 &amp; 8 for PPE, handling &amp; protection.

**Section 16 – Other Information**

This document has been prepared in accordance with the SDS requirements of the OSHA hazard communication Standard 29 CFR 1910.1200. All information came from the original MSDS for this product.

## Field Safety Data Sheet Index

### **Stucco & EIFS**

1. Master Fiber M100
2. Spec Mix Scratch & Brown
3. Felt Paper
4. Dryvit – ADEPS
5. Dryvit – AP Adhesive
6. Dryvit – EPS Stucco Adhesive
7. Dryvit – Genesis
8. Dryvit – Genesis DMS
9. Dryvit – NCB
10. Dryvit – Primus
11. Dryvit – Primus DM
12. Dryvit – Mesh
13. Dryvit – aquaflash
14. Dryvit – Flashing Tape
15. Dryvit – Backstop NT
16. Dryvit – Color Prime
17. Dryvit – Finishes
18. Senergy - Mesh
19. Senergy – Senerquick Adhesive
20. Senergy – Senershield R
21. Senergy – Stuccobase
22. Senergy – Alpha Dry Base Coat
23. Senergy – Sahara Finish

## Field Safety Data Sheet Index - continued

### **Stucco & EIFS-continued**

- 24. Sto – BTS-Plus Base Coat
- 25. Sto – Stoguard Fabric
- 26. Sto – Mesh
- 27. Sto – Primer/Adhesive-B
- 28. Sto – Acrylic Finish
- 29. Sto – Gold Coat
- 30. Sto – StoCoat Acrylic
- 31. Sto – Primer Sand
- 32. Sto – Primer Smooth
- 33. Acryl 60 Bonding Agent
- 34. TK-225 Bonding Agent
- 35. Synergy-Senershield VB
- 36. Synergy- Senerflash
- 37. Styrotech Foam
- 38. Dryvit EPS Insulation Board

# Safety Data Sheet

## MasterFiber M 100 also MasterFiber™ M100

Revision date : 2015/10/05

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(30606104/SDS\_GEN\_CA/EN)

### 1. Identification

#### Product identifier used on the label

### MasterFiber M 100 also MasterFiber(TM) M100

#### Recommended use of the chemical and restriction on use

Recommended use\*: Additive for cement industry

\* The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

#### Details of the supplier of the safety data sheet

##### Company:

BASF Canada Inc.  
100 Milverton Drive  
Mississauga, ON L5R 4H1, CANADA

Telephone: +1 289 360-1300

#### Emergency telephone number

CANUTEC (reverse charges): (613) 996-6666

BASF HOTLINE: (800) 454-COPE (2673)

#### Other means of identification

Chemical family: No applicable information available.

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### 2. Hazards Identification

#### According to Hazardous Products Regulations (HPR) (SOR/2015-17)

#### Classification of the product

No need for classification according to GHS criteria for this product.

#### Label elements

The product does not require a hazard warning label in accordance with GHS criteria.

#### Hazards not otherwise classified

# Safety Data Sheet

## MasterFiber M 100 also MasterFiber™ M100

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If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

### **According to Controlled Products Regulations (CPR) (SOR/88-66)**

#### **Emergency overview**

NO PARTICULAR HAZARDS KNOWN.

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### **3. Composition / Information on Ingredients**

#### **According to Hazardous Products Regulations (HPR) (SOR/2015-17)**

This product does not contain any components classified as hazardous under the referenced regulation.

#### **According to Controlled Products Regulations (CPR) (SOR/88-66)**

Not WHMIS controlled.

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### **4. First-Aid Measures**

#### **Description of first aid measures**

##### **General advice:**

First aid personnel should pay attention to their own safety.

##### **If inhaled:**

Remove victim to fresh air and away from exposure immediately. If not breathing, give artificial respiration. Seek medical attention.

##### **If on skin:**

Remove contaminated clothing. Wash skin with soap and water, rinse abundantly. If large slivers or particles penetrate skin, get medical attention. If symptoms persist, seek medical advice.

##### **If in eyes:**

Flush with copious amounts of water for at least 15 minutes. If large slivers or particles contact eyes, get medical attention. If symptoms persist, seek medical advice.

##### **If swallowed:**

Do not induce vomiting unless told to by a poison control center or doctor. If large quantities are ingested, seek medical advice.

#### **Most important symptoms and effects, both acute and delayed**

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Hazards: No applicable information available.

#### **Indication of any immediate medical attention and special treatment needed**

##### **Note to physician**

Treatment:

Symptomatic treatment (decontamination, vital functions).



# Safety Data Sheet

## MasterFiber M 100 also MasterFiber™ M100

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### 5. Fire-Fighting Measures

#### Extinguishing media

Suitable extinguishing media:  
carbon dioxide, dry powder, foam, water spray

#### Special hazards arising from the substance or mixture

Hazards during fire-fighting:  
carbon dioxide, carbon monoxide, harmful vapours, nitrogen oxides, fumes/smoke, carbon black

#### Advice for fire-fighters

Protective equipment for fire-fighting:  
Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

#### Further information:

Copious amounts of water may be used to cool exposures. In case of combustion evolution of toxic gases/vapours possible.

---

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

#### Environmental precautions

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

#### Methods and material for containment and cleaning up

Sweep/shovel up. Place into suitable containers for reuse or disposal in a licensed facility. Dispose of in accordance with national, state and local regulations.

---

### 7. Handling and Storage

#### Precautions for safe handling

Ensure thorough ventilation of stores and work areas.

Protection against fire and explosion:  
Avoid dust formation.

#### Conditions for safe storage, including any incompatibilities

No applicable information available.

Suitable materials for containers: Paper/Fibreboard

Further information on storage conditions: Avoid dust formation, product dust can form an explosive mixture with air.

Storage stability:

# Safety Data Sheet

## MasterFiber M 100 also MasterFiber™ M100

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Keep only in the original container in a cool, dry, well-ventilated place away from ignition sources, heat or flame.

Protect from direct sunlight.

### 8. Exposure Controls/Personal Protection

No occupational exposure limits known.

#### Advice on system design:

Provide local exhaust ventilation to maintain recommended P.E.L.

#### Personal protective equipment

##### Respiratory protection:

Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) respirator as necessary.

##### Hand protection:

Protective glove selection must be based on the user's assessment of the workplace hazards.

##### Eye protection:

Safety glasses with side-shields.

##### Body protection:

Body protection must be chosen based on level of activity and exposure.

##### General safety and hygiene measures:

Handle in accordance with good industrial hygiene and safety practice. Food, beverages, and tobacco products shall not be carried, stored, or consumed where this material is in use. Hands and/or face should be washed before breaks and at the end of the shift. Handle in accordance with good industrial hygiene and safety practice.

### 9. Physical and Chemical Properties

Form:	fibers
Odour:	product specific
Odour threshold:	No applicable information available.
Colour:	No applicable information available.
pH value:	not applicable
Melting temperature:	Unspecified
Boiling point:	No applicable information available.
Sublimation point:	No applicable information available.
Flash point:	not applicable
Flammability:	not determined
Lower explosion limit:	No applicable information available.
Upper explosion limit:	No applicable information available.
Autoignition:	No applicable information available.
Vapour pressure:	not applicable
Density:	0.91 g/cm <sup>3</sup> ( 60 °F)
Relative density:	0.91 ( 60 °F)
Bulk density:	1,800 - 2,400 kg/m <sup>3</sup>
Vapour density:	No applicable information available.

# Safety Data Sheet

## MasterFiber M 100 also MasterFiber™ M100

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Partitioning coefficient n-octanol/water (log Pow):	not applicable
Self-ignition temperature:	not self-igniting
Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.
Viscosity, dynamic:	No applicable information available.
Viscosity, kinematic:	No applicable information available.
Solubility in water:	insoluble
Solubility (quantitative):	No applicable information available.
Solubility (qualitative):	No applicable information available.
Evaporation rate:	No applicable information available.
Other Information:	If necessary, information on other physical and chemical parameters is indicated in this section.

## 10. Stability and Reactivity

### Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Oxidizing properties:

Based on its structural properties the product is not classified as oxidizing.

### Chemical stability

The product is stable if stored and handled as prescribed/indicated.

### Possibility of hazardous reactions

The product is stable if stored and handled as prescribed/indicated.

### Conditions to avoid

See MSDS section 7 - Handling and storage.

### Incompatible materials

strong acids, strong bases, strong oxidizing agents, strong reducing agents

### Hazardous decomposition products

Decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:

No decomposition if stored and handled as prescribed/indicated.

## 11. Toxicological information

### Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

### Acute Toxicity/Effects

#### Acute toxicity

Assessment of acute toxicity: Virtually nontoxic after a single ingestion. Based on available Data, the classification criteria are not met.

# Safety Data Sheet

## MasterFiber M 100 also MasterFiber™ M100

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### Oral

No data available.

### Inhalation

No data available.

### Dermal

No data available.

### Assessment other acute effects

No applicable information available.

### Irritation / corrosion

Assessment of irritating effects: No irritation is expected under intended use and appropriate handling. Based on available Data, the classification criteria are not met.

### Sensitization

Assessment of sensitization: Based on available Data, the classification criteria are not met.

## **Chronic Toxicity/Effects**

### Repeated dose toxicity

Assessment of repeated dose toxicity: No reliable data was available concerning repeated dose toxicity. Based on available Data, the classification criteria are not met.

### Genetic toxicity

Assessment of mutagenicity: The chemical structure does not suggest a specific alert for such an effect. Based on available Data, the classification criteria are not met.

### Carcinogenicity

Assessment of carcinogenicity: The chemical structure does not suggest a specific alert for such an effect. Based on available Data, the classification criteria are not met.

### Reproductive toxicity

Assessment of reproduction toxicity: The chemical structure does not suggest a specific alert for such an effect. Based on available Data, the classification criteria are not met.

### Teratogenicity

Assessment of teratogenicity: The chemical structure does not suggest a specific alert for such an effect. Based on available Data, the classification criteria are not met.

### Other Information

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses. The product has not been tested. The statements on toxicology have been derived from the properties of the individual components.

## **Symptoms of Exposure**

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

---

## **12. Ecological Information**

### **Toxicity**

# Safety Data Sheet

## MasterFiber M 100 also MasterFiber™ M100

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Aquatic toxicity

Assessment of aquatic toxicity:

Based on available Data, the classification criteria are not met. There is a high probability that the product is not acutely harmful to aquatic organisms.

### Persistence and degradability

Assessment biodegradation and elimination (H<sub>2</sub>O)

Inherently biodegradable. The insoluble fraction can be removed by mechanical means in suitable waste water treatment plants.

The polymer component of the product is poorly biodegradable.

### Bioaccumulative potential

Assessment bioaccumulation potential

Discharge into the environment must be avoided.

### Mobility in soil

Assessment transport between environmental compartments

No data available.

### Additional information

Other ecotoxicological advice:

Do not discharge product into the environment without control. The product has not been tested. The statements on ecotoxicology have been derived from the properties of the individual components.

---

## 13. Disposal considerations

### Waste disposal of substance:

Do not discharge into drains/surface waters/groundwater. Dispose of in a licensed facility.

### Container disposal:

Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.

---

## 14. Transport Information

### Land transport

TDG

Not classified as a dangerous good under transport regulations

### Sea transport

IMDG

Not classified as a dangerous good under transport regulations

### Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

# Safety Data Sheet

## MasterFiber M 100 also MasterFiber™ M100

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### 15. Regulatory Information

#### Federal Regulations

##### **Registration status:**

Chemical DSL, CA released / listed

#### According to Controlled Products Regulations (CPR) (SOR/88-66)

Not WHMIS controlled.

**THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.**

---

### 16. Other Information

#### **SDS Prepared by:**

BASF NA Product Regulations

SDS Prepared on: 2015/10/05

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

---

END OF DATA SHEET

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**SECTION I: PRODUCT IDENTIFICATION**

---

SPEC MIX, Inc.  
1230 Eagan Industrial Rd. Ste 160  
Eagan, MN 55121

Emergency Telephone Number (800) 282-5828  
Information Telephone Number (888) 773-2649

Revision: Jun-15

SDS SM1

<u>Spec Mix® Product Name</u>	<u>Item #(s)</u>
a. Fiber Base Coat Stucco	(SU-05)
b. Scratch & Brown Stucco	(SU-01)
c. Fiber Reinforced Scratch & Brown Stucco	(SU-04)

Product Use: Portland cement based plasters

---

**SECTION II - HAZARD IDENTIFICATION**

---

Hazard-determining components of labeling: Silica, Portland cement

2.1 Classification of the substance or mixture

Carcinogen – Category 1A

Skin Corrosion – Category 1B

Skin Sensitization – Category 1B

Specific Target Organ Toxicity Repeat Exposure – Category 1

Specific Target Organ Toxicity: Single Exposure – Category 3

2.2a Signal word DANGER!

2.2b Hazard Statements

May cause cancer through chronic inhalation

Causes severe skin burns and serious eye damage

May cause an allergic skin reaction

Causes damage to lungs through prolonged or repeated inhalation

May cause respiratory irritation

## 2.2c Pictograms



## 2.2d Precautionary statements

Do not handle until all safety precautions have been read and understood.

Wear protective gloves, eye protection, and protective clothing.

Do not eat, drink or smoke when using this product.

Wash thoroughly after handling.

Use in a well-ventilated area.

Do not breathe dust.

If swallowed: Rinse mouth. Do NOT induce vomiting.

If inhaled: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If on skin (or hair): Remove immediately all contaminated clothing and wash before re-use. Rinse skin or hair with water.

If significant skin irritation or rash occurs: get medical advice or attention.

Immediately seek medical advice or attention if symptoms are significant or persist.

Store in a well-ventilated place. Keep container tightly closed.

Dispose of contents/containers in accordance with all regulations.

**2.3 Additional Information** Precautions must be observed because burns occur with little warning -- little heat is sensed.

**2.3a HNO<sub>3</sub> – Hazards not otherwise classified:** Not applicable

**2.3b Unknown Acute Toxicity:** None

### 2.3C WHMIS Classification

Class D2B – Skin/Eye Irritant

Class D2A – Chronic Toxic Effects – Carcinogen

Class E – Corrosive Material

### 2.3d Label Elements According To WHMIS

#### Hazard Symbols





Signal Word  
**DANGER!**

---

### SECTION III - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

---

<u>Hazardous Components</u>	<u>CAS No.</u>	<u>% by Weight</u>
Sand, Silica, Quartz	14808-60-7	40-70*
Portland Cement	65997 15 1	10-30*
Lime	01305-62-0	5-10%

\*The concentrations ranges are provided due to batch-to-batch variability.  
None of the constituents of this material are of unknown toxicity.

---

### SECTION IV – FIRST AID MEASURES

---

#### 4.1 Description of the first-aid measures

##### General information:

**After inhalation:** Remove person to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration. In case of unconsciousness, place patient stably in side position for transportation.

**After skin contact:** Wash skin with cool water and pH-neutral soap or a mild detergent. If significant skin irritation or rash occurs: get medical advice or attention.

**After eye contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**After swallowing:** Do not induce vomiting. If conscious, have the victim drink plenty of water and call a physician immediately. Never give anything by mouth to an unconscious person.

#### 4.2 Most important symptoms/effects, acute and delayed

**Inhalation:** May cause respiratory tract irritation. Causes damage to organs through prolonged or repeated inhalation. This product contains crystalline silica. Prolonged or repeated inhalation of respirable silica from this product can cause silicosis.

**Skin contact:** Causes skin irritation. Handling can cause dry skin, discomfort, irritation, and dermatitis. May cause sensitization by skin contact. Product becomes extremely alkaline when exposed to moisture, and can cause alkali burns and affect the mucous membranes. Precautions must be observed because burns occur with little warning -- little heat is sensed.

**Eye Contact:** Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

**Ingestion:** May be harmful if swallowed. Ingestion may cause discomfort and/or distress, nausea or vomiting.

**4.3 Indication of immediate medical attention and special treatment needed:**  
Immediately seek medical advice or attention if symptoms are significant or persist.

---

## **SECTION V - FIRE FIGHTING MEASURES**

---

**5.1 Flammability of the Product:** Non-flammable and non-combustible

**5.2 Suitable extinguishing agents:** Treat for surrounding material

**5.3 Special hazards arising from the substance or mixture:** None

**5.3a Products of Combustion:** None

**5.3b Explosion Hazards in Presence of Various Substances:** Non-explosive in presence of shocks

---

## **SECTION VI – ACCIDENTAL RELEASE MEASURES**

---

**6.1 Personal precautions, protective equipment and emergency procedures:** Wear personal protective equipment (See section VIII). Keep unprotected persons away.

**6.2 Methods and material for containment and cleaning up:**

Do not allow to enter sewers/ surface or ground water. Dispose of unwanted materials and containers properly in accordance with all regulations.

---

## **SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND STORAGE**

---

### **7.1 Handling**

**Precautions for safe handling:** Ensure good ventilation/exhaustion at the workplace. **DO NOT BREATHE DUST.** In dusty environments, the use of an OSHA, MSHA or NIOSH approved respirator and tight fitting goggles is recommended. Wear appropriate PPE (See section 8). Do not mix with other chemical products, except as indicated by the manufacturer. Do not get in eyes, on skin or clothing. Good housekeeping is important to prevent accumulation of dust.

### **7.2 Storage**

**Requirements to be met by storerooms and receptacles:** No special requirements.

**Information about storage in one common storage facility:** Not required.

**Further information about storage conditions:** Keep out of the reach of children. Keep container tightly closed and prevent exposure to humidity. Do not allow water to contact the product until time of use to preserve product utility.

---

## **SECTION VIII – EXPOSURE CONTROL MEASURES / PERSONAL PROTECTION**

---

**8.1 Components with limit values that require monitoring at the workplace:**

<b>Hazardous Components</b>	<b>CAS No.</b>	<b>PEL (OSHA) mg/M<sup>3</sup></b>	<b>TLV (ACGIH) mg/M<sup>3</sup></b>
Silica Sand, crystalline	14808-60-7	0.1	0.025 (resp)
Portland Cement	65997-15-1	5 (resp) 15 (total)	10 (resp)

## 8.2 Exposure Controls

Use ventilation adequate to keep exposures below recommended exposure limits.

## 8.3 General protective and hygienic measures

Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

### 8.3a Personal protective equipment

#### Protection of hands:

Wear gloves of adequate length to offer appropriate skin protection from splashes. Nitrile, Butyl and PVC gloves have been found to offer adequate protection for incidental contact. Precautions must be observed because burns occur with little warning -- little heat is sensed.

#### Eye protection:

Wear approved eye protection (properly fitted dust- or splash-proof chemical safety glasses).

#### Respiratory protection:

A NIOSH-approved dust mask or filtering face piece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional, following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).

---

## SECTION IX - PHYSICAL/CHEMICAL CHARACTERISTICS

---

### General Information

Appearance	Form: Granular Solid Color: Gray to gray-brown colored Odor: None
pH-value at 20°C (68 °F):	13 (10%)
Boiling point/Boiling range:	Not applicable
Flash point:	Not applicable
Auto igniting:	Product is not self-igniting
Vapor pressure at 21°C (70°F)	Not available
Density at 25°C (77 °F):	2.6 to 3.15
Solubility in / Miscibility with	
Water:	Insoluble
VOC content:	0 g/L VOC

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## SECTION X – STABILITY AND REACTIVITY

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### **10.1 Reactivity**

No dangerous reaction known under conditions of normal use.

### **10.2 Chemical stability**

Stable under normal storage conditions. Keep in dry storage.

### **10.3 Possibility of hazardous reaction**

No dangerous reaction known under conditions of normal use.

### **10.4 Thermal decomposition / conditions to be avoided**

No decomposition if used according to specifications.

### **10.5 Incompatible materials**

Contact of silica with powerful oxidizing agents such as fluorine, chlorine trifluoride, manganese trioxide, or oxygen difluoride may cause fires

### **10.6 Hazardous Decomposition or By-products**

Silica will dissolve in Hydrofluoric Acid and produce a corrosive gas – silicon tetrafluoride.

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## **SECTION XI – TOXICOLOGICAL INFORMATION**

---

**11.1 Exposure Routes:** Skin contact, skin adsorption, eye contact, inhalation, or ingestion.

**11.2 Symptoms related to physical/chemical/toxicological characteristics:**

**Inhalation:** May cause respiratory tract irritation. Causes damage to organs through prolonged or repeated exposure. This product contains crystalline silica. Prolonged or repeated inhalation of respirable silica from this product can cause silicosis.

**Skin contact:** Causes skin irritation. Handling can cause dry skin, discomfort, irritation, and dermatitis. May cause sensitization by skin contact. Product becomes extremely alkaline when exposed to moisture, and can cause alkali burns and affect the mucous membranes.

**Eye Contact:** Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

**Ingestion:** Harmful if swallowed. Ingestion may cause discomfort and/or distress, nausea or vomiting.

**11.3 Delayed, immediate and chronic effects of short-term and long-term exposure**

**Short Term**

**Skin Corrosion/Irritation:** Causes severe skin burns.

**Serious Eye Damage/Irritation:** Causes severe eye damage.

**Respiratory Sensitization:** Not available

**Skin Sensitization:** May cause an allergic skin reaction.

**Specific Target Organ Toxicity-Single Exposure:** (Category 1) Causes respiratory irritation.

**Aspiration Hazard:** Not available

#### **Long Term**

**Carcinogenicity:** May cause cancer through chronic inhalation.

**Germ Cell Mutagenicity:** Not available

**Reproductive Toxicity:** Not available

**Specific Target Organ Toxicity- Repeated Exposure:** (Category 1) Causes damage to lungs through prolonged/repeated exposure

**Synergistic/Antagonistic Effects:** Not available.

---

### **SECTION XII – ECOLOGICAL INFORMATION**

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#### **12.1 Ecotoxicity**

May cause long-term adverse effects to the aquatic environment. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Must not reach bodies of water or drainage ditch undiluted or un-neutralized

#### **12.2 Persistence and degradability**

No further relevant information available.

#### **12.3 Bioaccumulative potential:**

No further relevant information available.

#### **12.4 Mobility in soil**

No further relevant information available.

#### **12.5 Other Adverse Effects**

No further relevant information available.

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### **SECTION XIII – DISPOSAL CONSIDERATIONS**

---

#### **13.1 Waste Disposal Method**

The packaging and material may be land filled; however, material should be covered to minimize generation of airborne dust. This product is not classified as a hazardous waste under the authority of the RCRA (40CFR 261) or CERCLA (40CFR 117&302). Disposal must be made in accordance with local, state and federal regulations.

#### **13.2 Other disposal considerations**

Uncleaned packaging recommendation: Disposal must be made in accordance with local, state and federal regulations.

Recommended cleansing agent: Water, if necessary with cleansing agents.

---

**SECTION XIV – TRANSPORT INFORMATION**

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	DOT (U.S.)	TDG (Canada)
UN-Number	Not Regulated	Not Regulated
UN proper shipping name	Not Regulated	Not Regulated
Transport Hazard Class(es)	Not Regulated	Not Regulated
Packing Group (if applicable)	Not Regulated	Not Regulated

**14.1 Environmental hazards:**

Not Available

**14.2 Transport in bulk according to Annex II of Marpol 73/78 and the IBC Code**

Not available

**14.3 Special precautions for user**

Do not handle until all safety precautions have been read and understood.

---

**SECTION XV – OTHER REGULATORY INFORMATION**

---

**15.1 Safety, Health and Environmental Regulations/Legislations specific for the chemical****Canada**

**WHMIS Classification:** Considered to be a hazardous material under the Hazardous Products Act as defined by the Controlled Products Regulations and subject to the requirements of Health Canada's Workplace Hazardous Material Information (WHMIS). This document complies with the WHMIS requirements of the Hazardous Products Act (HPA) and the CPR.

**15.2 US Federal Information****SARA 302/311/312/313 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302, 311, 312 or 313.

**RCRA:** Crystalline silica (quartz) is not classified as a hazardous waste under the Resource Conservation and Recovery Act, or its regulations, 40 CFR §261 et seq.

**CERCLA:** Crystalline silica (quartz) is not classified as a hazardous substance under regulations of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), 40 CFR §302.

**Emergency Planning and Community Right to Know Act (SARA Title III):** Crystalline silica (quartz) is not an extremely hazardous substance under Section 302 and is not a toxic chemical subject to the requirements of Section 313.

**FDA:** Silica is included in the list of substances that may be included in coatings used in food contact surfaces, 21 CFR §175.300(b)(3)(xxvi).

**NTP:** Respirable crystalline silica, primarily quartz dusts occurring in industrial and occupational settings, is classified as Known to be a Human Carcinogen.

OSHA Carcinogen: Crystalline silica (quartz) is not listed.

### 15.3 State Right to Know Laws

California Prop. 65 Components

**WARNING:** This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

California Inhalation Reference Exposure Level (REL): California established a chronic REL of 3 µg for silica (crystalline, respirable). A chronic REL is an airborne level of a substance at or below which no adverse health effects are anticipated in individuals indefinitely exposed to the substance at that level.

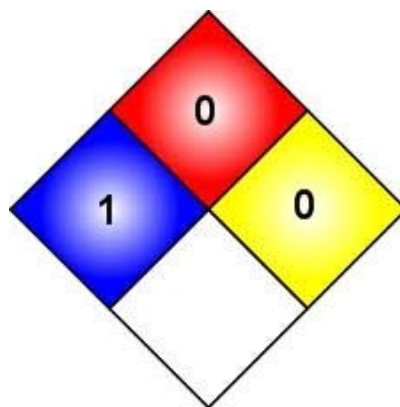
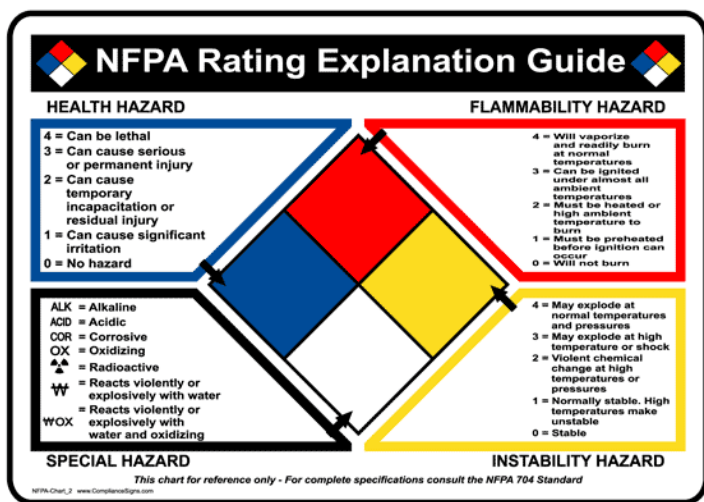
Massachusetts Toxic Use Reduction Act: Silica, crystalline (respirable size, <10 microns) is “toxic” for purposes of the Massachusetts Toxic Use Reduction Act.

### 15.4 Global Inventories

DSL All components of this product are on the Canadian DSL list.

TSCA No.: Crystalline silica (quartz) appears on the EPA TSCA inventory under the CAS No. 14808-60-7. All constituents are listed in the TSCA inventory.

### 15.5 NFPA Ratings



## SECTION XVI – OTHER INFORMATION

Last Updated: June 19, 2015

**NOTE:** The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to silica contained in our products.

Prepared by

SPEC MIX, Inc.

Phone (888) 773-2649

[www.SPECMIX.com](http://www.SPECMIX.com)

**End of SDS**



**TAMKO BUILDING PRODUCTS, INC. SAFETY DATA SHEET – T08A2015****1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION****TRADE NAME:** Saturated Felt Underlayments**LABEL:** NO.15, NO15UL, NO.15 ASTM D-4869 TYPE I, NO15 ASTM D-226 TYPE I, NO. 30, NO. 30UL, NO. 30 18 in, NO. 30 ASTM D-4869 TYPE I, NO.30 ASTM D-226 TYPE II, NO. 30 ASTM D-4869 TYPE III, NO. 30 ASTM SHAKE UNDERLAYMENT**USE & DESCRIPTION:** Underlayment**CHEMICAL FAMILY:** Mixture**MANUFACTURED BY:**

TAMKO Building Products, Inc.

P. O. Box 1404

Joplin, MO 64802-1404

www.TAMKO.com

**EMERGENCY TELEPHONE NUMBERS:**

General Information: 1-417-624-6644 (8 a.m. - 5 p.m. CST)

Chemtrec: 1-800-424-9300 (24 HOURS)

**2. HAZARDS IDENTIFICATION****SIGNAL WORD:** Danger**GHS CLASSIFICATION:**

Carcinogenicity – Category 1A

Skin Irritation – Category 2

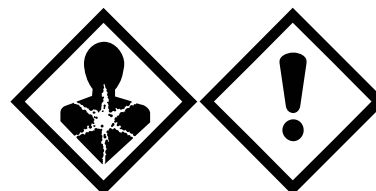
Sensitization (Skin) – Category 1

Eye Irritation – Category 2B

Specific Target Organ Toxicity, Repeated Exposure – Category 1

Specific Target Organ Toxicity, Single Exposure – Category 3

Sensitization (Respiratory) – Category 1

**HAZARD STATEMENTS:**

May cause cancer.

Causes damage to organs through prolonged or repeated exposure.

Causes skin and eye irritation.

May cause an allergic skin reaction.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause respiratory irritation

Additional hazard information: Can cause silicosis and other permanent lung damage.

**PRECAUTIONARY STATEMENTS:**Prevention

Obtain special instructions before use.

Avoid breathing dust.

Use only outdoors or in a well ventilated area.

Wash hands and exposed skin thoroughly after handling.

Do not handle until all safety precautions have been read and understood.

Wear protective gloves/protective clothing/eye protection/face protection.

In case of inadequate ventilation, wear respiratory protection.

Response

If on skin: Wash with plenty of water.

Specific treatment: See section 4-First Aid

In case of fire: See Section 5.

Take off contaminated clothing and wash before reuse.

Get medical advice/attention: If exposed or concerned or you feel unwell, if respiratory, eye and or skin irritation persists.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If inhaled: Remove person to fresh air and keep comfortable for breathing.

Storage

Store locked up, in a well-ventilated place.

Disposal

Dispose in accordance with Federal, State, and Local regulations. (See section 13 for additional information).

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Components	CAS No.	% by Weight	
Oxidized Asphalt	64742-93-4	20-30	
Asphalt	8052-42-4	20-30	NE= Not established
Felt***	NE	30-40	
***Contains Wood Dust	NE	60-80	

**4. FIRST AID MEASURES****EYE CONTACT:** Immediately flush eyes with plenty of cool water for at least 20 minutes, occasionally lifting the eye lids to ensure thorough rinsing. Get medical attention if irritation persists.**SKIN CONTACT:** Clean any exposed skin with warm soapy water if possible. If not, and a waterless hand cleaner is used, it should be without pumice. Do not use solvents or thinners to remove material from skin. Get medical attention if irritation persists or develops.**INGESTION:** If swallowed, do not induce vomiting. If vomiting occurs, keep head lower than hips to avoid aspiration of vomit into the lungs which can cause inflammation or pneumonitis. Call poison control center or get immediate medical attention.**INHALATION:** If inhalation of cured product particles, fumes, vapors, or mist occurs, remove person to fresh air. Drink water to clear throat or blow nose to clear. If not breathing, give artificial respiration or give oxygen by trained personnel and get immediate medical attention.**NOTES TO PHYSICIAN:** Treatment should be based on removing the source of irritation with treatment of symptoms as necessary.

**5. FIRE FIGHTING MEASURES**

**EXTINGUISHING MEDIA:** Dry chemical, CO<sub>2</sub>, or foam fire extinguisher should be used. Avoid use of straight-stream water.

**SPECIAL FIRE FIGHTING PROCEDURES:** Firefighters should not enter confined spaces without wearing a National Institute for Occupational Safety and Health (NIOSH) approved positive pressure self-contained breathing apparatus (SCBA) with full face mask and full protective equipment. Water may be used to cool containers in a fire-exposed area.

**UNUSUAL FIRE OR EXPLOSION HAZARDS:** When heated, fumes may burn if ignition source is provided. Petroleum asphalt fumes can explode if emitted in an enclosed environment and supplied with an ignition source. Burning product may cause thick black smoke.

**SEE SECTION 10 FOR COMBUSTION PRODUCTS**

**6. ACCIDENTAL RELEASE MEASURES**

**PRECAUTIONS IF MATERIAL IS SPILLED OR RELEASED:** Pick up large pieces. Do not dry sweep dusts or blow with air in confined area.

**WASTE DISPOSAL METHODS:** Dispose in accordance with applicable Federal, State, and Local regulations. Do not burn.

**7. HANDLING AND STORAGE**

**STORAGE TEMPERATURE:** Store away from heat and all ignition sources and open flames in accordance with applicable laws and regulations.

**PRODUCT SHOULD NOT BE BURNED OR HEATED USING A DIRECT FLAME DEVICE.**

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:** Follow recommended work practices and use recommended personal protective clothing and equipment. See Section 8 of this MSDS.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****EXPOSURE LIMITS**

Components	CAS No.	OSHA		ACGIH		
Raw Products		TWA	STEL	TWA	STEL	Unit
Oxidized Asphalt	64742-93-4	NE	NE	0.5**I	NE	mg/m <sup>3</sup>
Asphalt	8052-42-4	NE	NE	0.5**I	NE	mg/m <sup>3</sup>
Wood Dust	NE	15/5***	NE	1/.05****	NE	mg/m <sup>3</sup>
†Contains Crystalline Silica Quartz	14808-60-7	See 1910.1000 Table Z.3	NE	0.025	NE	mg/m <sup>3</sup>

NE= Not established

Note: Due to the form of the product, hazardous exposures from this product are not expected to occur. Gloves must be worn when handling and adequate ventilation must be provided during roofing related activities.

\*\* Asphalt Fume as benzene-soluble inhalable aerosol (Bitumen)

I = Inhalable Fraction

\*\*\* Total Nuisance Dust/Respirable Dust

\*\*\*\* Hardwood/Softwood

**RESPIRATORY PROTECTION:** Normally not needed in well-ventilated areas. If applicable exposure standards are exceeded or can be exceeded, use a NIOSH approved air-purifying respirator. If concentrations are sufficiently high that this respirator is inadequate, or high enough to cause oxygen deficiency, use a positive pressure self-contained breathing apparatus (SCBA). Follow all applicable respirator/SCBA use, fitting, training standards and regulations.

**VENTILATION:** Use only with adequate ventilation to maintain exposures below applicable exposure limits. Local exhaust ventilation and/or enclosure of the process may be required. All equipment must be explosion proof.

**EYE PROTECTION:** Chemical safety goggles with side-shields or face shield must be used if eye contact is possible.

**SKIN:** Chemical resistant gloves, apron, or other protective clothing needed to prevent skin contact. Must wear leather or heat-resistant gloves, long-sleeve cotton shirt, long pants with no cuffs, and non-skid shoes or boots with 6-inch leather uppers during application and/or tear off activities.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance and Odor:	Black asphalt saturated felt
Odor Threshold	Not Applicable
pH:	Not Applicable
Boiling Point:	>700 °F
Melting Point:	>200 °F
Flash Point:	Not Applicable
Autoignition Temperature:	>460°C/860°F
Viscosity:	Not Applicable
Decomposition Temperature:	Not Applicable

Upper/Lower Flammability or Explosive Limits:	Not Applicable
Vapor Pressure:	Not Applicable
Vapor Density (Air = 1):	Not Applicable
Specific Gravity/Relative Density:	Variable
Solubility (IES):	No data available
Initial Boiling Point and Boiling Range:	Not Applicable
Evaporation Rate (Butyl Acetate = 1):	<0.1
Flammability(Solid and Gas):	Not Applicable
Partition Coefficient: N-Octanol/Water:	Not Applicable

**10. STABILITY AND REACTIVITY**

**STABILITY:** Stable

**REACTIVITY:** Reactivity will not occur.

**CONDITIONS TO AVOID:** Keep from heat, sparks, open flame and other sources of ignition. Avoid contact with strong oxidizing agents.

**HAZARDOUS REACTION:** Polymerization will not occur.

**INCOMPATIBILITY (MATERIALS TO AVOID):** Strong acids or bases, oxidizing agents and selected amines.

**HAZARDOUS COMBUSTION PRODUCTS:** Carbon monoxide, carbon dioxide, ozone, hydrogen sulfide, oxides of sulfur and various hydrocarbons. These combustion products are not expected unless product is heated or burned.

## 11. TOXICOLOGICAL INFORMATION

**EYE** – Can cause eye irritation.

**SKIN** – Can cause skin irritation.

**INHALATION** – Dust may cause upper respiratory irritation.

**INGESTION** – May cause harmful effects if swallowed.

### THE FOLLOWING COMPONENT DATA IS PROVIDED FOR USER INFORMATION:

#### WOOD DUST

**Cancer** - This product contains wood dust. NTP and IARC have classified wood dust as a known human carcinogen. IARC concluded that there was increased risk of adenocarcinomas of the nasal cavities and paranasal sinuses. The physical nature of this product may help limit any inhalation hazard from wood dust during application and in its hardened state. However, physical forces such as grinding, drilling and other demolition work on this product may liberate wood dust.

**Acute Effects** - Exposure to wood dust can cause irritation of the eyes, nose and throat causing shortness of breath, dryness and soreness of the throat, sneezing, tearing and conjunctivitis. **Chronic Effects** – In addition to cancer, breathing of wood dust over a period of time can cause damage to the lung tissue and shortness of breath.

#### OXIDIZED ASPHALT

**Cancer** - This product contains oxidized asphalt. Occupational exposures to oxidized asphalt and its emissions during roofing activities has been classified by the International Agency for Research on Cancer (IARC) as "probably carcinogenic to humans" (Group 2A). IARC based this classification on its finding that available data from studies in humans points to an association between exposures to oxidized asphalts during roofing and cancers of the lung and upper aerodigestive tract. IARC also determined that there was sufficient evidence of carcinogenicity of extracts and condensates of oxidized asphalts in experimental animals. The oxidized asphalt in this product may contain small amounts of Polycyclic Aromatic Hydrocarbons (PAH's) some of which are recognized carcinogens in humans or experimental animals. Oxidized asphalt may also cause irritation of the respiratory tract. The physical nature of this product may help limit any inhalation hazard from oxidized asphalt during application in its hardened state. However, physical forces such as grinding, drilling and other demolition work on this product may liberate dust containing oxidized asphalt. Burning or heating of the product may cause fumes, vapors or mists.

**Acute Effects** - Inhalation of dust may cause nose, throat, respiratory tract, and mucous membrane irritation. Eye contact may cause severe irritation, redness, tearing, and blurred vision. If ingested, may cause mouth, throat and gastrointestinal tract irritation and upset with possible nausea, vomiting and diarrhea. See Section 8 for exposure controls.

**Chronic Effects** - In addition to cancer, prolonged or repeated skin contact may result in dryness and irritation of the skin. Long term skin exposure to asphalt can increase sensitivity to the sun, and may cause discoloration. Oxidized asphalt may also cause irritation of the upper respiratory tract.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity** – No data available

**Persistence and degradability** – No data available

**Bioaccumulative potential** – No data available

**Mobility in Soil** – No data available

**Other adverse effects (GHG, Ozone)** - No data available

## 13. DISPOSAL CONSIDERATIONS

This product has not been regulated as a hazardous waste by the USEPA. Dispose in accordance with Federal, State, and Local regulations.

## 14. TRANSPORT INFORMATION

This product is not regulated as a hazardous material for transport under 49 CFR or for vessel transport under the IMDG Code.

**DOT PROPER SHIPPING NAME:** Not Applicable

**DOT HAZARD CLASSIFICATION:** Not Applicable

**DOT LABELING REQUIREMENTS:** Not Applicable

**UN/NA NUMBER:** Not Applicable

**PACKING GROUP:** Not Applicable

**IMDG CODE:** Not Applicable

**IMDG SHIPPING NAME:** Not Applicable

**IMDG HAZARD CLASS:** Not Applicable

**UN/ID NUMBER:** Not Applicable

**PACKING GROUP NUMBER:** Not Applicable

## 15. REGULATORY INFORMATION

**TOXIC SUBSTANCES CONTROL ACT (TSCA):** Some components in this product are listed on the TSCA Inventory.

**COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT (CERCLA):** None

**SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA), TITLE III:**

Section 302 Extremely Hazardous Substances: None

Section 311/312 Hazard Categories: Immediate Health; Delayed Health; Fire Hazard

Section 313 Reportable Ingredients: None

**California Proposition 65: WARNING:** This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

**16. OTHER INFORMATION**

<u>HMIS Rating:</u>	<u>NFPA Rating:</u>
Health - * 1	Health - 1
Flammability - 1	Flammability - 1
Reactivity - 0	Reactivity - 0

Preparation Date: **April 2015****Disclaimer of Liability**

The information and recommendations contained herein are to the best of **TAMKO Building Products, Inc.**'s knowledge and belief, accurate and reliable as of the date issued. **TAMKO Building Products, Inc.** does not warrant or guarantee their accuracy or reliability, and **TAMKO Building Products, Inc.** shall not be liable for any loss or damage arising out of the use thereof.

The information and recommendations are offered for the user's consideration and examination, and it is the user's responsibility to satisfy his or herself that they are suitable and complete for the user's particular use.

# SAFETY DATA SHEET



Revision Date 21-May-2015  
Version 1

## 1. Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

Product name ADEPS® Adhesive  
Product code 011013

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Restricted to professional users  
Restrictions on use No information available  
Uses advised against Not suitable for use in homemaker (DIY) applications

### 1.3 Details of the supplier of the safety data sheet

Supplier Dryvit Systems, Inc  
One Energy Way,  
West Warwick, RI 02893  
Phone Number: (401) 822-4100  
Toll Free Number: (800) 556-7752

E-mail Address ehs@dryvit.com

### 1.4 Emergency telephone number

Emergency telephone number Chemtrec: +1 703-527-3887 ex-USA  
Chemtrec: 1-800-424-9300 USA

## 2. Hazards identification

### 2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910.1200

#### OSHA Regulatory Status

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122)

Skin sensitization	Category 1
Germ Cell Mutagenicity	Category 1B
Carcinogenicity	Category 1A

### 2.2 Label elements

#### Signal Word

Danger

**Hazard Statements**

May cause an allergic skin reaction  
 May cause genetic defects  
 May cause cancer

**Precautionary Statements - Prevention**

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Use personal protective equipment as required  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Contaminated work clothing should not be allowed out of the workplace

**Precautionary Statements - Response**

If exposed or concerned: Get medical advice/attention  
 IF ON SKIN: Wash with plenty of soap and water  
 If skin irritation or rash occurs: Get medical advice/attention  
 Wash contaminated clothing before reuse

**Precautionary Statements - Storage**

Store in accordance with local regulations

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**2.3 Other Hazards Hazards not otherwise classified (HNOC)**

Not Applicable

**2.4 Other information**

Not Applicable

**Unknown Acute Toxicity**

No information available

### 3. Composition/Information on Ingredients

**Substance**

Chemical Name	CAS-No	Weight %
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND	14808-60-7	60 - 70%
Chlorinated paraffin resin - long chain C18-28	63449-39-8	0 - 10%
Ethylene oxide	75-21-8	0 - 10%
2-Propenoic acid (Acrylic Acid)	79-10-7	0 - 10%
Hexahydro-1,3,5-tris(hydroxyethyl)-s-triazine	4719-04-4	0 - 10%
HYDROCARBON DISTILLATE	64742-65-0	0 - 10%

\*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

### 4. First aid measures

**4.1 Description of first-aid measures****General advice**

If symptoms persist, call a physician.

**Eye contact**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Call a physician if irritation develops or persists.

**Skin contact**

Immediate medical attention is not required. Call a physician if irritation develops or persists.

**Inhalation**

Immediate medical attention is not required. Get medical attention if symptoms occur. Call a physician if irritation develops or persists.

**Ingestion**

If swallowed, do not induce vomiting - seek medical advice.

**4.2 Most important symptoms and effects, both acute and delayed****Symptoms**

No information available.

**4.3 Recommendations for immediate medical care and/or special treatment****Notes to physician**

No information available.

## 5. Fire-Fighting Measures

**5.1 Extinguishing media****Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media**      None.

**5.2 Specific hazards arising from the substance or mixture****Special Hazard**

No information available

**Hazardous Combustion Products**      No information available.

**Explosion Data**

**Sensitivity to Mechanical Impact**      No information available.

**Sensitivity to Static Discharge**      No information available.

**5.3 Advice for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. Accidental Release Measures

**6.1 Personal precautions, protective equipment and emergency procedures**

Personal protection needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the training and the expertise of employees in the area responding to the spill.

**6.2 Environmental precautions**

Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological information.

**6.3 Methods and materials for containment and cleaning up****Methods for Containment**

Spills and leaks are not likely. Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up**

Pick up and transfer to properly labeled containers.

## 7. Handling and storage

**7.1 Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

**Hygiene measures** Handle in accordance with good industrial hygiene and safety practice.

**7.2 Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep in a dry, cool and well-ventilated place. Keep out of the reach of children. Store in accordance with local regulations. Keep from freezing.

**Materials to Avoid** Strong oxidizing agents. Strong acids. Strong bases.

**8. Exposure controls/personal protection****8.1 Occupational Exposure Limits (OEL)**

Chemical Name	ACGIH TLV	OSHA PEL	British Columbia	Alberta	Quebec	Ontario TWAEV
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND 14808-60-7	TWA: 0.025 mg/m <sup>3</sup> respirable fraction	: (30)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA total dust : (250)/(%SiO <sub>2</sub> + 5) mppcf TWA respirable fraction : (10)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA respirable fraction	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>	TWA: 0.10 mg/m <sup>3</sup>
Ethylene oxide 75-21-8	TWA: 1 ppm	TWA: 1 ppm STEL: 5 ppm see 29 CFR 1910.1047	TWA: 0.1 ppm STEL: 1 ppm Adverse reproductive effect	TWA: 1 ppm TWA: 1.8 mg/m <sup>3</sup>	TWA: 1 ppm TWA: 1.8 mg/m <sup>3</sup>	TWA: 1 ppm TWA: 1.8 mg/m <sup>3</sup> STEL: 10 ppm STEL: 18 mg/m <sup>3</sup>
2-Propenoic acid (Acrylic Acid) 79-10-7	TWA: 2 ppm S*	-	TWA: 2 ppm Skin Adverse reproductive effect	TWA: 2 ppm TWA: 5.9 mg/m <sup>3</sup> Skin	TWA: 2 ppm TWA: 5.9 mg/m <sup>3</sup> Skin	TWA: 2 ppm Skin

**8.2 Appropriate engineering controls**

**Engineering Measures** Ensure adequate ventilation, especially in confined areas.

**8.3 Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** If splashes are likely to occur, wear: Tightly fitting safety goggles.

**Skin and body protection** Wear protective gloves/ protective clothing.

**Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**Hygiene measures** See section 7 for more information



## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Viscous liquid
Color	Off-white Gray or Colored liquid
Odor	Faint
Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Methods</u>
pH	>8	
Melting/freezing point		No information available
Boiling point/boiling range	> 100 °C	
Flash Point	no data available	No information available
Evaporation rate		
Flammability (solid, gas)		No information available
Flammability Limits in Air		
upper flammability limit		No information available
lower flammability limit		No information available
Vapor pressure		No information available
Vapor density		No information available
Specific Gravity	0.96 – 1.80 g/cc	
Water solubility	Soluble in water	
Solubility in other solvents		No information available
Partition coefficient		No information available
Autoignition temperature		
Decomposition temperature		
Viscosity, kinematic		No information available
Viscosity, dynamic		No information available
Explosive properties		No information available
Oxidizing Properties		No information available

### 9.2 Other information

Volatile organic compounds (VOC) content	no data available
Density	8.0 – 15.0 lbs/gal

## 10. Stability and Reactivity

### 10.1 Reactivity

No dangerous reaction known under conditions of normal use

.

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

None under normal processing.

### 10.4 Conditions to Avoid

Do not freeze. To avoid thermal decomposition, do not overheat.

### 10.5 Incompatible Materials

Strong oxidizing agents. Strong acids. Strong bases.

**10.6 Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating gases and vapors.

**11. Toxicological information****11.1 Acute toxicity****Numerical measures of toxicity: Product Information**

The following values are calculated based on chapter 3.1 of the GHS document

**Unknown Acute Toxicity** No information available

**Numerical measures of toxicity: Component Information**

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND 14808-60-7	500 mg/kg ( Rat )	-	-
Ethylene oxide 75-21-8	72 mg/kg ( Rat )	-	= 800 ppm ( Rat ) 4 h
2-Propenoic acid (Acrylic Acid) 79-10-7	193 mg/kg ( Rat )	= 295 mg/kg ( Rabbit )	= 11.1 mg/L ( Rat ) 1 h = 3.6 mg/L ( Rat ) 4 h

**11.2 Information on toxicological effects****Skin corrosion/irritation**Product Information

- No information available

Component Information

- No information available

**Eye damage/irritation**Product Information

- No information available

Component Information

- No information available

**Respiratory or skin sensitization**Product Information

- May cause allergic skin reaction

Component Information

- No information available

**Germ Cell Mutagenicity**Product Information

- Mutagenic

Component Information

- No information available

**Carcinogenicity**

- The table below indicates whether each agency has listed any ingredient as a carcinogen

Chemical Name	ACGIH	IARC	NTP	OSHA
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND 14808-60-7	A2	Group 1	Known	
Chlorinated paraffin resin - long chain C18-28	-	Group 2B	-	

63449-39-8				
Ethylene oxide 75-21-8	A2	Group 1 Group 2A	Known	
HYDROCARBON DISTILLATE 64742-65-0	A2	Group 1	-	

**Reproductive toxicity**Product Information

- No information available

Component Information

- No information available

**STOT - single exposure**

No information available

**STOT - repeated exposure**

No information available

**Other adverse effects**Target Organs

- None under normal use conditions

Product Information

- No information available

Component Information

- No information available

**Aspiration hazard**Product Information

- No information available

Component Information

- No information available

## 12. Ecological information

**12.1 Toxicity****Ecotoxicity**

No information available

**Ecotoxicity effects**

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Chlorinated paraffin resin - long chain C18-28 63449-39-8	-	LC50: 96 h <i>Lepomis macrochirus</i> 300 mg/L static LC50: 96 h <i>Oncorhynchus mykiss</i> 0.0109 mg/L flow-through LC50: 96 h <i>Oncorhynchus mykiss</i> 94.5 - 271 mg/L static LC50: 96 h <i>Lepomis macrochirus</i> 0.1 mg/L flow-through LC50: 96 h <i>Pimephales promelas</i> 100 mg/L static	-
Ethylene oxide 75-21-8	-	LC50: 96 h <i>Pimephales promelas</i> 73 - 96 mg/L	LC50: 48 h <i>Daphnia magna</i> 137 - 300 mg/L
2-Propenoic acid (Acrylic Acid) 79-10-7	EC50: 96 h <i>Pseudokirchneriella subcapitata</i> 0.17 mg/L EC50: 72 h <i>Desmodesmus subspicatus</i> 0.04 mg/L	LC50: 96 h <i>Brachydanio rerio</i> 222 mg/L semi-static	EC50: 48 h <i>Daphnia magna</i> 95 mg/L
HYDROCARBON DISTILLATE 64742-65-0	-	LC50: 96 h <i>Oncorhynchus mykiss</i> 5000 mg/L	EC50: 48 h <i>Daphnia magna</i> 1000 mg/L

**12.2 Persistence and degradability**

No information available.

**12.3 Bioaccumulative potential**

Discharge into the environment must be avoided

Chemical Name	log Pow
Chlorinated paraffin resin - long chain C18-28 63449-39-8	6
Ethylene oxide 75-21-8	-0.3
2-Propenoic acid (Acrylic Acid) 79-10-7	0.46

**12.4 Mobility in soil**

No information available.

**12.5 Other adverse effects**

No information available

## 13. Disposal Considerations

**13.1 Waste Disposal Guidance**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

## 14. Transport Information

**DOT** Not regulated

**MEX** Not regulated

**IMDG** Not regulated

**IATA** Not regulated

## 15. Regulatory information

**15.1 International Inventories**

**TSCA** -  
**DSL** -  
**EINECS/ELINCS** -  
**ENCS** -  
**IECSC** -  
**KECL** -  
**PICCS** -  
**AICS** -  
**NZIoC** -

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL** - Canadian Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**NZIoC** - New Zealand Inventory of Chemicals

**15.2 U.S. Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	SARA 313 - Threshold Values %
Ethylene oxide 75-21-8	0.1

**15.3 Pesticide Information**

Not applicable

**15.4 U.S. State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND - 14808-60-7	Carcinogen
Chlorinated paraffin resin - long chain C18-28 - 63449-39-8	Carcinogen
Ethylene oxide - 75-21-8	Carcinogen Developmental Female Reproductive Male Reproductive
Chlorothalonil - 1897-45-6	Carcinogen
SULPHURIC ACID - 7664-93-9	Carcinogen
ETHYL ACRYLATE - 140-88-5	Carcinogen

**16. Other information**

<b>NFPA</b>	<b>Health Hazard 1</b>	<b>Flammability 0</b>	<b>Instability 0</b>	<b>Physical and chemical hazards *</b>
<b>HMIS</b>	<b>Health Hazard 1</b>	<b>Flammability 0</b>	<b>Physical Hazard 0</b>	<b>Personal protection B</b>

**Legend:**

ACGIH (American Conference of Governmental Industrial Hygienists)

Ceiling (C)

DOT (Department of Transportation)

EPA (Environmental Protection Agency)

IARC (International Agency for Research on Cancer)

International Air Transport Association (IATA)

International Maritime Dangerous Goods (IMDG)

NIOSH (National Institute for Occupational Safety and Health)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

PEL (Permissible Exposure Limit)

Reportable Quantity (RQ)

Skin designation (S\*)

STEL (Short Term Exposure Limit)

TLV® (Threshold Limit Value)

TWA (time-weighted average)

**Revision Date**

21-May-2015

**Revision Note**

No information available

**Disclaimer**

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

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**End of Safety Data Sheet**

# Safety Data Sheet

## AP ADHESIVE



Revision date: 06/28/2016  
Version: 2.1

Page: 1/12

### 1. Identification

Product identifier used on the label: AP Adhesive  
Recommended use of the chemical and restriction on use  
Recommended use\*: for industrial and professional users

• The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied. Including by incorporation into or reference in the seller's sales agreement.

#### Details of the supplier of the safety data sheet

Supplier:  
Dryvit Systems, Inc  
One Energy Way,  
West Warwick, RI 02893

Phone Number: (401) 822-4100  
Toll Free Number: (800) 556-7752

E-mail Address: ehs@dryvit.com

Emergency telephone number

Emergency telephone number Chemtrec: +1 703-527-3887 ex-USA  
Chemtrec: 1-800-424-9300 USA

#### Other means of identification

Chemical family: No data available.

### 2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard: 29 CFR part 1910.1200

#### Classification of the product

Acute Tox.	4 (Inhalation - mist)	Acute toxicity
Skin Corr./Irrit.	2	Skin corrosion/irritation
Eye Dam./Irrit.	2A	Serious eye damage/eye irritation
Resp. Sens.	1	Respiratory sensitization
Skin Sens.	18	Skin sensitization
STOT SE	3 (irritating to respiratory system)	Specific target organ toxicity — single exposure

STOT RE                      2 {by inhalation}                      Specific target organ toxicity — repeated exposure

## Label elements

Pictogram:



Signal Word:  
Danger

Hazard Statement:

H320	Causes eye irritation.
H315	Causes skin irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.
H373	May cause damage to organs (Olfactory organs) through prolonged or repeated exposure (inhalation).

Precautionary Statements (Prevention):

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P271	Use only outdoors or in a well-ventilated area.
P201	Obtain special instructions before use.
P260	Do not breathe dust/gas/mist/vapours.
P261	Avoid breathing mist.
P202	Do not handle until all safety precautions have been read and understood.
P284	In case of inadequate ventilation wear respiratory protection.
P272	Contaminated work clothing should not be allowed out of the workplace.
P264	Wash with plenty of water and soap thoroughly after handling.

Precautionary Statements (Response):

P308 + P311	IF exposed or concerned: Call a POISON CENTER or doctor/physician.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P314	Get medical advice/attention if you feel unwell.
P303 + P361	IF ON SKIN (or hair): Wash with plenty of soap and water.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P337 + P311	If eye irritation persists: Call a POISON CENTER or doctor/physician.

Precautionary Statements (Storage):

P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

Precautionary Statements (Disposal):

P501	Dispose of contents/container to hazardous or special waste collection point.
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Version: 2.1

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### Hazards not otherwise classified

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

Labeling of special preparations (GHS):

CONTAINS ISOCYANATES. INHALATION OF ISOCYANATE MISTS OR VAPORS MAY CAUSE RESPIRATORY IRRITATION, BREATHLESSNESS, CHEST DISCOMFORT AND REDUCED PULMONARY FUNCTION. OVEREXPOSURE WELL ABOVE THE PEL MAY RESULT IN BRONCHITIS. BRONCHIAL SPASMS AND PULMONARY EDEMA. LONG-TERM EXPOSURE TO ISOCYANATES HAS BEEN REPORTED TO CAUSE LUNG DAMAGE, INCLUDING REDUCED LUNG FUNCTION WHICH MAY BE PERMANENT. ACUTE OR CHRONIC OVEREXPOSURE TO ISOCYANATES MAY CAUSE SENSITIZATION IN SOME INDIVIDUALS, RESULTING IN ALLERGIC RESPIRATORY REACTIONS INCLUDING WHEEZING, SHORTNESS OF BREATH AND DIFFICULTY BREATHING. ANIMAL TESTS INDICATE THAT SKIN CONTACT MAY PLAY A ROLE IN CAUSING RESPIRATORY SENSITIZATION.

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## 3. Composition / Information on Ingredients

Accordjgg to Regylatjog 2012 OSHA Hazard Commugjcatjog Stagdard: 29 CFR part 1910.1200

CAS Nymber	Wejgbt %	Cbemjcal game
58228-06-1	>= 25.0 - < 50.0%	Isocyanic acid, polymethylenepolyphenylene ester, polymer with methylo xirane polymer with oxirane ether with 2-ethyl-2-(hydroxymethyl)-1,3-p ropanediol (3:1)
14807-96-6	>= 25.0 - < 50.0%	talc
101-68-8	>= 10.0 - < 15.0%	Diphenylmethane-4,4'-diisocyanate (MDI)
64742-46-7	>= 7.0 - < 10.0%	Distillates (petroleum), hydrotreated middle
26447-40-5	>= 3.0 - < 5.0%	Methylenediphenyl diisocyanate
9016-87-9	>= 1.0 - < 3.0%	P-MDI
57636-09-6	>= 0.1 - < 0.2%	Isocyanic acid, polymethylenepolyphenylene ester, polymer with .alpha.-hydro- .ornega.-hydroxypoly(oxy-1,2-ethanediyl)

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## 4. First-Aid Measures

### Description of first aid measures

#### General advice:

First aid personnel should pay attention to their own safety. Remove contaminated clothing.

#### If inhaled:

Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary. Immediate medical attention required.

#### If on skin:

Wash affected areas thoroughly with soap and water. If irritation develops, seek medical attention.

#### If in eyes:

In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Immediate medical attention required.

**If swallowed:**

Rinse mouth and then drink plenty of water. Do not induce vomiting. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Immediate medical attention required.

**Most important symptoms and effects, both acute and delayed**

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Hazards: Respiratory sensitization may result in allergic (asthma-like) signs in the lower respiratory tract including wheezing, shortness of breath and difficulty breathing, the onset of which may be delayed. Repeated inhalation of high concentrations may cause lung damage, including reduced lung function, which may be permanent. Substances eliciting lower respiratory tract irritation may worsen the asthma-like reactions that may be produced by product exposures.

**Indication of any immediate medical attention and special treatment needed**

Note to physician

Treatment:	Treat according to symptoms (decontamination, vital functions), no known specific antidote.
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## 5. Fire-Fighting Measures

**Extinguishing media**

Suitable extinguishing media:  
foam, water spray, dry powder, carbon dioxide

Unsuitable extinguishing media for safety reasons:  
water jet

**Special hazards arising from the substance or mixture**

Hazards during fire-fighting:  
nitrous gases, fumes/smoke, isocyanate, vapor

**Advice for fire-fighters**

Protective equipment for fire-fighting:  
Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

**Further information:**

Keep containers cool by spraying with water if exposed to fire. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

---

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

Clear area. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.

**Environmental precautions**

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

### Methods and material for containment and cleaning up

For small amounts: Absorb isocyanate with suitable absorbent material (see § 40 CFR, sections 260, 264 and 265 for further information). Shovel into open container. Do not make container pressure tight. Move container to a well-ventilated area (outside). Spill area can be decontaminated with the following recommended decontamination solution: Mixture of 90 % water, 8 % concentrated ammonia, 2 % detergent. Add at a 10 to 1 ratio. Allow to stand for at least 48 hours to allow escape of evolved carbon dioxide.

For large amounts; If temporary control of isocyanate vapor is required, a blanket of protein foam or other suitable foam (available from most fire departments) may be placed over the spill. Transfer as much liquid as possible via pump or vacuum device into closed but not sealed containers for disposal.

For residues: The following measures should be taken for final cleanup: Wash down spill area with decontamination solution. Allow solution to stand for at least 10 minutes.  
Dike spillage.

## 7. Handling and Storage

### Precautions for safe handling

Provide suitable exhaust ventilation at the processing machines. Ensure thorough ventilation of stores and work areas. Avoid aerosol formation. When handling heated product, vapours of the product should be ventilated, and respiratory protection used. Wear respiratory protection when spraying. Danger of bursting when sealed gas tight. Protect against moisture. If bulging of drum occurs, transfer to well ventilated area, puncture to relieve pressure, open vent and let stand for 48 hours before resealing.

Protection against fire and explosion:

Keep away from sources of ignition - No smoking. The relevant fire protection measures should be noted.

### Conditions for safe storage, including any incompatibilities

No applicable information available.

Suitable materials for containers: tinned carbon steel (Tinplate)

Further information on storage conditions: Keep only in the original container in a cool, well-ventilated place. Protect from direct sunlight. Store protected against freezing.

## 8. Exposure Controls/Personal Protection

### Components with occupational exposure limits

Diphenylmethane-4,4'-diisocyanate (MDI)	OSHA PEL	CLV 0.02 ppm 0.2 mg/m <sup>3</sup> ; CLV 0.02 ppm 0.2 mg/m <sup>3</sup> ;
	ACGIH TLV	TWA value 0.005 ppm ;
P-MDI	OSHA PEL	CLV 0.02 ppm 0.2 mg/m <sup>3</sup> ; CLV 0.02 ppm 0.2 mg/m <sup>3</sup> ;
	ACGIH TLV	TWA value 0.005 ppm ;

talc	OSHA PEL	<p>TWA value 20 millions of particles per cubic foot of air ; TWA value 2.4 millions of particles per cubic foot of air Respirable ;</p> <p>The exposure limit is calculated from the equation, <math>250/(\%SiO_2+5)</math>, using a value of 100% SiO<sub>2</sub>. Lower percentages of SiO<sub>2</sub> will yield higher exposure limits.</p> <p>TWA value 0.1 mg/m<sup>3</sup> Respirable ;</p> <p>The exposure limit is calculated from the equation, <math>10/(\%SiO_2+2)</math>, using a value of 100% SiO<sub>2</sub>. Lower percentages of SiO<sub>2</sub> will yield higher exposure limits.</p> <p>TWA value 0.3 mg/m<sup>3</sup> Total dust ;</p> <p>The exposure limit is calculated from the equation, <math>30/(\%SiO_2+2)</math>, using a value of 100% SiO<sub>2</sub>. Lower percentages of SiO<sub>2</sub> will yield higher exposure limits.</p> <p>TWA value 2 mg/m<sup>3</sup> Respirable dust ; TWA value 0.3 mg/m<sup>3</sup> Total dust ;</p> <p>The exposure limit is calculated from the equation, <math>30/(\%SiO_2+2)</math>, using a value of 100% SiO<sub>2</sub>. Lower percentages of SiO<sub>2</sub> will yield higher exposure limits.</p> <p>TWA value 0.1 mg/m<sup>3</sup> Respirable ; The exposure limit is calculated from the equation, <math>10/(\%SiO_2+2)</math>, using a value of 100% SiO<sub>2</sub>. Lower percentages of SiO<sub>2</sub> will yield higher exposure limits.</p> <p>TWA value 2.4 millions of particles per cubic foot of air Respirable ;</p> <p>The exposure limit is calculated from the equation, <math>250/(\%SiO_2+5)</math>, using a value of 100% SiO<sub>2</sub>. Lower percentages of SiO<sub>2</sub> will yield higher exposure limits.</p>
	ACGIH TLV	<p>TWA value 20 millions of particles per cubic foot of air ;</p> <p>TWA value 2 mg/m<sup>3</sup> Respirable fraction ;</p> <p>The value is for particulate matter containing no asbestos and &lt;1% crystalline silica.</p>
Distillates (petroleum), hydrotreated middle	OSHA PEL	<p>PEL 5 mg/m<sup>3</sup> Mist ; TWA value 5 mg/m<sup>3</sup> Mist</p>
	ACGIH TLV	<p>Included in the regulation, but with no data values - See the regulation for further details</p> <p>Exposure by all routes should be carefully controlled to levels as low as possible.</p> <p>TWA value 5 mg/m<sup>3</sup> Inhalable fraction ;</p>

Advice on system design:  
No applicable information available.

**Personal protective equipment****Respiratory protection:**

When workers are facing concentrations above the occupational exposure limits they must use appropriate certified respirators. When atmospheric levels may exceed the occupational exposure limit (PEL or TLV) NIOSH-certified air-purifying respirators equipped with an organic vapor sorbent and particulate filter can be used as long as appropriate precautions and change out schedules are in place. For emergency or non-routine, high exposure situations, including confined space entry, use a NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions.

**Hand protection:**

Chemical resistant protective gloves should be worn to prevent all skin contact. Suitable materials may include, chloroprene rubber (Neoprene), nitrile rubber (Buna N), chlorinated polyethylene, polyvinylchloride (Pylox), butyl rubber, depending upon conditions of use.

**Eye protection:**

Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

**Body protection:**

Cover as much of the exposed skin as possible to prevent all skin contact. Suitable materials may include, saran-coated material, depending upon conditions of use.

**General safety and hygiene measures:**

Wear protective clothing as necessary to prevent contact. Eye wash fountains and safety showers must be easily accessible. Observe the appropriate PEL or TLV value. Wash soiled clothing immediately. Contaminated equipment or clothing should be cleaned after each use or disposed of.

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**9. Physical and Chemical Properties**

Form:	paste
Odour:	oily, mild
Odour threshold:	No applicable information available.
Colour:	tan
pH value:	neutral to slightly alkaline
Melting point:	The product has not been tested.
Boiling point:	172.22- 267.78
Sublimation point:	- C
Flash point:	- C
Flammability:	No applicable information available.
Lower explosion limit:	121.11 °C
Upper explosion limit:	not highly flammable
Autoignition:	1.6 %(V)
Vapour pressure:	10.2 %(V)
Relative density:	No data available.
Bulk density:	No data available.
Vapour density:	1.26
Partitioning coefficient n-octanol/water (log Pow):	1,800 - 2,400 kg/m3
Self-ignition temperature:	Heavier than air.
Thermal decomposition:	No data available.
	not self-igniting
Viscosity, dynamic:	No decomposition if stored and handled as prescribed/indicated.
Viscosity, kinematic:	No data available.
Solubility in water:	No data available.
Solubility (quantitative):	No applicable information available.
Solubility (qualitative):	No applicable information available.
	slightly soluble
	No applicable information available.

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Evaporation rate:	No applicable information available.
Other Information:	If necessary, information on other physical and chemical parameters is indicated in this section.

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## 10. Stability and Reactivity

### Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

### Oxidizing properties:

Based on its structural properties the product is not classified as oxidizing.

### Chemical stability

The product is stable if stored and handled as prescribed/indicated.

### Possibility of hazardous reactions

The product is stable if stored and handled as prescribed/indicated.

### Conditions to avoid

See MSDS section 7 - Handling and storage.

### Incompatible materials

strong oxidizing agents, strong bases, strong acids

### Hazardous decomposition products

#### Decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated.

#### Thermal decomposition:

No decomposition if stored and handled as prescribed/indicated.

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## 11. Toxicological information

### Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

### Acute Toxicity/Effects

#### Acute toxicity

Assessment of acute toxicity: Inhalation of vapours may cause irritation of the mucous membranes of the nose, throat or trachea, breathlessness, chest discomfort, difficult breathing and reduced pulmonary function. Inhalation exposure well above the PEL may result additionally in eye irritation, headache, chemical bronchitis, asthma-like findings or pulmonary edema. Isocyanates have also been reported to cause hypersensitivity pneumonitis, which is characterized by flu-like symptoms, the onset of which may be delayed.

#### Oral

No applicable information available.

Type of value: ATE

Value: > 5,000 mg/kg

#### Inhalation

Type of value: ATE

Value: 3.45 mg/l

Determined for mist

#### Dermal

Type of value: ATE

Value: > 5,000 mg/kg

#### Assessment other acute effects

Assessment of STOT single:

Causes temporary irritation of the respiratory tract.

#### Irritation / corrosion

Assessment of irritating effects: Irritating to eyes, respiratory system and skin. Skin contact may result in dermatitis, either irritative or allergic.

#### Sensitization

Assessment of sensitization: Sensitization after skin contact possible. As a result of previous repeated overexposures or a single large dose, certain individuals will develop isocyanate sensitization (chemical asthma) which will cause them to react to a later exposure to isocyanate at levels well below the PELITLV. These symptoms, which include chest tightness, wheezing, cough, shortness of breath, or asthmatic attack, could be immediate or delayed up to several hours after exposure. Similar to many non-specific asthmatic responses, there are reports that once sensitized an individual can experience these symptoms upon exposure to dust, cold air, or other irritants. This increased lung sensitivity can persist for weeks and in severe cases for several years. Chronic overexposure to isocyanates has also been reported to cause lung damage, including a decrease in lung function, which may be permanent. Prolonged contact can cause reddening, swelling, rash, scaling, or blistering. In those who have developed a skin sensitization, these symptoms can develop as a result of contact with very small amounts of liquid material, or even as a result of vapour-only exposure. Animal tests indicate that skin contact may play a role in causing respiratory sensitization.

#### Aspiration Hazard

Study scientifically not justified.

### **Chronic Toxicity/Effects**

#### Repeated dose toxicity

Assessment of repeated dose toxicity: The substance may cause damage to the olfactory epithelium after repeated inhalation. The substance may cause damage to the lung after repeated inhalation. These effects are not relevant to humans at occupational levels of exposure.

#### Genetic toxicity

Assessment of mutagenicity: The substance was mutagenic in various bacterial test systems; however, these results could not be confirmed in tests with mammals.

#### Carcinogenicity

Assessment of carcinogenicity: A carcinogenic potential cannot be excluded after prolonged exposure to severely irritating concentrations. These effects are not relevant to humans at occupational levels of exposure. IARC Group 3 (not classifiable as to human carcinogenicity).

#### *Information on: Titanium dioxide*

*Assessment of carcinogenicity: IARC (International Agency for Research on Cancer) has classified this substance as group 2B (The agent is possibly carcinogenic to humans). In long-term studies in rats in which the substance was given by inhalation, a carcinogenic effect was observed. Tumors were only observed in rats after chronic inhalative exposure to high concentrations which caused*



*sustained lung inflammation. In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed. Dermal exposure is not expected to be carcinogenic.*

#### Reproductive toxicity

Assessment of reproduction toxicity: Repeated inhalative uptake of the substance did not cause damage to the reproductive organs.

#### Teratogenicity

Assessment of teratogenicity: The substance did not cause malformations in animal studies; however, toxicity to development was observed at high doses that were toxic to the parental animals.

#### Other Information

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses. The product has not been tested. The statements on toxicology have been derived from the properties of the individual components.

### **Symptoms of Exposure**

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

#### Medical conditions aggravated by overexposure

The isocyanate component is a respiratory sensitizer. It may cause allergic reaction leading to asthma-like spasms of the bronchial tubes and difficulty in breathing. Medical supervision of all employees who handle or come into contact with isocyanates is recommended. Contact may aggravate pulmonary disorders. Persons with history of respiratory disease or hypersensitivity should not be exposed to this product. Preemployment and periodic medical examinations with respiratory function tests (FEV, FVC as a minimum) are suggested. Persons with asthmatic conditions, chronic bronchitis, other chronic respiratory diseases, recurrent eczema or pulmonary sensitization should be excluded from working with isocyanates. Once a person is diagnosed as having pulmonary sensitization (allergic asthma) to isocyanates, further exposure is not recommended.

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## **12. Ecological Information**

### **Toxicity**

#### Aquatic toxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations. Based on long-term (chronic) toxicity study data, the product is very likely not harmful to aquatic organisms.

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

### **Persistence and degradability**

Assessment biodegradation and elimination (H20)

Not readily biodegradable (by OECD criteria).

### **Bioaccumulative potential**



#### Assessment bioaccumulation potential

Based on a weight of evidence, the compound will not bioaccumulate.

#### Mobility in soil

#### Assessment transport between environmental compartments

The substance will not evaporate into the atmosphere from the water surface.

Adsorption to solid soil phase is not expected.

#### Additional information

#### Other ecotoxicological advice:

Do not release untreated into natural waters. Do not allow to enter soil, waterways or waste water channels. The product has not been tested. The statement has been derived from the properties of the individual components.

### 13. Disposal considerations

#### Waste disposal of substance:

Dispose of in accordance with local authority regulations. Do not discharge into drains/surface waters/groundwater.

### 14. Transport Information

#### Land transport

USDOT

Not classified as a dangerous good under transport regulations

#### Sea transport

IMDG

Not classified as a dangerous good under transport regulations

#### Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

### 15. Regulatory Information

#### Federal Regulations

#### Registration status:

Chemical TSCA, US released /listed

EPCRA 311/312 (Hazard categories):

Acute; Chronic

#### CERCLARQ

5000 LBS

#### CAS Nymber

7664-38-2; 78-93-3; 101-68-8; 9016-87-9

#### Cbem jca! name

phosphoric acid; Methylethylketone; Diphenylmethane-4,4'-diisocyanate (MDI); P-MDI

1000 LBS

7705-08-0; 108-

Iron trichloride: Toluene

100 LBS                      88-3  
                                     108-90-7                      chlorobenzene

CA Prop. 65:  
 WARNING: THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

NFPA Hazard codes:  
 Health : 2              Fire: 1              Reactivity: 0              Special:

Assessment of the hazard classes according to UN GHS criteria (most recent version)

Acute Tox.	4 (Inhalation - mist)	Acute toxicity
Eye Dam./Irrit.	2A	Serious eye damage/eye irritation
Skin Corr./Irrit.	2	Skin corrosion/irritation
Resp. Sens.	1	Respiratory sensitization
STOT SE	3 (irritating to respiratory system)	Specific target organ toxicity-single exposure
STOT RE	2	Specific target organ toxicity-repeated exposure

## 16. Other Information

IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE, IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY OUR COMPANY HEREUNDER ARE GIVEN GRATIS AND WE ASSUME NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK.

END OF DATA SHEET

# SAFETY DATA SHEET



Revision Date 28-May-2015  
Version 1

## 1. Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

Product name EPS Adhesive For Stucco  
Product code 043011

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Restricted to professional users  
Restrictions on use No information available  
Uses advised against Not suitable for use in homemaker (DIY) applications

### 1.3 Details of the supplier of the safety data sheet

Supplier Dryvit Systems, Inc  
One Energy Way,  
West Warwick, RI 02893  
Phone Number: (401) 822-4100  
Toll Free Number: (800) 556-7752

E-mail Address ehs@dryvit.com

### 1.4 Emergency telephone number

Emergency telephone number Chemtrec: +1 703-527-3887 ex-USA  
Chemtrec: 1-800-424-9300 USA

## 2. Hazards identification

### 2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910.1200

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1B
Carcinogenicity	Category 1A
Specific target organ toxicity (single exposure)	Category 3 - (H335)

### 2.2 Label elements

Signal Word  
Danger

### Hazard Statements

Causes skin irritation  
 Causes serious eye damage  
 May cause an allergic skin reaction  
 May cause cancer  
 May cause respiratory irritation



#### Precautionary Statements - Prevention

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Use personal protective equipment as required  
 Wash face, hands and any exposed skin thoroughly after handling  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Contaminated work clothing should not be allowed out of the workplace  
 Use only outdoors or in a well-ventilated area

#### Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 Immediately call a POISON CENTER or doctor/physician  
 IF ON SKIN: Wash with plenty of soap and water  
 Take off contaminated clothing and wash before reuse  
 If skin irritation or rash occurs: Get medical advice/attention  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

#### Precautionary Statements - Storage

Store in accordance with local regulations  
 Store in a well-ventilated place. Keep container tightly closed

#### Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

#### 2.3. Other Hazards Hazards not otherwise classified (HNOC)

Not Applicable

#### 2.4 Other information

Not Applicable

### 3. Composition/Information on Ingredients

#### Substance

Chemical Name	CAS-No	Weight %
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND	14808-60-7	50 - 60%
PORTLAND CEMENT	65997-15-1	20 - 30%
CALCIUM CARBONATE (LIMESTONE)	1317-65-3	0 - 10%
CALCIUM SULFATE HEMIHYDRATE	13397-24-5	0 - 10%
CALCIUM HYDROXIDE	1305-62-0	0 - 10%
CALCIUM OXIDE/LIME	1305-78-8	0 - 10%
MAGNESIUM OXIDE	1309-48-4	0 - 10%
CLAY (KAOLIN)	1332-58-7	0 - 10%

\*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

## 4. First aid measures

### 4.1 Description of first-aid measures

<b>General advice</b>	If symptoms persist, call a physician.
<b>Eye contact</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician if irritation develops or persists.
<b>Skin contact</b>	Immediate medical attention is not required. Wash off with soap and water. Call a physician if irritation develops or persists.
<b>Inhalation</b>	Immediate medical attention is not required. Get medical attention if symptoms occur. Call a physician if irritation develops or persists.
<b>Ingestion</b>	If swallowed, do not induce vomiting - seek medical advice.

### 4.2 Most important symptoms and effects, both acute and delayed

<b>Symptoms</b>	No information available.
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### 4.3 Recommendations for immediate medical care and/or special treatment

<b>Notes to physician</b>	No information available.
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## 5. Fire-Fighting Measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

<b>Unsuitable Extinguishing Media</b>	None.
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### 5.2 Specific hazards arising from the substance or mixture

#### Special Hazard

No information available

<b>Hazardous Combustion Products</b>	No information available.
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#### Explosion Data

**Sensitivity to Mechanical Impact** No information available.

**Sensitivity to Static Discharge** No information available.

### 5.3 Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. Accidental Release Measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Personal protection needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the training and the expertise of employees in the area responding to the spill.

### 6.2 Environmental precautions

Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological information.

**6.3 Methods and materials for containment and cleaning up**

**Methods for Containment** Spills and leaks are not likely. Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

**7. Handling and storage****7.1 Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

**Hygiene measures** Handle in accordance with good industrial hygiene and safety practice.

**7.2 Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep in a dry, cool and well-ventilated place. Keep out of the reach of children. Store in accordance with local regulations.

**Materials to Avoid** Strong oxidizing agents. Strong acids. Strong bases.

**8. Exposure controls/personal protection****8.1 Occupational Exposure Limits (OEL)**

Chemical Name	ACGIH TLV	OSHA PEL	British Columbia	Alberta	Quebec	Ontario TWAEV
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND 14808-60-7	TWA: 0.025 mg/m <sup>3</sup> respirable fraction	: (30)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA total dust : (250)/(%SiO <sub>2</sub> + 5) mppcf TWA respirable fraction : (10)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA respirable fraction	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>	TWA: 0.10 mg/m <sup>3</sup>
PORTLAND CEMENT 65997-15-1	TWA: 1 mg/m <sup>3</sup> particulate matter containing no asbestos and <1% crystalline silica, respirable fraction	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction TWA: 50 mppcf <1% Crystalline silica	TWA: 10 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>
CALCIUM CARBONATE (LIMESTONE) 1317-65-3	-	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 10 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	
CALCIUM SULFATE HEMIHYDRATE 13397-24-5	TWA: 10 mg/m <sup>3</sup> inhalable fraction	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 10 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>
CALCIUM HYDROXIDE 1305-62-0	TWA: 5 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>
CALCIUM OXIDE/LIME 1305-78-8	TWA: 2 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>
MAGNESIUM OXIDE 1309-48-4	TWA: 10 mg/m <sup>3</sup> inhalable fraction	TWA: 15 mg/m <sup>3</sup> fume, total particulate	TWA: 10 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>
CLAY (KAOLIN) 1332-58-7	TWA: 2 mg/m <sup>3</sup> particulate matter containing no asbestos and <1% crystalline silica,	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>

	respirable fraction					
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**8.2 Appropriate engineering controls**

**Engineering Measures** Ensure adequate ventilation, especially in confined areas.

**8.3 Individual protection measures, such as personal protective equipment**

<b>Eye/Face Protection</b>	Safety glasses with side-shields.
<b>Skin and body protection</b>	Wear protective gloves/ protective clothing.
<b>Respiratory protection</b>	Effective dust mask. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.
<b>Hygiene measures</b>	See section 7 for more information

## 9. Physical and chemical properties

**9.1 Information on basic physical and chemical properties**

<b>Physical state</b>	Solid
<b>Appearance</b>	Powder
<b>Color</b>	Off-white or Gray
<b>Odor</b>	No information available
<b>Odor Threshold</b>	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Methods</u>
<b>pH</b>		
<b>Melting/freezing point</b>		No information available
<b>Boiling point/boiling range</b>		No information available
<b>Flash Point</b>		No information available
<b>Evaporation rate</b>		
<b>Flammability (solid, gas)</b>		No information available
<b>Flammability Limits in Air</b>		
upper flammability limit		No information available
lower flammability limit		No information available
<b>Vapor pressure</b>		No information available
<b>Vapor density</b>		No information available
<b>Specific Gravity</b>	1.60 - 2.80 g/cc	
<b>Water solubility</b>	Soluble in water	
<b>Solubility in other solvents</b>		No information available
<b>Partition coefficient</b>		No information available
<b>Autoignition temperature</b>		
<b>Decomposition temperature</b>		
<b>Viscosity, kinematic</b>		No information available
<b>Viscosity, dynamic</b>		No information available
<b>Explosive properties</b>		No information available
<b>Oxidizing Properties</b>		No information available

**9.2 Other information**

<b>Volatile organic compounds (VOC) content</b>	no data available
<b>Density</b>	14.0 - 23.0 lbs/gal

## 10. Stability and Reactivity

**10.1 Reactivity**

No dangerous reaction known under conditions of normal use

**10.2 Chemical stability**

Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**

None under normal processing.

**10.4 Conditions to Avoid**

Do not freeze. To avoid thermal decomposition, do not overheat.

**10.5 Incompatible Materials**

Strong oxidizing agents. Strong acids. Strong bases.

**10.6 Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating gases and vapors.

## 11. Toxicological information

**11.1 Acute toxicity****Numerical measures of toxicity: Product Information**

The following values are calculated based on chapter 3.1 of the GHS document

**Oral LD50** 20,947.00 mg/kg

**Numerical measures of toxicity: Component Information**

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND 14808-60-7	500 mg/kg ( Rat )	-	-
CALCIUM HYDROXIDE 1305-62-0	7340 mg/kg ( Rat )	-	-
CALCIUM OXIDE/LIME 1305-78-8	500 mg/kg ( Rat )	-	-

**11.2 Information on toxicological effects****Skin corrosion/irritation**Product Information

- Corrosive to skin. Contact with skin may cause irritation or severe burns and scarring.

Component Information

- No information available

**Eye damage/irritation**Product Information

- Risk of serious damage to eyes

Component Information

- No information available

**Respiratory or skin sensitization**Product Information

- May cause allergic skin reaction

Component Information

- No information available



**Germ Cell Mutagenicity**Product Information

- No information available

Component Information

- No information available

**Carcinogenicity**

- The table below indicates whether each agency has listed any ingredient as a carcinogen

Chemical Name	ACGIH	IARC	NTP	OSHA
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND 14808-60-7	A2	Group 1	Known	

**Reproductive toxicity**Product Information

- No information available

Component Information

- No information available

**STOT - single exposure**

No information available

**STOT - repeated exposure**

No information available

**Other adverse effects**Target Organs

- Eyes
- Lungs
- Respiratory system
- Skin

Product Information

- No information available

Component Information

- No information available

**Aspiration hazard**Product Information

- No information available

Component Information

- No information available

## 12. Ecological information

**12.1 Toxicity****Ecotoxicity**

No information available

**Ecotoxicity effects**

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
CALCIUM OXIDE/LIME 1305-78-8	-	LC50: 96 h Cyprinus carpio 1070 mg/L static	-

**12.2 Persistence and degradability**

No product level data available.

**12.3 Bioaccumulative potential**

Some components of this material have some potential to bioaccumulate but not all have been tested

#### **12.4 Mobility in soil**

No information available.

#### **12.5 Other adverse effects**

No information available

### **13. Disposal Considerations**

#### **13.1 Waste Disposal Guidance**

Dispose of in accordance with federal, state, and local regulations.

### **14. Transport Information**

**DOT** Not regulated

**MEX** Not regulated

**IMDG** Not regulated

**IATA** Not regulated

### **15. Regulatory information**

#### **15.1 International Inventories**

<b>TSCA</b>	-
<b>DSL</b>	-
<b>EINECS/ELINCS</b>	-
<b>ENCS</b>	-
<b>IECSC</b>	-
<b>KECL</b>	-
<b>PICCS</b>	-
<b>AICS</b>	-
<b>NZIoC</b>	-

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL** - Canadian Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**NZIoC** - New Zealand Inventory of Chemicals

#### **15.2 U.S. Federal Regulations**

##### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

#### **15.3 Pesticide Information**

Not applicable

## 15.4 U.S. State Regulations

### California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND - 14808-60-7	Carcinogen
Formaldehyde - 50-00-0	Carcinogen
Ethanol - 64-17-5	Carcinogen Developmental
METHANOL - 67-56-1	Developmental
Acetaldehyde - 75-07-0	Carcinogen

## 16. Other information

<b>NFPA</b>	<b>Health Hazard</b> 2	<b>Flammability</b> 0	<b>Instability</b> 0	<b>Physical and chemical hazards</b> -
<b>HMIS</b>	<b>Health Hazard</b> 2	<b>Flammability</b> 0	<b>Physical Hazard</b> 0	<b>Personal protection</b> E

### Legend:

ACGIH (American Conference of Governmental Industrial Hygienists)

Ceiling (C)

DOT (Department of Transportation)

EPA (Environmental Protection Agency)

IARC (International Agency for Research on Cancer)

International Air Transport Association (IATA)

International Maritime Dangerous Goods (IMDG)

NIOSH (National Institute for Occupational Safety and Health)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

PEL (Permissible Exposure Limit)

Reportable Quantity (RQ)

Skin designation (S\*)

STEL (Short Term Exposure Limit)

TLV® (Threshold Limit Value)

TWA (time-weighted average)

**Revision Date** 28-May-2015

### Revision Note

No information available

### Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Safety Data Sheet**

# SAFETY DATA SHEET



Revision Date 28-May-2015  
Version 1.01

## 1. Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

Product name Genesis®, Genesis® FM, Genesis® Tintable  
Product code 011012

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Restricted to professional users  
Restrictions on use No information available  
Uses advised against Not suitable for use in homemaker (DIY) applications

### 1.3 Details of the supplier of the safety data sheet

Supplier Dryvit Systems, Inc  
One Energy Way,  
West Warwick, RI 02893  
Phone Number: (401) 822-4100  
Toll Free Number: (800) 556-7752

E-mail Address ehs@dryvit.com

### 1.4 Emergency telephone number

Emergency telephone number Chemtrec: +1 703-527-3887 ex-USA  
Chemtrec: 1-800-424-9300 USA

## 2. Hazards identification

### 2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910.1200

Skin sensitization	Category 1
Carcinogenicity	Category 1A

### 2.2 Label elements

#### Signal Word

Danger

#### Hazard Statements

May cause an allergic skin reaction  
May cause cancer

**Precautionary Statements - Prevention**

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Use personal protective equipment as required  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Contaminated work clothing should not be allowed out of the workplace

**Precautionary Statements - Response**

If exposed or concerned: Get medical advice/attention  
 IF ON SKIN: Wash with plenty of soap and water  
 If skin irritation or rash occurs: Get medical advice/attention  
 Wash contaminated clothing before reuse

**Precautionary Statements - Storage**

Store in accordance with local regulations

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**2.3. Other Hazards Hazards not otherwise classified (HNOC)**

Not Applicable

**2.4 Other information**

Not Applicable

### 3. Composition/Information on Ingredients

**Substance**

Chemical Name	CAS-No	Weight %
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND	14808-60-7	50 - 60%
Calcium Metasilicate	13983-17-0	0 - 10%
Aluminium magnesium silicate	12174-11-7	0 - 10%
Hexahydro-1,3,5-tris(hydroxyethyl)-s-triazine	4719-04-4	0 - 10%
HYDROCARBON DISTILLATE	64742-65-0	0 - 10%

\*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

### 4. First aid measures

**4.1 Description of first-aid measures**

<b>General advice</b>	If symptoms persist, call a physician.
<b>Eye contact</b>	Call a physician if irritation develops or persists. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
<b>Skin contact</b>	Immediate medical attention is not required. Call a physician if irritation develops or persists.
<b>Inhalation</b>	Immediate medical attention is not required. Call a physician if irritation develops or persists. Get medical attention if symptoms occur.

**Ingestion** If swallowed, do not induce vomiting - seek medical advice.

#### **4.2 Most important symptoms and effects, both acute and delayed**

**Symptoms** No information available.

#### **4.3 Recommendations for immediate medical care and/or special treatment**

**Notes to physician** No information available.

### **5. Fire-Fighting Measures**

#### **5.1 Extinguishing media**

##### **Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** None.

#### **5.2 Specific hazards arising from the substance or mixture**

##### **Special Hazard**

No information available

**Hazardous Combustion Products** No information available.

##### **Explosion Data**

**Sensitivity to Mechanical Impact** No information available.

**Sensitivity to Static Discharge** No information available.

#### **5.3 Advice for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### **6. Accidental Release Measures**

#### **6.1 Personal precautions, protective equipment and emergency procedures**

Personal protection needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the training and the expertise of employees in the area responding to the spill.

#### **6.2 Environmental precautions**

Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological information.

#### **6.3 Methods and materials for containment and cleaning up**

**Methods for Containment** Spills and leaks are not likely. Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

### **7. Handling and storage**

#### **7.1 Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

**Hygiene measures** Handle in accordance with good industrial hygiene and safety practice.

**7.2 Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep in a dry, cool and well-ventilated place. Keep out of the reach of children. Store in accordance with local regulations. Keep from freezing.

**Materials to Avoid** Strong oxidizing agents. Strong acids. Strong bases.

**8. Exposure controls/personal protection****8.1 Occupational Exposure Limits (OEL)**

Chemical Name	ACGIH TLV	OSHA PEL	British Columbia	Alberta	Quebec	Ontario TWAEV
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND 14808-60-7	TWA: 0.025 mg/m <sup>3</sup> respirable fraction	: (30)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA total dust : (250)/(%SiO <sub>2</sub> + 5) mppcf TWA respirable fraction : (10)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA respirable fraction	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>	TWA: 0.10 mg/m <sup>3</sup>
Calcium Metasilicate 13983-17-0	-	-			TWA: 10 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>	
Aluminium magnesium silicate 12174-11-7	TWA: 1 mg/m <sup>3</sup> respirable fraction	-	TWA: 1.0 mg/m <sup>3</sup>		TWA: 1 fibre/cm <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>

**8.2 Appropriate engineering controls**

**Engineering Measures** Ensure adequate ventilation, especially in confined areas.

**8.3 Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** If splashes are likely to occur, wear: Tightly fitting safety goggles.

**Skin and body protection** Wear protective gloves/ protective clothing.

**Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**Hygiene measures** See section 7 for more information

## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Viscous liquid
Color	Off-white Gray or Colored liquid
Odor	Faint
Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Methods</u>
pH	>8	
Melting/freezing point		No information available
Boiling point/boiling range	> 100 °C / 212 °F	
Flash Point	no data available	No information available
Evaporation rate		
Flammability (solid, gas)		No information available
Flammability Limits in Air		
upper flammability limit		No information available
lower flammability limit		No information available
Vapor pressure		No information available
Vapor density		No information available
Specific Gravity	0.96 - 1.80 g/cc	
Water solubility	Soluble in water	
Solubility in other solvents		No information available
Partition coefficient		No information available
Autoignition temperature		
Decomposition temperature		
Viscosity, kinematic		No information available
Viscosity, dynamic		No information available
Explosive properties		No information available
Oxidizing Properties		No information available

### 9.2 Other information

Volatile organic compounds (VOC) content	no data available
Density	8.0 - 15.0 lbs/gal

## 10. Stability and Reactivity

### 10.1 Reactivity

No dangerous reaction known under conditions of normal use

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

None under normal processing.

### 10.4 Conditions to Avoid

Do not freeze. To avoid thermal decomposition, do not overheat.

### 10.5 Incompatible Materials

Strong oxidizing agents. Strong acids. Strong bases.



**10.6 Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating gases and vapors.

**11. Toxicological information****11.1 Acute toxicity****Numerical measures of toxicity: Product Information**

The following values are calculated based on chapter 3.1 of the GHS document

**Numerical measures of toxicity: Component Information**

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND 14808-60-7	500 mg/kg ( Rat )	-	-

**11.2 Information on toxicological effects****Skin corrosion/irritation**Product Information

- No information available

Component Information

- No information available

**Eye damage/irritation**Product Information

- No information available

Component Information

- No information available

**Respiratory or skin sensitization**Product Information

- May cause sensitization by skin contact

Component Information

- No information available

**Germ Cell Mutagenicity**Product Information

- No information available

Component Information

- No information available

**Carcinogenicity**

- The table below indicates whether each agency has listed any ingredient as a carcinogen

Chemical Name	ACGIH	IARC	NTP	OSHA
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND 14808-60-7	A2	Group 1	Known	
Aluminium magnesium silicate 12174-11-7	-	Group 2B Group 3	-	
HYDROCARBON DISTILLATE 64742-65-0	A2	Group 1	-	

**Reproductive toxicity**Product Information

- No information available

Component Information

- No information available

**STOT - single exposure**

No information available

**STOT - repeated exposure**

No information available

**Other adverse effects**Target Organs

- None under normal use conditions

Product Information

- No information available

Component Information

- No information available

**Aspiration hazard**Product Information

- No information available

Component Information

- No information available

## 12. Ecological information

**12.1 Toxicity****Ecotoxicity**

No information available

**Ecotoxicity effects**

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
HYDROCARBON DISTILLATE 64742-65-0	-	LC50: 96 h Oncorhynchus mykiss 5000 mg/L	EC50: 48 h Daphnia magna 1000 mg/L

**12.2 Persistence and degradability**

No information available.

**12.3 Bioaccumulative potential**

Discharge into the environment must be avoided

**12.4 Mobility in soil**

No information available.

**12.5 Other adverse effects**

No information available

## 13. Disposal Considerations

**13.1 Waste Disposal Guidance**

Dispose of in accordance with federal, state, and local regulations.

## 14. Transport Information

<b><u>DOT</u></b>	Not regulated
<b><u>MEX</u></b>	Not regulated
<b><u>IMDG</u></b>	Not regulated
<b><u>IATA</u></b>	Not regulated

## 15. Regulatory information

### 15.1 International Inventories

<b>TSCA</b>	-
<b>DSL</b>	-
<b>EINECS/ELINCS</b>	-
<b>ENCS</b>	-
<b>IECSC</b>	Complies
<b>KECL</b>	-
<b>PICCS</b>	-
<b>AICS</b>	Complies
<b>NZIoC</b>	-

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL** - Canadian Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**NZIoC** - New Zealand Inventory of Chemicals

### 15.2 U.S. Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

### 15.3 Pesticide Information

Not applicable

### 15.4 U.S. State Regulations

#### California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND - 14808-60-7	Carcinogen
Aluminium magnesium silicate - 12174-11-7	Carcinogen
Benzophenone - 119-61-9	Carcinogen
Titanium dioxide - 13463-67-7	Carcinogen
N-(3,4-dichlorophenyl)-N,N-dimethylurea - 330-54-1	Carcinogen
Ethylene oxide - 75-21-8	Carcinogen Developmental Female Reproductive Male Reproductive
Benzyl chloride - 100-44-7	Carcinogen

<b>16. Other information</b>
------------------------------

<b>NFPA</b>	<b>Health Hazard</b> 1	<b>Flammability</b> 0	<b>Instability</b> 0	<b>Physical and chemical hazards -</b>
<b>HMIS</b>	<b>Health Hazard</b> 1	<b>Flammability</b> 0	<b>Physical Hazard</b> 0	<b>Personal protection</b> B

**Legend:**

ACGIH (American Conference of Governmental Industrial Hygienists)

Ceiling (C)

DOT (Department of Transportation)

EPA (Environmental Protection Agency)

IARC (International Agency for Research on Cancer)

International Air Transport Association (IATA)

International Maritime Dangerous Goods (IMDG)

NIOSH (National Institute for Occupational Safety and Health)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

PEL (Permissible Exposure Limit)

Reportable Quantity (RQ)

Skin designation (S\*)

STEL (Short Term Exposure Limit)

TLV® (Threshold Limit Value)

TWA (time-weighted average)

**Revision Date**

28-May-2015

**Revision Note**

No information available

**Disclaimer**

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Safety Data Sheet**

# SAFETY DATA SHEET



Revision Date 28-May-2015

Version 1.02

## 1. Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

**Product name** Genesis® DM, Genesis® DMS, Genesis® DMS White, Genesis® DMS White Supersack  
**Product code** 013012

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Recommended Use** Restricted to professional users  
**Restrictions on use** Professional Use Only  
**Uses advised against** Not suitable for use in homemaker (DIY) applications

### 1.3 Details of the supplier of the safety data sheet

**Supplier** Dryvit Systems, Inc  
One Energy Way,  
West Warwick, RI 02893  
Phone Number: (401) 822-4100  
Toll Free Number: (800) 556-7752

**E-mail Address** ehs@dryvit.com

### 1.4 Emergency telephone number

**Emergency telephone number** Chemtrec: +1 703-527-3887 ex-USA  
Chemtrec: 1-800-424-9300 USA

## 2. Hazards identification

### 2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910.1200

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1B
Carcinogenicity	Category 1A
Specific target organ toxicity (single exposure)	Category 3 - (H335)

### 2.2 Label elements

#### Signal Word

Danger

#### Hazard Statements

Causes skin irritation  
Causes serious eye damage  
May cause an allergic skin reaction  
May cause cancer  
May cause respiratory irritation



#### Precautionary Statements - Prevention

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Use personal protective equipment as required  
Wash face, hands and any exposed skin thoroughly after handling  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Contaminated work clothing should not be allowed out of the workplace  
Use only outdoors or in a well-ventilated area

#### Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
Immediately call a POISON CENTER or doctor/physician  
IF ON SKIN: Wash with plenty of soap and water  
Take off contaminated clothing and wash before reuse  
If skin irritation or rash occurs: Get medical advice/attention  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

#### Precautionary Statements - Storage

Store in accordance with local regulations

#### Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

#### 2.3. Other Hazards Hazards not otherwise classified (HNOC)

Not Applicable

#### 2.4 Other information

Not Applicable

#### Unknown Acute Toxicity

No information available

### 3. Composition/Information on Ingredients

#### Substance

Chemical Name	CAS-No	Weight %
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND	14808-60-7	30 - 40%
PORTLAND CEMENT	65997-15-1	20 - 30%
CALCIUM CARBONATE (LIMESTONE)	1317-65-3	20 - 30%
CALCIUM SULFATE HEMIHYDRATE	13397-24-5	0 - 10%
CALCIUM OXIDE/LIME	1305-78-8	0 - 10%
MAGNESIUM OXIDE	1309-48-4	0 - 10%
Calcium Metasilicate	13983-17-0	0 - 10%
CLAY (KAOLIN)	1332-58-7	0 - 10%

\*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

## 4. First aid measures

### 4.1 Description of first-aid measures

<b>General advice</b>	If symptoms persist, call a physician.
<b>Eye contact</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician if irritation develops or persists.
<b>Skin contact</b>	Immediate medical attention is not required. Wash off with soap and water. Call a physician if irritation develops or persists.
<b>Inhalation</b>	Immediate medical attention is not required. Call a physician if irritation develops or persists. Get medical attention if symptoms occur.
<b>Ingestion</b>	If swallowed, do not induce vomiting - seek medical advice.

### 4.2 Most important symptoms and effects, both acute and delayed

<b>Symptoms</b>	No information available.
-----------------	---------------------------

### 4.3 Recommendations for immediate medical care and/or special treatment

<b>Notes to physician</b>	No information available.
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## 5. Fire-Fighting Measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

<b>Unsuitable Extinguishing Media</b>	None.
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### 5.2 Specific hazards arising from the substance or mixture

#### Special Hazard

May cause sensitization by inhalation and skin contact Thermal decomposition can lead to release of irritating gases and vapors  
No information available

<b>Hazardous Combustion Products</b>	No information available.
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#### Explosion Data

**Sensitivity to Mechanical Impact** No information available.

**Sensitivity to Static Discharge** No information available.

### 5.3 Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. Accidental Release Measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Personal protection needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the training and the expertise of employees in the area responding to the spill.

### 6.2 Environmental precautions

Do not flush into surface water or sanitary sewer system. Prevent product from entering drains. See Section 12 for additional Ecological information.

### 6.3 Methods and materials for containment and cleaning up

**Methods for Containment** Spills and leaks are not likely. Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

## 7. Handling and storage

### 7.1 Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

**Hygiene measures** Handle in accordance with good industrial hygiene and safety practice.

### 7.2 Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep in a dry, cool and well-ventilated place. Keep out of the reach of children. Store in accordance with local regulations.

**Materials to Avoid** Strong oxidizing agents. Strong acids. Strong bases.

## 8. Exposure controls/personal protection

### 8.1 Occupational Exposure Limits (OEL)

Chemical Name	ACGIH TLV	OSHA PEL	British Columbia	Alberta	Quebec	Ontario TWAEV
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND 14808-60-7	TWA: 0.025 mg/m <sup>3</sup> respirable fraction	: (30)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA total dust : (250)/(%SiO <sub>2</sub> + 5) mppcf TWA respirable fraction : (10)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA respirable fraction	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>	TWA: 0.10 mg/m <sup>3</sup>
PORTLAND CEMENT 65997-15-1	TWA: 1 mg/m <sup>3</sup> particulate matter containing no asbestos and <1% crystalline silica, respirable fraction	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction TWA: 50 mppcf <1% Crystalline silica	TWA: 10 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>
CALCIUM CARBONATE (LIMESTONE) 1317-65-3	-	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 10 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	
CALCIUM SULFATE HEMIHYDRATE 13397-24-5	TWA: 10 mg/m <sup>3</sup> inhalable fraction	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 10 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>
CALCIUM OXIDE/LIME 1305-78-8	TWA: 2 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>
MAGNESIUM OXIDE 1309-48-4	TWA: 10 mg/m <sup>3</sup> inhalable fraction	TWA: 15 mg/m <sup>3</sup> fume, total particulate	TWA: 10 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>
Calcium Metasilicate 13983-17-0	-	-			TWA: 10 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>	
CLAY (KAOLIN) 1332-58-7	TWA: 2 mg/m <sup>3</sup> particulate matter containing no	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>



	asbestos and <1% crystalline silica, respirable fraction	respirable fraction				
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## 8.2 Appropriate engineering controls

**Engineering Measures** Ensure adequate ventilation, especially in confined areas.

## 8.3 Individual protection measures, such as personal protective equipment

<b>Eye/Face Protection</b>	Safety glasses with side-shields.
<b>Skin and body protection</b>	Wear protective gloves/ protective clothing.
<b>Respiratory protection</b>	Effective dust mask. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.
<b>Hygiene measures</b>	See section 7 for more information

# 9. Physical and chemical properties

## 9.1 Information on basic physical and chemical properties

<b>Physical state</b>	Solid
<b>Appearance</b>	Powder
<b>Color</b>	Off-white or Gray
<b>Odor</b>	No information available
<b>Odor Threshold</b>	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Methods</u>
pH		
Melting/freezing point		No information available
Boiling point/boiling range		No information available
Flash Point		No information available
Evaporation rate		
Flammability (solid, gas)		No information available
Flammability Limits in Air		
upper flammability limit		No information available
lower flammability limit		No information available
Vapor pressure		No information available
Vapor density		No information available
Specific Gravity	1.60-2.80 g/cc	
Water solubility	Soluble in water	
Solubility in other solvents		No information available
Partition coefficient		No information available
Autoignition temperature		
Decomposition temperature		
Viscosity, kinematic		No information available
Viscosity, dynamic		No information available
Explosive properties		No information available
Oxidizing Properties		No information available

## 9.2 Other information

<b>Volatile organic compounds (VOC) content</b>	no data available
<b>Density</b>	14.0 - 23.0 lbs/gal

# 10. Stability and Reactivity

## 10.1 Reactivity

No dangerous reaction known under  
conditions of normal use

#### **10.2 Chemical stability**

Stable under recommended storage conditions.

#### **10.3 Possibility of hazardous reactions**

None under normal processing.

#### **10.4 Conditions to Avoid**

Do not freeze. To avoid thermal decomposition, do not overheat.

#### **10.5 Incompatible Materials**

Strong oxidizing agents. Strong acids. Strong bases.

#### **10.6 Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating gases and vapors.

### **11. Toxicological information**

#### **11.1 Acute toxicity**

##### **Numerical measures of toxicity: Product Information**

The following values are calculated based on chapter 3.1 of the GHS document

**Unknown Acute Toxicity** No information available

**Oral LD50** 17,795.00 mg/kg

##### **Numerical measures of toxicity: Component Information**

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND 14808-60-7	500 mg/kg ( Rat )	-	-
CALCIUM OXIDE/LIME 1305-78-8	500 mg/kg ( Rat )	-	-

#### **11.2 Information on toxicological effects**

##### **Skin corrosion/irritation**

###### Product Information

- Corrosive to skin. Contact with skin may cause irritation or severe burns and scarring.

###### Component Information

- No information available

##### **Eye damage/irritation**

###### Product Information

- Risk of serious damage to eyes

###### Component Information

- No information available

##### **Respiratory or skin sensitization**

###### Product Information

- May cause allergic skin reaction

Component Information

- No information available

**Germ Cell Mutagenicity**

Product Information

- No information available

Component Information

- No information available

**Carcinogenicity**

- The table below indicates whether each agency has listed any ingredient as a carcinogen

Chemical Name	ACGIH	IARC	NTP	OSHA
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND 14808-60-7	A2	Group 1	Known	

**Reproductive toxicity**

Product Information

- No information available

Component Information

- No information available

**STOT - single exposure**

No information available

**STOT - repeated exposure**

- Repeated contact may cause allergic reactions in very susceptible persons
- Avoid repeated exposure

**Other adverse effects**

Target Organs

- Eyes
- Lungs
- Respiratory system
- Skin

Product Information

- No information available

Component Information

- No information available

**Aspiration hazard**

Product Information

- No information available

Component Information

- No information available

## 12. Ecological information

### 12.1 Toxicity

Ecotoxicity

No information available

**Ecotoxicity effects**

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
CALCIUM OXIDE/LIME 1305-78-8	-	LC50: 96 h Cyprinus carpio 1070 mg/L static	-

## **12.2 Persistence and degradability**

No product level data available.

## **12.3 Bioaccumulative potential**

Some components of this material have some potential to bioaccumulate but not all have been tested

## **12.4 Mobility in soil**

No information available.

## **12.5 Other adverse effects**

No information available

# **13. Disposal Considerations**

## **13.1 Waste Disposal Guidance**

Dispose of in accordance with federal, state, and local regulations.

# **14. Transport Information**

**DOT** Not regulated

**MEX** Not regulated

**IMDG** Not regulated

**IATA** Not regulated

# **15. Regulatory information**

## **15.1 International Inventories**

**TSCA** -  
**DSL** -  
**EINECS/ELINCS** -  
**ENCS** -  
**IECSC** -  
**KECL** -  
**PICCS** -  
**AICS** -  
**NZIoC** -

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL** - Canadian Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**NZIoC** - New Zealand Inventory of Chemicals

## **15.2 U.S. Federal Regulations**

### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

### **15.3 Pesticide Information**

Not applicable

### **15.4 U.S. State Regulations**

#### **California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND - 14808-60-7	Carcinogen
Titanium dioxide - 13463-67-7	Carcinogen
Formaldehyde - 50-00-0	Carcinogen
METHANOL - 67-56-1	Developmental
Acetaldehyde - 75-07-0	Carcinogen

### **16. Other information**

<b>NFPA</b>	<b>Health Hazard</b> 2	<b>Flammability</b> 0	<b>Instability</b> 0	<b>Physical and chemical hazards -</b>
<b>HMIS</b>	<b>Health Hazard</b> 2	<b>Flammability</b> 0	<b>Physical Hazard</b> 0	<b>Personal protection</b> E

#### **Legend:**

ACGIH (American Conference of Governmental Industrial Hygienists)

Ceiling (C)

DOT (Department of Transportation)

EPA (Environmental Protection Agency)

IARC (International Agency for Research on Cancer)

International Air Transport Association (IATA)

International Maritime Dangerous Goods (IMDG)

NIOSH (National Institute for Occupational Safety and Health)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

PEL (Permissible Exposure Limit)

Reportable Quantity (RQ)

Skin designation (S\*)

STEL (Short Term Exposure Limit)

TLV® (Threshold Limit Value)

TWA (time-weighted average)

**Revision Date** 28-May-2015

#### **Revision Note**

No information available

#### **Disclaimer**

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Safety Data Sheet**

# SAFETY DATA SHEET



Revision Date 26-May-2015  
Version 1

## 1. Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

Product name NCB  
Product code 011009182

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Restricted to professional users  
Restrictions on use Professional Use Only  
Uses advised against Not suitable for use in homemaker (DIY) applications

### 1.3 Details of the supplier of the safety data sheet

Supplier Dryvit Systems, Inc  
One Energy Way,  
West Warwick, RI 02893  
Phone Number: (401) 822-4100  
Toll Free Number: (800) 556-7752

E-mail Address ehs@dryvit.com

### 1.4 Emergency telephone number

Emergency telephone number Chemtrec: +1 703-527-3887 ex-USA  
Chemtrec: 1-800-424-9300 USA

## 2. Hazards identification

### 2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910.1200

Acute Toxicity - Oral	Category 4
Germ Cell Mutagenicity	Category 1A
Carcinogenicity	Category 1A

### 2.2 Label elements

**Signal Word**  
Danger

**Hazard Statements**  
Harmful if swallowed  
May cause genetic defects

May cause cancer



#### Precautionary Statements - Prevention

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Use personal protective equipment as required  
Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product

#### Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention  
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
Rinse mouth

#### Precautionary Statements - Storage

Store in accordance with local regulations

#### Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

#### 2.3 Other Hazards Hazards not otherwise classified (HNOC)

Not Applicable

#### 2.4 Other information

Not Applicable

### 3. Composition/Information on Ingredients

#### Substance

Chemical Name	CAS-No	Weight %
CALCIUM CARBONATE (LIMESTONE)	1317-65-3	30 - 40%
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND	14808-60-7	20 - 30%
Aluminium Hydroxide	21645-51-2	10 - 20%
MICA	12001-26-2	0 - 10%
Titanium dioxide	13463-67-7	0 - 10%
Ethylene oxide	75-21-8	0 - 10%
SOLID GLASS SPHERES	65997-17-3	0 - 10%
2-Propenoic acid (Acrylic Acid)	79-10-7	0 - 10%

\*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

### 4. First aid measures

#### 4.1 Description of first-aid measures

**General advice** If symptoms persist, call a physician.

**Eye contact** Immediate medical attention is not required. Call a physician if irritation develops or persists.

**Skin contact** Immediate medical attention is not required. Wash skin with soap and water. Call a

physician if irritation develops or persists.

**Inhalation**

Immediate medical attention is not required. If inhaled, remove to fresh air. Call a physician if irritation develops or persists.

**Ingestion**

Immediate medical attention is not required. If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel. Rinse mouth. If symptoms persist, call a physician.

**4.2 Most important symptoms and effects, both acute and delayed****Symptoms**

See Section 2.2, Label Elements and/or Section 11, Toxicological effects.

**4.3 Recommendations for immediate medical care and/or special treatment****Notes to physician**

Treat symptomatically.

## 5. Fire-Fighting Measures

**5.1 Extinguishing media****Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media**      None.

**5.2 Specific hazards arising from the substance or mixture****Special Hazard**

None known based on information supplied

**Hazardous Combustion Products**      No information available.

**Explosion Data**

**Sensitivity to Mechanical Impact**      None.

**Sensitivity to Static Discharge**      None.

**5.3 Advice for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. Accidental Release Measures

**6.1 Personal precautions, protective equipment and emergency procedures**

Personal protection needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the training and the expertise of employees in the area responding to the spill.

**6.2 Environmental precautions**

Dike to collect large liquid spills. See Section 12 for additional Ecological information.

**6.3 Methods and materials for containment and cleaning up**

**Methods for Containment**      Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up**      Pick up and transfer to properly labeled containers.

## 7. Handling and storage

**7.1 Precautions for safe handling**



**Hygiene measures** Handle in accordance with good industrial hygiene and safety practice.

## 7.2 Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep in a dry, cool and well-ventilated place. Keep out of the reach of children. Store in accordance with local regulations. Keep from freezing.

**Materials to Avoid** No materials to be especially mentioned.

## 8. Exposure controls/personal protection

### 8.1 Occupational Exposure Limits (OEL)

Chemical Name	ACGIH TLV	OSHA PEL	British Columbia	Alberta	Quebec	Ontario TWAEV
CALCIUM CARBONATE (LIMESTONE) 1317-65-3	-	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 10 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND 14808-60-7	TWA: 0.025 mg/m <sup>3</sup> respirable fraction	: (30)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA total dust : (250)/(%SiO <sub>2</sub> + 5) mppcf TWA respirable fraction : (10)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA respirable fraction	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>	TWA: 0.10 mg/m <sup>3</sup>
Aluminium Hydroxide 21645-51-2	TWA: 1 mg/m <sup>3</sup> respirable fraction	-	TWA: 1.0 mg/m <sup>3</sup>			TWA: 1 mg/m <sup>3</sup>
MICA 12001-26-2	TWA: 3 mg/m <sup>3</sup> respirable fraction	TWA: 20 mppcf <1% Crystalline silica	TWA: 3 mg/m <sup>3</sup>	TWA: 3 mg/m <sup>3</sup>	TWA: 3 mg/m <sup>3</sup>	TWA: 3 mg/m <sup>3</sup>
Titanium dioxide 13463-67-7	TWA: 10 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup> total dust	TWA: 10 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>
Ethylene oxide 75-21-8	TWA: 1 ppm	TWA: 1 ppm STEL: 5 ppm see 29 CFR 1910.1047	TWA: 0.1 ppm STEL: 1 ppm Adverse reproductive effect	TWA: 1 ppm TWA: 1.8 mg/m <sup>3</sup>	TWA: 1 ppm TWA: 1.8 mg/m <sup>3</sup>	TWA: 1 ppm TWA: 1.8 mg/m <sup>3</sup> STEL: 10 ppm STEL: 18 mg/m <sup>3</sup>
SOLID GLASS SPHERES 65997-17-3	TWA: 1 fiber/cm <sup>3</sup> respirable fibers: length >5 µm, aspect ratio ≥3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination TWA: 5 mg/m <sup>3</sup> inhalable fraction	-	TWA: 1 fibre/cm <sup>3</sup> TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup> TWA: 1 fibre/cm <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 1 fibre/cm <sup>3</sup> TWA: 5 mg/m <sup>3</sup>
2-Propenoic acid (Acrylic Acid) 79-10-7	TWA: 2 ppm S*	-	TWA: 2 ppm Skin Adverse reproductive effect	TWA: 2 ppm TWA: 5.9 mg/m <sup>3</sup> Skin	TWA: 2 ppm TWA: 5.9 mg/m <sup>3</sup> Skin	TWA: 2 ppm Skin

### 8.2 Appropriate engineering controls

**Engineering Measures** Ensure adequate ventilation, especially in confined areas.

### 8.3 Individual protection measures, such as personal protective equipment

**Eye/Face Protection** If splashes are likely to occur, wear:.. Tightly fitting safety goggles.

**Skin and body protection** Wear protective gloves/ protective clothing.

**Respiratory protection**

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**Hygiene measures**

See section 7 for more information

## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

<b>Physical state</b>	Liquid
<b>Appearance</b>	Viscous liquid
<b>Color</b>	Off-white Gray or Colored liquid
<b>Odor</b>	Faint
<b>Odor Threshold</b>	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Methods</u>
<b>pH</b>	>8	No information available
<b>Melting/freezing point</b>		No information available
<b>Boiling point/boiling range</b>	> 100 °C	
<b>Flash Point</b>		No information available
<b>Evaporation rate</b>		No information available
<b>Flammability (solid, gas)</b>		No information available
<b>Flammability Limits in Air</b>		
upper flammability limit		No information available
lower flammability limit		No information available
<b>Vapor pressure</b>		No information available
<b>Vapor density</b>		No information available
<b>Specific Gravity</b>	0.96 - 1.80 g/cc	
<b>Water solubility</b>	Soluble in water	
<b>Solubility in other solvents</b>		No information available
<b>Partition coefficient</b>		No information available
<b>Autoignition temperature</b>		No information available
<b>Decomposition temperature</b>		No information available
<b>Viscosity, kinematic</b>		No information available
<b>Viscosity, dynamic</b>		No information available
<b>Explosive properties</b>		No information available
<b>Oxidizing Properties</b>		No information available

### 9.2 Other information

<b>Volatile organic compounds (VOC) content</b>	No information available
<b>Density</b>	8.0 - 15.0 lbs/gal

## 10. Stability and Reactivity

### 10.1 Reactivity

No dangerous reaction known under conditions of normal use

.

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

None under normal processing.

### 10.4 Conditions to Avoid

Extremes of temperature and direct sunlight.

**10.5 Incompatible Materials**

None known based on information supplied.

**10.6 Hazardous Decomposition Products**

None known based on information supplied.

**11. Toxicological information****11.1 Acute toxicity****Numerical measures of toxicity: Product Information**

The following values are calculated based on chapter 3.1 of the GHS document

**Oral LD50** 1,084.00 mg/kg mg/l

**Numerical measures of toxicity: Component Information**

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND 14808-60-7	500 mg/kg ( Rat )	-	-
Aluminium Hydroxide 21645-51-2	5000 mg/kg ( Rat )	-	-
Titanium dioxide 13463-67-7	10000 mg/kg ( Rat )	-	-
Ethylene oxide 75-21-8	72 mg/kg ( Rat )	-	= 800 ppm ( Rat ) 4 h
2-Propenoic acid (Acrylic Acid) 79-10-7	193 mg/kg ( Rat )	= 295 mg/kg ( Rabbit )	= 11.1 mg/L ( Rat ) 1 h = 3.6 mg/L ( Rat ) 4 h

**11.2 Information on toxicological effects****Skin corrosion/irritation**Product Information

- No information available

Component Information

- No information available

**Eye damage/irritation**Product Information

- No information available

Component Information

- No information available

**Respiratory or skin sensitization**Product Information

- No information available

Component Information

- No information available

**Germ Cell Mutagenicity**Product Information

- Mutagenic

Component Information

- No information available

**Carcinogenicity**

- The table below indicates whether each agency has listed any ingredient as a carcinogen

Chemical Name	ACGIH	IARC	NTP	OSHA
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND 14808-60-7	A2	Group 1	Known	
Titanium dioxide 13463-67-7	-	Group 2B	-	
Ethylene oxide 75-21-8	A2	Group 1 Group 2A	Known	

**Reproductive toxicity**Product Information

- No information available

Component Information

- No information available

**STOT - single exposure**

No information available

**STOT - repeated exposure**

No information available

**Other adverse effects**Target Organs

- None under normal use conditions

Product Information

- No information available

Component Information

- No information available

**Aspiration hazard**Product Information

- No information available

Component Information

- No information available

## 12. Ecological information

**12.1 Toxicity**Ecotoxicity

No information available

**Ecotoxicity effects**

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Ethylene oxide 75-21-8	-	LC50: 96 h Pimephales promelas 73 - 96 mg/L	LC50: 48 h Daphnia magna 137 - 300 mg/L
2-Propenoic acid (Acrylic Acid) 79-10-7	EC50: 96 h Pseudokirchneriella subcapitata 0.17 mg/L EC50: 72 h Desmodesmus subspicatus 0.04 mg/L	LC50: 96 h Brachydanio rerio 222 mg/L semi-static	EC50: 48 h Daphnia magna 95 mg/L

**12.2 Persistence and degradability**

No information available.

**12.3 Bioaccumulative potential**

Discharge into the environment must be avoided

Chemical Name	log Pow
Ethylene oxide	-0.3

75-21-8	
2-Propenoic acid (Acrylic Acid)	0.46
79-10-7	

**12.4 Mobility in soil**

No information available.

**12.5 Other adverse effects**

No information available

## 13. Disposal Considerations

**13.1 Waste Disposal Guidance**

Dispose of in accordance with federal, state, and local regulations.

## 14. Transport Information

**DOT** Not regulated

**MEX** Not regulated

**IMDG** Not regulated

**IATA** Not regulated

## 15. Regulatory information

**15.1 International Inventories**

**TSCA** -  
**DSL** -  
**EINECS/ELINCS** -  
**ENCS** -  
**IECSC** -  
**KECL** -  
**PICCS** -  
**AICS** -  
**NZIoC** -

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL** - Canadian Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**NZIoC** - New Zealand Inventory of Chemicals

**15.2 U.S. Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	SARA 313 - Threshold Values %
Ethylene oxide	0.1

75-21-8

**15.3 Pesticide Information**

Not applicable

**15.4 U.S. State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND - 14808-60-7	Carcinogen
Titanium dioxide - 13463-67-7	Carcinogen
Ethylene oxide - 75-21-8	Carcinogen Developmental Female Reproductive Male Reproductive
N-(3,4-dichlorophenyl)-N,N-dimethylurea - 330-54-1	Carcinogen
SULPHURIC ACID - 7664-93-9	Carcinogen
ETHYL ACRYLATE - 140-88-5	Carcinogen

**16. Other information**

<b>NFPA</b>	<b>Health Hazard</b> 1	<b>Flammability</b> 0	<b>Instability</b> 0	<b>Physical and chemical hazards *</b>
<b>HMIS</b>	<b>Health Hazard</b> 1	<b>Flammability</b> 0	<b>Physical Hazard</b> 0	<b>Personal protection</b> B

**Legend:**

ACGIH (American Conference of Governmental Industrial Hygienists)

Ceiling (C)

DOT (Department of Transportation)

EPA (Environmental Protection Agency)

IARC (International Agency for Research on Cancer)

International Air Transport Association (IATA)

International Maritime Dangerous Goods (IMDG)

NIOSH (National Institute for Occupational Safety and Health)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

PEL (Permissible Exposure Limit)

Reportable Quantity (RQ)

Skin designation (S\*)

STEL (Short Term Exposure Limit)

TLV® (Threshold Limit Value)

TWA (time-weighted average)

**Revision Date**

26-May-2015

**Revision Note**

No information available

**Disclaimer**

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Safety Data Sheet**

# SAFETY DATA SHEET



Revision Date 28-May-2015  
Version 1.01

## 1. Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

Product name Primus®, Primus® RK  
Product code 011010

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Restricted to professional users  
Restrictions on use No information available  
Uses advised against Not suitable for use in homemaker (DIY) applications

### 1.3 Details of the supplier of the safety data sheet

Supplier Dryvit Systems, Inc  
One Energy Way,  
West Warwick, RI 02893  
Phone Number: (401) 822-4100  
Toll Free Number: (800) 556-7752

E-mail Address ehs@dryvit.com

### 1.4 Emergency telephone number

Emergency telephone number Chemtrec: +1 703-527-3887 ex-USA  
Chemtrec: 1-800-424-9300 USA

## 2. Hazards identification

### 2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910.1200

Carcinogenicity	Category 1A
-----------------	-------------

### 2.2 Label elements

**Signal Word**  
Danger

**Hazard Statements**  
May cause cancer

**Precautionary Statements - Prevention**

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Use personal protective equipment as required

**Precautionary Statements - Response**

If exposed or concerned: Get medical advice/attention

**Precautionary Statements - Storage**

Store in accordance with local regulations

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**2.3. Other Hazards Hazards not otherwise classified (HNOC)**

Not Applicable

**2.4 Other information**

Not Applicable

**Unknown Acute Toxicity**

No information available

### 3. Composition/Information on Ingredients

**Substance**

Chemical Name	CAS-No	Weight %
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND	14808-60-7	60 - 70%

\*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

### 4. First aid measures

**4.1 Description of first-aid measures****General advice**

If symptoms persist, call a physician.

**Eye contact**

Call a physician if irritation develops or persists. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Skin contact**

Immediate medical attention is not required. Call a physician if irritation develops or persists.

**Inhalation**

Immediate medical attention is not required. Call a physician if irritation develops or persists. Get medical attention if symptoms occur.

**Ingestion**

If swallowed, do not induce vomiting - seek medical advice.

**4.2 Most important symptoms and effects, both acute and delayed****Symptoms**

No information available.

**4.3 Recommendations for immediate medical care and/or special treatment**



**Notes to physician** No information available.

## 5. Fire-Fighting Measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** None.

### 5.2 Specific hazards arising from the substance or mixture

#### Special Hazard

No information available

**Hazardous Combustion Products** No information available.

#### Explosion Data

**Sensitivity to Mechanical Impact** No information available.

**Sensitivity to Static Discharge** No information available.

### 5.3 Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. Accidental Release Measures

### 6.1 Personal precautions, protective equipment and emergency procedures

None required. Personal protection needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the training and the expertise of employees in the area responding to the spill.

### 6.2 Environmental precautions

Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological information.

### 6.3 Methods and materials for containment and cleaning up

**Methods for Containment** Spills and leaks are not likely. Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

## 7. Handling and storage

### 7.1 Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

**Hygiene measures** Handle in accordance with good industrial hygiene and safety practice.

### 7.2 Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep in a dry, cool and well-ventilated place. Keep out of the reach of children. Store in accordance with local regulations. Keep from freezing.

**Materials to Avoid** Strong oxidizing agents. Strong acids. Strong bases.

## 8. Exposure controls/personal protection

### 8.1 Occupational Exposure Limits (OEL)

Chemical Name	ACGIH TLV	OSHA PEL	British Columbia	Alberta	Quebec	Ontario TWAEV
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND 14808-60-7	TWA: 0.025 mg/m <sup>3</sup> respirable fraction	: (30)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA total dust : (250)/(%SiO <sub>2</sub> + 5) mppcf TWA respirable fraction : (10)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA respirable fraction	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>	TWA: 0.10 mg/m <sup>3</sup>

### 8.2 Appropriate engineering controls

**Engineering Measures**                      Ensure adequate ventilation, especially in confined areas.

### 8.3 Individual protection measures, such as personal protective equipment

<b>Eye/Face Protection</b>	If splashes are likely to occur, wear: Tightly fitting safety goggles.
<b>Skin and body protection</b>	Wear protective gloves/ protective clothing.
<b>Respiratory protection</b>	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
<b>Hygiene measures</b>	See section 7 for more information

## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Viscous liquid
Color	Off-white Gray or Colored liquid
Odor	Faint
Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Methods</u>
pH	>8	
Melting/freezing point		No information available
Boiling point/boiling range	> 100 °C / 212 °F	
Flash Point	no data available	No information available
Evaporation rate		
Flammability (solid, gas)		No information available
Flammability Limits in Air		
upper flammability limit		No information available
lower flammability limit		No information available
Vapor pressure		No information available
Vapor density		No information available
Specific Gravity	0.96 - 1.80 g/cc	
Water solubility	Soluble in water	
Solubility in other solvents		No information available
Partition coefficient		No information available
Autoignition temperature		
Decomposition temperature		
Viscosity, kinematic		No information available
Viscosity, dynamic		No information available
Explosive properties		No information available
Oxidizing Properties		No information available

### 9.2 Other information

Volatile organic compounds (VOC) content	no data available
Density	8.0 - 15.0

## 10. Stability and Reactivity

### 10.1 Reactivity

No dangerous reaction known under conditions of normal use

.

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

None under normal processing.

### 10.4 Conditions to Avoid

Do not freeze. To avoid thermal decomposition, do not overheat.

### 10.5 Incompatible Materials

Strong oxidizing agents. Strong acids. Strong bases.

**10.6 Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating gases and vapors.

**11. Toxicological information****11.1 Acute toxicity****Numerical measures of toxicity: Product Information**

The following values are calculated based on chapter 3.1 of the GHS document

**Unknown Acute Toxicity**                      No information available

**Numerical measures of toxicity: Component Information**

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND 14808-60-7	500 mg/kg ( Rat )	-	-

**11.2 Information on toxicological effects****Skin corrosion/irritation**Product Information

- No information available

Component Information

- No information available

**Eye damage/irritation**Product Information

- No information available

Component Information

- No information available

**Respiratory or skin sensitization**Product Information

- No information available

Component Information

- No information available

**Germ Cell Mutagenicity**Product Information

- No information available

Component Information

- No information available

**Carcinogenicity**

- The table below indicates whether each agency has listed any ingredient as a carcinogen

Chemical Name	ACGIH	IARC	NTP	OSHA
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND 14808-60-7	A2	Group 1	Known	

**Reproductive toxicity**Product Information

- No information available

Component Information

- No information available

**STOT - single exposure**

No information available

**STOT - repeated exposure**

No information available

**Other adverse effects**Target Organs

- None under normal use conditions

Product Information

- No information available

Component Information

- No information available

**Aspiration hazard**Product Information

- No information available

Component Information

- No information available

## 12. Ecological information

**12.1 Toxicity****Ecotoxicity**

No information available

**Ecotoxicity effects****12.2 Persistence and degradability**

No information available.

**12.3 Bioaccumulative potential**

Discharge into the environment must be avoided

**12.4 Mobility in soil**

No information available.

**12.5 Other adverse effects**

No information available

## 13. Disposal Considerations

**13.1 Waste Disposal Guidance**

Dispose of in accordance with federal, state, and local regulations.

## 14. Transport Information

**DOT**

Not regulated

**MEX**

Not regulated

**IMDG**

Not regulated

**IATA**

Not regulated

## 15. Regulatory information

### 15.1 International Inventories

<b>TSCA</b>	Complies
<b>DSL</b>	Complies
<b>EINECS/ELINCS</b>	-
<b>ENCS</b>	-
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	-
<b>AICS</b>	Complies
<b>NZIoC</b>	-

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL** - Canadian Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**NZIoC** - New Zealand Inventory of Chemicals

### 15.2 U.S. Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

### 15.3 Pesticide Information

Not applicable

### 15.4 U.S. State Regulations

#### California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND - 14808-60-7	Carcinogen
Benzophenone - 119-61-9	Carcinogen

## 16. Other information

<b>NFPA</b>	<b>Health Hazard</b> 1	<b>Flammability</b> 0	<b>Instability</b> 0	<b>Physical and chemical hazards</b> -
<b>HMIS</b>	<b>Health Hazard</b> 1	<b>Flammability</b> 0	<b>Physical Hazard</b> 0	<b>Personal protection</b> B

#### Legend:

ACGIH (American Conference of Governmental Industrial Hygienists)

Ceiling (C)

DOT (Department of Transportation)

EPA (Environmental Protection Agency)

IARC (International Agency for Research on Cancer)

International Air Transport Association (IATA)

International Maritime Dangerous Goods (IMDG)

NIOSH (National Institute for Occupational Safety and Health)

NTP (National Toxicology Program)

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*OSHA (Occupational Safety and Health Administration of the US Department of Labor)*  
*PEL (Permissible Exposure Limit)*  
*Reportable Quantity (RQ)*  
*Skin designation (S\*)*  
*STEL (Short Term Exposure Limit)*  
*TLV® (Threshold Limit Value)*  
*TWA (time-weighted average)*

**Revision Date** 28-May-2015

**Revision Note**

No information available

**Disclaimer**

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Safety Data Sheet**

# SAFETY DATA SHEET



Revision Date 26-May-2015  
Version 1

## 1. Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

Product name Primus® DM  
Product code 013010

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Restricted to professional users  
Restrictions on use Professional Use Only  
Uses advised against Not suitable for use in homemaker (DIY) applications

### 1.3 Details of the supplier of the safety data sheet

Supplier Dryvit Systems, Inc  
One Energy Way,  
West Warwick, RI 02893  
Phone Number: (401) 822-4100  
Toll Free Number: (800) 556-7752

E-mail Address ehs@dryvit.com

### 1.4 Emergency telephone number

Emergency telephone number Chemtrec: +1 703-527-3887 ex-USA  
Chemtrec: 1-800-424-9300 USA

## 2. Hazards identification

### 2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910.1200

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1B
Carcinogenicity	Category 1A
Specific target organ toxicity (single exposure)	Category 3 - (H335)

### 2.2 Label elements

Signal Word  
Danger

### Hazard Statements



Causes skin irritation  
 Causes serious eye damage  
 May cause an allergic skin reaction  
 May cause cancer  
 May cause respiratory irritation



#### Precautionary Statements - Prevention

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Use personal protective equipment as required  
 Wash face, hands and any exposed skin thoroughly after handling  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Contaminated work clothing should not be allowed out of the workplace  
 Use only outdoors or in a well-ventilated area

#### Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 Immediately call a POISON CENTER or doctor/physician  
 IF ON SKIN: Wash with plenty of soap and water  
 Take off contaminated clothing and wash before reuse  
 If skin irritation or rash occurs: Get medical advice/attention  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

#### Precautionary Statements - Storage

Store in accordance with local regulations

#### Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

#### 2.3 Other Hazards Hazards not otherwise classified (HNOC)

Not Applicable

#### 2.4 Other information

Not Applicable

### 3. Composition/Information on Ingredients

#### Substance

Chemical Name	CAS-No	Weight %
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND	14808-60-7	50 - 60%
PORTLAND CEMENT	65997-15-1	20 - 30%
CALCIUM CARBONATE (LIMESTONE)	1317-65-3	0 - 10%
Calcium Metasilicate	13983-17-0	0 - 10%
CALCIUM SULFATE HEMIHYDRATE	13397-24-5	0 - 10%
CALCIUM OXIDE/LIME	1305-78-8	0 - 10%
MAGNESIUM OXIDE	1309-48-4	0 - 10%
AMORPHOUS SILICA	7631-86-9	0 - 10%
IRON OXIDE	1309-37-1	0 - 10%

ALUMINUM OXIDE	1344-28-1	0 - 10%
SOLID GLASS SPHERES	65997-17-3	0 - 10%

\*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

## 4. First aid measures

### 4.1 Description of first-aid measures

<b>General advice</b>	If symptoms persist, call a physician.
<b>Eye contact</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician if irritation develops or persists.
<b>Skin contact</b>	Immediate medical attention is not required. Wash off with soap and water. Call a physician if irritation develops or persists.
<b>Inhalation</b>	Immediate medical attention is not required. Call a physician if irritation develops or persists. Get medical attention if symptoms occur.
<b>Ingestion</b>	If swallowed, do not induce vomiting - seek medical advice.

### 4.2 Most important symptoms and effects, both acute and delayed

<b>Symptoms</b>	No information available.
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### 4.3 Recommendations for immediate medical care and/or special treatment

<b>Notes to physician</b>	No information available.
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## 5. Fire-Fighting Measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

<b>Unsuitable Extinguishing Media</b>	None.
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### 5.2 Specific hazards arising from the substance or mixture

#### Special Hazard

No information available

<b>Hazardous Combustion Products</b>	No information available.
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#### Explosion Data

**Sensitivity to Mechanical Impact** No information available.

**Sensitivity to Static Discharge** No information available.

### 5.3 Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. Accidental Release Measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Personal protection needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the training and the expertise of employees in the area responding to the spill.

**6.2 Environmental precautions**

Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological information.

**6.3 Methods and materials for containment and cleaning up**

**Methods for Containment** Spills and leaks are not likely. Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

**7. Handling and storage****7.1 Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

**Hygiene measures** Handle in accordance with good industrial hygiene and safety practice.

**7.2 Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep in a dry, cool and well-ventilated place. Keep out of the reach of children. Store in accordance with local regulations.

**Materials to Avoid** Strong oxidizing agents. Strong acids. Strong bases.

**8. Exposure controls/personal protection****8.1 Occupational Exposure Limits (OEL)**

Chemical Name	ACGIH TLV	OSHA PEL	British Columbia	Alberta	Quebec	Ontario TWAEV
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND 14808-60-7	TWA: 0.025 mg/m <sup>3</sup> respirable fraction	: (30)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA total dust : (250)/(%SiO <sub>2</sub> + 5) mppcf TWA respirable fraction : (10)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA respirable fraction	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>	TWA: 0.10 mg/m <sup>3</sup>
PORTLAND CEMENT 65997-15-1	TWA: 1 mg/m <sup>3</sup> particulate matter containing no asbestos and <1% crystalline silica, respirable fraction	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction TWA: 50 mppcf <1% Crystalline silica	TWA: 10 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>
CALCIUM CARBONATE (LIMESTONE) 1317-65-3	-	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 10 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	
Calcium Metasilicate 13983-17-0	-	-			TWA: 10 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>	
CALCIUM SULFATE HEMIHYDRATE 13397-24-5	TWA: 10 mg/m <sup>3</sup> inhalable fraction	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 10 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>
CALCIUM OXIDE/LIME 1305-78-8	TWA: 2 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>
MAGNESIUM OXIDE 1309-48-4	TWA: 10 mg/m <sup>3</sup> inhalable fraction	TWA: 15 mg/m <sup>3</sup> fume, total particulate	TWA: 10 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>
AMORPHOUS SILICA 7631-86-9	-	TWA: 20 mppcf : (80)/(% SiO <sub>2</sub> ) mg/m <sup>3</sup> TWA				

IRON OXIDE 1309-37-1	TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 10 mg/m <sup>3</sup> fume TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 10 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup> TWA: 10 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>
ALUMINUM OXIDE 1344-28-1	TWA: 1 mg/m <sup>3</sup> respirable fraction	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 1.0 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>
SOLID GLASS SPHERES 65997-17-3	TWA: 1 fiber/cm <sup>3</sup> respirable fibers: length >5 µm, aspect ratio ≥3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination TWA: 5 mg/m <sup>3</sup> inhalable fraction	-	TWA: 1 fibre/cm <sup>3</sup> TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup> TWA: 1 fibre/cm <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 1 fibre/cm <sup>3</sup> TWA: 5 mg/m <sup>3</sup>

## 8.2 Appropriate engineering controls

**Engineering Measures** Ensure adequate ventilation, especially in confined areas.

## 8.3 Individual protection measures, such as personal protective equipment

**Eye/Face Protection** Safety glasses with side-shields.

**Skin and body protection** Wear protective gloves/ protective clothing.

**Respiratory protection** Effective dust mask. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

**Hygiene measures** See section 7 for more information

## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state	Solid
Appearance	Powder
Color	Off-white or Gray
Odor	No information available
Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Methods</u>
pH		
Melting/freezing point		No information available
Boiling point/boiling range		No information available
Flash Point		No information available
Evaporation rate		
Flammability (solid, gas)		No information available
Flammability Limits in Air		
upper flammability limit		No information available
lower flammability limit		No information available
Vapor pressure		No information available
Vapor density		No information available
Specific Gravity	1.60-2.80 g/cc	
Water solubility	Soluble in water	
Solubility in other solvents		No information available
Partition coefficient		No information available
Autoignition temperature		
Decomposition temperature		
Viscosity, kinematic		No information available
Viscosity, dynamic		No information available
Explosive properties		No information available
Oxidizing Properties		No information available

### 9.2 Other information

Volatile organic compounds (VOC) content	no data available
Density	14.0 - 23.0 lbs/gal

## 10. Stability and Reactivity

### 10.1 Reactivity

No dangerous reaction known under conditions of normal use

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

None under normal processing.

### 10.4 Conditions to Avoid

Do not freeze. To avoid thermal decomposition, do not overheat.

### 10.5 Incompatible Materials

Strong oxidizing agents. Strong acids. Strong bases.

**10.6 Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating gases and vapors.

**11. Toxicological information****11.1 Acute toxicity****Numerical measures of toxicity: Product Information**

The following values are calculated based on chapter 3.1 of the GHS document

Oral LD50 23,370.00 mg/kg

**Numerical measures of toxicity: Component Information**

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND 14808-60-7	500 mg/kg ( Rat )	-	-
CALCIUM OXIDE/LIME 1305-78-8	500 mg/kg ( Rat )	-	-
AMORPHOUS SILICA 7631-86-9	5000 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	> 2.2 mg/L ( Rat ) 1 h
IRON OXIDE 1309-37-1	10000 mg/kg ( Rat )	-	-
ALUMINUM OXIDE 1344-28-1	5000 mg/kg ( Rat )	-	-

**11.2 Information on toxicological effects****Skin corrosion/irritation**Product Information

- Corrosive to skin. Contact with skin may cause irritation or severe burns and scarring.

Component Information

- No information available

**Eye damage/irritation**Product Information

- Risk of serious damage to eyes

Component Information

- No information available

**Respiratory or skin sensitization**Product Information

- May cause allergic skin reaction

Component Information

- No information available

**Germ Cell Mutagenicity**Product Information

- No information available

Component Information

- No information available

**Carcinogenicity**

- The table below indicates whether each agency has listed any ingredient as a carcinogen

Chemical Name	ACGIH	IARC	NTP	OSHA
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND	A2	Group 1	Known	

14808-60-7				
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**Reproductive toxicity**Product Information

- No information available

Component Information

- No information available

**STOT - single exposure**

No information available

**STOT - repeated exposure**

No information available

**Other adverse effects**Target Organs

- Eyes
- Lungs
- Respiratory system
- Skin

Product Information

- No information available

Component Information

- No information available

**Aspiration hazard**Product Information

- No information available

Component Information

- No information available

## 12. Ecological information

**12.1 Toxicity****Ecotoxicity**

No information available

**Ecotoxicity effects**

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
CALCIUM OXIDE/LIME 1305-78-8	-	LC50: 96 h Cyprinus carpio 1070 mg/L static	-
AMORPHOUS SILICA 7631-86-9	EC50: 72 h Pseudokirchneriella subcapitata 440 mg/L	LC50: 96 h Brachydanio rerio 5000 mg/L static	EC50: 48 h Ceriodaphnia dubia 7600 mg/L

**12.2 Persistence and degradability**

No product level data available.

**12.3 Bioaccumulative potential**

Some components of this material have some potential to bioaccumulate but not all have been tested

**12.4 Mobility in soil**

No information available.

**12.5 Other adverse effects**

No information available

### 13. Disposal Considerations

#### 13.1 Waste Disposal Guidance

Dispose of in accordance with federal, state, and local regulations.

### 14. Transport Information

**DOT** Not regulated

**MEX** Not regulated

**IMDG** Not regulated

**IATA** Not regulated

### 15. Regulatory information

#### 15.1 International Inventories

TSCA -  
DSL -  
EINECS/ELINCS -  
ENCS -  
IECSC -  
KECL -  
PICCS -  
AICS -  
NZIoC -

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL - Canadian Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

#### 15.2 U.S. Federal Regulations

##### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

#### 15.3 Pesticide Information

Not applicable

#### 15.4 U.S. State Regulations

##### California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND - 14808-60-7	Carcinogen
Titanium dioxide - 13463-67-7	Carcinogen
METHANOL - 67-56-1	Developmental



Acetaldehyde - 75-07-0	Carcinogen
------------------------	------------

## 16. Other information

<b>NFPA</b>	<b>Health Hazard</b> 2	<b>Flammability</b> 0	<b>Instability</b> 0	<b>Physical and chemical hazards -</b>
<b>HMIS</b>	<b>Health Hazard</b> 2	<b>Flammability</b> 0	<b>Physical Hazard</b> 0	<b>Personal protection</b> E

### Legend:

ACGIH (American Conference of Governmental Industrial Hygienists)

Ceiling (C)

DOT (Department of Transportation)

EPA (Environmental Protection Agency)

IARC (International Agency for Research on Cancer)

International Air Transport Association (IATA)

International Maritime Dangerous Goods (IMDG)

NIOSH (National Institute for Occupational Safety and Health)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

PEL (Permissible Exposure Limit)

Reportable Quantity (RQ)

Skin designation (S\*)

STEL (Short Term Exposure Limit)

TLV® (Threshold Limit Value)

TWA (time-weighted average)

### Revision Date

26-May-2015

### Revision Note

No information available

### Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Safety Data Sheet**

WEST WARWICK, RI  
(401) 822-4100

COLUMBUS, GA  
(706) 563-8021

SAND SPRINGS, OK  
(918) 245-0216

WOODLAKE, CA  
(559) 564-3591

## MATERIAL SAFETY DATA SHEET #019

Date Issued: November 25, 2008  
(Replaces: June, 2004)

### Section 1 - Chemical Product and Company Identification

**Product Name:** Standard™ Mesh 48, Standard™ Mesh 72, Standard™ Mesh 297, Standard™ Plus Mesh 48, Intermediate® Mesh 48, Corner™ Mesh, Panzer® 15 Mesh, Panzer® 20 Mesh, Sprint® Mesh 7 ½, Ultramesh®, I.S. Mesh™, Detail® Mesh 9 ½, Non-Woven 48 and Softkote Mesh 48”

**Chemical Formula:** N/A

**CAS Number:** None

**Other Designations:** Woven Fiberglass Fabric

**General Use:** Industrial

### Section 2 - Composition / Information on Ingredients

Ingredient Name	CAS Number	% wt or % vol
Continuous Filament/Fiber Glass	65997-17-3	80.0 - 96.0%
Vinyl Chloride Copolymer	None	4.0-20.0%
Inorganic/Organic Pigments	None	.05-8.0%

**Trace Impurities:** N/A

Ingredient	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH
	TWA	STEL	TWA	STEL	TWA	STEL	IDLH
Continuous Filament Fiberglass	15 mg/cuM	N/E	10.0 mg/m <sup>3</sup>	N/E	3 Fiber/cc	N/E	N/E
Vinyl Chloride Copolymer	N/E	N/E	N/E	N/E	N/E	N/E	N/E
Inorganic/organic pigments							

### Section 3 - Hazards Identification

#### ☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Dryvit Systems, Inc. coated and finished fabrics are stable under normal ambient conditions.

#### Potential Health Effects

**Primary Entry Routes:** Inhalation

**Target Organs:** None

**Acute Effects**

**Inhalation:** Mechanical irritation of the mouth, nose and throat

**Eye:** Direct contact will cause mechanical irritation.

**Skin:** Transient mechanical irritation. Occasionally there might be skin irritation noted by individuals who are initially exposed to fiberglass.

**Ingestion:** Observe individual. If symptoms of GI irritation develop, consult a physician.

**Carcinogenicity:** IARC, NTP, and OSHA do not list Dryvit Systems, Inc. Coated Glass Fabrics as a carcinogen.

**Medical Conditions Aggravated by Long-Term Exposure:** Skin, eyes and Respiratory Irritation.

**Chronic Effects:** None Known (See Section 11)

HMIS	
<b>H</b>	1
<b>F</b>	0
<b>R</b>	0
<b>PPE</b> <sup>†</sup>	
<sup>†</sup> Sec. 8	

## Section 4 - First Aid Measures

**Inhalation:** Remove to fresh air; drink water to clear throat and blow nose to expel fibers.

**Eye Contact:** Flush with water for 15 minutes; get medical attention if irritation persists.

**Skin Contact:** Wash with soap and water

**Ingestion:** Consult a physician if G.I. irritation exists.

*After first aid, get appropriate in-plant, paramedic, or community medical support.*

**Note to Physicians:** N/A

**Special Precautions/Procedures:** None

## Section 5 - Fire-Fighting Measures

**Flash Point:** None

**Flash Point Method:** N/A

**Burning Rate:** None

**Auto-ignition Temperature:** None

**LEL:** None

**UEL:** None

**Flammability Classification:** Non-flammable

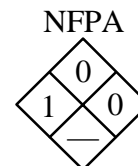
**Extinguishing Media:** Water is the best extinguishing media. Or use that which is appropriate for the surrounding area.

**Unusual Fire or Explosion Hazards:** None

**Hazardous Combustion Products:** Any sizing, binders or coatings on the fiberglass fabric might form hazardous decomposition products during a sustained fire. Follow fire-fighting procedures and use proper fire-fighting equipment.

**Fire-Fighting Instructions:** Do not release runoff from fire control methods to sewers or waterways.

**Fire-Fighting Equipment:** Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face-piece operated in pressure-demand or positive-pressure mode.



## Section 6 - Accidental Release Measures

**Spill /Leak Procedures:** Prevent the spread of fiberglass dust and avoid dust generation conditions. Vacuum clean dusts and fiber. If sweeping is necessary, use a dust suppressant. Those involved in the clean up of fiberglass should use appropriate personal protective equipment. See Section 8.

**Containment:** N/A

**Regulatory Requirements:** Follow applicable OSHA regulations (29 CFR 1910.120).

## Section 7 - Handling and Storage

**Handling Precautions:** Handle properly to prevent the spread of fiberglass dust or fibers.

**Storage Requirements:** Store in proper containers to prevent the spread of dusts and fibers. Low humidity levels will increase the spread of dusts and fibers.

**Regulatory Requirements:** Keep airborne dusts and fiber concentrations below regulatory levels.

## Section 8 - Exposure Controls / Personal Protection

**Engineering Controls:** None

**Ventilation:** Provide general or local exhaust ventilation systems to maintain airborne dust or fiber concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

**Respiratory Protection:** Where airborne dusts or fibers exceed the TLV, use NIOSH approved respirator to protect against nuisance dusts. Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear an MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions and levels of airborne contamination.

**Protective Clothing/Equipment:** If necessary wear protective gloves or use barrier cream to protect against any mechanical irritation. Eye protection is not required unless fiber levels might cause mechanical irritation of the eyes or local regulations require the use of eye protection. Goggles should then be used. Other protective clothing is not required.

**Safety Stations:** Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

**Contaminated Equipment:** Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

**Comments:** Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics. Wash hands after handling this material.

## Section 9 - Physical and Chemical Properties

**Physical State:** Woven fiberglass fabric  
**Appearance and Odor:** no discernible odor  
**Odor Threshold:** N/A  
**Vapor Pressure:** None  
**Vapor Density (A60  
 ir=1):** N/A  
**Formula Weight:** None  
**Density:** N/A  
**Specific Gravity (H<sub>2</sub>O=1, at 4 °C):** N/A  
**pH:** 6-8 (In water)

**Water Solubility:** Not soluble  
**Other Solubility's:** N/A  
**Boiling Point:** N/A  
**Freezing/Melting Point:** 800 Deg. C.  
**Viscosity:** N/A  
**Refractive Index:** N/A  
**Surface Tension:** N/A  
**% Volatile:** 0%  
**Evaporation Rate:** N/A

## Section 10 - Stability and Reactivity

**Stability:** Dryvit Systems, Inc. Coated Glass Fabric is stable at room temperature in closed containers under normal storage and handling conditions.

**Polymerization:** Hazardous polymerization cannot occur.

**Chemical Incompatibilities:** None

**Conditions to Avoid:** None

**Hazardous Decomposition Products:** Thermal oxidative decomposition of Dryvit Systems, Inc. Coated Glass Fabrics can produce oxides of carbon, CO, CO<sub>2</sub>, and hydrocarbons.

## Section 11- Toxicological Information

### Toxicity Data:\*

**Fiber Toxicity:** Glass Fiber diameter determines whether the fiber is respirable. NOISH has determined that man-made mineral fibers with diameters equal or greater than 3.5 microns are non-respirable. Respirable fibers will penetrate deep into the lungs. All E-glass continuous filament fiberglass has a fiber diameter larger than 3.5 microns and therefore are non-respirable.

**Carcinogenicity:** The following organizations have found that the continuous fiberglass filaments are not considered to be carcinogenic based on human and animal tests conducted within the last 10 years.

Internal Agency for Research on Cancer- IARC

American Conference of Governmental Industrial Hygienists –  
ACGIH

Occupational Safety and Health Administration - OSHA  
 National Toxicity Program NTP 7<sup>th</sup> Annual Report on  
 Carcinogens.

## Section 12 - Ecological Information

Fiberglass Fabric, cleaned or finished is considered to be an inert solid waste and will not cause harm to the environment if spilled or released. This product is not manufactured with, or does not contain and Ozone Depleting Chemicals.

## Section 13 - Disposal Considerations

**Disposal:** Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, state, and local regulations.

**Disposal Regulatory Requirements:** N/A

**Container Cleaning and Disposal:** N/A

## Section 14 - Transport Information

### DOT Transportation Data (49 CFR 172.101):

<b>Shipping Name:</b> Fiberglass Fabric	<b>Packaging Authorizations</b> a) <b>Exceptions:</b> None b) <b>Non-bulk Packaging:</b> None c) <b>Bulk Packaging:</b> None	<b>Quantity Limitations</b> a) <b>Passenger, Aircraft, or Railcar:</b> None b) <b>Cargo Aircraft Only:</b> None
<b>Shipping Symbols:</b> None		
<b>Hazard Class:</b> None		
<b>ID No.:</b> None		<b>Vessel Stowage Requirements</b>
<b>Packing Group:</b> N/A		a) <b>Vessel Stowage:</b> None
<b>Label:</b> None		b) <b>Other:</b> None
<b>Special Provisions (172.102):</b> None		

## Section 15 - Regulatory Information

### EPA Regulations:

RCRA Hazardous Waste Number: Not listed (40 CFR 261.33)  
 RCRA Hazardous Waste Classification (40 CFR 261.): Not classified  
 CERCLA Hazardous Substance (40 CFR 302.4) listed/unlisted specific per RCRA, Sec. 3001; CWA, Sec. 311 (b)(4); CWA, Sec. 307(a), CAA, Sec. 112  
 CERCLA Reportable Quantity (RQ), No RQ  
 SARA 311/312 Codes: N/A  
 SARA Toxic Chemical (40 CFR 372.65): Not listed  
 SARA EHS (Extremely Hazardous Substance) (40 CFR 355): Not listed, Threshold Planning Quantity (TPQ): None

### OSHA Regulations:

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): Not listed  
 OSHA Specifically Regulated Substance (29CFR 1910.) No

**State Regulations:** None

## Section 16 - Other Information

<b>Additional Hazard Rating Systems: NFPA Hazard Rating:</b>	<b>Health</b>	-	<b>1</b>
.....	<b>Flammability</b>	-	<b>0</b>
.....	<b>Reactivity</b>	-	<b>0</b>
.....	<b>Unusual Hazards</b>	-	<b>None</b>

**Disclaimer:** The information provided herein is believed to be accurate but is not warranted. Much of the information contained in the Material Safety Data Sheet originates from suppliers; this information cannot be warranted by Dryvit Systems, Inc. to be correct or appropriate for the recipient's use. Recipients are advised to confirm in advance of need that the information is correct, applicable, and suitable to their circumstances. Dryvit Systems, Inc. assumes no legal responsibility for the use or reliance on the data in this MSDS.

# SAFETY DATA SHEET



Revision Date 22-May-2015  
Version 1

## 1. Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

Product name Aquaflash®  
Product code 011294

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Restricted to professional users  
Restrictions on use Professional Use Only  
Uses advised against Not suitable for use in homemaker (DIY) applications

### 1.3 Details of the supplier of the safety data sheet

Supplier Dryvit Systems, Inc  
One Energy Way,  
West Warwick, RI 02893  
Phone Number: (401) 822-4100  
Toll Free Number: (800) 556-7752

E-mail Address ehs@dryvit.com

### 1.4 Emergency telephone number

Emergency telephone number Chemtrec: +1 703-527-3887 ex-USA  
Chemtrec: 1-800-424-9300 USA

## 2. Hazards identification

### 2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910.1200

Skin sensitization	Category 1
Carcinogenicity	Category 1A

### 2.2 Label elements

#### Signal Word

Danger

#### Hazard Statements

May cause an allergic skin reaction  
May cause cancer

**Precautionary Statements - Prevention**

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Use personal protective equipment as required  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Contaminated work clothing should not be allowed out of the workplace

**Precautionary Statements - Response**

If exposed or concerned: Get medical advice/attention  
 IF ON SKIN: Wash with plenty of soap and water  
 If skin irritation or rash occurs: Get medical advice/attention  
 Wash contaminated clothing before reuse

**Precautionary Statements - Storage**

Store in accordance with local regulations

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**2.3 Other Hazards Hazards not otherwise classified (HNOC)**

Not Applicable

**2.4 Other information**

Not Applicable

**Unknown Acute Toxicity**

No information available

### 3. Composition/Information on Ingredients

**Substance**

Chemical Name	CAS-No	Weight %
CALCIUM CARBONATE (LIMESTONE)	1317-65-3	0 - 10%
1,2-ETHANEDIOL	107-21-1	0 - 10%
AMMONIA	7664-41-7	0 - 10%
Talc	14807-96-6	0 - 10%
2-PROPENOIC ACID, 2-METHYL-	79-41-4	0 - 10%
HYDROCARBON DISTILLATE	64742-65-0	0 - 10%
CLAY (KAOLIN)	1332-58-7	0 - 10%
Hexahydro-1,3,5-tris(hydroxyethyl)-s-triazine	4719-04-4	0 - 10%
Sodium hydroxide	1310-73-2	0 - 10%

\*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

### 4. First aid measures

**4.1 Description of first-aid measures****General advice**

If symptoms persist, call a physician.

**Eye contact**

Call a physician if irritation develops or persists. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

<b>Skin contact</b>	Immediate medical attention is not required. Call a physician if irritation develops or persists.
<b>Inhalation</b>	Immediate medical attention is not required. Call a physician if irritation develops or persists. Get medical attention if symptoms occur.
<b>Ingestion</b>	If swallowed, do not induce vomiting - seek medical advice.

#### **4.2 Most important symptoms and effects, both acute and delayed**

**Symptoms** No information available.

#### **4.3 Recommendations for immediate medical care and/or special treatment**

**Notes to physician** No information available.

### **5. Fire-Fighting Measures**

#### **5.1 Extinguishing media**

##### **Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** None.

#### **5.2 Specific hazards arising from the substance or mixture**

##### **Special Hazard**

No information available

**Hazardous Combustion Products** No information available.

##### **Explosion Data**

**Sensitivity to Mechanical Impact** No information available.

**Sensitivity to Static Discharge** No information available.

#### **5.3 Advice for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### **6. Accidental Release Measures**

#### **6.1 Personal precautions, protective equipment and emergency procedures**

Personal protection needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the training and the expertise of employees in the area responding to the spill.

#### **6.2 Environmental precautions**

Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological information.

#### **6.3 Methods and materials for containment and cleaning up**

**Methods for Containment** Spills and leaks are not likely. Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

### **7. Handling and storage**

#### **7.1 Precautions for safe handling**



**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

**Hygiene measures** Handle in accordance with good industrial hygiene and safety practice.

## **7.2 Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep in a dry, cool and well-ventilated place. Keep out of the reach of children. Store in accordance with local regulations. Keep from freezing.

**Materials to Avoid** Strong oxidizing agents. Strong acids. Strong bases.

## **8. Exposure controls/personal protection**

### **8.1 Occupational Exposure Limits (OEL)**

Chemical Name	ACGIH TLV	OSHA PEL	British Columbia	Alberta	Quebec	Ontario TWAEV
CALCIUM CARBONATE (LIMESTONE) 1317-65-3	-	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 10 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	
1,2-ETHANEDIOL 107-21-1	Ceiling: 100 mg/m <sup>3</sup> aerosol only	-	TWA: 10 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup> Ceiling: 100 mg/m <sup>3</sup> Ceiling: 50 ppm	Ceiling: 100 mg/m <sup>3</sup>	Ceiling: 50 ppm Ceiling: 127 mg/m <sup>3</sup>	CEV: 100 mg/m <sup>3</sup>
AMMONIA 7664-41-7	STEL: 35 ppm TWA: 25 ppm	TWA: 50 ppm TWA: 35 mg/m <sup>3</sup>	TWA: 25 ppm STEL: 35 ppm	TWA: 25 ppm TWA: 17 mg/m <sup>3</sup> STEL: 35 ppm STEL: 24 mg/m <sup>3</sup>	TWA: 25 ppm TWA: 17 mg/m <sup>3</sup> STEL: 35 ppm STEL: 24 mg/m <sup>3</sup>	TWA: 25 ppm STEL: 35 ppm
Talc 14807-96-6	TWA: 2 mg/m <sup>3</sup> particulate matter containing no asbestos and <1% crystalline silica, respirable fraction	TWA: 20 mppcf if 1% Quartz or more, use Quartz limit	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	TWA: 3 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>
2-PROPENOIC ACID, 2-METHYL- 79-41-4	TWA: 20 ppm	-	TWA: 20 ppm	TWA: 20 ppm TWA: 70 mg/m <sup>3</sup>	TWA: 20 ppm TWA: 70 mg/m <sup>3</sup>	TWA: 20 ppm
CLAY (KAOLIN) 1332-58-7	TWA: 2 mg/m <sup>3</sup> particulate matter containing no asbestos and <1% crystalline silica, respirable fraction	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>
Sodium hydroxide 1310-73-2	Ceiling: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>	CEV: 2 mg/m <sup>3</sup>

### **8.2 Appropriate engineering controls**

**Engineering Measures** Ensure adequate ventilation, especially in confined areas.

### **8.3 Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** If splashes are likely to occur, wear:.. Tightly fitting safety goggles.

**Skin and body protection** Wear protective gloves/ protective clothing.

**Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**Hygiene measures** See section 7 for more information

## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Viscous liquid
Color	Off-white Gray or Colored liquid
Odor	Faint
Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Methods</u>
pH	>8	
Melting/freezing point		No information available
Boiling point/boiling range	> 100 °C / 212 °F	
Flash Point	no data available	No information available
Evaporation rate		
Flammability (solid, gas)		No information available
Flammability Limits in Air		
upper flammability limit		No information available
lower flammability limit		No information available
Vapor pressure		No information available
Vapor density		No information available
Specific Gravity	0.96 - 1.80 g/cc	
Water solubility	Soluble in water	
Solubility in other solvents		No information available
Partition coefficient		No information available
Autoignition temperature		
Decomposition temperature		
Viscosity, kinematic		No information available
Viscosity, dynamic		No information available
Explosive properties		No information available
Oxidizing Properties		No information available

### 9.2 Other information

Volatile organic compounds (VOC) content	no data available
Density	8.0 - 15.0 lbs/gal

## 10. Stability and Reactivity

### 10.1 Reactivity

No dangerous reaction known under conditions of normal use

.

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

None under normal processing.

### 10.4 Conditions to Avoid

Do not freeze. To avoid thermal decomposition, do not overheat.

### 10.5 Incompatible Materials

Strong oxidizing agents. Strong acids. Strong bases.

**10.6 Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating gases and vapors.

**11. Toxicological information****11.1 Acute toxicity****Numerical measures of toxicity: Product Information**

The following values are calculated based on chapter 3.1 of the GHS document

**Unknown Acute Toxicity** No information available

**Numerical measures of toxicity: Component Information**

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
1,2-ETHANEDIOL 107-21-1	4000 - 10200 mg/kg ( Rat )	= 10600 mg/kg ( Rat )	-
AMMONIA 7664-41-7	350 mg/kg ( Rat )	-	= 2000 ppm ( Rat ) 4 h
2-PROPENOIC ACID, 2-METHYL- 79-41-4	1060 mg/kg ( Rat )	500 - 1000 mg/kg ( Rabbit )	= 7.1 mg/L ( Rat ) 4 h
Sodium hydroxide 1310-73-2	-	= 1350 mg/kg ( Rabbit )	-

**11.2 Information on toxicological effects****Skin corrosion/irritation**Product Information

- No information available

Component Information

- No information available

**Eye damage/irritation**Product Information

- No information available

Component Information

- No information available

**Respiratory or skin sensitization**Product Information

- May cause allergic skin reaction

Component Information

- No information available

**Germ Cell Mutagenicity**Product Information

- No information available

Component Information

- No information available

**Carcinogenicity**

- The table below indicates whether each agency has listed any ingredient as a carcinogen

Chemical Name	ACGIH	IARC	NTP	OSHA
HYDROCARBON DISTILLATE 64742-65-0	A2	Group 1	-	

**Reproductive toxicity**Product Information

- No information available

Component Information

- No information available

**STOT - single exposure**

No information available

**STOT - repeated exposure**

No information available

**Other adverse effects**Target Organs

- None under normal use conditions
- Eyes
- Respiratory system
- Skin

Product Information

- No information available

Component Information

- No information available

**Aspiration hazard**Product Information

- No information available

Component Information

- No information available

## 12. Ecological information

**12.1 Toxicity****Ecotoxicity**

No information available

**Ecotoxicity effects**

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
1,2-ETHANEDIOL 107-21-1	EC50: 96 h <i>Pseudokirchneriella subcapitata</i> 6500 - 13000 mg/L	LC50: 96 h <i>Oncorhynchus mykiss</i> 41000 mg/L LC50: 96 h <i>Oncorhynchus mykiss</i> 14 - 18 mL/L static LC50: 96 h <i>Lepomis macrochirus</i> 27540 mg/L static LC50: 96 h <i>Oncorhynchus mykiss</i> 40761 mg/L static LC50: 96 h <i>Pimephales promelas</i> 40000 - 60000 mg/L static LC50: 96 h <i>Poecilia reticulata</i> 16000 mg/L static	EC50: 48 h <i>Daphnia magna</i> 46300 mg/L
AMMONIA 7664-41-7	-	LC50: 96 h <i>Cyprinus carpio</i> 0.44 mg/L LC50: 96 h <i>Lepomis macrochirus</i> 0.26 - 4.6 mg/L LC50: 96 h <i>Lepomis macrochirus</i> 1.17 mg/L flow-through LC50: 96 h <i>Pimephales promelas</i> 0.73 - 2.35 mg/L LC50: 96 h <i>Pimephales promelas</i> 5.9 mg/L static LC50: 96 h <i>Poecilia reticulata</i> 1.5 mg/L LC50: 96 h <i>Poecilia reticulata</i> 1.19 mg/L static	LC50: 48 h <i>Daphnia magna</i> 25.4 mg/L
Talc 14807-96-6	-	LC50: 96 h <i>Brachydanio rerio</i> 100 g/L semi-static	-
HYDROCARBON DISTILLATE 64742-65-0	-	LC50: 96 h <i>Oncorhynchus mykiss</i> 5000 mg/L	EC50: 48 h <i>Daphnia magna</i> 1000 mg/L
Sodium hydroxide	-	LC50: 96 h <i>Oncorhynchus mykiss</i>	-

1310-73-2		45.4 mg/L static	
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**12.2 Persistence and degradability**

No information available.

**12.3 Bioaccumulative potential**

Discharge into the environment must be avoided

Chemical Name	log Pow
1,2-ETHANEDIOL 107-21-1	-1.93
AMMONIA 7664-41-7	-1.14
2-PROPENOIC ACID, 2-METHYL- 79-41-4	0.93

**12.4 Mobility in soil**

No information available.

**12.5 Other adverse effects**

No information available

## 13. Disposal Considerations

**13.1 Waste Disposal Guidance**

Dispose of in accordance with federal, state, and local regulations.

## 14. Transport Information

<b><u>DOT</u></b>	Not regulated
<b><u>MEX</u></b>	Not regulated
<b><u>IMDG</u></b>	Not regulated
<b><u>IATA</u></b>	Not regulated

## 15. Regulatory information

**15.1 International Inventories**

<b>TSCA</b>	-
<b>DSL</b>	-
<b>EINECS/ELINCS</b>	-
<b>ENCS</b>	-
<b>IECSC</b>	-
<b>KECL</b>	-
<b>PICCS</b>	-
<b>AICS</b>	-
<b>NZIoC</b>	-

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL** - Canadian Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances  
**NZIoC** - New Zealand Inventory of Chemicals

## 15.2 U.S. Federal Regulations

### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

## 15.3 Pesticide Information

Not applicable

## 15.4 U.S. State Regulations

### California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND - 14808-60-7	Carcinogen
N-(3,4-dichlorophenyl)-N,N-dimethylurea - 330-54-1	Carcinogen
CARBON BLACK - 1333-86-4	Carcinogen
Titanium dioxide - 13463-67-7	Carcinogen
Formaldehyde - 50-00-0	Carcinogen
Ethylene oxide - 75-21-8	Carcinogen Developmental Female Reproductive Male Reproductive
ETHYL ACRYLATE - 140-88-5	Carcinogen
Benzyl chloride - 100-44-7	Carcinogen

## 16. Other information

<b>NFPA</b>	<b>Health Hazard</b> 1	<b>Flammability</b> 0	<b>Instability</b> 0	<b>Physical and chemical hazards</b> -
<b>HMIS</b>	<b>Health Hazard</b> 1	<b>Flammability</b> 0	<b>Physical Hazard</b> 0	<b>Personal protection</b> B

### Legend:

ACGIH (American Conference of Governmental Industrial Hygienists)  
 Ceiling (C)  
 DOT (Department of Transportation)  
 EPA (Environmental Protection Agency)  
 IARC (International Agency for Research on Cancer)  
 IATA (International Air Transport Association)  
 IMDG (International Maritime Dangerous Goods)  
 NIOSH (National Institute for Occupational Safety and Health)  
 NTP (National Toxicology Program)  
 OSHA (Occupational Safety and Health Administration of the US Department of Labor)  
 PEL (Permissible Exposure Limit)  
 Reportable Quantity (RQ)  
 Skin designation (S\*)  
 STEL (Short Term Exposure Limit)  
 TLV® (Threshold Limit Value)  
 TWA (time-weighted average)

**Revision Date** 22-May-2015

### Revision Note

No information available

### Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its

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publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Safety Data Sheet**

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### Section 01 - Product Information

**Identification of the company:**

**Dryvit Systems, Inc.**  
World Headquarters  
1 Energy Way  
West Warwick, RI 02893 USA  
Telephone: +1 401 822 4100

**CHEMTREC:**

Domestic North America  
International Call

800-424-9300  
+1 703-527-3887 (collect calls accepted)

**Trade name:**

**FLASHING TAPE™**

**Primary product use:**

Waterproofing Membrane

**Chemical family:**

Rubberized Asphalt Adhesive Sheet with Film and/or Mesh  
Comprising Various Components

### Section 02 - Composition information on ingredients

Ingredient	CAS#	Percent (max)
Heavy Paraffinic Distillate Solvent Extract	064742-04-7	10-25
Petroleum Asphalt	008052-42-4	50-100
Styrene-Butadiene block copolymer	009003-55-8	10-25

### Section 03 - Hazards identification

Emergency Overview:

**Warning!**

Eye contact with rubberized asphalt residue on hands can cause irritation.

Skin contact with rubberized asphalt can cause irritation.

May be harmful if ingested.

May be harmful if absorbed through skin.

May cause teratogenic effects.

May produce local skin tumors.

Removal of release liner may generate a static electrical discharge (spark).

Release liners are slippery. Remove from work area immediately.

HMIS Rating:

<b>Health:</b>	2*
<b>Flammability:</b>	1
<b>Reactivity:</b>	0
<b>Personal Protective Equipment:</b>	B (See Section 8)



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### Potential Health Effects:

**Inhalation:** Due to the physical nature of this product, inhalation is unlikely. If heated, inhalation of vapor causes irritation, sore throat, coughing and breathing difficulty. Effects include: Nausea, headache, dizziness and irritation.

**Eye Contact:** Eye contact with rubberized asphalt residue on hands can cause irritation

**Skin Contact:** Skin contact causes irritation.

Prolonged skin contact can result in dermatitis.

Contact with petroleum oils in this product, may produce serious toxic effects including skin cancer, liver damage, blood effects and effects on the unborn based on tests with laboratory animals. Animal tests indicate that prolonged and repeated skin contact to the oils in this product may produce local skin tumors.

Individuals with pre-existing skin disorders may be at increased risk for worsening their condition from exposure to this product.

**Skin Absorption:** Product can be absorbed through the skin upon prolonged contact resulting in systemic effects such as nausea, headache, and general discomfort. Ingestion: Due to the physical nature of this product, ingestion is unlikely. If ingested, causes burns to the linings of the mouth, esophagus and stomach. Effects include: Nausea, vomiting and diarrhea. Wash hands before eating.

### Section 04 - First aid measures

**Skin Contact:** In case of skin contact, clean fingernails and wash skin with soap and water. If residue remains, clean with waterless hand-cream or abrasive soap. Never use solvents. If discomfort or irritation persists, consult a physician. Remove contaminated clothing and wash before reuse.

**Eye Contact:** Flush eyes with water for at least 15 minutes while holding eyelids open. Get immediate medical attention.

**Ingestion:** If swallowed, contact a physician immediately. Never give anything by mouth to an unconscious person. The decision to induce vomiting should only be made by a physician.

**Inhalation:** If symptoms develop, get fresh air. If symptoms persist, consult a physician. If breathing has stopped, give artificial respiration then oxygen if needed. Get immediate medical attention.

### Section 05 - Fire and explosion hazard data

<b>Flash Point:</b>	>210C (>410F)
<b>Flash Point Method:</b>	Open Cup
<b>Lower Explosion Limit:</b>	Not Available
<b>Upper Explosion Limit:</b>	Not Available
<b>Auto-Ignition Temperature:</b>	Not Available

### NFPA Rating:

<b>Health:</b>	1
<b>Flammability:</b>	1
<b>Reactivity:</b>	0

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**Extinguishing Media:** In case of fire, use water spray, dry chemical, Carbon dioxide or foam.

**Special Fire Fighting Procedures:** Wear self-contained breathing apparatus and complete personal protective equipment when potential for exposure to vapors or products of combustion exist. Avoid breathing hazardous vapors or products of combustion, keep upwind. Isolate area and keep unnecessary people away. Prevent run-off from fire control or dilution from entering streams or drinking water supplies.

**Unusual Fire and Explosion Hazards:** None unless noted below. Removal of release paper may create a static electric discharge (sparks). Do not remove where sparks may ignite flammable vapors.

### Section 06 - Accidental release measures

**Spills/Leaks:** Due to the physical nature of this product, spills are not possible.

### Section 07 - Handling and storage

**Precautionary Measures:** Avoid contact with eyes, skin and clothing.

Practice good personal hygiene to avoid ingestion.

Use only with adequate ventilation.

Wash clothing before reuse.

Slippery when wet or covered with frost.

Do not apply where membrane odors may penetrate living areas.

To avoid skin contact, use gloves or barrier creams. Promptly cleanse hands with waterless hand cleaner, clean fingernails and wash with soap and water after handling.

Release liners are slippery. Remove from work area immediately after membrane application.

Consistent with good roofing practice, always wear fall protection when working on roof decks.

**FOR PROFESSIONAL USE ONLY. KEEP OUT OF CHILDREN'S REACH.**

### Section 08 - Exposure controls / personal protection

#### EXPOSURE GUIDELINES (US)

Ingredient	ACGIH TLV			OSHA PEL			Other
	TWA	STEL	Ceiling	TWA	STEL	Ceiling	
Heavy Paraffinic Distillate Solvent Extract	-	-	-	-	-	-	-
Petroleum Asphalt	0.5 mg/m3 TWA (inhalable fraction); (as benzene-soluble aerosol)	-	-	-	-	-	-
Styrene-Butadiene block copolymer	-	-	-	-	-	-	-

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### EXPOSURE GUIDELINES (CANADA)

Employers should consult local Provincial regulatory limits for exposure guidelines, which may vary locally.

#### Engineering Controls:

Not generally required.

#### Personal Protective Equipment:

**Respiratory Protection:** Respiratory protection is not generally required. If exposure limits are exceeded, wear approved respiratory protection.

**Skin Protection:** Use oil impervious gloves to avoid prolonged or repeated contact with rubberized asphalt residue.

**Eye Protection:** Not required for normal use.

**Work/Hygienic Practices:** Use good personal hygiene practices. Avoid rubbing eyes while handling. Due to the physical nature of this product, ingestion is unlikely. Incidental ingestion of residue on hands can be avoided by using good personal hygiene practices.

This product contains compounds subject to exposure guidelines and/or identified as carcinogens. (See Sections 8 and 11). However, due to the physical nature of this product, these compounds are unlikely to reach exposure limits unless airborne dust or spray mist is created. To avoid skin contact, wear recommended gloves (see skin protection recommendation) and wash with soap and water after handling. Intermittent or occasional skin contact with petroleum asphalt is not expected to have serious health effects as long as good personal hygiene measures are taken. Promptly cleanse with waterless hand cleaner, clean fingernails and wash with soap and water after handling. All employees working with this product must exercise good and prudent personal hygiene practices.

### Section 09 - Physical and chemical properties

#### **Physical State:**

Solid sheet

#### **Appearance/Odor:**

A black, rubberized asphalt adhesive layer on a grey/black plastic sheet with a paper or plastic release sheet.

Petroleum odor.

#### **Odor Threshold:** (ppm)

Unknown

#### **pH:**

Not Applicable

#### **Vapor Pressure:** (Mm Hg)

Not Applicable

#### **Vapor Density:** (Air = 1)

Not Applicable

#### **Solubility In Water:**

Negligible

#### **Specific Gravity:** (Water = 1)

1.0 - 1.1

#### **Evaporation Rate:** (Butyl Acetate = 1)

Not Applicable

#### **Boiling Point:**

Not Applicable

#### **Viscosity:**

Not Available

#### **Bulk Density:** (Pounds/Cubic Foot)(Pcf)

~70

#### **% Volatiles** (gr/L): (70°F) (21°C)

Negligible

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### Section 10 - Stability and reactivity

**Chemical Stability:** Stable  
**Conditions To Avoid:** Heat, Oxidizing materials, Strong oxidizers and Water.  
**Hazardous Polymerization:** Will not polymerize.  
**Hazardous Decomposition:** Carbon dioxide, Carbon monoxide, Sulfur oxides and Low  
**Products:** molecular weight hydrocarbons.

### Section 11 - Toxicological information

**Ingredient(No data unless listed.)**      **CAS Number**      **LD50 and LC50**  
**Carcinogenicity:**

Ingredient	IARC Group 1	IARC Group 2A	IARC Group 2B	NTP Known	NTP Suspect	OSHA
Heavy Paraffinic Distillate Solvent Extract	Yes	No	No	No	No	Yes
Petroleum Asphalt	No	No	Yes	No	No	No
Styrene-Butadiene block copolymer	No	No	No	No	No	No

Animal tests indicate that prolonged and repeated skin contact with the asphalt in this product may produce local skin tumors.

**Mutagenicity:** Not applicable.  
**Teratogenicity:** Petroleum oils in this product have caused effects on the unborn based on tests with laboratory animals.  
**Reproductive Toxicity:** Not applicable.

### Section 12 - Ecological information

**Environmental Fate:** No data available for product.  
**Ecotoxicity:** No data available for product.

### Section 13 - Disposal considerations

**Waste Disposal Procedures:** Consult all regulations (federal, state, provincial, local) or a qualified waste disposal firm when characterizing waste for disposal. According to EPA (40 CFR § 261), waste of this product is not defined as hazardous. Dispose of waste in accordance with all applicable regulations.

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### Section 14 - Transport information

Proper Shipping Name:	Not Applicable
UN/NA Number:	Not Applicable
Domestic Hazard Class:	Nonhazardous
Surface Freight Classification:	Asphalt Mixture, N.O.I.B.N.
Label/Placard Required:	Not Applicable

### Section 15 - Regulatory information

#### **REGULATORY CHEMICAL LISTS:**

#### **CERCLA (Comprehensive Response Compensation and Liability Act):**

(None present unless listed below)

<b><u>Chemical Name</u></b>	<b><u>CAS #</u></b>	<b><u>Wt %</u></b>	<b><u>CERCLA RQ</u></b>
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#### **SARA Title III (Superfund Amendments and Reauthorization Act)**

#### **SARA Section 312/Tier I & II Hazard Categories:**

Health Immediate (acute)	Yes
Health Delayed (chronic)	Yes
Flammable	No
Reactive	No
Pressure	No

#### **302 Reportable Ingredients (Identification Threshold 1%):**

<b><u>Chemical Name</u></b>	<b><u>CAS #</u></b>	<b><u>Wt %</u></b>	<b><u>SARA 302 TPQ</u></b>
-----------------------------	---------------------	--------------------	----------------------------

#### **313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):**

<b><u>Chemical Name</u></b>	<b><u>CAS #</u></b>	<b><u>Wt %</u></b>
-----------------------------	---------------------	--------------------

#### **National Volatile Organic Compound Emission Standards For Architectural Coatings:**

Volatile Organic Content: (gr/L)	Not Applicable
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<b><u>WHMIS Classification(s):</u></b>	D2 B
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This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR). This MSDS contains all the information required by the CPR.

#### **State Regulatory Information:**

**California Proposition 65:** This product contains substances known to the state of California to cause cancer, birth defects or other reproductive harm.

#### **Massachusetts Hazardous Substance List(Identification threshold 0.001%(1ppm)):**

<b><u>Chemical Name</u></b>	<b><u>CAS #</u></b>	<b><u>Wt %</u></b>
Heavy Paraffinic Distillate Solvent Extract	064742-04-7	21

#### **New Jersey Hazardous Substance List(Identification threshold (0.1%)):**

<b><u>Chemical Name</u></b>	<b><u>CAS #</u></b>	<b><u>Wt %</u></b>
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#### **Pennsylvania Hazardous Substance List(Identification threshold 0.01%):**

<b><u>Chemical Name</u></b>	<b><u>CAS #</u></b>	<b><u>Wt %</u></b>
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### **CHEMICAL INVENTORY STATUS:**

All chemicals in this product are listed or exempt from listing in the following countries:

US	CANADA		EUROPE	AUSTRALIA	JAPAN	KOREA	PHILIPPINES
TSCA	DSL	NDSL	EINECS/ELINCS	AICS	ENCS	ECL	PICCS
Yes	Yes	No	Yes	Yes	Not Determined	Yes	Yes

### **Section 16 - Other information**

This information is supplied under the OSHA Hazard Communication Standard, 29 CFR 1910.1200, and is offered in good faith based on data available to us that we believe to be true and accurate. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable to the material. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate for that use. No warranty, express or implied, is made regarding the accuracy of this data, the hazards connected with the use of the material, or the results to be obtained from the use thereof. We assume no responsibility for damage or injury from the use of the product described herein. Data provided here are typical and not intended for use as product specifications. (R) and TM indicate trademarks of Dryvit Systems, Inc., its business partners or suppliers.

# SAFETY DATA SHEET



Revision Date 26-May-2015  
Version 1

## 1. Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

**Product name** Backstop® NT Spray, Backstop® NT Smooth and Texture, Backstop® NT-VB  
**Product code** 011200

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Recommended Use** Restricted to professional users  
**Restrictions on use** Professional Use Only  
**Uses advised against** Not suitable for use in homemaker (DIY) applications

### 1.3 Details of the supplier of the safety data sheet

**Supplier** Dryvit Systems, Inc  
One Energy Way,  
West Warwick, RI 02893  
Phone Number: (401) 822-4100  
Toll Free Number: (800) 556-7752

**E-mail Address** ehs@dryvit.com

### 1.4 Emergency telephone number

**Emergency telephone number** Chemtrec: +1 703-527-3887 ex-USA  
Chemtrec: 1-800-424-9300 USA

## 2. Hazards identification

### 2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910.1200

Carcinogenicity	Category 1A
-----------------	-------------

### 2.2 Label elements

**Signal Word**  
Danger

**Hazard Statements**  
May cause cancer



#### Precautionary Statements - Prevention

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Use personal protective equipment as required

#### Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention

#### Precautionary Statements - Storage

Store in accordance with local regulations

#### Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

#### 2.3 Other Hazards Hazards not otherwise classified (HNOC)

Not Applicable

#### 2.4 Other information

Not Applicable

#### Unknown Acute Toxicity

No information available

### 3. Composition/Information on Ingredients

#### Substance

Chemical Name	CAS-No	Weight %
CALCIUM CARBONATE (LIMESTONE)	1317-65-3	40 - 50%
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND	14808-60-7	0 - 10%
Titanium dioxide	13463-67-7	0 - 10%
Aluminium magnesium silicate	12174-11-7	0 - 10%
AMORPHOUS SILICA	7631-86-9	0 - 10%
Aluminium Hydroxide	21645-51-2	0 - 10%
2-PROPENOIC ACID, 2-METHYL-	79-41-4	0 - 10%

\*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

### 4. First aid measures

#### 4.1 Description of first-aid measures

##### General advice

If symptoms persist, call a physician.

##### Eye contact

Call a physician if irritation develops or persists. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

##### Skin contact

Immediate medical attention is not required. Call a physician if irritation develops or persists.

##### Inhalation

Immediate medical attention is not required. Call a physician if irritation develops or persists. Get medical attention if symptoms occur.



**Ingestion** If swallowed, do not induce vomiting - seek medical advice.

#### **4.2 Most important symptoms and effects, both acute and delayed**

**Symptoms** No information available.

#### **4.3 Recommendations for immediate medical care and/or special treatment**

**Notes to physician** No information available.

### **5. Fire-Fighting Measures**

#### **5.1 Extinguishing media**

##### **Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** None.

#### **5.2 Specific hazards arising from the substance or mixture**

##### **Special Hazard**

No information available

**Hazardous Combustion Products** No information available.

##### **Explosion Data**

**Sensitivity to Mechanical Impact** No information available.

**Sensitivity to Static Discharge** No information available.

#### **5.3 Advice for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### **6. Accidental Release Measures**

#### **6.1 Personal precautions, protective equipment and emergency procedures**

Personal protection needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the training and the expertise of employees in the area responding to the spill.

#### **6.2 Environmental precautions**

Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological information.

#### **6.3 Methods and materials for containment and cleaning up**

**Methods for Containment** Spills and leaks are not likely. Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

### **7. Handling and storage**

#### **7.1 Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

**Hygiene measures** Handle in accordance with good industrial hygiene and safety practice.

## 7.2 Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep in a dry, cool and well-ventilated place. Keep out of the reach of children. Store in accordance with local regulations. Keep from freezing.

**Materials to Avoid** Strong oxidizing agents. Strong acids. Strong bases.

## 8. Exposure controls/personal protection

### 8.1 Occupational Exposure Limits (OEL)

Chemical Name	ACGIH TLV	OSHA PEL	British Columbia	Alberta	Quebec	Ontario TWAEV
CALCIUM CARBONATE (LIMESTONE) 1317-65-3	-	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 10 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND 14808-60-7	TWA: 0.025 mg/m <sup>3</sup> respirable fraction	: (30)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA total dust : (250)/(%SiO <sub>2</sub> + 5) mppcf TWA respirable fraction : (10)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA respirable fraction	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>	TWA: 0.10 mg/m <sup>3</sup>
Titanium dioxide 13463-67-7	TWA: 10 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup> total dust	TWA: 10 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>
Aluminium magnesium silicate 12174-11-7	TWA: 1 mg/m <sup>3</sup> respirable fraction	-	TWA: 1.0 mg/m <sup>3</sup>		TWA: 1 fibre/cm <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>
AMORPHOUS SILICA 7631-86-9	-	TWA: 20 mppcf : (80)/(% SiO <sub>2</sub> ) mg/m <sup>3</sup> TWA				
Aluminium Hydroxide 21645-51-2	TWA: 1 mg/m <sup>3</sup> respirable fraction	-	TWA: 1.0 mg/m <sup>3</sup>			TWA: 1 mg/m <sup>3</sup>
2-PROPENOIC ACID, 2-METHYL- 79-41-4	TWA: 20 ppm	-	TWA: 20 ppm	TWA: 20 ppm TWA: 70 mg/m <sup>3</sup>	TWA: 20 ppm TWA: 70 mg/m <sup>3</sup>	TWA: 20 ppm

### 8.2 Appropriate engineering controls

**Engineering Measures** Ensure adequate ventilation, especially in confined areas.

### 8.3 Individual protection measures, such as personal protective equipment

**Eye/Face Protection** If splashes are likely to occur, wear:.. Tightly fitting safety goggles.

**Skin and body protection** Wear protective gloves/ protective clothing.

**Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**Hygiene measures** See section 7 for more information

## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Viscous liquid
Color	Off-white Gray or Colored liquid
Odor	Faint
Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Methods</u>
pH	>8	
Melting/freezing point		No information available
Boiling point/boiling range	> 100 °C / 212 °F	
Flash Point	no data available	No information available
Evaporation rate		
Flammability (solid, gas)		No information available
Flammability Limits in Air		
upper flammability limit		No information available
lower flammability limit		No information available
Vapor pressure		No information available
Vapor density		No information available
Specific Gravity	0.96 - 1.80 g/cc	
Water solubility	Soluble in water	
Solubility in other solvents		No information available
Partition coefficient		No information available
Autoignition temperature		
Decomposition temperature		
Viscosity, kinematic		No information available
Viscosity, dynamic		No information available
Explosive properties		No information available
Oxidizing Properties		No information available

### 9.2 Other information

Volatile organic compounds (VOC) content	no data available
Density	8.0 - 15.0 lbs/gal

## 10. Stability and Reactivity

### 10.1 Reactivity

No dangerous reaction known under conditions of normal use

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

None under normal processing.

### 10.4 Conditions to Avoid

Do not freeze. To avoid thermal decomposition, do not overheat.

### 10.5 Incompatible Materials

Strong oxidizing agents. Strong acids. Strong bases.

## 10.6 Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating gases and vapors.

## 11. Toxicological information

### 11.1 Acute toxicity

Numerical measures of toxicity: Product Information

The following values are calculated based on chapter 3.1 of the GHS document

Unknown Acute Toxicity No information available

Numerical measures of toxicity: Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND 14808-60-7	500 mg/kg ( Rat )	-	-
Titanium dioxide 13463-67-7	10000 mg/kg ( Rat )	-	-
AMORPHOUS SILICA 7631-86-9	5000 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	> 2.2 mg/L ( Rat ) 1 h
Aluminium Hydroxide 21645-51-2	5000 mg/kg ( Rat )	-	-
2-PROPENOIC ACID, 2-METHYL- 79-41-4	1060 mg/kg ( Rat )	500 - 1000 mg/kg ( Rabbit )	= 7.1 mg/L ( Rat ) 4 h

### 11.2 Information on toxicological effects

#### Skin corrosion/irritation

Product Information

- No information available

Component Information

- No information available

#### Eye damage/irritation

Product Information

- No information available

Component Information

- No information available

#### Respiratory or skin sensitization

Product Information

- No information available

Component Information

- No information available

#### Germ Cell Mutagenicity

Product Information

- No information available

Component Information

- No information available

#### Carcinogenicity

- The table below indicates whether each agency has listed any ingredient as a carcinogen

Chemical Name	ACGIH	IARC	NTP	OSHA
---------------	-------	------	-----	------

CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND 14808-60-7	A2	Group 1	Known	
Titanium dioxide 13463-67-7	-	Group 2B	-	
Aluminium magnesium silicate 12174-11-7	-	Group 2B Group 3	-	

#### Reproductive toxicity

##### Product Information

- No information available

##### Component Information

- No information available

#### STOT - single exposure

No information available

#### STOT - repeated exposure

No information available

#### Other adverse effects

##### Target Organs

- None under normal use conditions

##### Product Information

- No information available

##### Component Information

- No information available

#### Aspiration hazard

##### Product Information

- No information available

##### Component Information

- No information available

## 12. Ecological information

### 12.1 Toxicity

#### Ecotoxicity

No information available

#### Ecotoxicity effects

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
AMORPHOUS SILICA 7631-86-9	EC50: 72 h Pseudokirchneriella subcapitata 440 mg/L	LC50: 96 h Brachydanio rerio 5000 mg/L static	EC50: 48 h Ceriodaphnia dubia 7600 mg/L

### 12.2 Persistence and degradability

No information available.

### 12.3 Bioaccumulative potential

Discharge into the environment must be avoided

Chemical Name	log Pow
2-PROPENOIC ACID, 2-METHYL- 79-41-4	0.93

### 12.4 Mobility in soil

No information available.

### **12.5 Other adverse effects**

No information available

## **13. Disposal Considerations**

### **13.1 Waste Disposal Guidance**

Dispose of in accordance with federal, state, and local regulations.

## **14. Transport Information**

**DOT** Not regulated

**MEX** Not regulated

**IMDG** Not regulated

**IATA** Not regulated

## **15. Regulatory information**

### **15.1 International Inventories**

<b>TSCA</b>	-
<b>DSL</b>	-
<b>EINECS/ELINCS</b>	-
<b>ENCS</b>	-
<b>IECSC</b>	-
<b>KECL</b>	-
<b>PICCS</b>	-
<b>AICS</b>	-
<b>NZIoC</b>	-

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL** - Canadian Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**NZIoC** - New Zealand Inventory of Chemicals

### **15.2 U.S. Federal Regulations**

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

### **15.3 Pesticide Information**

Not applicable

### **15.4 U.S. State Regulations**

#### **California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND - 14808-60-7	Carcinogen
Titanium dioxide - 13463-67-7	Carcinogen
Aluminium magnesium silicate - 12174-11-7	Carcinogen
N-(3,4-dichlorophenyl)-N,N-dimethylurea - 330-54-1	Carcinogen
ASHES (RESIDUES) - 68131-74-8	Carcinogen
CARBON BLACK - 1333-86-4	Carcinogen
Formaldehyde - 50-00-0	Carcinogen
Ethylene oxide - 75-21-8	Carcinogen Developmental Female Reproductive Male Reproductive
ETHYL ACRYLATE - 140-88-5	Carcinogen
Benzyl chloride - 100-44-7	Carcinogen

## 16. Other information

<b>NFPA</b>	<b>Health Hazard</b> 1	<b>Flammability</b> 0	<b>Instability</b> 0	<b>Physical and chemical hazards -</b>
<b>HMIS</b>	<b>Health Hazard</b> 1	<b>Flammability</b> 0	<b>Physical Hazard</b> 0	<b>Personal protection</b> B

### Legend:

ACGIH (American Conference of Governmental Industrial Hygienists)

Ceiling (C)

DOT (Department of Transportation)

EPA (Environmental Protection Agency)

IARC (International Agency for Research on Cancer)

International Air Transport Association (IATA)

International Maritime Dangerous Goods (IMDG)

NIOSH (National Institute for Occupational Safety and Health)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

PEL (Permissible Exposure Limit)

Reportable Quantity (RQ)

Skin designation (S\*)

STEL (Short Term Exposure Limit)

TLV® (Threshold Limit Value)

TWA (time-weighted average)

**Revision Date** 26-May-2015

### Revision Note

No information available

### Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Safety Data Sheet**

# SAFETY DATA SHEET



Revision Date 28-May-2015  
Version 1

## 1. Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

Product name Color Prime  
Product code 011193198

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Restricted to professional users  
Restrictions on use No information available  
Uses advised against Not suitable for use in homemaker (DIY) applications

### 1.3 Details of the supplier of the safety data sheet

Supplier Dryvit Systems, Inc  
One Energy Way,  
West Warwick, RI 02893  
Phone Number: (401) 822-4100  
Toll Free Number: (800) 556-7752

E-mail Address ehs@dryvit.com

### 1.4 Emergency telephone number

Emergency telephone number Chemtrec: +1 703-527-3887 ex-USA  
Chemtrec: 1-800-424-9300 USA

## 2. Hazards identification

### 2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910.1200

Skin sensitization	Category 1
Carcinogenicity	Category 1A

### 2.2 Label elements

#### Signal Word

Danger

#### Hazard Statements

May cause an allergic skin reaction  
May cause cancer



**Precautionary Statements - Prevention**

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Use personal protective equipment as required  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Wash hands and face thoroughly after handling  
 Do not eat, drink or smoke when using this product

**Precautionary Statements - Response**

Get medical advice/attention if you feel unwell  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 If eye irritation persists: Get medical advice/attention  
 Rinse skin with water/shower  
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
 Fight fire with normal precautions from a reasonable distance

**Precautionary Statements - Storage**

Store in accordance with local regulations

**Precautionary Statements - Disposal**

Refer to manufacturer/supplier for information on recovery/recycling

**2.3. Other Hazards Hazards not otherwise classified (HNOC)**

Not Applicable

**2.4 Other information**

Not Applicable

### 3. Composition/Information on Ingredients

**Substance**

Chemical Name	CAS-No	Weight %
CALCIUM CARBONATE (LIMESTONE)	1317-65-3	10 - 20%
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND	14808-60-7	0 - 10%
Titanium dioxide	13463-67-7	0 - 10%
CLAY (KAOLIN)	1332-58-7	0 - 10%
Propylene glycol	57-55-6	0 - 10%
AMORPHOUS SILICA	7631-86-9	0 - 10%
Aluminium Hydroxide	21645-51-2	0 - 10%
Aluminium magnesium silicate	12174-11-7	0 - 10%
2-PROPENOIC ACID, 2-METHYL-	79-41-4	0 - 10%
Hexahydro-1,3,5-tris(hydroxyethyl)-s-triazine	4719-04-4	0 - 10%

\*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

### 4. First aid measures

**4.1 Description of first-aid measures****General advice**

If symptoms persist, call a physician.

<b>Eye contact</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician if irritation develops or persists.
<b>Skin contact</b>	Immediate medical attention is not required. Call a physician if irritation develops or persists.
<b>Inhalation</b>	Immediate medical attention is not required. Get medical attention if symptoms occur. Call a physician if irritation develops or persists.
<b>Ingestion</b>	If swallowed, do not induce vomiting - seek medical advice.

#### **4.2 Most important symptoms and effects, both acute and delayed**

**Symptoms** No information available.

#### **4.3 Recommendations for immediate medical care and/or special treatment**

**Notes to physician** No information available.

### **5. Fire-Fighting Measures**

#### **5.1 Extinguishing media**

##### **Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** None.

#### **5.2 Specific hazards arising from the substance or mixture**

##### **Special Hazard**

No information available

**Hazardous Combustion Products** No information available.

##### **Explosion Data**

**Sensitivity to Mechanical Impact** No information available.

**Sensitivity to Static Discharge** No information available.

#### **5.3 Advice for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### **6. Accidental Release Measures**

#### **6.1 Personal precautions, protective equipment and emergency procedures**

Personal protection needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the training and the expertise of employees in the area responding to the spill.

#### **6.2 Environmental precautions**

Prevent product from entering drains. Do not flush into surface water or sanitary sewer system.

#### **6.3 Methods and materials for containment and cleaning up**

**Methods for Containment** Spills and leaks are not likely. Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

### **7. Handling and storage**

**7.1 Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

**Hygiene measures** Handle in accordance with good industrial hygiene and safety practice.

**7.2 Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep in a dry, cool and well-ventilated place. Keep out of the reach of children. Store in accordance with local regulations. Keep from freezing.

**Materials to Avoid** Strong oxidizing agents. Strong acids. Strong bases.

**8. Exposure controls/personal protection****8.1 Occupational Exposure Limits (OEL)**

Chemical Name	ACGIH TLV	OSHA PEL	British Columbia	Alberta	Quebec	Ontario TWAEV
CALCIUM CARBONATE (LIMESTONE) 1317-65-3	-	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 10 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND 14808-60-7	TWA: 0.025 mg/m <sup>3</sup> respirable fraction	: (30)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA total dust : (250)/(%SiO <sub>2</sub> + 5) mppcf TWA respirable fraction : (10)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA respirable fraction	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>	TWA: 0.10 mg/m <sup>3</sup>
Titanium dioxide 13463-67-7	TWA: 10 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup> total dust	TWA: 10 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>
CLAY (KAOLIN) 1332-58-7	TWA: 2 mg/m <sup>3</sup> particulate matter containing no asbestos and <1% crystalline silica, respirable fraction	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>
Propylene glycol 57-55-6	-	-				TWA: 10 mg/m <sup>3</sup> TWA: 50 ppm TWA: 155 mg/m <sup>3</sup>
AMORPHOUS SILICA 7631-86-9	-	TWA: 20 mppcf : (80)/(% SiO <sub>2</sub> ) mg/m <sup>3</sup> TWA				
Aluminium Hydroxide 21645-51-2	TWA: 1 mg/m <sup>3</sup> respirable fraction	-	TWA: 1.0 mg/m <sup>3</sup>			TWA: 1 mg/m <sup>3</sup>
Aluminium magnesium silicate 12174-11-7	TWA: 1 mg/m <sup>3</sup> respirable fraction	-	TWA: 1.0 mg/m <sup>3</sup>		TWA: 1 fibre/cm <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>
2-PROPENOIC ACID, 2-METHYL- 79-41-4	TWA: 20 ppm	-	TWA: 20 ppm	TWA: 20 ppm TWA: 70 mg/m <sup>3</sup>	TWA: 20 ppm TWA: 70 mg/m <sup>3</sup>	TWA: 20 ppm

**8.2 Appropriate engineering controls**

**Engineering Measures** Ensure adequate ventilation, especially in confined areas.

**8.3 Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** If splashes are likely to occur, wear:.. Tightly fitting safety goggles.

**Skin and body protection** Wear protective gloves/ protective clothing.

**Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

**Hygiene measures**

See section 7 for more information

## 9. Physical and chemical properties

**9.1 Information on basic physical and chemical properties**

<b>Physical state</b>	Liquid
<b>Appearance</b>	Viscous liquid
<b>Color</b>	Off-white Gray or Colored liquid
<b>Odor</b>	Faint
<b>Odor Threshold</b>	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Methods</u>
<b>pH</b>	>8	No information available
<b>Melting/freezing point</b>		No information available
<b>Boiling point/boiling range</b>	> 100 °C	No information available
<b>Flash Point</b>	no data available	No information available
<b>Evaporation rate</b>		No information available
<b>Flammability (solid, gas)</b>		No information available
<b>Flammability Limits in Air</b>		
upper flammability limit		No information available
lower flammability limit		No information available
<b>Vapor pressure</b>		No information available
<b>Vapor density</b>		No information available
<b>Specific Gravity</b>	0.96 - 1.80 g/cc	No information available
<b>Water solubility</b>	Soluble in water	No information available
<b>Solubility in other solvents</b>		No information available
<b>Partition coefficient</b>		No information available
<b>Autoignition temperature</b>		No information available
<b>Decomposition temperature</b>		No information available
<b>Viscosity, kinematic</b>		No information available
<b>Viscosity, dynamic</b>		No information available
<b>Explosive properties</b>		No information available
<b>Oxidizing Properties</b>		No information available

**9.2 Other information**

<b>Volatile organic compounds (VOC) content</b>	no data available
<b>Density</b>	8.0 - 15.0 lbs/gal

## 10. Stability and Reactivity

**10.1 Reactivity**

No dangerous reaction known under conditions of normal use

.

**10.2 Chemical stability**

Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**

None under normal processing.

**10.4 Conditions to Avoid**

Do not freeze. To avoid thermal decomposition, do not overheat.

**10.5 Incompatible Materials**

Strong oxidizing agents. Strong acids. Strong bases.

### 10.6 Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating gases and vapors.

## 11. Toxicological information

### 11.1 Acute toxicity

#### Numerical measures of toxicity: Product Information

#### Numerical measures of toxicity: Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND 14808-60-7	500 mg/kg ( Rat )	-	-
Titanium dioxide 13463-67-7	10000 mg/kg ( Rat )	-	-
Propylene glycol 57-55-6	20000 mg/kg ( Rat )	= 20800 mg/kg ( Rabbit )	-
AMORPHOUS SILICA 7631-86-9	5000 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	> 2.2 mg/L ( Rat ) 1 h
Aluminium Hydroxide 21645-51-2	5000 mg/kg ( Rat )	-	-
2-PROPENOIC ACID, 2-METHYL- 79-41-4	1060 mg/kg ( Rat )	500 - 1000 mg/kg ( Rabbit )	= 7.1 mg/L ( Rat ) 4 h

### 11.2 Information on toxicological effects

#### Skin corrosion/irritation

##### Product Information

- No information available

##### Component Information

- No information available

#### Eye damage/irritation

##### Product Information

- No information available

##### Component Information

- No information available

#### Respiratory or skin sensitization

##### Product Information

- May cause allergic skin reaction

##### Component Information

- No information available

#### Germ Cell Mutagenicity

##### Product Information

- No information available

##### Component Information

- No information available

#### Carcinogenicity

- The table below indicates whether each agency has listed any ingredient as a carcinogen

Chemical Name	ACGIH	IARC	NTP	OSHA
---------------	-------	------	-----	------

CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND 14808-60-7	A2	Group 1	Known	
Titanium dioxide 13463-67-7	-	Group 2B	-	
Aluminium magnesium silicate 12174-11-7	-	Group 2B Group 3	-	

**Reproductive toxicity**Product Information

- No information available

Component Information

- No information available

**STOT - single exposure**

No information available

**STOT - repeated exposure**

No information available

**Other adverse effects**Target Organs

- None under normal use conditions

Product Information

- No information available

Component Information

- No information available

**Aspiration hazard**Product Information

- No information available

Component Information

- No information available

## 12. Ecological information

**12.1 Toxicity**Ecotoxicity

No information available

**Ecotoxicity effects**

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Propylene glycol 57-55-6	EC50: 96 h Pseudokirchneriella subcapitata 19000 mg/L	LC50: 96 h Oncorhynchus mykiss 51600 mg/L static LC50: 96 h Oncorhynchus mykiss 41 - 47 mL/L static LC50: 96 h Pimephales promelas 51400 mg/L static LC50: 96 h Pimephales promelas 710 mg/L	EC50: 48 h Daphnia magna 1000 mg/L Static
AMORPHOUS SILICA 7631-86-9	EC50: 72 h Pseudokirchneriella subcapitata 440 mg/L	LC50: 96 h Brachydanio rerio 5000 mg/L static	EC50: 48 h Ceriodaphnia dubia 7600 mg/L

**12.2 Persistence and degradability**

No information available.

**12.3 Bioaccumulative potential**

Discharge into the environment must be avoided

Chemical Name	log Pow
2-PROPENOIC ACID, 2-METHYL-	0.93

79-41-4

**12.4 Mobility in soil**

No information available.

**12.5 Other adverse effects**

No information available

**13. Disposal Considerations****13.1 Waste Disposal Guidance**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**14. Transport Information**

<b><u>DOT</u></b>	Not regulated
<b><u>MEX</u></b>	Not regulated
<b><u>IMDG</u></b>	Not regulated
<b><u>IATA</u></b>	Not regulated

**15. Regulatory information****15.1 International Inventories**

<b>TSCA</b>	-
<b>DSL</b>	-
<b>EINECS/ELINCS</b>	-
<b>ENCS</b>	-
<b>IECSC</b>	-
<b>KECL</b>	-
<b>PICCS</b>	-
<b>AICS</b>	-
<b>NZIoC</b>	-

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory**DSL** - Canadian Domestic Substances List**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances**PICCS** - Philippines Inventory of Chemicals and Chemical Substances**ENCS** - Japan Existing and New Chemical Substances**IECSC** - China Inventory of Existing Chemical Substances**KECL** - Korean Existing and Evaluated Chemical Substances**PICCS** - Philippines Inventory of Chemicals and Chemical Substances**AICS** - Australian Inventory of Chemical Substances**NZIoC** - New Zealand Inventory of Chemicals**15.2 U.S. Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

**15.3 Pesticide Information**

Not applicable

**15.4 U.S. State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND - 14808-60-7	Carcinogen
Titanium dioxide - 13463-67-7	Carcinogen
Aluminium magnesium silicate - 12174-11-7	Carcinogen
Ethanol - 64-17-5	Carcinogen Developmental
N-(3,4-dichlorophenyl)-N,N-dimethylurea - 330-54-1	Carcinogen
Benzophenone - 119-61-9	Carcinogen
Formaldehyde - 50-00-0	Carcinogen
1,4-DIOXANE - 123-91-1	Carcinogen
Benzyl chloride - 100-44-7	Carcinogen
Acetaldehyde - 75-07-0	Carcinogen
Ethylene oxide - 75-21-8	Carcinogen Developmental Female Reproductive Male Reproductive

**16. Other information**

<b>NFPA</b>	<b>Health Hazard 1</b>	<b>Flammability 0</b>	<b>Instability 0</b>	<b>Physical and chemical hazards -</b>
<b>HMIS</b>	<b>Health Hazard 1</b>	<b>Flammability 0</b>	<b>Physical Hazard 0</b>	<b>Personal protection B</b>

**Legend:**

ACGIH (American Conference of Governmental Industrial Hygienists)

Ceiling (C)

DOT (Department of Transportation)

EPA (Environmental Protection Agency)

IARC (International Agency for Research on Cancer)

International Air Transport Association (IATA)

International Maritime Dangerous Goods (IMDG)

NIOSH (National Institute for Occupational Safety and Health)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

PEL (Permissible Exposure Limit)

Reportable Quantity (RQ)

Skin designation (S\*)

STEL (Short Term Exposure Limit)

TLV® (Threshold Limit Value)

TWA (time-weighted average)

**Revision Date** 28-May-2015**Revision Note**

No information available

**Disclaimer**

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Safety Data Sheet**



# SAFETY DATA SHEET



Revision Date 29-May-2015  
Version 1

## 1. Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

**Product name** Weatherlastic® Smooth, Sanded Weatherlastic® Smooth, Weatherlastic® Smooth - Si  
**Product code** 012705198

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Recommended Use** Restricted to professional users  
**Restrictions on use** No information available  
**Uses advised against** Not suitable for use in homemaker (DIY) applications

### 1.3 Details of the supplier of the safety data sheet

**Supplier** Dryvit Systems, Inc  
One Energy Way,  
West Warwick, RI 02893  
Phone Number: (401) 822-4100  
Toll Free Number: (800) 556-7752

**E-mail Address** ehs@dryvit.com

### 1.4 Emergency telephone number

**Emergency telephone number** Chemtrec: +1 703-527-3887 ex-USA  
Chemtrec: 1-800-424-9300 USA

## 2. Hazards identification

### 2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910.1200

Skin sensitization	Category 1
Carcinogenicity	Category 1A

### 2.2 Label elements

#### Signal Word

Danger

#### Hazard Statements

May cause an allergic skin reaction  
May cause cancer



#### Precautionary Statements - Prevention

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Use personal protective equipment as required  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Contaminated work clothing should not be allowed out of the workplace

#### Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention  
IF ON SKIN: Wash with plenty of soap and water  
If skin irritation or rash occurs: Get medical advice/attention  
Wash contaminated clothing before reuse

#### Precautionary Statements - Storage

Store in accordance with local regulations

#### Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

#### 2.3. Other Hazards Hazards not otherwise classified (HNOC)

Not Applicable

#### 2.4 Other information

Not Applicable

### 3. Composition/Information on Ingredients

#### Substance

Chemical Name	CAS-No	Weight %
CALCIUM CARBONATE (LIMESTONE)	1317-65-3	30 - 40%
Titanium dioxide	13463-67-7	0 - 10%
Propylene glycol	57-55-6	0 - 10%
HYDROCARBON DISTILLATE	64742-65-0	0 - 10%
AMORPHOUS SILICA	7631-86-9	0 - 10%
Aluminium Hydroxide	21645-51-2	0 - 10%
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND	14808-60-7	0 - 10%
2-PROPENOIC ACID, 2-METHYL-	79-41-4	0 - 10%
Hexahydro-1,3,5-tris(hydroxyethyl)-s-triazine	4719-04-4	0 - 10%
MINERAL SEAL OIL	64741-89-5	0 - 10%
ALIPHATIC PETROLEUM DISTILLATES	64741-88-4	0 - 10%

\*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

### 4. First aid measures

#### 4.1 Description of first-aid measures

**General advice** If symptoms persist, call a physician.

**Eye contact** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

	present and easy to do. Continue rinsing. Call a physician if irritation develops or persists.
<b>Skin contact</b>	Immediate medical attention is not required. Call a physician if irritation develops or persists.
<b>Inhalation</b>	Immediate medical attention is not required. Get medical attention if symptoms occur. Call a physician if irritation develops or persists.
<b>Ingestion</b>	If swallowed, do not induce vomiting - seek medical advice.

#### **4.2 Most important symptoms and effects, both acute and delayed**

**Symptoms** No information available.

#### **4.3 Recommendations for immediate medical care and/or special treatment**

**Notes to physician** No information available.

### **5. Fire-Fighting Measures**

#### **5.1 Extinguishing media**

##### **Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** None.

#### **5.2 Specific hazards arising from the substance or mixture**

##### **Special Hazard**

No information available

**Hazardous Combustion Products** No information available.

##### **Explosion Data**

**Sensitivity to Mechanical Impact** No information available.

**Sensitivity to Static Discharge** No information available.

#### **5.3 Advice for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### **6. Accidental Release Measures**

#### **6.1 Personal precautions, protective equipment and emergency procedures**

Personal protection needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the training and the expertise of employees in the area responding to the spill.

#### **6.2 Environmental precautions**

Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological information.

#### **6.3 Methods and materials for containment and cleaning up**

**Methods for Containment** Spills and leaks are not likely. Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

## 7. Handling and storage

### 7.1 Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

**Hygiene measures** Handle in accordance with good industrial hygiene and safety practice.

### 7.2 Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep in a dry, cool and well-ventilated place. Keep out of the reach of children. Store in accordance with local regulations. Keep from freezing.

**Materials to Avoid** Strong oxidizing agents. Strong acids. Strong bases.

## 8. Exposure controls/personal protection

### 8.1 Occupational Exposure Limits (OEL)

Chemical Name	ACGIH TLV	OSHA PEL	British Columbia	Alberta	Quebec	Ontario TWAEV
CALCIUM CARBONATE (LIMESTONE) 1317-65-3	-	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 10 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	
Titanium dioxide 13463-67-7	TWA: 10 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup> total dust	TWA: 10 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>
Propylene glycol 57-55-6	-	-				TWA: 10 mg/m <sup>3</sup> TWA: 50 ppm TWA: 155 mg/m <sup>3</sup>
AMORPHOUS SILICA 7631-86-9	-	TWA: 20 mppcf : (80)/(% SiO <sub>2</sub> ) mg/m <sup>3</sup> TWA				
Aluminium Hydroxide 21645-51-2	TWA: 1 mg/m <sup>3</sup> respirable fraction	-	TWA: 1.0 mg/m <sup>3</sup>			TWA: 1 mg/m <sup>3</sup>
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND 14808-60-7	TWA: 0.025 mg/m <sup>3</sup> respirable fraction	: (30)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA total dust : (250)/(%SiO <sub>2</sub> + 5) mppcf TWA respirable fraction : (10)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA respirable fraction	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>	TWA: 0.10 mg/m <sup>3</sup>
2-PROPENOIC ACID, 2-METHYL- 79-41-4	TWA: 20 ppm	-	TWA: 20 ppm	TWA: 20 ppm TWA: 70 mg/m <sup>3</sup>	TWA: 20 ppm TWA: 70 mg/m <sup>3</sup>	TWA: 20 ppm

### 8.2 Appropriate engineering controls

**Engineering Measures** Ensure adequate ventilation, especially in confined areas.

### 8.3 Individual protection measures, such as personal protective equipment

**Eye/Face Protection** If splashes are likely to occur, wear:.. Tightly fitting safety goggles.

**Skin and body protection** Wear protective gloves/ protective clothing.

**Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**Hygiene measures** See section 7 for more information

## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Viscous liquid
Color	Off-white Gray or Colored liquid
Odor	Faint
Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Methods</u>
pH	>8	
Melting/freezing point		No information available
Boiling point/boiling range	> 100 °C	
Flash Point	no data available	No information available
Evaporation rate		
Flammability (solid, gas)		No information available
Flammability Limits in Air		
upper flammability limit		No information available
lower flammability limit		No information available
Vapor pressure		No information available
Vapor density		No information available
Specific Gravity	0.96 - 1.80 g/cc	
Water solubility	Soluble in water	
Solubility in other solvents		No information available
Partition coefficient		No information available
Autoignition temperature		
Decomposition temperature		
Viscosity, kinematic		No information available
Viscosity, dynamic		No information available
Explosive properties		No information available
Oxidizing Properties		No information available

### 9.2 Other information

Volatile organic compounds (VOC) content	no data available
Density	8.0 - 15.0 lbs/gal

## 10. Stability and Reactivity

### 10.1 Reactivity

No dangerous reaction known under conditions of normal use

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

None under normal processing.

### 10.4 Conditions to Avoid

Do not freeze. To avoid thermal decomposition, do not overheat.

### 10.5 Incompatible Materials

Strong oxidizing agents. Strong acids. Strong bases.

## 10.6 Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating gases and vapors.

## 11. Toxicological information

### 11.1 Acute toxicity

Numerical measures of toxicity: Product Information

Numerical measures of toxicity: Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Titanium dioxide 13463-67-7	10000 mg/kg ( Rat )	-	-
Propylene glycol 57-55-6	20000 mg/kg ( Rat )	= 20800 mg/kg ( Rabbit )	-
AMORPHOUS SILICA 7631-86-9	5000 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	> 2.2 mg/L ( Rat ) 1 h
Aluminium Hydroxide 21645-51-2	5000 mg/kg ( Rat )	-	-
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND 14808-60-7	500 mg/kg ( Rat )	-	-
2-PROPENOIC ACID, 2-METHYL- 79-41-4	1060 mg/kg ( Rat )	500 - 1000 mg/kg ( Rabbit )	= 7.1 mg/L ( Rat ) 4 h
MINERAL SEAL OIL 64741-89-5	5000 mg/kg ( Rat )	> 5 g/kg ( Rabbit )	= 2.18 mg/L ( Rat ) 4 h
ALIPHATIC PETROLEUM DISTILLATES 64741-88-4	5000 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	= 2.18 mg/L ( Rat ) 4 h

### 11.2 Information on toxicological effects

#### Skin corrosion/irritation

Product Information

- No information available

Component Information

- No information available

#### Eye damage/irritation

Product Information

- No information available

Component Information

- No information available

#### Respiratory or skin sensitization

Product Information

- May cause allergic skin reaction

Component Information

- No information available

#### Germ Cell Mutagenicity

Product Information

- No information available

Component Information

- No information available

#### Carcinogenicity

Product Information

- The table below indicates whether each agency has listed any ingredient as a carcinogen

#### Component Information

•

Chemical Name	ACGIH	IARC	NTP	OSHA
Titanium dioxide 13463-67-7	-	Group 2B	-	
HYDROCARBON DISTILLATE 64742-65-0	A2	Group 1	-	
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND 14808-60-7	A2	Group 1	Known	
ALIPHATIC PETROLEUM DISTILLATES 64741-88-4	A2	-	-	
MINERAL SEAL OIL 64741-89-5	A2	-	-	

#### Reproductive toxicity

##### Product Information

• No information available

##### Component Information

• No information available

#### STOT - single exposure

No information available

#### STOT - repeated exposure

No information available

#### Other adverse effects

##### Target Organs

• None under normal use conditions

##### Product Information

• No information available

##### Component Information

• No information available

#### Aspiration hazard

##### Product Information

• No information available

##### Component Information

• No information available

## 12. Ecological information

### 12.1 Toxicity

#### Ecotoxicity

No information available

#### Ecotoxicity effects

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Propylene glycol 57-55-6	EC50: 96 h Pseudokirchneriella subcapitata 19000 mg/L	LC50: 96 h Oncorhynchus mykiss 51600 mg/L static LC50: 96 h Oncorhynchus mykiss 41 - 47 mL/L static LC50: 96 h Pimephales promelas 51400 mg/L static LC50: 96 h Pimephales promelas 710 mg/L	EC50: 48 h Daphnia magna 1000 mg/L Static
HYDROCARBON DISTILLATE 64742-65-0	-	LC50: 96 h Oncorhynchus mykiss 5000 mg/L	EC50: 48 h Daphnia magna 1000 mg/L

AMORPHOUS SILICA 7631-86-9	EC50: 72 h Pseudokirchneriella subcapitata 440 mg/L	LC50: 96 h Brachydanio rerio 5000 mg/L static	EC50: 48 h Ceriodaphnia dubia 7600 mg/L
MINERAL SEAL OIL 64741-89-5	-	LC50: 96 h Oncorhynchus mykiss 5000 mg/L	EC50: 48 h Daphnia magna 1000 mg/L
ALIPHATIC PETROLEUM DISTILLATES 64741-88-4	-	LC50: 96 h Oncorhynchus mykiss 5000 mg/L	EC50: 48 h Daphnia magna 1000 mg/L

## 12.2 Persistence and degradability

No information available.

## 12.3 Bioaccumulative potential

Discharge into the environment must be avoided

Chemical Name	log Pow
2-PROPENOIC ACID, 2-METHYL- 79-41-4	0.93

## 12.4 Mobility in soil

No information available.

## 12.5 Other adverse effects

No information available

# 13. Disposal Considerations

## 13.1 Waste Disposal Guidance

Disposal should be in accordance with applicable regional, national and local laws and regulations.

# 14. Transport Information

**DOT** Not regulated

**MEX** Not regulated

**IMDG** Not regulated

**IATA** Not regulated

# 15. Regulatory information

## 15.1 International Inventories

TSCA -  
DSL -  
EINECS/ELINCS -  
ENCS -  
IECSC -  
KECL -  
PICCS -  
AICS -  
NZIoC -

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL - Canadian Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances



ENCS - Japan Existing and New Chemical Substances  
IECSC - China Inventory of Existing Chemical Substances  
KECL - Korean Existing and Evaluated Chemical Substances  
PICCS - Philippines Inventory of Chemicals and Chemical Substances  
AICS - Australian Inventory of Chemical Substances  
NZIoC - New Zealand Inventory of Chemicals

## 15.2 U.S. Federal Regulations

### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

## 15.3 Pesticide Information

Not applicable

## 15.4 U.S. State Regulations

### California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
Titanium dioxide - 13463-67-7	Carcinogen
CRYSTALLINE SILICA (QUARTZ)/ SILICA SAND - 14808-60-7	Carcinogen
N-(3,4-dichlorophenyl)-N,N-dimethylurea - 330-54-1	Carcinogen
Benzophenone - 119-61-9	Carcinogen
Formaldehyde - 50-00-0	Carcinogen
Acrylonitrile - 107-13-1	Carcinogen
1,4-DIOXANE - 123-91-1	Carcinogen
Acetaldehyde - 75-07-0	Carcinogen
Ethylene oxide - 75-21-8	Carcinogen Developmental Female Reproductive Male Reproductive

## 16. Other information

<b>NFPA</b>	<b>Health Hazard</b> 1	<b>Flammability</b> 0	<b>Instability</b> 0	<b>Physical and chemical hazards -</b>
<b>HMIS</b>	<b>Health Hazard</b> 1	<b>Flammability</b> 0	<b>Physical Hazard</b> 0	<b>Personal protection</b> B

### Legend:

ACGIH (American Conference of Governmental Industrial Hygienists)  
Ceiling (C)  
DOT (Department of Transportation)  
EPA (Environmental Protection Agency)  
IARC (International Agency for Research on Cancer)  
International Air Transport Association (IATA)  
International Maritime Dangerous Goods (IMDG)  
NIOSH (National Institute for Occupational Safety and Health)  
NTP (National Toxicology Program)  
OSHA (Occupational Safety and Health Administration of the US Department of Labor)  
PEL (Permissible Exposure Limit)  
Reportable Quantity (RQ)  
Skin designation (S\*)  
STEL (Short Term Exposure Limit)  
TLV® (Threshold Limit Value)  
TWA (time-weighted average)

Revision Date 29-May-2015

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**Revision Note**

No information available

**Disclaimer**

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Safety Data Sheet**

# Safety Data Sheet

## Standard Reinforcing Mesh

Revision date : 2012/06/15

Version: 1.1

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(549284/SDS\_GEN\_US/EN)

### 1. Product and Company Identification

Company

BASF CORPORATION  
100 Park Avenue  
Florham Park, NJ 07932, USA

24 Hour Emergency Response Information

CHEMTREC: 1-800-424-9300  
BASF HOTLINE: 1-800-832-HELP (4357)

### 2. Hazards Identification

Emergency overview**CAUTION:**

Contact with the eyes or skin may cause mechanical irritation.

CONTAINS MATERIAL WHICH CAN CAUSE CANCER.

Avoid contact with the skin, eyes and clothing.

Avoid inhalation of dusts.

Wear protective clothing.

Wear a NIOSH-certified (or equivalent) particulate respirator.

State of matter: solid

Potential health effects**Primary routes of exposure:**

Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases.

**Acute toxicity:**

Not expected to be acutely toxic.

**Irritation / corrosion:**

Mechanical irritation effects from dust exposure are possible at ambient temperature. Mechanical rubbing may increase skin irritation.

Potential environmental effects**Aquatic toxicity:**

At the present state of knowledge, no negative ecological effects are expected. There is a high probability that the product is not acutely harmful to aquatic organisms. The product has not been tested. The statement has been derived from products of a similar structure or composition.

# Safety Data Sheet

## Standard Reinforcing Mesh

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### 3. Composition / Information on Ingredients

<u>CAS Number</u>	<u>Content (W/W)</u>	<u>Chemical name</u>
65997-17-3	>= 60.0 - <= 100.0 %	Glass, oxide, chemicals
126-86-3	>= 7.0 - <= 13.0 %	2,4,7,9-Tetramethyldec-5-yne-4,7-diol
1332-58-7	>= 0.5 - <= 1.5 %	Kaolin
1309-64-4	>= 0.5 - <= 1.5 %	diantimony trioxide

### 4. First-Aid Measures

**General advice:**

First aid personnel should pay attention to their own safety.

**If inhaled:**

Remove victim to fresh air and away from exposure immediately. If not breathing, give artificial respiration. Seek medical attention.

**If on skin:**

Remove contaminated clothing. Wash skin with soap and water, rinse abundantly. If large slivers or particles penetrate skin, get medical attention. If symptoms persist, seek medical advice.

**If swallowed:**

Do not induce vomiting unless told to by a poison control center or doctor. If large quantities are ingested, seek medical advice.

### 5. Fire-Fighting Measures

**Suitable extinguishing media:**

carbon dioxide, dry powder, foam, water spray

**Protective equipment for fire-fighting:**

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

**Further information:**

Copious amounts of water may be used to cool exposures. Dust can form an explosive mixture with air. In case of combustion evolution of toxic gases/vapours possible.

### 6. Accidental release measures

**Personal precautions:**

Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

**Environmental precautions:**

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

**Cleanup:**

Sweep/shovel up. Place into suitable containers for reuse or disposal in a licensed facility. Dispose of in accordance with national, state and local regulations.

# Safety Data Sheet

## Standard Reinforcing Mesh

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### 7. Handling and Storage

#### Handling

##### **General advice:**

Ensure thorough ventilation of stores and work areas.

##### **Protection against fire and explosion:**

Avoid dust formation. Dust can form an explosive mixture with air.

#### Storage

##### **General advice:**

Avoid dust formation, product dust can form an explosive mixture with air.

##### **Storage stability:**

Keep only in the original container in a cool, dry, well-ventilated place away from ignition sources, heat or flame. Protect from direct sunlight.

### 8. Exposure Controls and Personal Protection

#### Components with workplace control parameters

diantimony trioxide	OSHA ACGIH	PEL 0.5 mg/m3 (antimony (Sb)); TWA value 0.5 mg/m3 (antimony (Sb)); ; Included in the regulation, but with no data values - See the regulation for further details ; Exposure by all routes should be carefully controlled to levels as low as possible.
Kaolin	OSHA ACGIH	PEL 5 mg/m3 Respirable fraction ; PEL 15 mg/m3 Total dust ; TWA value 2 mg/m3 Respirable fraction ; The value is for particulate matter containing no asbestos and <1% crystalline silica.
Glass, oxide, chemicals	ACGIH	TWA value 5 mg/m3 Inhalable fraction ; TWA value 1 fibers/cm <sup>3</sup> Fiber ; TWA value 1 fibers/cm <sup>3</sup> Fiber ; TWA value 0.2 fibers/cm <sup>3</sup> Fiber ;

##### **Advice on system design:**

Provide local exhaust ventilation to maintain recommended P.E.L.

#### Personal protective equipment

##### **Respiratory protection:**

Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) respirator as necessary.

##### **Hand protection:**

Protective glove selection must be based on the user's assessment of the workplace hazards.

##### **Eye protection:**

Safety glasses with side-shields.

##### **Body protection:**

Body protection must be chosen based on level of activity and exposure.

##### **General safety and hygiene measures:**

Handle in accordance with good industrial hygiene and safety practice. Food, beverages, and tobacco products shall not be carried, stored, or consumed where this material is in use. Hands and/or face should be washed before breaks and at the end of the shift. Handle in accordance with good industrial hygiene and safety practice.

# Safety Data Sheet

## Standard Reinforcing Mesh

Revision date : 2012/06/15  
Version: 1.1

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### 9. Physical and Chemical Properties

Form:	fibers	
pH value:		not applicable
Vapour pressure:		not applicable
Partitioning coefficient n-octanol/water (log Pow):		not applicable

### 10. Stability and Reactivity

#### Hazardous reactions:

The product is stable if stored and handled as prescribed/indicated.

#### Thermal decomposition:

No decomposition if stored and handled as prescribed/indicated.

### 11. Toxicological information

#### Acute toxicity

*Information on: diantimony trioxide*

*Assessment of acute toxicity:*

*Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation. Of low toxicity after short-term skin contact.*

#### Irritation / corrosion

*Information on: 2,4,7,9-Tetramethyldec-5-yne-4,7-diol*

*Assessment of irritating effects:*

*Not irritating to the skin. Eye contact causes irritation.*

*Information on: diantimony trioxide*

*Assessment of irritating effects:*

*Skin contact causes irritation. May cause severe damage to the eyes.*

#### Carcinogenicity

*Information on: Glass, oxide, chemicals*

*IARC (International Agency for Research on Cancer) has classified this substance as group 2B (The agent is possibly carcinogenic to humans). NTP listed carcinogen*

*Information on: diantimony trioxide*

*Indication of possible carcinogenic effect in animal tests.*

*IARC (International Agency for Research on Cancer) has classified this substance as group 2B (The agent is possibly carcinogenic to humans).*

#### Other Information:

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses. The product has not been tested. The statements on toxicology have been derived from products of a similar structure and composition.

### 12. Ecological Information

# Safety Data Sheet

## Standard Reinforcing Mesh

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### Other adverse effects:

Ecological data are not available.

## 13. Disposal considerations

### Waste disposal of substance:

Dispose of in accordance with national, state and local regulations. Recommendations: Use excess product in an alternate beneficial application.

## 14. Transport Information

### Land transport USDOT

Not classified as a dangerous good under transport regulations

### Sea transport IMDG

Not classified as a dangerous good under transport regulations

### Air transport IATA/ICAO

Not classified as a dangerous good under transport regulations

## 15. Regulatory Information

### Federal Regulations

#### Registration status:

Chemical TSCA, US released / listed

#### OSHA hazard category:

IARC 1, 2A or 2B carcinogen; NTP listed carcinogen; Chronic target organ effects reported; ACGIH TLV established

#### EPCRA 311/312 (Hazard categories):

Acute; Chronic

#### EPCRA 313:

##### CAS Number

1163-19-5  
1309-64-4

##### Chemical name

Benzene, 1,1'-oxybis[2,3,4,5,6-pentabromo-  
diantimony trioxide

##### CERCLA RQ

1000 LBS

##### CAS Number

1309-64-4

##### Chemical name

diantimony trioxide

### State regulations

#### State RTK

MA, NJ, PA  
MA, PA

#### CAS Number

65997-17-3  
1332-58-7

#### Chemical name

Glass, oxide, chemicals  
Kaolin

#### CA Prop. 65:

# Safety Data Sheet

## Standard Reinforcing Mesh

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THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

### 16. Other Information

#### HMIS III rating

Health: 1☐ Flammability: 0 Physical hazard: 0

NFPA and HMIS use a numbering scale ranging from 0 to 4 to indicate the degree of hazard. A value of zero means that the substance possesses essentially no hazard; a rating of four indicates extreme danger. Although similar, the two rating systems are intended for different purposes, and use different criteria. The NFPA system was developed to provide an on-the-spot alert to the hazards of a material, and their severity, to emergency responders. The HMIS system was designed to communicate workplace hazard information to employees who handle hazardous chemicals.

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

#### MSDS Prepared by:

BASF NA Product Regulations

msds@basf.com

MSDS Prepared on: 2012/06/15

IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE, IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY OUR COMPANY HEREUNDER ARE GIVEN GRATIS AND WE ASSUME NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK.  
END OF DATA SHEET



# Safety Data Sheet

## SENERQUICK ADHESIVE

Revision date : 2011/03/02

Version: 3.0

Page: 1/6

(30368377/SDS\_GEN\_CA/EN)

### 1. Product and Company Identification

Use: Product for construction chemicals

Company

BASF Canada Inc.  
100 Milverton Drive  
Mississauga, ON L5R 4H1, CANADA

24 Hour Emergency Response Information

CANUTEC (reverse charges): (613) 996-6666  
BASF HOTLINE: (800) 454-COPE (2673)

### 2. Hazards Identification

Emergency overview

IRRITANT.

Irritating to eyes and skin.

CONTAINS MATERIAL WHICH CAN CAUSE CANCER.

Colour: white

Odour: ammonia-like, slight odour

Potential health effects**Acute toxicity:**

The product has not been tested. The statement has been derived from the properties of the individual components.

**Irritation / corrosion:**

Irritating to eyes, respiratory system and skin.

**Sensitization:**

There is no evidence of a skin-sensitizing potential.

Potential environmental effects**Aquatic toxicity:**

The product has not been tested.

### 3. Composition / Information on Ingredients

CAS Number

14808-60-7

64741-88-4

Content (W/W)

≥ 0.1 - ≤ 1.0 %

≥ 0.1 - ≤ 1.0 %

Hazardous ingredients

crystalline silica

Distillates (petroleum), solvent-refined heavy paraffinic

# Safety Data Sheet

## SENERQUICK ADHESIVE

Revision date : 2011/03/02

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(30368377/SDS\_GEN\_CA/EN)

64741-89-5

>= 0.1 - <= 1.0 %

Distillates (petroleum), solvent-refined light paraffinic

---

### 4. First-Aid Measures

**General advice:**

First aid personnel should pay attention to their own safety. Remove contaminated clothing.

**If inhaled:**

If difficulties occur after vapour/aerosol has been inhaled, remove to fresh air and seek medical attention.

**If on skin:**

After contact with skin, wash immediately with plenty of water and soap. Under no circumstances should organic solvent be used. If irritation develops, seek medical attention.

**If in eyes:**

Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

**If swallowed:**

Rinse mouth immediately with water. Seek medical attention if necessary. Do not induce vomiting unless told to by a poison control center or doctor.

---

### 5. Fire-Fighting Measures

Flash point:

93.34 °C

Lower explosion limit:

No data available.

Upper explosion limit:

No data available.

**Suitable extinguishing media:**

foam, water spray, dry powder, carbon dioxide

**Unsuitable extinguishing media for safety reasons:**

water jet

**Hazards during fire-fighting:**

carbon monoxide, carbon dioxide, harmful vapours, nitrogen oxides, fumes/smoke, carbon black

**Protective equipment for fire-fighting:**

Wear a self-contained breathing apparatus.

**Further information:**

The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

---

### 6. Accidental release measures

**Personal precautions:**

Use personal protective clothing. Do not breathe vapour/aerosol/spray mists. Handle in accordance with good building materials hygiene and safety practice.

**Environmental precautions:**

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

# Safety Data Sheet

## SENERQUICK ADHESIVE

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### Cleanup:

For small amounts: Pick up with inert absorbent material (e.g. sand, earth etc.). Dispose of contaminated material as prescribed.

For large amounts: Pump off product.

## 7. Handling and Storage

### Handling

#### General advice:

Avoid aerosol formation. Avoid inhalation of mists/vapours. Avoid skin contact. No special measures necessary provided product is used correctly.

#### Protection against fire and explosion:

The product does not contribute to the spreading of flames, nor is it self combustible, not explosive.

### Storage

#### General advice:

Keep only in the original container in a cool, well-ventilated place. Protect from direct sunlight. Store protected against freezing.

#### Temperature tolerance

Protect from temperatures below: 0 °C

The packed product must be protected from temperatures below the indicated one.

## 8. Exposure Controls and Personal Protection

### Components with workplace control parameters

crystalline silica	OSHA	TWA value 2.4 millions of particles per cubic foot of air Respirable ; The value is calculated from a specified equation using a value of 100%. Lower values of % will give higher exposure limits. See regulation for specific equation. TWA value 0.1 mg/m3 Respirable ; The value is calculated from a specified equation using a value of 100%. Lower values of % will give higher exposure limits. See regulation for specific equation. TWA value 0.3 mg/m3 Total dust ; The value is calculated from a specified equation using a value of 100%. Lower values of % will give higher exposure limits. See regulation for specific equation.
Distillates (petroleum), solvent-refined heavy paraffinic	ACGIH OSHA ACGIH	TWA value 0.025 mg/m3 Respirable fraction ; PEL 500 ppm 2,000 mg/m3 ; PEL 5 mg/m3 Mist ; ; Included in the regulation, but with no data values - See the regulation for further details ; Exposure by all routes should be carefully controlled to levels as low as possible.
Distillates (petroleum), solvent-refined light paraffinic	OSHA ACGIH	TWA value 5 mg/m3 Inhalable fraction ; PEL 5 mg/m3 Mist ; ; Included in the regulation, but with no data values - See the regulation for further details ; Exposure by all routes should be carefully controlled to levels as low as possible. TWA value 5 mg/m3 Inhalable fraction ;

# Safety Data Sheet

## SENERQUICK ADHESIVE

Revision date : 2011/03/02  
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### Personal protective equipment

#### **Respiratory protection:**

Wear a NIOSH-certified (or equivalent) organic vapour respirator.

#### **Hand protection:**

Wear chemical resistant protective gloves.

#### **Eye protection:**

Safety glasses with side-shields.

#### **Body protection:**

depending upon conditions of use., Cover as much of the exposed skin as possible to prevent all skin contact., light protective clothing

#### **General safety and hygiene measures:**

Avoid contact with the skin, eyes and clothing. In order to prevent contamination while handling, closed working clothes and working gloves should be used. Handle in accordance with good building materials hygiene and safety practice. When using, do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. At the end of the shift the skin should be cleaned and skin-care agents applied.

Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks).

## 9. Physical and Chemical Properties

Form:	liquid	
Odour:	ammonia-like, slight odour	
Odour threshold:	No data available.	
Colour:	white	
pH value:		slightly alkaline
Boiling point:	100 °C	
Density:	1.18 - 1.31 g/cm <sup>3</sup>	( 20 °C)
Partitioning coefficient n-octanol/water (log Pow):		not applicable

## 10. Stability and Reactivity

#### **Conditions to avoid:**

Avoid extreme temperatures.

#### **Substances to avoid:**

strong acids, strong bases, strong oxidizing agents

#### **Hazardous reactions:**

The product is stable if stored and handled as prescribed/indicated.

#### **Decomposition products:**

No hazardous decomposition products if stored and handled as prescribed/indicated.

#### **Thermal decomposition:**

No decomposition if stored and handled as prescribed/indicated.

#### **Oxidizing properties:**

Based on its structural properties the product is not classified as oxidizing.

## 11. Toxicological information

-----  
**Carcinogenicity**

# Safety Data Sheet

## SENERQUICK ADHESIVE

Revision date : 2011/03/02  
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*Information on: crystalline silica*

*The International Agency for Research on Cancer (IARC) has classified this substance as a Group 1 (known) human carcinogen.*

*NTP listed carcinogen*

*Information on: Distillates (petroleum), solvent-refined heavy paraffinic*

*The substance caused cancer in animal studies.*

*Information on: Distillates (petroleum), solvent-refined light paraffinic*

*The substance caused cancer in animal studies. Relating to this endpoint the product has not been fully tested.*

*The statement has been derived from the structure of the product.*

### Experiences in humans:

According to experience, the product is considered to be harmless to health if used in the correct manner.

### Other Information:

The product has not been tested. The statement has been derived from the properties of the individual components.

## 12. Ecological Information

### Other adverse effects:

The product has not been tested. Do not allow to enter soil, waterways or waste water channels.

## 13. Disposal considerations

### Waste disposal of substance:

Dispose of in accordance with local authority regulations. Do not discharge into drains/surface waters/groundwater.

### Container disposal:

Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.

## 14. Transport Information

### Land transport

TDG

Not classified as a dangerous good under transport regulations

### Sea transport

IMDG

Not classified as a dangerous good under transport regulations

### Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

# Safety Data Sheet

## SENERQUICK ADHESIVE

Revision date : 2011/03/02  
Version: 3.0

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### 15. Regulatory Information

#### Federal Regulations

**Registration status:**

Chemical DSL, CA released / listed

**WHMIS classification:** D2A: Materials Causing Other Toxic Effects - Very toxic material



**THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.**

### 16. Other Information

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

**MSDS Prepared by:**

BASF NA Product Regulations  
msds@basf.com  
MSDS Prepared on: 2011/03/02

END OF DATA SHEET

# Safety Data Sheet

## SENERSHIELD R

Revision date : 2014/02/28

Version: 4.1

Page: 1/7

(30368384/SDS\_GEN\_CA/EN)

### 1. Product and Company Identification

Company

BASF Canada Inc.  
100 Milverton Drive  
Mississauga, ON L5R 4H1, CANADA

24 Hour Emergency Response Information

CANUTEC (reverse charges): (613) 996-6666  
BASF HOTLINE: (800) 454-COPE (2673)

### 2. Hazards Identification

Emergency overview

CONTAINS MATERIAL WHICH CAN CAUSE CANCER.  
Contains a suspect teratogen.

State of matter: liquid  
Colour: grey  
Odour: slight odour

Potential health effects**Acute toxicity:**

Ingestion may cause gastrointestinal disturbances. The product has not been tested. The statement has been derived from the properties of the individual components.

**Irritation / corrosion:**

May cause slight irritation to the eyes. May cause slight irritation to the skin. The product has not been tested. The statement has been derived from the properties of the individual components.

**Sensitization:**

May produce an allergic reaction. Sensitization after skin contact possible. The product has not been tested. The statement has been derived from the properties of the individual components.

**Chronic toxicity:**

**Repeated dose toxicity:** No reliable data was available concerning repeated dose toxicity. Based on available Data, the classification criteria are not met.

**Reproductive toxicity:** The chemical structure does not suggest a specific alert for such an effect. Based on available Data, the classification criteria are not met.

# Safety Data Sheet

## SENERSHIELD R

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**Genotoxicity:** The chemical structure does not suggest a specific alert for such an effect. Based on available Data, the classification criteria are not met.

**Signs and symptoms of overexposure:**

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

**Potential environmental effects**

**Aquatic toxicity:**

Based on available Data, the classification criteria are not met. There is a high probability that the product is not acutely harmful to aquatic organisms.

**Bioaccumulation / bioconcentration:**

Discharge into the environment must be avoided.

### 3. Composition / Information on Ingredients

<u>CAS Number</u>	<u>Content (W/W)</u>	<u>Hazardous ingredients</u>
14808-60-7	>= 15.0 - <= 40.0 %	crystalline silica
13463-67-7	>= 0.5 - <= 1.5 %	Titanium dioxide
12174-11-7	>= 0.1 - <= 1.0 %	Palygorskite ([Mg(Al <sub>0.5</sub> -1Fe <sub>0.5</sub> )]Si <sub>4</sub> (OH)O <sub>10</sub> .4H <sub>2</sub> O)
107-21-1	>= 0.1 - <= 1.0 %	ethylene glycol

### 4. First-Aid Measures

**General advice:**

First aid personnel should pay attention to their own safety. Remove contaminated clothing.

**If inhaled:**

If difficulties occur after vapour/aerosol has been inhaled, remove to fresh air and seek medical attention.

**If on skin:**

After contact with skin, wash immediately with plenty of water and soap. Under no circumstances should organic solvent be used. If irritation develops, seek medical attention.

**If in eyes:**

Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

**If swallowed:**

Rinse mouth immediately with water. Seek medical attention if necessary. Do not induce vomiting unless told to by a poison control center or doctor.

### 5. Fire-Fighting Measures

Flash point:

A flash point determination is unnecessary due to the high water content.

**Suitable extinguishing media:**

foam, water spray, dry powder, carbon dioxide

**Unsuitable extinguishing media for safety reasons:**

water jet

**Hazards during fire-fighting:**

carbon monoxide, carbon dioxide, harmful vapours, nitrogen oxides, fumes/smoke, carbon black



# Safety Data Sheet

## SENERSHIELD R

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### Protective equipment for fire-fighting:

Wear a self-contained breathing apparatus.

### Further information:

The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

---

## 6. Accidental release measures

### Personal precautions:

Use personal protective clothing. Do not breathe vapour/aerosol/spray mists. Handle in accordance with good building materials hygiene and safety practice.

### Environmental precautions:

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

### Cleanup:

For small amounts: Pick up with inert absorbent material (e.g. sand, earth etc.). Dispose of contaminated material as prescribed.

For large amounts: Pump off product.

---

## 7. Handling and Storage

### Handling

#### General advice:

Avoid aerosol formation. Avoid inhalation of mists/vapours. Avoid skin contact. No special measures necessary provided product is used correctly.

#### Protection against fire and explosion:

The product does not contribute to the spreading of flames, nor is it self combustible, not explosive.

### Storage

#### General advice:

Keep only in the original container in a cool, well-ventilated place. Protect from direct sunlight. Store protected against freezing.

#### Temperature tolerance

Protect from temperatures below: 0 °C

The packed product must be protected from temperatures below the indicated one.

---

## 8. Exposure Controls and Personal Protection

### Components with occupational exposure limits

crystalline silica

OSHA PEL

TWA value 2.4 millions of particles per cubic foot of air  
Respirable ;

The value is calculated from a specified equation using a value of 100%. Lower values of % will give higher exposure limits. See regulation for specific equation.

TWA value 0.1 mg/m<sup>3</sup> Respirable ;

The value is calculated from a specified equation using a value of 100%. Lower values of % will give higher exposure limits. See regulation for specific equation.

TWA value 0.3 mg/m<sup>3</sup> Total dust ;

The value is calculated from a specified equation using a value of 100%. Lower values of % will give higher exposure limits. See regulation for specific equation.

# Safety Data Sheet

## SENERSHIELD R

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ethylene glycol	ACGIH TLV	TWA value	0.025 mg/m3	Respirable fraction ;
	ACGIH TLV	TLV value	100 mg/m3	aerosol ; Ceiling Limit
Titanium dioxide	ACGIH TLV	TWA value	10 mg/m3	;

### Personal protective equipment

#### **Respiratory protection:**

When workers are facing concentrations above the occupational exposure limits they must use appropriate certified respirators.

#### **Hand protection:**

Wear chemical resistant protective gloves.

#### **Eye protection:**

Safety glasses with side-shields.

#### **Body protection:**

depending upon conditions of use., Cover as much of the exposed skin as possible to prevent all skin contact., light protective clothing

#### **General safety and hygiene measures:**

Avoid contact with the skin, eyes and clothing. In order to prevent contamination while handling, closed working clothes and working gloves should be used. Handle in accordance with good building materials hygiene and safety practice. When using, do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. At the end of the shift the skin should be cleaned and skin-care agents applied. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks).

## 9. Physical and Chemical Properties

Form:	viscous	
Odour:	slight odour	
Odour threshold:	No data available.	
Colour:	grey	
pH value:	8 - 9.5	( 23 °C)
Boiling point:		not applicable
Vapour pressure:		not applicable
Density:	1.47 g/cm3	( 23 °C)
Bulk density:		not applicable
Partitioning coefficient n-octanol/water (log Pow):		not applicable
Solubility in water:		soluble, miscible
Other Information:	If necessary, information on other physical and chemical parameters is indicated in this section.	

## 10. Stability and Reactivity

#### **Conditions to avoid:**

Avoid extreme temperatures.

#### **Substances to avoid:**

strong acids, strong bases, strong oxidizing agents

#### **Hazardous reactions:**

The product is stable if stored and handled as prescribed/indicated.

#### **Decomposition products:**

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No hazardous decomposition products if stored and handled as prescribed/indicated.

### Thermal decomposition:

No decomposition if stored and handled as prescribed/indicated.

### Oxidizing properties:

Not an oxidizer.

## 11. Toxicological information

### Acute toxicity

*Information on: ethylene glycol*

*Assessment of acute toxicity:*

*Of moderate toxicity after single ingestion. Of low toxicity after short-term skin contact.*

### Sensitization

*Information on: ethylene glycol*

*Assessment of sensitization:*

*Skin sensitizing effects were not observed in animal studies. Human data do not fully exclude a skin sensitizing potential.*

Can sensitize the skin and/or respiratory tract of allergic persons. May produce an allergic reaction.

### Repeated dose toxicity

*Information on: ethylene glycol*

*Assessment of repeated dose toxicity:*

*The substance may cause damage to the kidney after repeated ingestion. The substance may cause damage to the kidney after repeated skin contact with high doses.*

### Carcinogenicity

*Information on: crystalline silica*

*In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed. In long-term animal studies in which the substance was given by inhalation in high doses, a carcinogenic effect was observed. The substance and its compounds in the form of respirable dusts/aerosols classified by the German MAK commission as a category 1 carcinogen (substances that cause cancer to humans). A carcinogenic effect cannot safely be ruled out. The inhalation uptake of the alveolar fraction of the fine dust may cause damage to the lungs. The International Agency for Research on Cancer (IARC) has classified this substance as a Group 1 (known) human carcinogen.*

*The International Agency for Research on Cancer (IARC) has classified this substance as a Group 1 (known) human carcinogen.*

*NTP listed carcinogen*

*Information on: Titanium dioxide*

*IARC (International Agency for Research on Cancer) has classified this substance as group 2B (The agent is possibly carcinogenic to humans). In long-term studies in rats in which the substance was given by inhalation, a carcinogenic effect was observed. Tumors were only observed in rats after chronic inhalative exposure to high concentrations which caused sustained lung inflammation. In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed. Dermal exposure is not expected to be carcinogenic.*

### Development:

*Information on: ethylene glycol*

*In animal studies the substance caused malformations when given at high doses.*

*Embryotoxicity and teratogenicity was observed in animal studies, in the absence of maternal toxicity.*

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### Other Information:

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses. The product has not been tested. The statements on toxicology have been derived from the properties of the individual components.

---

## 12. Ecological Information

### Degradability / Persistence Biological / Abiological Degradation

Evaluation: Inherently biodegradable.  
The insoluble fraction can be removed by mechanical means in suitable waste water treatment plants.

### Other adverse effects:

Ecological data are not available. Do not allow to enter soil, waterways or waste water channels.

---

## 13. Disposal considerations

### Waste disposal of substance:

Recommendations: Use excess product in an alternate beneficial application. Dispose of in accordance with local authority regulations. Do not discharge into drains/surface waters/groundwater.

### Container disposal:

Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.

---

## 14. Transport Information

### Land transport TDG

Not classified as a dangerous good under transport regulations

### Sea transport IMDG

Not classified as a dangerous good under transport regulations

### Air transport IATA/ICAO

Not classified as a dangerous good under transport regulations

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## 15. Regulatory Information

### Federal Regulations

Registration status:

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Chemical

DSL, CA

released / listed

**WHMIS classification:** D2A: Materials Causing Other Toxic Effects - Very toxic material



**THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.**

---

## 16. Other Information

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

---

### SDS Prepared by:

BASF NA Product Regulations

BASF HOTLINE (800) 454 – COPE (2673)

SDS Prepared on: 2014/02/28

END OF DATA SHEET

# Safety Data Sheet

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### 1. Product and Company Identification

Company

BASF CORPORATION  
100 Campus Drive  
Florham Park, NJ 07932, USA

24 Hour Emergency Response Information

CHEMTREC: 1-800-424-9300  
BASF HOTLINE: 1-800-832-HELP

### 2. Hazards Identification

Emergency overview

## WARNING:

MAY BE HARMFUL IF INHALED.

RISK OF SERIOUS DAMAGE TO EYES.

Can cause moderate irritation due to abrasive action.

In combination with water, repeated or prolonged dermal exposure can cause moderate to severe alkali burns.

CONTAINS MATERIAL WHICH CAN CAUSE CANCER.

Keep container tightly closed.

Avoid inhalation of dusts.

Avoid ingestion.

Avoid contact with the skin, eyes and clothing.

Wash thoroughly after handling.

State of matter: solid

Colour: dark grey

Odour: odourless

Potential health effects**Primary routes of exposure:**

Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases.

**Acute toxicity:**

Product may present a nuisance dust hazard. Inhalation of dust may cause respiratory tract irritation, coughing and breathing difficulties.

**Irritation / corrosion:**

The product has not been tested. The statement has been derived from products of a similar structure or composition.

**Sensitization:**

Chromate in this product has been reduced. Sensitization due to chromate within stated shelf-life is unlikely.

Potential environmental effects

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### **Aquatic toxicity:**

The product gives rise to pH shifts.

### **Degradation / environmental fate:**

Inorganic product which cannot be eliminated from water by biological purification processes. The product is slightly soluble in water. It can be largely eliminated from the water by abiotic processes, e.g. mechanical separation.

## 3. Composition / Information on Ingredients

<u>CAS Number</u>	<u>Content (W/W)</u>	<u>Chemical name</u>
65997-15-1	>= 40.0 - <= 70.0 %	Cement, portland, chemicals
1309-37-1	>= 5.0 - <= 10.0 %	Iron oxide
1305-62-0	>= 5.0 - <= 10.0 %	Calcium dihydroxide
7778-18-9	>= 1.0 - <= 5.0 %	Calcium sulphate
1305-78-8	>= 1.0 - <= 5.0 %	calcium oxide
1309-48-4	>= 1.0 - <= 5.0 %	magnesium oxide
1317-65-3	>= 1.0 - <= 5.0 %	Limestone
14808-60-7	>= 0.5 - <= 1.5 %	crystalline silica
65997-17-3	>= 0.1 - <= 1.0 %	Glass, oxide, chemicals

## 4. First-Aid Measures

### **General advice:**

First aid personnel should pay attention to their own safety. Remove contaminated clothing.

### **If inhaled:**

After inhalation of dust. Keep patient calm, remove to fresh air. If difficulties occur: Obtain medical attention.

### **If on skin:**

After contact with skin, wash immediately with plenty of water and soap. Under no circumstances should organic solvent be used. If irritation develops, seek medical attention.

### **If in eyes:**

Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

### **If swallowed:**

Rinse mouth immediately and then drink plenty of water, seek medical attention. Do not induce vomiting unless told to by a poison control center or doctor.

## 5. Fire-Fighting Measures

Flash point:

Self-ignition temperature:

The substance/product is non-combustible.  
not self-igniting

### **Suitable extinguishing media:**

foam, water spray, dry powder, carbon dioxide

### **Unsuitable extinguishing media for safety reasons:**

water jet

### **Hazards during fire-fighting:**

carbon monoxide, carbon dioxide, harmful vapours

Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

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**Protective equipment for fire-fighting:**

Wear self-contained breathing apparatus and chemical-protective clothing.

**Further information:**

Product itself is non-combustible; fire extinguishing method of surrounding areas must be considered. The degree of risk is governed by the burning substance and the fire conditions. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

---

## 6. Accidental release measures

**Personal precautions:**

Avoid dust formation. Avoid contact with skin and eyes. Use personal protective clothing. Handle in accordance with good building materials hygiene and safety practice.

**Environmental precautions:**

No special precautions necessary.

Do not discharge into drains/surface waters/groundwater.

**Cleanup:**

Avoid raising dust.

For small amounts: Pick up with suitable appliance and dispose of.

For large amounts: Pick up with suitable appliance and dispose of. Pack in tightly closed containers for disposal.

For residues: Rinse with plenty of water.

---

## 7. Handling and Storage

**Handling****General advice:**

Avoid dust formation. The Cement contained in this product reacts alkaline when in contact with water or humidity. This may cause severe irritation of skin or mucous membranes. The humidity of the skin or mucous membranes is enough for this reaction. Prolonged direct contact to the dry product should be avoided therefore. Avoid inhalation of dusts. Avoid skin contact. Pour downwind and allow as little free fall as possible while emptying bags into equipment. Breathing must be protected when large quantities are decanted without local exhaust ventilation.

**Protection against fire and explosion:**

No special precautions necessary.

**Storage****General advice:**

Containers should be stored tightly sealed in a dry place.

**Storage incompatibility:**

General advice: Segregate from metals. Segregate from acids. Segregate from lyes. Segregate from oxidants. Segregate from foods and animal feeds.

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## 8. Exposure Controls and Personal Protection

**Components with workplace control parameters**



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crystalline silica	OSHA	TWA value 2.4 millions of particles per cubic foot of air Respirable ; The value is calculated from a specified equation using a value of 100%. Lower values of % will give higher exposure limits. See regulation for specific equation. TWA value 0.1 mg/m3 Respirable ; The value is calculated from a specified equation using a value of 100%. Lower values of % will give higher exposure limits. See regulation for specific equation. TWA value 0.3 mg/m3 Total dust ; The value is calculated from a specified equation using a value of 100%. Lower values of % will give higher exposure limits. See regulation for specific equation.
Cement, portland, chemicals	ACGIH	TWA value 0.025 mg/m3 Respirable fraction ;
	OSHA	PEL 5 mg/m3 Respirable fraction ; PEL 15 mg/m3 Total dust ;
	ACGIH	TWA value 1 mg/m3 Respirable fraction ; The value is for particulate matter containing no asbestos and <1% crystalline silica.
Iron oxide	OSHA	PEL 10 mg/m3 fumes/smoke ;
calcium oxide	ACGIH	TWA value 5 mg/m3 Respirable fraction ;
	OSHA	PEL 5 mg/m3 ;
Calcium dihydroxide	ACGIH	TWA value 2 mg/m3 ;
	OSHA	PEL 5 mg/m3 Respirable fraction ; PEL 15 mg/m3 Total dust ;
Glass, oxide, chemicals	ACGIH	TWA value 5 mg/m3 ;
	ACGIH	TWA value 5 mg/m3 Inhalable fraction ; TWA value 1 fibers/cm <sup>3</sup> Fiber ; TWA value 1 fibers/cm <sup>3</sup> Fiber ; TWA value 0.2 fibers/cm <sup>3</sup> Fiber ;
Calcium sulphate	OSHA	PEL 5 mg/m3 Respirable fraction ; PEL 15 mg/m3 Total dust ;
magnesium oxide	ACGIH	TWA value 10 mg/m3 Inhalable fraction ;
	OSHA	PEL 15 mg/m3 Total particulate ;
Limestone	ACGIH	TWA value 10 mg/m3 Inhalable fraction ;
	OSHA	PEL 5 mg/m3 Respirable fraction ; PEL 15 mg/m3 Total dust ;

### Advice on system design:

Provide local exhaust ventilation to maintain recommended P.E.L.

### Personal protective equipment

#### Respiratory protection:

Breathing protection if dusts are formed.

#### Hand protection:

Chemical resistant protective gloves, Manufacturer's directions for use should be observed because of great diversity of types.

#### Eye protection:

Tightly fitting safety goggles (chemical goggles).

#### Body protection:

Body protection must be chosen based on level of activity and exposure.

### General safety and hygiene measures:

Avoid contact with the skin, eyes and clothing. Avoid inhalation of dusts. In order to prevent contamination while handling, closed working clothes and working gloves should be used. Handle in accordance with good building materials hygiene and safety practice. When using, do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. At the end of the shift the skin should be cleaned and

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skin-care agents applied. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks).

### 9. Physical and Chemical Properties

Form:	powder	
Odour:	odourless	
Colour:	dark grey	
pH value:		slightly alkaline
:		Unspecified
Relative density:	0.8	
Bulk density:	1,800 - 2,400	
	kg/m <sup>3</sup>	
Viscosity, dynamic:		No data available.

### 10. Stability and Reactivity

#### Conditions to avoid:

Avoid dust formation. Avoid humidity.

#### Substances to avoid:

strong acids

#### Hazardous reactions:

The product is stable if stored and handled as prescribed/indicated.

Strong bases are formed on the addition of water.

#### Oxidizing properties:

Based on its structural properties the product is not classified as oxidizing.

### 11. Toxicological information

#### Acute toxicity

*Information on: calcium oxide*

*Assessment of acute toxicity:*

*The toxicity of the product is based on its corrosivity.*

#### Irritation / corrosion

*Information on: Cement, portland, chemicals*

*Assessment of irritating effects:*

*Skin contact causes irritation. May cause severe damage to the eyes.*

*Information on: Calcium dihydroxide*

*Assessment of irritating effects:*

*Skin contact causes irritation. May cause severe damage to the eyes.*

*Information on: calcium oxide*

*Assessment of irritating effects:*

*Corrosive! Damages skin and eyes.*

#### Skin:

Result: Irritant.

#### Eye:

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Result: Risk of serious damage to eyes.

### Repeated dose toxicity

*Information on: crystalline silica*

*Assessment of repeated dose toxicity:*

*Repeated inhalation exposure may affect certain organs. The substance may cause increase in lung mass and lung tissue changes after repeated inhalation.*

*This product may contain greater than 0.1% crystalline silica. Repeated exposure to high concentrations results in silicosis, a lung disease characterized by coughing, difficult breathing, wheezing, scarring of the lungs, and repeated, non-specific chest illnesses.*

-----

### Carcinogenicity

*Information on: crystalline silica*

*The International Agency for Research on Cancer (IARC) has classified this substance as a Group 1 (known) human carcinogen.*

*NTP listed carcinogen*

-----

### Experiences in humans:

*Information on: crystalline silica*

*May cause silicosis.*

-----

### Other Information:

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses. The product has not been tested. The statements on toxicology have been derived from products of a similar structure and composition.

*Information on: calcium oxide  
development of pulmonary edema*

-----

---

## 12. Ecological Information

### Aquatic invertebrates

Acute:

static

Daphnia magna/LC50 (48 h): > 100 mg/l

### Aquatic plants

Toxicity to aquatic plants:

static

green algae/EC50 (96 h): > 100 mg/l

### Soil living organisms

Toxicity to soil dwelling organisms:

other soil dwelling arthropod/LC50 (10 d): 9,931 mg/kg

### Other adverse effects:

Do not discharge product into the environment without control.

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### 13. Disposal considerations

**Waste disposal of substance:**

Dispose of in accordance with local authority regulations. Do not discharge into drains/surface waters/groundwater.

**Container disposal:**

Completely emptied packagings can be given for recycling.

### 14. Transport Information

**Land transport**  
USDOT

Not classified as a dangerous good under transport regulations

**Sea transport**  
IMDG

Not classified as a dangerous good under transport regulations

**Air transport**  
IATA/ICAO

Not classified as a dangerous good under transport regulations

### 15. Regulatory Information

**Federal Regulations**

**Registration status:**

Chemical TSCA, US released / listed

**OSHA hazard category:**

IARC 1, 2A or 2B carcinogen; NTP listed carcinogen; Chronic target organ effects reported; Acute target organ effects reported; ACGIH TLV established; Skin and/or eye irritant

**EPCRA 311/312 (Hazard categories):**

Acute; Chronic

**State regulations**

**State RTK**

MA, NJ, PA  
MA, NJ, PA  
MA, NJ, PA  
MA, PA  
MA, NJ, PA  
MA, NJ, PA  
MA, PA  
MA, NJ, PA  
MA, NJ, PA

**CAS Number**

65997-15-1  
1309-37-1  
1305-62-0  
7778-18-9  
1305-78-8  
1309-48-4  
1317-65-3  
14808-60-7  
65997-17-3

**Chemical name**

Cement, portland, chemicals  
Iron oxide  
Calcium dihydroxide  
Calcium sulphate  
calcium oxide  
magnesium oxide  
Limestone  
crystalline silica  
Glass, oxide, chemicals

**CA Prop. 65:**

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THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

### 16. Other Information

#### HMIS III rating

Health: 2 $\alpha$       Flammability: 0      Physical hazard: 1

NFPA and HMIS use a numbering scale ranging from 0 to 4 to indicate the degree of hazard. A value of zero means that the substance possesses essentially no hazard; a rating of four indicates extreme danger. Although similar, the two rating systems are intended for different purposes, and use different criteria. The NFPA system was developed to provide an on-the-spot alert to the hazards of a material, and their severity, to emergency responders. The HMIS system was designed to communicate workplace hazard information to employees who handle hazardous chemicals.

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

#### MSDS Prepared by:

BASF NA Product Regulations

msds@basf.com

MSDS Prepared on: 2010/10/27

IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE, IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY BASF HEREUNDER ARE GIVEN GRATIS AND BASF ASSUMES NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK.

END OF DATA SHEET

# Safety Data Sheet

## ALPHA DRY BASE COAT

Revision date : 2014/05/13

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(30367421/SDS\_GEN\_CA/EN)

### 1. Product and Company Identification

Company

BASF Canada Inc.  
100 Milverton Drive  
Mississauga, ON L5R 4H1, CANADA

24 Hour Emergency Response Information

CANUTEC (reverse charges): (613) 996-6666  
BASF HOTLINE: (800) 454-COPE (2673)

### 2. Hazards Identification

Emergency overview

IRRITANT.

In combination with water, repeated or prolonged dermal exposure can cause moderate to severe alkali burns.

Risk of serious damage to eyes.

Irritating to respiratory system and skin.

CONTAINS MATERIAL WHICH CAN CAUSE CANCER.

State of matter: solid

Colour: grey

Odour: earthy

Potential health effects**Acute toxicity:**

Product may present a nuisance dust hazard. Inhalation of dust may cause respiratory tract irritation, coughing and breathing difficulties.

**Irritation / corrosion:**

Skin contact causes irritation. May cause severe damage to the eyes.

**Assessment other acute effects:**

Causes temporary irritation of the respiratory tract.

**Sensitization:**

There is no evidence of a skin-sensitizing potential. The product has not been tested. The statement has been derived from the properties of the individual components.

Chromate in this product has been reduced. Sensitization due to chromate within stated shelf-life is unlikely.

**Chronic toxicity:**

**Carcinogenicity:** The substance caused cancer in animal studies.

**Repeated dose toxicity:** Repeated exposure may affect certain organs.

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**Reproductive toxicity:** The chemical structure does not suggest a specific alert for such an effect. Based on available Data, the classification criteria are not met.

**Teratogenicity:** The chemical structure does not suggest a specific alert for such an effect. Based on available Data, the classification criteria are not met.

**Genotoxicity:** The chemical structure does not suggest a specific alert for such an effect. Based on available Data, the classification criteria are not met.

**Signs and symptoms of overexposure:**

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

**Potential environmental effects**

**Aquatic toxicity:**

The product gives rise to pH shifts. Based on available Data, the classification criteria are not met.

**Degradation / environmental fate:**

Inorganic product which cannot be eliminated from water by biological purification processes. The product is slightly soluble in water. It can be largely eliminated from the water by abiotic processes, e.g. mechanical separation.

---

### 3. Composition / Information on Ingredients

<u>CAS Number</u>	<u>Content (W/W)</u>	<u>Hazardous ingredients</u>
14808-60-7	>= 30.0 - <= 60.0 %	crystalline silica
65997-15-1	>= 30.0 - <= 60.0 %	Cement, portland, chemicals
1317-65-3	>= 5.0 - <= 10.0 %	Limestone
68131-74-8	>= 3.0 - <= 7.0 %	Ashes (residues)
1332-58-7	>= 1.0 - <= 5.0 %	Kaolin
13397-24-5	>= 1.0 - <= 5.0 %	Gypsum (Ca(SO <sub>4</sub> ).2H <sub>2</sub> O)

---

### 4. First-Aid Measures

**General advice:**

First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately remove contaminated clothing.

**If inhaled:**

Keep patient calm, remove to fresh air, seek medical attention. Immediately administer a corticosteroid from a controlled/metered dose inhaler.

**If on skin:**

Immediately wash thoroughly with plenty of water, apply sterile dressings, consult a skin specialist.

**If in eyes:**

Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

**If swallowed:**

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

**Note to physician**

Treatment:

Treat according to symptoms (decontamination, vital functions), no known specific antidote.

# Safety Data Sheet

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### 5. Fire-Fighting Measures

Flash point:		Non-flammable.
Flammability:	not flammable	
Self-ignition temperature:		not self-igniting

**Suitable extinguishing media:**  
foam, water spray, dry powder, carbon dioxide

**Unsuitable extinguishing media for safety reasons:**  
water jet

**Hazards during fire-fighting:**  
carbon dioxide, carbon monoxide, harmful vapours, nitrogen oxides, fumes/smoke, carbon black

**Protective equipment for fire-fighting:**  
Wear a self-contained breathing apparatus.

**Further information:**  
The degree of risk is governed by the burning substance and the fire conditions. If exposed to fire, keep containers cool by spraying with water. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Contaminated extinguishing water must be disposed of in accordance with official regulations.

---

### 6. Accidental release measures

**Personal precautions:**  
Do not breathe dust. Wear eye/face protection. Use personal protective clothing. Handle in accordance with good building materials hygiene and safety practice.

**Environmental precautions:**  
Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

**Cleanup:**  
Avoid raising dust.  
For small amounts: Pick up with suitable appliance and dispose of. Dispose of contaminated material as prescribed.  
For large amounts: Pick up with suitable appliance and dispose of. Dispose of absorbed material in accordance with regulations.

---

### 7. Handling and Storage

#### Handling

**General advice:**  
Avoid dust formation. Wear suitable protective clothing and eye/face protection. Avoid inhalation of dusts/mists/vapours. Breathing must be protected when large quantities are decanted without local exhaust ventilation.

**Protection against fire and explosion:**  
Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy. Keep away from sources of ignition - No smoking. Dust can form an explosive mixture with air.

#### Storage

**General advice:**  
Keep only in the original container in a cool, dry, well-ventilated place away from ignition sources, heat or flame. Protect from direct sunlight.



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### 8. Exposure Controls and Personal Protection

#### Components with occupational exposure limits

crystalline silica

ACGIH TLV TWA value 0.025 mg/m3 Respirable fraction ;

Cement, portland, chemicals

ACGIH TLV TWA value 1 mg/m3 Respirable fraction ;  
The value is for particulate matter containing no asbestos  
and <1% crystalline silica.

crystalline silica

ACGIH TLV TWA value 0.025 mg/m3 Respirable fraction ;

Cement, portland, chemicals

ACGIH TLV TWA value 1 mg/m3 Respirable fraction ;  
The value is for particulate matter containing no asbestos  
and <1% crystalline silica.

Kaolin

ACGIH TLV TWA value 2 mg/m3 Respirable fraction ;  
The value is for particulate matter containing no asbestos  
and <1% crystalline silica.

Gypsum (Ca(SO<sub>4</sub>).2H<sub>2</sub>O)

ACGIH TLV TWA value 10 mg/m3 Inhalable fraction ;

#### Personal protective equipment

##### **General safety and hygiene measures:**

Avoid inhalation of dusts. Wearing of closed work clothing is required additionally to the stated personal protection equipment. Avoid exposure - obtain special instructions before use. Handle in accordance with good building materials hygiene and safety practice. When using, do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. At the end of the shift the skin should be cleaned and skin-care agents applied. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks).

### 9. Physical and Chemical Properties

Form:	powder	
Odour:	earthy	
Odour threshold:	No data available.	
Colour:	grey	
pH value:	approx. 12 - 13	(as aqueous suspension)
Melting point:		No applicable information available.
Boiling point:		No applicable information available.
Sublimation temperature:		No applicable information available.
Density:	2.6 g/cm3	( 25 °C)
Relative density:	2.6	
Bulk density:	12 lb/USg	
Viscosity, kinematic:		No applicable information available.
Solubility in water:		( 15 °C) miscible
Miscibility with water:		( 15 °C) completely (e.g. >=90%)
Solubility in other solvents:		No applicable information available.
Solubility (qualitative):	No applicable information available.	

### 10. Stability and Reactivity

**Conditions to avoid:**

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See MSDS section 7 - Handling and storage.

### Substances to avoid:

strong acids, strong bases, strong oxidizing agents, strong reducing agents

### Hazardous reactions:

The product is stable if stored and handled as prescribed/indicated.

### Decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated.

### Thermal decomposition:

No decomposition if stored and handled as prescribed/indicated.

### Oxidizing properties:

Based on its structural properties the product is not classified as oxidizing.

## 11. Toxicological information

### Acute toxicity

#### Oral:

Type of value: ATE

Value: > 5,000 mg/kg

#### Dermal:

Type of value: ATE

Value: > 5,000 mg/kg

### Irritation / corrosion

#### Skin:

Result: Irritant.

*Information on: Cement, portland, chemicals*

*Species: rabbit*

*Result: Irritant.*

#### Eye:

Result: Risk of serious damage to eyes.

*Information on: Cement, portland, chemicals*

*Species: rabbit*

*Result: Severely irritating.*

### Carcinogenicity

*Information on: crystalline silica*

*In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed. In long-term animal studies in which the substance was given by inhalation in high doses, a carcinogenic effect was observed. The substance and its compounds in the form of respirable dusts/aerosols classified by the German MAK commission as a category 1 carcinogen (substances that cause cancer to humans). A carcinogenic effect cannot safely be ruled out. The inhalation uptake of the alveolar fraction of the fine dust may cause damage to the lungs. The International Agency for Research on Cancer (IARC) has classified this substance as a Group 1 (known) human carcinogen.*

*The International Agency for Research on Cancer (IARC) has classified this substance as a Group 1 (known) human carcinogen.*

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*NTP listed carcinogen*  
-----

### Other Information:

The product has not been tested. The statement has been derived from the properties of the individual components.

---

## 12. Ecological Information

### Degradability / Persistence Biological / Abiological Degradation

Evaluation:

Experience shows this product to be inert and non-degradable.

### Other adverse effects:

Do not discharge product into the environment without control. The product has not been tested. The statements on ecotoxicology have been derived from the properties of the individual components.

---

## 13. Disposal considerations

### Waste disposal of substance:

Dispose of in accordance with local authority regulations. Do not discharge into drains/surface waters/groundwater.

### Container disposal:

Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.

---

## 14. Transport Information

### Land transport

TDG

Not classified as a dangerous good under transport regulations

### Sea transport

IMDG

Not classified as a dangerous good under transport regulations

### Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

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## 15. Regulatory Information

### Federal Regulations

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**Registration status:**

Chemical DSL, CA released / listed

**THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.**

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### 16. Other Information

Recommended use: for industrial and professional users

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

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**SDS Prepared by:**

BASF NA Product Regulations

BASF HOTLINE (800) 454 – COPE (2673)

SDS Prepared on: 2014/05/13

END OF DATA SHEET

# Safety Data Sheet

## SAHARA COLOR MAXI WHITE

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### 1. Identification

**Product identifier used on the label**

**SAHARA COLOR MAXI WHITE**

**Recommended use of the chemical and restriction on use**

Recommended use\*: for industrial and professional users

\* The "Recommended use" identified for this product is provided solely to comply with a US Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

**Details of the supplier of the safety data sheet**

Company:

BASF CORPORATION  
100 Park Avenue  
Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

**Emergency telephone number**

CHEMTREC: 1-800-424-9300  
BASF HOTLINE: 1-800-832-HELP (4357)

**Other means of identification**

Chemical family: Coating

### 2. Hazards Identification

**According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200**

**Classification of the product**

Skin Sens.	1	Skin sensitization
STOT RE	1 (by inhalation)	Specific target organ toxicity — repeated exposure

**Label elements**

Pictogram:

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Signal Word:  
Danger

Hazard Statement:

H317 May cause an allergic skin reaction.  
H372 Causes damage to organs (Lung) through prolonged or repeated exposure (inhalation).

Precautionary Statements (Prevention):

P280 Wear protective gloves.  
P260 Do not breathe dust/gas/mist/vapours.  
P270 Do not eat, drink or smoke when using this product.  
P264 Wash with plenty of water and soap thoroughly after handling.  
P272 Contaminated work clothing should not be allowed out of the workplace.

Precautionary Statements (Response):

P314 Get medical advice/attention if you feel unwell.  
P303 + P352 IF ON SKIN (or hair): Wash with plenty of soap and water.  
P333 + P311 If skin irritation or rash occurs: Call a POISON CENTER or doctor/physician.  
P362 + P364 Take off contaminated clothing and wash before reuse.

Precautionary Statements (Disposal):

P501 Dispose of contents/container to hazardous or special waste collection point.

### Hazards not otherwise classified

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

**According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200**

### Emergency overview

WARNING:  
CONTAINS MATERIAL WHICH MAY CAUSE CANCER.  
May cause sensitization by skin contact.  
Keep container tightly closed.  
Avoid ingestion.  
Avoid contact with the skin, eyes and clothing.  
Wash thoroughly after handling.

## 3. Composition / Information on Ingredients

**According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200**

<u>CAS Number</u>	<u>Content (W/W)</u>	<u>Chemical name</u>
1317-65-3	>= 25.0 - < 75.0 %	Limestone
14808-60-7	>= 0.3 - < 50.0 %	crystalline silica
13463-67-7	>= 1.0 - < 3.0 %	Titanium dioxide
34375-28-5	>= 0.1 - < 0.3 %	Ethanol, 2-(hydroxymethylamino)-

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**According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200**

<u>CAS Number</u>	<u>Content (W/W)</u>	<u>Chemical name</u>
1317-65-3	>= 30.0 - <= 60.0 %	Limestone
14808-60-7	>= 7.0 - <= 13.0 %	crystalline silica
12001-26-2	>= 3.0 - <= 7.0 %	Mica-group minerals
13463-67-7	>= 1.0 - <= 5.0 %	Titanium dioxide

## 4. First-Aid Measures

### Description of first aid measures

#### General advice:

First aid personnel should pay attention to their own safety. Immediately remove contaminated clothing.

#### If inhaled:

If difficulties occur after vapour/aerosol has been inhaled, remove to fresh air and seek medical attention.

#### If on skin:

After contact with skin, wash immediately with plenty of water and soap. Under no circumstances should organic solvent be used. If irritation develops, seek medical attention.

#### If in eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

#### If swallowed:

Rinse mouth immediately and then drink plenty of water, seek medical attention. Do not induce vomiting unless told to by a poison control center or doctor.

### Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Hazards: No applicable information available.

### Indication of any immediate medical attention and special treatment needed

#### Note to physician

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

## 5. Fire-Fighting Measures

### Extinguishing media

Suitable extinguishing media:

foam, water spray, dry powder, carbon dioxide

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Unsuitable extinguishing media for safety reasons:  
water jet

### Special hazards arising from the substance or mixture

Hazards during fire-fighting:

carbon dioxide, carbon monoxide, harmful vapours, nitrogen oxides, fumes/smoke, carbon black

### Advice for fire-fighters

Protective equipment for fire-fighting:

Wear a self-contained breathing apparatus.

### Further information:

The degree of risk is governed by the burning substance and the fire conditions. If exposed to fire, keep containers cool by spraying with water. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Contaminated extinguishing water must be disposed of in accordance with official regulations.

---

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Do not breathe vapour/aerosol/spray mists. Wear eye/face protection. If exposed to high vapour concentration, leave area immediately. Use personal protective clothing. Handle in accordance with good building materials hygiene and safety practice.

### Environmental precautions

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

### Methods and material for containment and cleaning up

For small amounts: Pick up with inert absorbent material (e.g. sand, earth etc.). Dispose of contaminated material as prescribed.

For large amounts: Pump off product.

---

## 7. Handling and Storage

### Precautions for safe handling

Avoid aerosol formation. Avoid inhalation of mists/vapours. Avoid skin contact. No special measures necessary provided product is used correctly.

### Conditions for safe storage, including any incompatibilities

No applicable information available.

Suitable materials for containers: Paper/Fibreboard

Further information on storage conditions: Keep only in the original container in a cool, dry, well-ventilated place away from ignition sources, heat or flame. Protect from direct sunlight.

Protect from temperatures below: 32 °F

The packed product must be protected from temperatures below the indicated one.

---

## 8. Exposure Controls/Personal Protection

### Components with occupational exposure limits



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Limestone	OSHA PEL	PEL 5 mg/m3 Respirable fraction ; PEL 15 mg/m3 Total dust ; TWA value 15 mg/m3 Total dust ; TWA value 5 mg/m3 Respirable fraction ;
Titanium dioxide	OSHA PEL	PEL 15 mg/m3 Total dust ; TWA value 10 mg/m3 Total dust ;
	ACGIH TLV	TWA value 10 mg/m3 ;
crystalline silica	OSHA PEL	TWA value 2.4 millions of particles per cubic foot of air Respirable ; The exposure limit is calculated from the equation, $250/(\%SiO_2+5)$ , using a value of 100% SiO <sub>2</sub> . Lower percentages of SiO <sub>2</sub> will yield higher exposure limits. TWA value 0.1 mg/m3 Respirable ; The exposure limit is calculated from the equation, $10/(\%SiO_2+2)$ , using a value of 100% SiO <sub>2</sub> . Lower percentages of SiO <sub>2</sub> will yield higher exposure limits. TWA value 0.3 mg/m3 Total dust ; The exposure limit is calculated from the equation, $30/(\%SiO_2+2)$ , using a value of 100% SiO <sub>2</sub> . Lower percentages of SiO <sub>2</sub> will yield higher exposure limits.
	ACGIH TLV	TWA value 0.025 mg/m3 Respirable fraction ;

### Advice on system design:

No applicable information available.

### Personal protective equipment

#### Respiratory protection:

Wear appropriate certified respirator when exposure limits may be exceeded.

#### Hand protection:

Wear chemical resistant protective gloves., Manufacturer's directions for use should be observed because of great diversity of types.

#### Eye protection:

Safety glasses with side-shields.

#### Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

#### General safety and hygiene measures:

Do not inhale gases/vapours/aerosols. Avoid contact with the skin, eyes and clothing. Avoid exposure - obtain special instructions before use. Handle in accordance with good building materials hygiene and safety practice. Wearing of closed work clothing is recommended. When using, do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. At the end of the shift the skin should be cleaned and skin-care agents applied. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks).

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### 9. Physical and Chemical Properties

Form:	viscous	
Odour:	acrylic-like	
Odour threshold:		No applicable information available.
Colour:	whitish	
pH value:	8.5 - 10	
Melting point:		No applicable information available.
Boiling point:		not applicable
Sublimation point:		No applicable information available.
Flash point:		A flash point determination is unnecessary due to the high water content.
Flammability:	not determined	
Lower explosion limit:		No applicable information available.
Upper explosion limit:		No applicable information available.
Vapour pressure:		The product has not been tested.
Density:	1.86 g/cm <sup>3</sup> 15.5 lb/USg	( 22 °C)
Relative density:		No applicable information available.
Bulk density:		not applicable
Vapour density:		No applicable information available.
Partitioning coefficient n-octanol/water (log Pow):		not applicable
Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.	
Viscosity, dynamic:		No applicable information available.
Viscosity, kinematic:		No applicable information available.
Solubility (quantitative):		No applicable information available.
Solubility (qualitative):	No applicable information available.	
Evaporation rate:		No applicable information available.
Other Information:	If necessary, information on other physical and chemical parameters is indicated in this section.	

### 10. Stability and Reactivity

#### Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Oxidizing properties:  
Not an oxidizer.

#### Chemical stability

The product is stable if stored and handled as prescribed/indicated.

#### Possibility of hazardous reactions

The product is stable if stored and handled as prescribed/indicated.

#### Conditions to avoid

See MSDS section 7 - Handling and storage.

#### Incompatible materials

strong acids, strong bases, strong oxidizing agents, strong reducing agents

#### Hazardous decomposition products

Decomposition products:

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No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:

No decomposition if stored and handled as prescribed/indicated.

---

## 11. Toxicological information

### Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

### Acute Toxicity/Effects

#### Acute toxicity

Assessment of acute toxicity: Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact. Virtually nontoxic by inhalation. The product has not been tested. The statement has been derived from the properties of the individual components.

#### Oral

Type of value: ATE

Value: > 5,000 mg/kg

#### Inhalation

No applicable information available.

#### Dermal

Type of value: ATE

Value: > 5,000 mg/kg

#### Assessment other acute effects

No applicable information available.

#### Irritation / corrosion

Assessment of irritating effects: May cause slight irritation to the eyes. May cause slight irritation to the skin. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

#### Sensitization

Assessment of sensitization: May cause sensitization by skin contact.

### Chronic Toxicity/Effects

#### Repeated dose toxicity

Assessment of repeated dose toxicity: No reliable data was available concerning repeated dose toxicity.

#### Genetic toxicity

Assessment of mutagenicity: The chemical structure does not suggest a specific alert for such an effect. The product has not been tested. The statement has been derived from the properties of the individual components.

#### Carcinogenicity

Assessment of carcinogenicity: The chemical structure does not suggest a specific alert for such an effect. The product has not been tested. The statement has been derived from the properties of the individual components.

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### *Information on: crystalline silica*

*Assessment of carcinogenicity: In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed. In long-term animal studies in which the substance was given by inhalation in high doses, a carcinogenic effect was observed. The substance and its compounds in the form of respirable dusts/aerosols is classified by the German MAK commission as a category 1 carcinogen (substances that cause cancer to humans). A carcinogenic effect cannot safely be ruled out. The inhalation uptake of the alveolar fraction of the fine dust may cause damage to the lungs. The International Agency for Research on Cancer (IARC) has classified this substance as a Group 1 (known) human carcinogen.  
NTP listed carcinogen*

### *Information on: Titanium dioxide*

*Assessment of carcinogenicity: IARC (International Agency for Research on Cancer) has classified this substance as group 2B (The agent is possibly carcinogenic to humans). In long-term studies in rats in which the substance was given by inhalation, a carcinogenic effect was observed. Tumors were only observed in rats after chronic inhalative exposure to high concentrations which caused sustained lung inflammation. In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed. Dermal exposure is not expected to be carcinogenic.*  
-----

### Reproductive toxicity

Assessment of reproduction toxicity: The chemical structure does not suggest a specific alert for such an effect. The product has not been tested. The statement has been derived from the properties of the individual components.

### Teratogenicity

Assessment of teratogenicity: The chemical structure does not suggest a specific alert for such an effect. The product has not been tested. The statement has been derived from the properties of the individual components.

### *Information on: ethylene glycol*

*Assessment of teratogenicity: In animal studies the substance caused malformations when given at high doses.  
However, the relevance of this result for humans is unclear.*  
-----

### Other Information

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses. The product has not been tested. The statements on toxicology have been derived from products of a similar structure and composition.

## **Symptoms of Exposure**

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

---

## **12. Ecological Information**

### **Toxicity**

#### Aquatic toxicity

Assessment of aquatic toxicity:

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At the present state of knowledge, no negative ecological effects are expected. There is a high probability that the product is not acutely harmful to aquatic organisms. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

### Persistence and degradability

#### Assessment biodegradation and elimination (H<sub>2</sub>O)

Inherently biodegradable. The insoluble fraction can be removed by mechanical means in suitable waste water treatment plants.

### Bioaccumulative potential

#### Assessment bioaccumulation potential

No data available.

Discharge into the environment must be avoided.

### Mobility in soil

#### Assessment transport between environmental compartments

No data available.

### Additional information

Other ecotoxicological advice:

There is a high probability that the product is not acutely harmful to aquatic organisms. Do not discharge product into the environment without control. The product has not been tested. The statement has been derived from the properties of the individual components.

Ecological data are not available. Do not allow to enter soil, waterways or waste water channels.

---

## 13. Disposal considerations

### **Waste disposal of substance:**

Dispose of in accordance with national, state and local regulations. Residues should be disposed of in the same manner as the substance/product. Do not discharge into drains/surface waters/groundwater.

### **Container disposal:**

Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.

---

## 14. Transport Information

### **Land transport**

USDOT

Not classified as a dangerous good under transport regulations

### **Sea transport**

IMDG

Not classified as a dangerous good under transport regulations

### **Air transport**

IATA/ICAO

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Not classified as a dangerous good under transport regulations

### 15. Regulatory Information

#### Federal Regulations

##### Registration status:

Chemical TSCA, US released / listed

##### EPCRA 311/312 (Hazard categories):

Acute; Chronic

<u>CERCLA RQ</u>	<u>CAS Number</u>	<u>Chemical name</u>
5000 LBS	67-56-1; 67-64-1; 71-36-3; 79-06-1; 79-10-7; 98-82-8; 107-21-1	Methanol; Acetone; n-butanol; acrylamide; acrylic acid; cumene; ethylene glycol
1000 LBS	25155-30-0; 75- 07-0; 80-62-6; 1336-21-6; 100- 41-4; 1310-73-2	sodium dodecylbenzenesulphonate, pure; acetaldehyde; Methyl methacrylate; Ammonium hydroxide; ethylbenzene; Sodium Hydroxide
100 LBS	1330-20-7; 7664- 41-7; 75-65-0; 142-96-1; 123-91- 1	Xylene; ammonia; 2-methylpropan-2-ol; dibutyl ether; 1,4-dioxane
10 LBS	75-21-8	Ethylene Oxide

#### State regulations

<u>State RTK</u>	<u>CAS Number</u>	<u>Chemical name</u>
MA, NJ, PA	1317-65-3	Limestone
MA, NJ, PA	14808-60-7	crystalline silica
MA, NJ, PA	12001-26-2	Mica-group minerals
MA, NJ, PA	13463-67-7	Titanium dioxide

##### CA Prop. 65:

WARNING: THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

##### NFPA Hazard codes:

Health : 2 Fire: 1 Reactivity: 0 Special:

##### HMIS III rating

Health: 2 $\square$  Flammability: 1 Physical hazard: 0

### 16. Other Information

##### SDS Prepared by:

BASF NA Product Regulations  
SDS Prepared on: 2015/02/05

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in

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a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE , IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY OUR COMPANY HEREUNDER ARE GIVEN GRATIS AND WE ASSUME NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK.

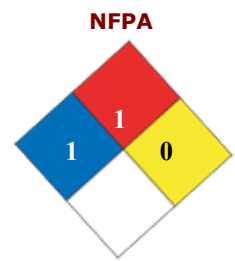
END OF DATA SHEET



## SAFETY DATA SHEET

### SECTION 1 - IDENTIFICATION

**Product Name:** Sto BTS-Plus  
**Product Code:** 80727  
**SDS Manufacturer Number:** 80727  
**Product Use/Restriction:** Polymer Modified Cementitious Based Groundcoat/Adhesive  
**Manufacturer Name:** Sto Corp.  
**Address:** 6175 Riverside Drive, SW  
Atlanta, Georgia 30331  
**General Phone Number:** (404) 346-3666  
**Emergency Phone Number:** (800) 424-9300  
**SDS Creation Date:** July 08, 2013  
**SDS Revision Date:** July 08, 2013  
**(M)SDS Format:**



#### HMIS

Health Hazard	1
Fire Hazard	0
Reactivity	0
Personal Protection	1

### SECTION 2 - HAZARD(S) IDENTIFICATION

#### GHS Pictograms:



**GHS Class:** Eye Damage, Category 1  
Skin Irritant, Category 2  
Acute Toxicity Oral, Category 4

**Hazard Statements:** Causes serious eye damage  
Causes skin irritation  
May cause an allergic skin reaction  
May cause respiratory irritation  
May cause drowsiness or dizziness

**Precautionary Statements:** Wash hands thoroughly after handling.  
Wear protective gloves/protective clothing/eye protection/face protection.  
Store locked up.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Immediately call a POISON CENTER or doctor/physician.  
IF ON SKIN: Wash with plenty of soap and water.  
If skin irritation or rash occurs: Get medical advice/attention.  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
Call a POISON CENTER or doctor/physician if you feel unwell.



If skin irritation occurs: Get medical advice/attention.  
Take off contaminated clothing and wash it before reuse.  
Contaminated work clothing should not be allowed out of the workplace.  
Use only outdoors or in a well-ventilated area.  
Store locked up.  
Dispose of contents/container in accordance with Local, State, Federal and Provincial regulations.

**Emergency Overview:** Irritant.

**Route of Exposure:** Eyes. Skin. Inhalation. Ingestion.

**Potential Health Effects:**

**Eye:** May cause irritation, burns and permanent tissue damage.

**Skin:** May cause irritation, dry skin, redness, discomfort or burns.

**Inhalation:** Prolonged or repeated inhalation may cause lung damage.  
Prolonged and repeated inhalation of respirable crystalline silica can cause silicosis, a chronic lung disease characterized by fibrosis and scarring of the lung tissue resulting in a decrease in lung function, breathlessness, wheezing, coughing and sputum production.

**Ingestion:** May cause irritation. Ingesting large amounts may cause injury.

**Signs/Symptoms:** Product is alkali when wet, excessive and prolonged exposure can cause severe irritation, burns and permanent tissue damage

**Aggravation of Pre-Existing Conditions:** May aggravate pre-existing respiratory disorders, allergy, eczema, or skin conditions.

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## SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

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Chemical Name	CAS#	Ingredient Percent	EC Num.
Aluminum Silicate	1302-76-7	1 - 5 by weight	
Calcium sulfate	7778-18-9	1 - 5 by weight	
Crystalline silica (Quartz)	14808-60-7	60 - 100 by weight	
Ethylene vinyl acetate copolymer	24937-78-8	1 - 5 by weight	
Portland cement	65997-15-1	10 - 30 by weight	

---

## SECTION 4 - FIRST AID MEASURES

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**Eye Contact:** Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention.

**Skin Contact:** Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes.  
Get medical attention if irritation develops or persists.

**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.

**Ingestion:** If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

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## SECTION 5 - FIRE FIGHTING MEASURES

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Flammable Properties:	Non Flammable.
Flash Point:	No information.
Flash Point Method:	Data not available.
Auto Ignition Temperature:	Data not available.
Lower Flammable/Explosive Limit:	Data not available.
Upper Flammable/Explosive Limit:	Data not available.
Extinguishing Media:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Protective Equipment:	As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.
Hazardous Combustion Byproducts:	Oxides of carbon, oxides of nitrogen and other organic substances may be formed.

#### **NFPA Ratings:**

NFPA Health:	1
NFPA Flammability:	1
NFPA Reactivity:	0
NFPA Other:	

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personnel Precautions:	Use proper personal protective equipment as listed in section 8. Evacuate area and keep unnecessary and unprotected personnel from entering the spill area.
Environmental Precautions:	Avoid runoff into storm sewers, ditches, and waterways.
Methods for containment:	Contain spills with an inert absorbent material such as soil, sand or oil dry.
Methods for cleanup:	Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Provide ventilation. Clean up spills immediately observing precautions in the protective equipment section.

## SECTION 7 - HANDLING and STORAGE

Handling:	Use with adequate ventilation. Avoid breathing vapor and contact with eyes, skin and clothing.
Storage:	Store in a cool, dry, well ventilated area away from sources of heat and incompatible materials. Keep container tightly closed when not in use.
Work Practices:	Use good laboratory practice when working with chemicals. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
Special Handling Procedures:	Material is alkaline when mixed with water. Use precaution and proper protective equipment

**Hygiene Practices:** Wash thoroughly after handling. Avoid contact with eyes and skin. Avoid inhaling vapor or mist.

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## SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION - EXPOSURE GUIDELINES

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**Engineering Controls:** Good general ventilation should be sufficient to control airborne levels. Otherwise, use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls including use of a biosafety cabinet / fume hood to control airborne levels below recommended exposure limits.

**Eye/Face Protection:** Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166.

**Skin Protection Description:** Protective laboratory coat, apron, or disposable garment recommended.

**Hand Protection Description:** Use impervious gloves. Nitrile gloves are recommended.

**Respiratory Protection:** A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

**Other Protective:** Follow good industrial hygiene practices when handling this material.

**PPE Pictograms:**



### EXPOSURE GUIDELINES

**Calcium sulfate :**

**Guideline ACGIH:** TLV-TWA: 10 mg/m<sup>3</sup> Inhalable fraction (I)  
**Guideline OSHA:** PEL-TWA: 15 mg/m<sup>3</sup> Total particulate/dust (T)  
PEL-TWA: 5 mg/m<sup>3</sup> Respirable fraction (R)

**Crystalline silica (Quartz) :**

**Guideline ACGIH:** TLV-TWA: 0.025 mg/m<sup>3</sup> Respirable fraction (R)

**Portland cement :**

**Guideline ACGIH:** TLV-TWA: 10 mg/m<sup>3</sup>  
TLV-TWA: 1 mg/m<sup>3</sup> Respirable fraction (R)  
**Guideline OSHA:** PEL-TWA: 5 mg/m<sup>3</sup> Respirable fraction (R)  
PEL-TWA: 50 mppcf Total particulate/dust (T)  
PEL-TWA: 15 mg/m<sup>3</sup> Total particulate/dust (T)

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## SECTION 9 - PHYSICAL and CHEMICAL PROPERTIES

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**Physical State Appearance:** Solid or powder.

**Color:** Gray

**Odor:** Little to no odor.

**Boiling Point:** > 1832 °F (>1000 °C)

**Melting Point:** No Data

**Specific Gravity:** No Data

Solubility:	0.1 to 1.0% in water.
Vapor Density:	No Data
Vapor Pressure:	None.
Evaporation Rate:	No Data
pH:	No Data
Flash Point:	No information.
Flash Point Method:	Data not available.
Auto Ignition Temperature:	Data not available.

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## SECTION 10 - STABILITY and REACTIVITY

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Chemical Stability:	Stable under normal temperatures and pressures.
Hazardous Polymerization:	Will not occur.
Conditions to Avoid:	Avoid high temperature condition. Avoid contact with incompatible materials.
Incompatible Materials:	Not applicable.
Special Decomposition Products:	Oxides of carbon, oxides of nitrogen and other organic substances may be formed.

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## SECTION 11 - TOXICOLOGICAL INFORMATION

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### Crystalline silica (Quartz) :

RTECS Number: VV7330000

**Inhalation:** Inhalation - Rat TCLo - Lowest published toxic concentration : 248 mg/m3/6H [ Lungs, Thorax, or Respiration - Other changes Biochemical - Metabolism (intermediary) - Other proteins Biochemical - Metabolism (intermediary) - Effect on inflammation or mediation of inflammation ]  
Inhalation - Rat TCLo - Lowest published toxic concentration : 248 mg/m3/6H [ Lungs, Thorax, or Respiration - Changes in lung weight Immunological Including Allergic - Increase in cellular immune response Biochemical - Metabolism (intermediary) - Effect on inflammation or mediation of inflammation ]  
Inhalation - Rat TCLo - Lowest published toxic concentration : 200 mg/kg [ Lungs, Thorax, or Respiration - Fibrosis, focal (pneumoconiosis) Lungs, Thorax, or Respiration - Other changes Nutritional and Gross Metabolic - Changes in iron ]  
Inhalation - Mouse TCLo - Lowest published toxic concentration : 40 mg/kg [ Lungs, Thorax, or Respiration - Other changes ]  
Inhalation - Mouse TCLo - Lowest published toxic concentration : 40 mg/kg [ Immunological Including Allergic - Decrease in cellular immune response ]  
Inhalation - Rat TCLo - Lowest published toxic concentration : 1 mg/kg (RTECS)

**Ingestion:** Oral - Rat TDLo - Lowest published toxic dose : 120 gm/kg [ Gastrointestinal - Hypermotility, diarrhea Gastrointestinal - Other changes ] (RTECS)

## SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity:	No ecotoxicity data was found for the product.
Environmental Fate:	No environmental information found for this product.

## SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal:	Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local guidelines.
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## SECTION 14 - TRANSPORT INFORMATION

DOT Shipping Name:	Non regulated.
DOT Hazard Class:	Non regulated.
IATA Shipping Name:	Non regulated.
IMDG UN Number :	Non regulated.

## SECTION 15 - REGULATORY INFORMATION

SARA:	This product does not contain any chemicals which are subject to the reporting requirements of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III (40CFR, Part 372).
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California PROP 65:	The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): WARNING! This product contains a chemical known to the State of California to cause cancer.
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### Aluminum Silicate :

Canada DSL:	Listed
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### Calcium sulfate :

TSCA Inventory Status:	Listed
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Canada DSL:	Listed
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### Crystalline silica (Quartz) :

TSCA Inventory Status:	Listed
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Canada DSL:	Listed
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### Ethylene vinyl acetate copolymer :

TSCA Inventory Status: Listed

Canada DSL: Listed

**Portland cement :**

TSCA Inventory Status: Listed

Canada DSL: Listed

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## SECTION 16 - ADDITIONAL INFORMATION

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HMIS Health Hazard: 1

HMIS Fire Hazard: 0

HMIS Reactivity: 0

HMIS Personal Protection: 1

SDS Creation Date: July 08, 2013

SDS Revision Date: July 08, 2013

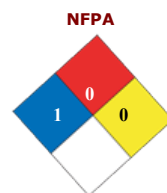
**Disclaimer:** The information and recommendations contained herein are, to the best of Sto Corp.'s knowledge and belief, accurate and reliable as of the date issued. Sto Corp. does not warrant or guarantee their accuracy or reliability, and Sto Corp. shall not be liable for any loss or damage arising out of their use thereof. The information and recommendations are offered for the users' consideration and examination, and it is the users' responsibility to satisfy itself that they are suitable and complete for its particular use.

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# SAFETY DATA SHEET

## SECTION 1 : IDENTIFICATION

Product Name: **StoGuard Fabric 6" Wide**  
Product Code: 80208  
SDS Manufacturer Number: 80208  
Product Use/Restriction: Coated Polyester Fabric  
Manufacturer Name: Sto Corp.  
Address: 6175 Riverside Drive, SW  
Atlanta, Georgia 30331  
General Phone Number: (404) 346-3666  
Emergency Phone Number: (800) 424-9300  
SDS Creation Date: July 07, 2014  
SDS Revision Date: July 07, 2014



HMIS	
Health Hazard	1
Fire Hazard	0
Reactivity	0
Personal Protection	X

## SECTION 2 : HAZARD(S) IDENTIFICATION

GHS Class:



GHS Signal word: WARNING!

Emergency Overview: No unusual conditions are expected from this product under normal conditions of use.

Route of Exposure: Eye contact  
Skin contact  
Inhalation.

Eye: Eye contact with dust and fibers may cause short term mechanical irritation.

Skin: Skin contact with dust and fibers may cause itching and short term irritation.

Inhalation: Inhaling dust or fibers may cause short-term irritation of the mouth, nose and upper airways and of the intestines.

Ingestion: Ingestion may cause transient irritation of throat, stomach and gastrointestinal tract.

Chronic Health Effects: There is no known chronic health effect connected with long-term use or contact with this product.

Carcinogenicity: This product contains a component which is listed by IARC, OSHA or NTP.

Potential Environmental Effects: There is no known ecological information for this material.

Aggravation of Pre-Existing Conditions: Chronic respiratory or skin conditions may temporarily worsen from exposure to this product.

## SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Ingredient Percent	EC Num.
Glass oxide (Continuous filaments)	65997-17-3	60 - 100 %	266-046-0
Carbon black	1333-86-4	0.5 - 1.5 %	215-609-9

## SECTION 4 : FIRST AID MEASURES

Eye Contact: Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention.

Skin Contact: Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes.  
Get medical attention if irritation develops or persists.

Inhalation:	Move to fresh air. If symptoms persist, call a physician.
Ingestion:	Accidental ingestion of this material is unlikely. If this does occur, watch person for several days to make sure intestinal blockage does not occur. Rinse mouth with water and drink water to remove fibers from the throat. If symptoms persist, call a physician.

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## SECTION 5 : FIRE FIGHTING MEASURES

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Flammable Properties:	Non Flammable.
Flash Point:	None.
Auto Ignition Temperature:	Not determined.
Lower Flammable/Explosive Limit:	Not determined.
Upper Flammable/Explosive Limit:	Not determined.
Extinguishing Media:	dry chemical foam. carbon dioxide (CO2). water fog
Protective Equipment:	Wear self-contained breathing apparatus (SCBA) and full fire fighting protective gear.
Hazardous Combustion Byproducts:	Carbon monoxide. Carbon dioxide. hydrogen. Other undetermined compounds could be released in small quantities.
Universal Fire And Explosion Hazards:	Not available.

### **NFPA Ratings:**

NFPA Health:	1
NFPA Flammability:	0
NFPA Reactivity:	0

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## SECTION 6 : ACCIDENTAL RELEASE MEASURES

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Personnel Precautions:	Avoid contact with skin and eyes.
Environmental Precautions:	Prevent further leakage or spillage if safe to do so.
Methods for containment:	This material will settle out of the air. Prevent from spreading by covering, diking or other means.
Methods for cleanup:	Use an industrial vacuum cleaner with a high efficiency filter to clean up dust and fiber contamination. Avoid dry sweeping. Pick up and transfer to properly labeled containers.
Other Precautions:	Does not apply.

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## SECTION 7 : HANDLING and STORAGE

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Handling:	Avoid dust formation. Do not breathe dust. Wear personal protective equipment.
Storage:	Keep product in its packaging until use to minimize potential dust generation. Product should be kept dry and undercover.
Hygiene Practices:	Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use.

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## SECTION 8 : EXPOSURE CONTROLS, PERSONAL PROTECTION - EXPOSURE GUIDELINES

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Engineering Controls:	Provide local exhaust and/or general ventilation to maintain exposure below regulatory and recommended limits. Dust collection system must be used in transferring operations, cutting or machining or other dust generating processes, such as using power tools. Vacuum or wet clean-up methods should be used.
Eye/Face Protection:	Safety glasses with side-shields.
Skin Protection Description:	Protective gloves. Long sleeved shirt and long pants.
Respiratory Protection:	When workers are facing airborne particulate/dust concentrations above the exposure limit they must use appropriate certified respirators. A properly fitted NIOSH approved disposable N 95 type dust respirator or better is recommended. Consult with your company's local procedures for selection, training, inspection and maintenance of respirators. Otherwise, consult the NIOSH web site ( <a href="http://www.cdc.gov/niosh/npptl/topics/respirators/disp_part">http://www.cdc.gov/niosh/npptl/topics/respirators/disp_part</a> ) for a list of dust respirator types and approved suppliers.
PPE Pictograms:	

#### EXPOSURE GUIDELINES

##### Glass oxide (Continuous filaments) :

Guideline ACGIH: TLV-TWA: 1 f/cc (Respirable)  
5 mg/m3 (Inhalable)

Guideline OSHA: PEL-TWA: 1 f/cc (Respirable)

##### Carbon black :

Guideline ACGIH: TLV-TWA: 3 mg/m3 Inhalable fraction (I)

Guideline NIOSH: REL-TWA: 0.1 mg/m3 as Carbon black  
REL-TWA: 3.5 mg/m3 as Carbon black

## SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

Physical State Appearance:	Fiberglass mat.
Color:	Black.
Odor:	Faint chemical odor.
Boiling Point:	Not determined.
Melting Point:	Not determined.
Specific Gravity:	Not determined.
Solubility:	Insoluble. in water.
Vapor Density:	Not determined.
Vapor Pressure:	Not determined.
Evaporation Rate:	Not determined.
pH:	Not determined.
Viscosity:	Not determined.
Flash Point:	None.
Auto Ignition Temperature:	Not determined.

## SECTION 10 : STABILITY and REACTIVITY

Chemical Stability:	Stable under normal conditions.
Hazardous Polymerization:	Hazardous polymerization does not occur.
Conditions to Avoid:	None expected
Incompatible Materials:	No materials to be especially mentioned.
Special Decomposition Products:	See Section 5 of MSDS for hazardous decomposition products during a fire.

## SECTION 11 : TOXICOLOGICAL INFORMATION

Acute Toxicity:	Dusts may cause mechanical irritation to eyes and skin. Ingestion may cause transient irritation of throat, stomach and gastrointestinal tract. Inhalation may cause coughing, nose and throat irritation, and sneezing. High exposures may cause difficulty breathing, congestion, and chest tightness.
Acute Effects:	Dusts may cause mechanical irritation to eyes and skin. Ingestion may cause transient irritation of throat, stomach and gastrointestinal tract. Inhalation may cause coughing, nose and throat irritation, and sneezing. High exposures may cause difficulty breathing, congestion, and chest tightness.
Sensitization:	No information available.
Mutagenicity:	No information available.
Reproductive Toxicity:	No information available.
Teratogenicity:	No information available.
Neurological Effects:	No information available.
<b><u>Carbon black :</u></b>	
Skin:	Administration onto the skin - Rabbit LD50 - Lethal dose, 50 percent kill: >3 gm/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)
Inhalation:	Inhalation - Rat TCLo - Lowest published toxic concentration: 7 mg/m3 - [Lungs, Thorax, or Respiration - Other changes Biochemical - Metabolism (Intermediary) - Effect on inflammation or mediation of inflammation ] (RTECS)
Ingestion:	Oral - Rat LD50 - Lethal dose, 50 percent kill: >15400 mg/kg [Behavioral-Somnolence (general depressed activity)] (RTECS)
Carcinogenicity:	IARC: Group 2B: Possibly carcinogenic to humans.

## SECTION 12 : ECOLOGICAL INFORMATION

Ecotoxicity:	This material is not expected to cause harm to animals, plants or fish.
Bioaccumulation:	Not available.
Biodegradation:	Not available.
Mobility In Environmental Media:	Not available.

## SECTION 13 : DISPOSAL CONSIDERATIONS

Waste Disposal:	Dispose of in accordance with Local, State, Federal and Provincial regulations.
RCRA Number:	No EPA Waste Numbers are applicable for this product's components.

## SECTION 14 : TRANSPORT INFORMATION

DOT Shipping Name:	Non regulated.
DOT Hazard Class:	Non regulated.
IATA Shipping Name:	Non regulated.
IMDG UN Number :	Non regulated.

## SECTION 15 : REGULATORY INFORMATION

SARA:	This product does not contain any chemicals which are subject to the reporting requirements of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III (40CFR, Part 372).
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Section 311/312 Hazard  
Categories:

Acute Health Hazard.:	Yes
Chronic Health Hazard:	No
Risk of Ignition.:	No
Sudden Release of Pressure Hazard.:	No
Reactive Hazard:	No

Clean Air Act: This product does not contain any Hazardous Air Pollutants (HAPs).

California PROP 65: The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):  
WARNING! This product contains a chemical known to the State of California to cause cancer.

Canada WHMIS: Not controlled.

EU Class: This product is not hazardous according to European Directive 67/548/EEC and 99/45/EC and their latest amendments.

Risk Phrases: Does not apply.

Safety Phrase: Does not apply.

**Glass oxide (Continuous filaments) :**

TSCA Inventory Status:	Listed
EINECS Number:	266-046-0
Japan ENCS:	Not listed
New Jersey:	No Data
Pennsylvania:	No Data
Canada DSL:	Listed
EC Number:	266-046-0
South Korea KECL:	KE-17630
China:	Listed
Australia AICS:	Listed

**Carbon black :**

TSCA Inventory Status:	Listed
EINECS Number:	215-609-9
Japan ENCS:	(5)-3328
California PROP 65:	Listed: cancer.
New Jersey:	No Data
Pennsylvania:	Listed
Canada DSL:	Listed
Canada IDL:	Identified under the Canadian Hazardous Products Act Ingredient Disclosure List: 1%. Item: 309(1271)
EC Number:	215-609-9
South Korea KECL:	KE-04682
Australia AICS:	Listed

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## SECTION 16 : ADDITIONAL INFORMATION

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HMIS Health Hazard:	1
HMIS Fire Hazard:	0
HMIS Reactivity:	0
HMIS Personal Protection:	X
SDS Creation Date:	July 07, 2014
SDS Revision Date:	July 07, 2014

Disclaimer: The information and recommendations contained herein are, to the best of Sto Corp.'s knowledge and belief, accurate and reliable as of the date issued. Sto Corp. does not warrant or guarantee their accuracy or reliability, and Sto Corp. shall not be liable for any loss or damage arising out of their use thereof. The information and recommendations are offered for the users' consideration and examination, and it is the users' responsibility to satisfy itself that they are suitable and complete for its particular use.

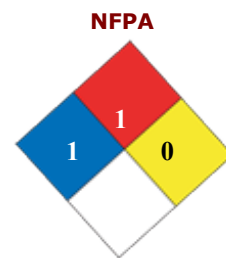




## SAFETY DATA SHEET

### SECTION 1 - IDENTIFICATION

**Product Name:** Sto Primer/Adhesive-B  
**Product Code:** 80101  
**SDS Manufacturer Number:** 80101  
**Product Use/Restriction:** Polymer Modified Cementitious Based Groundcoat/Adhesive  
**Manufacturer Name:** Sto Corp.  
**Address:** 6175 Riverside Drive, SW  
Atlanta, Georgia 30331  
**General Phone Number:** (404) 346-3666  
**Emergency Phone Number:** (800) 424-9300  
**SDS Creation Date:** July 08, 2013  
**SDS Revision Date:** July 08, 2013  
**(M)SDS Format:**



#### HMIS

Health Hazard	1
Fire Hazard	0
Reactivity	0
Personal Protection	1

### SECTION 2 - HAZARD(S) IDENTIFICATION

#### GHS Pictograms:



**GHS Class:** Eye Damage, Category 1  
Skin Irritant, Category 2  
Acute Toxicity Oral, Category 4

**Hazard Statements:** Causes serious eye damage  
Causes skin irritation  
May cause an allergic skin reaction  
May cause respiratory irritation  
May cause drowsiness or dizziness

**Precautionary Statements:** Wash hands thoroughly after handling.  
Wear protective gloves/protective clothing/eye protection/face protection.  
Store locked up.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Immediately call a POISON CENTER or doctor/physician.  
IF ON SKIN: Wash with plenty of soap and water.  
If skin irritation or rash occurs: Get medical advice/attention.  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
Call a POISON CENTER or doctor/physician if you feel unwell.

If skin irritation occurs: Get medical advice/attention.  
Take off contaminated clothing and wash it before reuse.  
Contaminated work clothing should not be allowed out of the workplace.  
Use only outdoors or in a well-ventilated area.  
Store locked up.  
Dispose of contents/container in accordance with Local, State, Federal and Provincial regulations.

**Emergency Overview:** Irritant.

**Route of Exposure:** Eyes. Skin. Inhalation. Ingestion.

**Potential Health Effects:**

**Eye:** May cause irritation, burns and permanent tissue damage.

**Skin:** May cause irritation, dry skin, redness, discomfort or burns.

**Inhalation:** Prolonged or repeated inhalation may cause lung damage.  
Prolonged and repeated inhalation of respirable crystalline silica can cause silicosis, a chronic lung disease characterized by fibrosis and scarring of the lung tissue resulting in a decrease in lung function, breathlessness, wheezing, coughing and sputum production.

**Ingestion:** May cause irritation. Ingesting large amounts may cause injury.

**Signs/Symptoms:** Product is alkali when wet, excessive and prolonged exposure can cause severe irritation, burns and permanent tissue damage

**Aggravation of Pre-Existing Conditions:** May aggravate pre-existing respiratory disorders, allergy, eczema, or skin conditions.

---

## SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

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Chemical Name	CAS#	Ingredient Percent	EC Num.
Calcium sulfate	7778-18-9	1 - 5 by weight	
Crystalline silica (Quartz)	14808-60-7	60 - 100 by weight	
Ethylene vinyl acetate copolymer	24937-78-8	1 - 5 by weight	
Portland cement	65997-15-1	10 - 30 by weight	

---

## SECTION 4 - FIRST AID MEASURES

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**Eye Contact:** Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention.

**Skin Contact:** Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes.  
Get medical attention if irritation develops or persists.

**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.

**Ingestion:** If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

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## SECTION 5 - FIRE FIGHTING MEASURES

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Flammable Properties:	Non Flammable.
Flash Point:	No information.
Flash Point Method:	Data not available.
Auto Ignition Temperature:	Data not available.
Lower Flammable/Explosive Limit:	Data not available.
Upper Flammable/Explosive Limit:	Data not available.
Extinguishing Media:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Protective Equipment:	As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.
Hazardous Combustion Byproducts:	Oxides of carbon, oxides of nitrogen and other organic substances may be formed.

#### **NFPA Ratings:**

NFPA Health:	1
NFPA Flammability:	1
NFPA Reactivity:	0
NFPA Other:	

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personnel Precautions:	Use proper personal protective equipment as listed in section 8. Evacuate area and keep unnecessary and unprotected personnel from entering the spill area.
Environmental Precautions:	Avoid runoff into storm sewers, ditches, and waterways.
Methods for containment:	Contain spills with an inert absorbent material such as soil, sand or oil dry.
Methods for cleanup:	Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Provide ventilation. Clean up spills immediately observing precautions in the protective equipment section.

## SECTION 7 - HANDLING and STORAGE

Handling:	Use with adequate ventilation. Avoid breathing vapor and contact with eyes, skin and clothing.
Storage:	Store in a cool, dry, well ventilated area away from sources of heat and incompatible materials. Keep container tightly closed when not in use.
Work Practices:	Use good laboratory practice when working with chemicals. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
Special Handling Procedures:	Material is alkaline when mixed with water. Use precaution and proper protective equipment

**Hygiene Practices:** Wash thoroughly after handling. Avoid contact with eyes and skin. Avoid inhaling vapor or mist.

---

## SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION - EXPOSURE GUIDELINES

---

**Engineering Controls:** Good general ventilation should be sufficient to control airborne levels. Otherwise, use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls including use of a biosafety cabinet / fume hood to control airborne levels below recommended exposure limits.

**Eye/Face Protection:** Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166.

**Skin Protection Description:** Protective laboratory coat, apron, or disposable garment recommended.

**Hand Protection Description:** Use impervious gloves. Nitrile gloves are recommended.

**Respiratory Protection:** A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

**Other Protective:** Follow good industrial hygiene practices when handling this material.

**PPE Pictograms:**



### EXPOSURE GUIDELINES

#### **Calcium sulfate :**

**Guideline ACGIH:** TLV-TWA: 10 mg/m3 Inhalable fraction (I)  
**Guideline OSHA:** PEL-TWA: 15 mg/m3 Total particulate/dust (T)  
PEL-TWA: 5 mg/m3 Respirable fraction (R)

#### **Crystalline silica (Quartz) :**

**Guideline ACGIH:** TLV-TWA: 0.025 mg/m3 Respirable fraction (R)

#### **Portland cement :**

**Guideline ACGIH:** TLV-TWA: 10 mg/m3  
TLV-TWA: 1 mg/m3 Respirable fraction (R)  
**Guideline OSHA:** PEL-TWA: 5 mg/m3 Respirable fraction (R)  
PEL-TWA: 50 mppcf Total particulate/dust (T)  
PEL-TWA: 15 mg/m3 Total particulate/dust (T)

---

## SECTION 9 - PHYSICAL and CHEMICAL PROPERTIES

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**Physical State Appearance:** Solid or powder.

**Color:** Gray

**Odor:** Little to no odor.

**Boiling Point:** > 1832 °F (>1000 °C)

**Melting Point:** No Data

**Specific Gravity:** No Data



Solubility:	0.1 to 1.0% in water.
Vapor Density:	No Data
Vapor Pressure:	None.
Evaporation Rate:	No Data
pH:	No Data
Flash Point:	No information.
Flash Point Method:	Data not available.
Auto Ignition Temperature:	Data not available.

---

## SECTION 10 - STABILITY and REACTIVITY

---

Chemical Stability:	Stable under normal temperatures and pressures.
Hazardous Polymerization:	Will not occur.
Conditions to Avoid:	Avoid high temperature condition. Avoid contact with incompatible materials.
Incompatible Materials:	Not applicable.
Special Decomposition Products:	Oxides of carbon, oxides of nitrogen and other organic substances may be formed.

---

## SECTION 11 - TOXICOLOGICAL INFORMATION

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### Crystalline silica (Quartz) :

RTECS Number: VV7330000

**Inhalation:** Inhalation - Rat TCLo - Lowest published toxic concentration : 248 mg/m3/6H [ Lungs, Thorax, or Respiration - Other changes Biochemical - Metabolism (intermediary) - Other proteins Biochemical - Metabolism (intermediary) - Effect on inflammation or mediation of inflammation ]  
Inhalation - Rat TCLo - Lowest published toxic concentration : 248 mg/m3/6H [ Lungs, Thorax, or Respiration - Changes in lung weight Immunological Including Allergic - Increase in cellular immune response Biochemical - Metabolism (intermediary) - Effect on inflammation or mediation of inflammation ]  
Inhalation - Rat TCLo - Lowest published toxic concentration : 200 mg/kg [ Lungs, Thorax, or Respiration - Fibrosis, focal (pneumoconiosis) Lungs, Thorax, or Respiration - Other changes Nutritional and Gross Metabolic - Changes in iron ]  
Inhalation - Mouse TCLo - Lowest published toxic concentration : 40 mg/kg [ Lungs, Thorax, or Respiration - Other changes ]  
Inhalation - Mouse TCLo - Lowest published toxic concentration : 40 mg/kg [ Immunological Including Allergic - Decrease in cellular immune response ]  
Inhalation - Rat TCLo - Lowest published toxic concentration : 1 mg/kg (RTECS)

**Ingestion:** Oral - Rat TDLo - Lowest published toxic dose : 120 gm/kg [ Gastrointestinal - Hypermotility, diarrhea Gastrointestinal - Other changes ] (RTECS)

## SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity:	No ecotoxicity data was found for the product.
Environmental Fate:	No environmental information found for this product.

## SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal:	Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local guidelines. Triple-rinse drum prior to offering for recycle, reconditioning or disposal. Dispose of rinsate in an environmentally acceptable manner consistent with applicable waste management.
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## SECTION 14 - TRANSPORT INFORMATION

DOT Shipping Name:	Non regulated.
DOT Hazard Class:	Non regulated.
IATA Shipping Name:	Non regulated.
IMDG UN Number :	Non regulated.

## SECTION 15 - REGULATORY INFORMATION

SARA:	This product does not contain any chemicals which are subject to the reporting requirements of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III (40CFR, Part 372).
California PROP 65:	The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): WARNING! This product contains a chemical known to the State of California to cause cancer.
<u>Calcium sulfate :</u>	
TSCA Inventory Status:	Listed
Canada DSL:	Listed
<u>Crystalline silica (Quartz) :</u>	
TSCA Inventory Status:	Listed
Canada DSL:	Listed
<u>Ethylene vinyl acetate copolymer :</u>	
TSCA Inventory Status:	Listed

Canada DSL: Listed

**Portland cement :**

TSCA Inventory Status: Listed

Canada DSL: Listed

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## SECTION 16 - ADDITIONAL INFORMATION

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HMIS Health Hazard: 1

HMIS Fire Hazard: 0

HMIS Reactivity: 0

HMIS Personal Protection: 1

SDS Creation Date: July 08, 2013

SDS Revision Date: July 08, 2013

**Disclaimer:** The information and recommendations contained herein are, to the best of Sto Corp.'s knowledge and belief, accurate and reliable as of the date issued. Sto Corp. does not warrant or guarantee their accuracy or reliability, and Sto Corp. shall not be liable for any loss or damage arising out of their use thereof. The information and recommendations are offered for the users' consideration and examination, and it is the users' responsibility to satisfy itself that they are suitable and complete for its particular use.

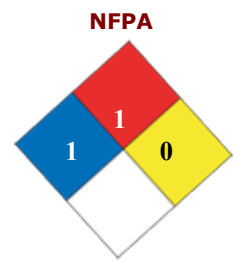
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## SAFETY DATA SHEET

### SECTION 1 : IDENTIFICATION

Product Name: **Stolit 1.5**  
Product Code: 80131  
SDS Manufacturer Number: 80131  
Product Use/Restriction: Waterbased Acrylic Coating.  
Manufacturer Name: Sto Corp.  
Address: 6175 Riverside Drive, SW  
Atlanta, Georgia 30331  
  
General Phone Number: (404) 346-3666  
Emergency Phone Number: (800) 424-9300  
SDS Creation Date: July 08, 2013  
SDS Revision Date: July 08, 2013  
(M)SDS Format:



HMIS	
Health Hazard	1*
Fire Hazard	1
Reactivity	0
Personal Protection	X

\* Chronic Health Effects

### SECTION 2 : HAZARD(S) IDENTIFICATION

GHS Pictograms:



Signal Word: WARNING!  
GHS Class: Eye Irritant, Category 2  
Skin Irritant, Category 2

Hazard Statements: Causes eye irritation  
Causes skin irritation

Precautionary Statements: Wash hands thoroughly after handling.  
Wear protective gloves/protective clothing/eye protection/face protection.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice/attention.  
IF ON SKIN: Wash with plenty of soap and water.  
If skin irritation or rash occurs: Get medical advice/attention.  
Wash contaminated clothing before reuse.

Emergency Overview: WARNING! Irritant.

<b>Route of Exposure:</b>	Eyes. Skin. Inhalation. Ingestion.
<b>Potential Health Effects:</b>	
<b>Eye:</b>	May cause irritation.
<b>Skin:</b>	May cause irritation.
<b>Inhalation:</b>	Prolonged or excessive inhalation may cause respiratory tract irritation.
<b>Ingestion:</b>	Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.
<b>Target Organs:</b>	Eyes. Skin. Respiratory system. Digestive system.

### SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

<b>Chemical Name</b>	<b>CAS#</b>	<b>Ingredient Percent</b>	<b>EC Num.</b>
Acrylic polymer	No Data	1 - 5 by weight	
Calcium carbonate	1317-65-3	30 - 60 by weight	
Crystalline silica (Quartz)	14808-60-7	10 - 30 by weight	
Crystalline Silica (Cristobalite)	14464-46-1	1 - 5 by weight	
Diatomaceous Earth, Flux-Calcined	68855-54-9	1 - 5 by weight	
Titanium Oxide	13463-67-7	0.1 - 1.0 by weight	
Water	7732-18-5	10 - 30 by weight	

### SECTION 4 : FIRST AID MEASURES

<b>Eye Contact:</b>	Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention.
<b>Skin Contact:</b>	Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists.
<b>Inhalation:</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.
<b>Ingestion:</b>	If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.
<b>Other First Aid:</b>	First Responders should provide for their own safety prior to rendering assistance.

### SECTION 5 : FIRE FIGHTING MEASURES

<b>Flash Point:</b>	Not determined.
<b>Auto Ignition Temperature:</b>	Not determined.
<b>Lower Flammable/Explosive Limit:</b>	Not determined.

Upper Flammable/Explosive Limit:	Not determined.
Fire Fighting Instructions:	Evacuate area of unprotected personnel. Use cold water spray to cool fire exposed containers to minimize risk of rupture. Do not enter confined fire space without full protective gear. If possible, contain fire run-off water.
Extinguishing Media:	Use dry chemical or foam when fighting fires involving this material. Water mist may be used to cool closed containers.
Protective Equipment:	As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.
Unusual Fire Hazards:	Material may spatter above 100 °C/212 °F

#### **NFPA Ratings:**

NFPA Health:	1
NFPA Flammability:	1
NFPA Reactivity:	0

---

## SECTION 6 : ACCIDENTAL RELEASE MEASURES

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Personnel Precautions:	Evacuate area and keep unnecessary and unprotected personnel from entering the spill area.
Environmental Precautions:	Avoid runoff into storm sewers, ditches, and waterways.
Methods for containment:	Contain spills with an inert absorbent material such as soil, sand or oil dry.
Methods for cleanup:	Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Provide ventilation. Clean up spills immediately observing precautions in the protective equipment section.

---

## SECTION 7 : HANDLING and STORAGE


---

Handling:	Use with adequate ventilation. Avoid breathing vapor, aerosol or mist.
Storage:	Store in a cool, dry, well ventilated area away from sources of heat and incompatible materials. Keep container tightly closed when not in use. Store away from direct heat or sunlight, sources of UV radiation, peroxides, or free radicals. Do not store in temperatures above 120 °F or below 48 °F. Keep away from direct sunlight.
Work Practices:	Handle in accordance with good industrial hygiene and safety practices.
Hygiene Practices:	Wash thoroughly after handling.

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## SECTION 8 : EXPOSURE CONTROLS, PERSONAL PROTECTION - EXPOSURE GUIDELINES

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Engineering Controls:	Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.
Eye/Face Protection:	Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166.
Skin Protection Description:	Wear appropriate protective gloves and other protective apparel to prevent skin contact. Consult manufacturer's data for permeability data.
Hand Protection Description:	Nitrile rubber or natural rubber gloves are recommended.
Respiratory Protection:	A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.
Other Protective:	Facilities storing or utilizing this material should be equipped with an eyewash and a deluge shower safety station.
PPE Pictograms:	

#### EXPOSURE GUIDELINES

##### **Crystalline silica (Quartz) :**

Guideline ACGIH: TLV-TWA: 0.025 mg/m<sup>3</sup> Respirable fraction (R)

##### **Crystalline Silica (Cristobalite) :**

Guideline ACGIH: TLV-TWA: 0.025 mg/m<sup>3</sup> Respirable fraction (R)

##### **Diatomaceous Earth, Flux-Calcined :**

Guideline ACGIH: TLV-TWA: 0.025 mg/m<sup>3</sup> Respirable fraction (R)

##### **Titanium Oxide :**

Guideline ACGIH: TLV-TWA: 10 mg/m<sup>3</sup>

Notes : Only established PEL and TLV values for the ingredients are listed.

## SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

Physical State Appearance:	Liquid.
Odor:	Slight
Boiling Point:	Not determined.
Melting Point:	0°C (32°F)
Specific Gravity:	> 1
Solubility:	Miscible in water
Vapor Density:	Not determined.
Vapor Pressure:	Not determined.
Percent Volatile:	Data not available.
Evaporation Rate:	Not determined.

pH: 7.5 - 10  
Flash Point: Not determined.  
Auto Ignition Temperature: Not determined.

---

## SECTION 10 : STABILITY and REACTIVITY

---

**Chemical Stability:** Stable under recommended handling and storage conditions.  
**Hazardous Polymerization:** Hazardous polymerization does not occur.  
**Conditions to Avoid:** Heat, flames, ignition sources, and sparks. Incompatible materials. Freezing or temperatures below 32 deg. F.  
**Incompatible Materials:** Water reactive materials.  
**Special Decomposition Products:** Thermal decomposition can lead to release irritant fumes and toxic gases.

---

## SECTION 11 : TOXICOLOGICAL INFORMATION

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### Calcium carbonate :

**RTECS Number:** EV9580000

**Inhalation:** Inhalation - Rat TCLo - Lowest published toxic concentration : 250 mg/m3/2H/24W (Intermittent) [ Lungs, Thorax, or Respiration - Fibrosis, focal (pneumoconiosis) ]  
Inhalation - Rat TCLo - Lowest published toxic concentration : 84 mg/m3/4H/40W (Intermittent) [ Lungs, Thorax, or Respiration - Fibrosis (interstitial) Liver - Other changes Kidney/Ureter/Bladder - Other changes ] (RTECS)

### Crystalline silica (Quartz) :

**RTECS Number:** VV7330000

**Inhalation:** Inhalation - Rat TCLo - Lowest published toxic concentration : 248 mg/m3/6H [ Lungs, Thorax, or Respiration - Other changes Biochemical - Metabolism (intermediary) - Other proteins Biochemical - Metabolism (intermediary) - Effect on inflammation or mediation of inflammation ]  
Inhalation - Rat TCLo - Lowest published toxic concentration : 248 mg/m3/6H [ Lungs, Thorax, or Respiration - Changes in lung weight Immunological Including Allergic - Increase in cellular immune response Biochemical - Metabolism (intermediary) - Effect on inflammation or mediation of inflammation ]  
Inhalation - Rat TCLo - Lowest published toxic concentration : 200 mg/kg [ Lungs, Thorax, or Respiration - Fibrosis, focal (pneumoconiosis) Lungs, Thorax, or Respiration - Other changes Nutritional and Gross Metabolic - Changes in iron ]  
Inhalation - Mouse TCLo - Lowest published toxic concentration : 40 mg/kg [ Lungs, Thorax, or Respiration - Other changes ]  
Inhalation - Mouse TCLo - Lowest published toxic concentration : 40 mg/kg [ Immunological Including Allergic - Decrease in cellular immune response ]  
Inhalation - Rat TCLo - Lowest published toxic concentration : 1 mg/kg (RTECS)  
**Ingestion:** Oral - Rat TDLo - Lowest published toxic dose : 120 gm/kg [ Gastrointestinal - Hypermotility, diarrhea Gastrointestinal - Other changes ] (RTECS)

### Crystalline Silica (Cristobalite) :



RTECS Number: VV7325000

Inhalation: Inhalation - Mouse TCLo - Lowest published toxic concentration : 43 mg/m3/5H/9D (Intermittent) [ Lungs, Thorax, or Respiration - Pleural effusion Lungs, Thorax, or Respiration - Other changes ]  
Inhalation - Mouse TCLo - Lowest published toxic concentration : 70 mg/m3/5H/12D (Intermittent) [ Lungs, Thorax, or Respiration - Fibrosis, focal (pneumoconiosis) Lungs, Thorax, or Respiration - Fibrosis (interstitial) Lungs, Thorax, or Respiration - Other changes ] (RTECS)

#### Titanium Oxide :

RTECS Number: XR2275000

Inhalation: Inhalation - Rat TCLo - Lowest published toxic concentration : 1 mg/kg [ Lungs, Thorax, or Respiration - Other changes Biochemical - Metabolism (intermediary) - Effect on inflammation or mediation of inflammation ] (RTECS)

Ingestion: Oral - Rat TDLo - Lowest published toxic dose : 60 gm/kg [ Gastrointestinal - Hypermotility, diarrhea Gastrointestinal - Other changes ] (RTECS)

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## SECTION 12 : ECOLOGICAL INFORMATION

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Ecotoxicity: No environmental information found for this product.

Environmental Fate: No environmental information found for this product.

---

## SECTION 13 : DISPOSAL CONSIDERATIONS

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Waste Disposal: Dispose of in accordance with Local, State, Federal and Provincial regulations.

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## SECTION 14 : TRANSPORT INFORMATION

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DOT Shipping Name: Non regulated.

DOT Hazard Class: Non regulated.

IATA Shipping Name: Non regulated.

IMDG UN Number : Non regulated.

---

## SECTION 15 : REGULATORY INFORMATION

---

SARA: This product does not contain any chemicals which are subject to the reporting requirements of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III (40CFR, Part 372).

**California PROP 65:** The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):  
WARNING! This product contains a chemical known to the State of California to cause cancer.

**Canada WHMIS:** Xi - Irritant

**EU Class:** Irritant.  
In accordance to Regulation (EC) No 1272/2008 on the classification, labelling and packaging of substances and mixtures

**Risk Phrases:** R36/37/38 - Irritating to eyes, respiratory system and skin.

**Safety Phrase:** S23 - Do not breathe gas/fumes/vapour/spray.  
S37 - Wear suitable gloves.

**Calcium carbonate :**

**TSCA Inventory Status:** Listed

**Crystalline silica (Quartz) :**

**TSCA Inventory Status:** Listed

**Canada DSL:** Listed

**Crystalline Silica (Cristobalite) :**

**TSCA Inventory Status:** Listed

**Canada DSL:** Listed

**Diatomaceous Earth, Flux-Calcined :**

**TSCA Inventory Status:** Listed

**Canada DSL:** Listed

**Titanium Oxide :**

**TSCA Inventory Status:** Listed

**Canada DSL:** Listed

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## SECTION 16 : ADDITIONAL INFORMATION

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**HMIS Health Hazard:** 1\*

**HMIS Fire Hazard:** 1

**HMIS Reactivity:** 0

**HMIS Personal Protection:** X

**SDS Creation Date:** July 08, 2013

**SDS Revision Date:** July 08, 2013

**Disclaimer:** The information and recommendations contained herein are, to the best of Sto Corp.'s knowledge and belief, accurate and reliable as of the date issued. Sto Corp. does not warrant or guarantee their accuracy or reliability, and Sto Corp. shall not be liable for any loss or damage arising out of their use thereof. The information and recommendations are offered for the users' consideration and examination, and it is the users' responsibility to satisfy itself that they are suitable and complete for its particular use.

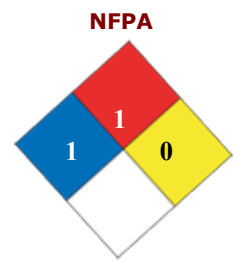




## SAFETY DATA SHEET

### SECTION 1 - IDENTIFICATION

Product Name: **Sto Gold Coat**  
Product Code: 80265  
SDS Manufacturer Number: 80265  
Product Use/Restriction: Waterbased Latex Coating.  
Manufacturer Name: Sto Corp.  
Address: 6175 Riverside Drive, SW  
Atlanta, Georgia 30331  
General Phone Number: (404) 346-3666  
Emergency Phone Number: (800) 424-9300  
SDS Creation Date: July 08, 2013  
SDS Revision Date: July 08, 2013  
(M)SDS Format:



#### HMIS

Health Hazard	1
Fire Hazard	1
Reactivity	0
Personal Protection	X

### SECTION 2 - HAZARD(S) IDENTIFICATION

GHS Pictograms:



GHS Class: Eye Irritant, Category 2  
Skin Irritant, Category 2

Hazard Statements: Causes eye irritation  
Causes skin irritation

Precautionary Statements: Wash hands thoroughly after handling.  
Wear protective gloves/protective clothing/eye protection/face protection.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice/attention.  
IF ON SKIN: Wash with plenty of soap and water.  
If skin irritation or rash occurs: Get medical advice/attention.  
Wash contaminated clothing before reuse.

Emergency Overview: WARNING! Irritant.

Route of Exposure: Eyes. Skin. Inhalation. Ingestion.

Potential Health Effects:

<b>Eye:</b>	May cause irritation.
<b>Skin:</b>	May cause irritation.
<b>Inhalation:</b>	Prolonged or excessive inhalation may cause respiratory tract irritation.
<b>Ingestion:</b>	Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.
<b>Target Organs:</b>	Eyes. Skin. Respiratory system. Digestive system.

### SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

<b>Chemical Name</b>	<b>CAS#</b>	<b>Ingredient Percent</b>	<b>EC Num.</b>
1,2-Propanediol	57-55-6	1 - 5 by weight	
Aluminum Silicate	1302-76-7	1 - 5 by weight	
Crystalline silica (Quartz)	14808-60-7	30 - 60 by weight	
Naphtha	64742-88-7	1 - 5 by weight	
Titanium Oxide	13463-67-7	1 - 5 by weight	
Water based dispersion of butadiene styrene copolymer	No Data	30 - 60 by weight	

### SECTION 4 - FIRST AID MEASURES

<b>Eye Contact:</b>	Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention.
<b>Skin Contact:</b>	Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists.
<b>Inhalation:</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.
<b>Ingestion:</b>	If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.
<b>Other First Aid:</b>	First Responders should provide for their own safety prior to rendering assistance.

### SECTION 5 - FIRE FIGHTING MEASURES

<b>Flash Point:</b>	Not determined.
<b>Auto Ignition Temperature:</b>	Not determined.
<b>Lower Flammable/Explosive Limit:</b>	Not determined.
<b>Upper Flammable/Explosive Limit:</b>	Not determined.

<b>Fire Fighting Instructions:</b>	Evacuate area of unprotected personnel. Use cold water spray to cool fire exposed containers to minimize risk of rupture. Do not enter confined fire space without full protective gear. If possible, contain fire run-off water.
<b>Extinguishing Media:</b>	Use dry chemical or foam when fighting fires involving this material. Water mist may be used to cool closed containers.
<b>Protective Equipment:</b>	As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.
<b>Unusual Fire Hazards:</b>	Material may spatter above 100 °C/212 °F

#### **NFPA Ratings:**

NFPA Health:	1
NFPA Flammability:	1
NFPA Reactivity:	0

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

<b>Personnel Precautions:</b>	Evacuate area and keep unnecessary and unprotected personnel from entering the spill area.
<b>Environmental Precautions:</b>	Avoid runoff into storm sewers, ditches, and waterways.
<b>Methods for containment:</b>	Contain spills with an inert absorbent material such as soil, sand or oil dry.
<b>Methods for cleanup:</b>	Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Provide ventilation. Clean up spills immediately observing precautions in the protective equipment section.

## SECTION 7 - HANDLING and STORAGE

<b>Handling:</b>	Use with adequate ventilation. Avoid breathing vapor, aerosol or mist.
<b>Storage:</b>	Store in a cool, dry, well ventilated area away from sources of heat and incompatible materials. Keep container tightly closed when not in use. Store away from direct heat or sunlight, sources of UV radiation, peroxides, or free radicals. Do not store in temperatures above 120 °F or below 48 °F. Keep away from direct sunlight.
<b>Work Practices:</b>	Handle in accordance with good industrial hygiene and safety practices.
<b>Hygiene Practices:</b>	Wash thoroughly after handling.

## SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION - EXPOSURE GUIDELINES

<b>Engineering Controls:</b>	Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.
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Eye/Face Protection:	Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166.
Skin Protection Description:	Wear appropriate protective gloves and other protective apparel to prevent skin contact. Consult manufacturer's data for permeability data.
Hand Protection Description:	Nitrile rubber or natural rubber gloves are recommended.
Respiratory Protection:	A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.
Other Protective:	Facilities storing or utilizing this material should be equipped with an eyewash and a deluge shower safety station.
PPE Pictograms:	



#### EXPOSURE GUIDELINES

##### Crystalline silica (Quartz) :

Guideline ACGIH:

TLV-TWA: 0.025 mg/m<sup>3</sup> Respirable fraction (R)

##### Titanium Oxide :

Guideline ACGIH:

TLV-TWA: 10 mg/m<sup>3</sup>

Notes :

Only established PEL and TLV values for the ingredients are listed.

## SECTION 9 - PHYSICAL and CHEMICAL PROPERTIES

Physical State Appearance:	Liquid.
Odor:	Slight
Boiling Point:	Not determined.
Melting Point:	0°C (32°F)
Specific Gravity:	> 1
Solubility:	Miscible in water
Vapor Density:	Not determined.
Vapor Pressure:	Not determined.
Percent Volatile:	Data not available.
Evaporation Rate:	Not determined.
pH:	7.5 - 10
Flash Point:	Not determined.
Auto Ignition Temperature:	Not determined.

## SECTION 10 - STABILITY and REACTIVITY

Chemical Stability:	Stable under recommended handling and storage conditions.
Hazardous Polymerization:	Hazardous polymerization does not occur.
Conditions to Avoid:	Heat, flames, ignition sources, and sparks. Incompatible materials. Freezing or temperatures below 32 deg. F.
Incompatible Materials:	Water reactive materials.
Special Decomposition Products:	Thermal decomposition can lead to release irritant fumes and toxic gases.

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## SECTION 11 - TOXICOLOGICAL INFORMATION

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### 1,2-Propanediol :

RTECS Number:	TY2000000
Eye:	Administration into the eye - Rabbit Standard Draize test : 100 mg [ Mild ] Administration into the eye - Rabbit Standard Draize test : 500 mg/24H [ Mild ] (RTECS)
Skin:	Administration onto the skin - Rabbit LD50 - Lethal dose, 50 percent kill : 20800 mg/kg [ Details of toxic effects not reported other than lethal dose value ] Administration onto the skin - Rabbit LD50 - Lethal dose, 50 percent kill : 20800 mg/kg [ Behavioral - Ataxia Behavioral - Tetany Lungs, Thorax, or Respiration - Respiratory depression ] (RTECS)
Inhalation:	Inhalation - Rat TCLo - Lowest published toxic concentration : 2180 mg/m3/6H/90D (Intermittent) [ Behavioral - Food intake (animal) Endocrine - Changes in spleen weight Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - Dehydrogenases ] (RTECS)
Ingestion:	Oral - Rat LD50 - Lethal dose, 50 percent kill : 20 gm/kg [ Details of toxic effects not reported other than lethal dose value ] Oral - Mouse LD50 - Lethal dose, 50 percent kill : 22 gm/kg [ Details of toxic effects not reported other than lethal dose value ] Oral - Rabbit LD50 - Lethal dose, 50 percent kill : 18500 mg/kg [ Details of toxic effects not reported other than lethal dose value ] Oral - Mouse LD50 - Lethal dose, 50 percent kill : 20300 mg/kg [ Behavioral - Ataxia Behavioral - Tetany Lungs, Thorax, or Respiration - Respiratory depression ] (RTECS)

### Crystalline silica (Quartz) :

RTECS Number:	VV7330000
Inhalation:	Inhalation - Rat TCLo - Lowest published toxic concentration : 248 mg/m3/6H [ Lungs, Thorax, or Respiration - Other changes Biochemical - Metabolism (intermediary) - Other proteins Biochemical - Metabolism (intermediary) - Effect on inflammation or mediation of inflammation ] Inhalation - Rat TCLo - Lowest published toxic concentration : 248 mg/m3/6H [ Lungs, Thorax, or Respiration - Changes in lung weight Immunological Including Allergic - Increase in cellular immune response Biochemical - Metabolism (intermediary) - Effect on inflammation or mediation of inflammation ] Inhalation - Rat TCLo - Lowest published toxic concentration : 200 mg/kg [ Lungs, Thorax, or Respiration - Fibrosis, focal (pneumoconiosis) Lungs, Thorax, or Respiration - Other changes Nutritional and Gross Metabolic - Changes in iron ] Inhalation - Mouse TCLo - Lowest published toxic concentration : 40 mg/kg [ Lungs, Thorax, or Respiration - Other changes ] Inhalation - Mouse TCLo - Lowest published toxic concentration : 40 mg/kg [ Immunological Including Allergic - Decrease in cellular immune response ] Inhalation - Rat TCLo - Lowest published toxic concentration : 1 mg/kg (RTECS)



**Ingestion:** Oral - Rat TDLo - Lowest published toxic dose : 120 gm/kg [ Gastrointestinal - Hypermotility, diarrhea Gastrointestinal - Other changes ] (RTECS)

**Naphtha :**

**RTECS Number:** WJ8930000

**Inhalation:** Inhalation - Rat TCLo - Lowest published toxic concentration : 1100 mg/m3/6H/16D (Intermittent) [ Kidney/Ureter/Bladder - Other changes Kidney/Ureter/Bladder - Kidney tumors ]  
Inhalation - Mouse TCLo - Lowest published toxic concentration : 550 mg/m3/6H/16D (Intermittent) [ Nutritional and Gross Metabolic - Weight loss or decreased weight gain ] (RTECS)

**Titanium Oxide :**

**RTECS Number:** XR2275000

**Inhalation:** Inhalation - Rat TCLo - Lowest published toxic concentration : 1 mg/kg [ Lungs, Thorax, or Respiration - Other changes Biochemical - Metabolism (intermediary) - Effect on inflammation or mediation of inflammation ] (RTECS)

**Ingestion:** Oral - Rat TDLo - Lowest published toxic dose : 60 gm/kg [ Gastrointestinal - Hypermotility, diarrhea Gastrointestinal - Other changes ] (RTECS)

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## SECTION 12 - ECOLOGICAL INFORMATION

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**Ecotoxicity:** No environmental information found for this product.

**Environmental Fate:** No environmental information found for this product.

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## SECTION 13 - DISPOSAL CONSIDERATIONS

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**Waste Disposal:** Dispose of in accordance with Local, State, Federal and Provincial regulations.

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## SECTION 14 - TRANSPORT INFORMATION

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**DOT Shipping Name:** Non regulated.

**DOT Hazard Class:** Non regulated.

**IATA Shipping Name:** Non regulated.

**IMDG UN Number :** Non regulated.

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## SECTION 15 - REGULATORY INFORMATION

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<b>SARA:</b>	This product does not contain any chemicals which are subject to the reporting requirements of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III (40CFR, Part 372).
<b>California PROP 65:</b>	The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): WARNING! This product contains a chemical known to the State of California to cause cancer.
<b>Canada WHMIS:</b>	Xi - Irritant
<b>EU Class:</b>	Irritant. In accordance to Regulation (EC) No 1272/2008 on the classification, labelling and packaging of substances and mixtures
<b>Risk Phrases:</b>	R36/37/38 - Irritating to eyes, respiratory system and skin.
<b>Safety Phrase:</b>	S23 - Do not breathe gas/fumes/vapour/spray. S37 - Wear suitable gloves.

#### **1,2-Propanediol :**

<b>TSCA Inventory Status:</b>	Listed
<b>Canada DSL:</b>	Listed

#### **Aluminum Silicate :**

<b>Canada DSL:</b>	Listed
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#### **Crystalline silica (Quartz) :**

<b>TSCA Inventory Status:</b>	Listed
<b>Canada DSL:</b>	Listed

#### **Naphtha :**

<b>TSCA Inventory Status:</b>	Listed
<b>Canada DSL:</b>	Listed

#### **Titanium Oxide :**

<b>TSCA Inventory Status:</b>	Listed
<b>Canada DSL:</b>	Listed

## **SECTION 16 - ADDITIONAL INFORMATION**

<b>HMIS Health Hazard:</b>	1
<b>HMIS Fire Hazard:</b>	1
<b>HMIS Reactivity:</b>	0
<b>HMIS Personal Protection:</b>	X
<b>SDS Creation Date:</b>	July 08, 2013
<b>SDS Revision Date:</b>	July 08, 2013

<b>Disclaimer:</b>	The information and recommendations contained herein are, to the best of Sto Corp.'s knowledge and belief, accurate and reliable as of the date issued. Sto Corp. does not warrant or guarantee their accuracy or reliability, and Sto Corp. shall not be liable for any loss or damage arising out of their use thereof. The information and recommendations are offered for the users' consideration and examination, and it is the users' responsibility to satisfy itself that they are suitable and complete for its particular use.
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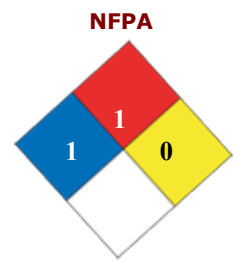
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## SAFETY DATA SHEET

### SECTION 1 - IDENTIFICATION

Product Name: **StoCoat Acryl**  
Product Code: 80201  
SDS Manufacturer Number: 80201  
Product Use/Restriction: Waterbased Acrylic Coating.  
Manufacturer Name: Sto Corp.  
Address: 6175 Riverside Drive, SW  
Atlanta, Georgia 30331  
General Phone Number: (404) 346-3666  
Emergency Phone Number: (800) 424-9300  
SDS Creation Date: July 08, 2013  
SDS Revision Date: July 08, 2013  
(M)SDS Format:



HMIS	
Health Hazard	1
Fire Hazard	1
Reactivity	0
Personal Protection	X

### SECTION 2 - HAZARD(S) IDENTIFICATION

GHS Pictograms:



GHS Class: Eye Irritant, Category 2  
Skin Irritant, Category 2

Hazard Statements: Causes eye irritation  
Causes skin irritation

Precautionary Statements: Wash hands thoroughly after handling.  
Wear protective gloves/protective clothing/eye protection/face protection.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice/attention.  
IF ON SKIN: Wash with plenty of soap and water.  
If skin irritation or rash occurs: Get medical advice/attention.  
Wash contaminated clothing before reuse.

Emergency Overview: WARNING! Irritant.

Route of Exposure: Eyes. Skin. Inhalation. Ingestion.

Potential Health Effects:

<b>Eye:</b>	May cause irritation.
<b>Skin:</b>	May cause irritation.
<b>Inhalation:</b>	Prolonged or excessive inhalation may cause respiratory tract irritation.
<b>Ingestion:</b>	Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.
<b>Target Organs:</b>	Eyes. Skin. Respiratory system. Digestive system.

## SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Ingredient Percent	EC Num.
Acrylic polymer	No Data	10 - 30 by weight	
Anhydrous aluminum silicate (Calcined kaolin)	66402-68-4	0.1 - 1.0 by weight	
Calcium carbonate	1317-65-3	10 - 30 by weight	
Crystalline silica (Quartz)	14808-60-7	0.1 - 1.0 by weight	
Muscovite Mica	12001-26-2	1 - 5 by weight	
Talc	14807-96-6	1 - 5 by weight	
Titanium Oxide	13463-67-7	10 - 30 by weight	
Trimethylpentanediol monoisobutyrate	25265-77-4	0.1 - 1.0 by weight	
Water	7732-18-5	30 - 60 by weight	

## SECTION 4 - FIRST AID MEASURES

<b>Eye Contact:</b>	Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention.
<b>Skin Contact:</b>	Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists.
<b>Inhalation:</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.
<b>Ingestion:</b>	If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.
<b>Other First Aid:</b>	First Responders should provide for their own safety prior to rendering assistance.

## SECTION 5 - FIRE FIGHTING MEASURES

<b>Flash Point:</b>	Not determined.
<b>Auto Ignition Temperature:</b>	Not determined.
<b>Lower Flammable/Explosive Limit:</b>	Not determined.

Upper Flammable/Explosive Limit:	Not determined.
Fire Fighting Instructions:	Evacuate area of unprotected personnel. Use cold water spray to cool fire exposed containers to minimize risk of rupture. Do not enter confined fire space without full protective gear. If possible, contain fire run-off water.
Extinguishing Media:	Use dry chemical or foam when fighting fires involving this material. Water mist may be used to cool closed containers.
Protective Equipment:	As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.
Unusual Fire Hazards:	Material may spatter above 100 °C/212 °F

#### **NFPA Ratings:**

NFPA Health:	1
NFPA Flammability:	1
NFPA Reactivity:	0

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## SECTION 6 - ACCIDENTAL RELEASE MEASURES

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Personnel Precautions:	Evacuate area and keep unnecessary and unprotected personnel from entering the spill area.
Environmental Precautions:	Avoid runoff into storm sewers, ditches, and waterways.
Methods for containment:	Contain spills with an inert absorbent material such as soil, sand or oil dry.
Methods for cleanup:	Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Provide ventilation. Clean up spills immediately observing precautions in the protective equipment section.

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## SECTION 7 - HANDLING and STORAGE


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Handling:	Use with adequate ventilation. Avoid breathing vapor, aerosol or mist.
Storage:	Store in a cool, dry, well ventilated area away from sources of heat and incompatible materials. Keep container tightly closed when not in use. Store away from direct heat or sunlight, sources of UV radiation, peroxides, or free radicals. Do not store in temperatures above 120 °F or below 48 °F. Keep away from direct sunlight.
Work Practices:	Handle in accordance with good industrial hygiene and safety practices.
Hygiene Practices:	Wash thoroughly after handling.

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## SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION - EXPOSURE GUIDELINES

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Engineering Controls:	Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.
Eye/Face Protection:	Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166.
Skin Protection Description:	Wear appropriate protective gloves and other protective apparel to prevent skin contact. Consult manufacturer's data for permeability data.
Hand Protection Description:	Nitrile rubber or natural rubber gloves are recommended.
Respiratory Protection:	A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.
Other Protective:	Facilities storing or utilizing this material should be equipped with an eyewash and a deluge shower safety station.
PPE Pictograms:	

#### EXPOSURE GUIDELINES

##### Crystalline silica (Quartz) :

Guideline ACGIH: TLV-TWA: 0.025 mg/m<sup>3</sup> Respirable fraction (R)

##### Muscovite Mica :

Guideline ACGIH: TLV-TWA: 3 mg/m<sup>3</sup> Respirable fraction (R)

Guideline OSHA: PEL-TWA: 20 mppcf

##### Talc :

Guideline ACGIH: TLV-TWA: 2 mg/m<sup>3</sup> Respirable fraction (R)

TLV-TWA: 1 mg/m<sup>3</sup> Respirable fraction (R)

Guideline OSHA: PEL-TWA: 20 mppcf

##### Titanium Oxide :

Guideline ACGIH: TLV-TWA: 10 mg/m<sup>3</sup>

Notes : Only established PEL and TLV values for the ingredients are listed.

## SECTION 9 - PHYSICAL and CHEMICAL PROPERTIES

Physical State Appearance:	Liquid.
Odor:	Slight
Boiling Point:	Not determined.
Melting Point:	0°C (32°F)
Specific Gravity:	> 1
Solubility:	Miscible in water
Vapor Density:	Not determined.
Vapor Pressure:	Not determined.

Percent Volatile:	Data not available.
Evaporation Rate:	Not determined.
pH:	7.5 - 10
Flash Point:	Not determined.
Auto Ignition Temperature:	Not determined.

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## SECTION 10 - STABILITY and REACTIVITY

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Chemical Stability:	Stable under recommended handling and storage conditions.
Hazardous Polymerization:	Hazardous polymerization does not occur.
Conditions to Avoid:	Heat, flames, ignition sources, and sparks. Incompatible materials. Freezing or temperatures below 32 deg. F.
Incompatible Materials:	Water reactive materials.
Special Decomposition Products:	Thermal decomposition can lead to release irritant fumes and toxic gases.

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## SECTION 11 - TOXICOLOGICAL INFORMATION

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### Calcium carbonate :

RTECS Number: EV9580000

Inhalation: Inhalation - Rat TCLo - Lowest published toxic concentration : 250 mg/m3/2H/24W (Intermittent) [ Lungs, Thorax, or Respiration - Fibrosis, focal (pneumoconiosis) ]  
Inhalation - Rat TCLo - Lowest published toxic concentration : 84 mg/m3/4H/40W (Intermittent) [ Lungs, Thorax, or Respiration - Fibrosis (interstitial) Liver - Other changes Kidney/Ureter/Bladder - Other changes ] (RTECS)

### Crystalline silica (Quartz) :

RTECS Number: VV7330000

Inhalation: Inhalation - Rat TCLo - Lowest published toxic concentration : 248 mg/m3/6H [ Lungs, Thorax, or Respiration - Other changes Biochemical - Metabolism (intermediary) - Other proteins Biochemical - Metabolism (intermediary) - Effect on inflammation or mediation of inflammation ]  
Inhalation - Rat TCLo - Lowest published toxic concentration : 248 mg/m3/6H [ Lungs, Thorax, or Respiration - Changes in lung weight Immunological Including Allergic - Increase in cellular immune response Biochemical - Metabolism (intermediary) - Effect on inflammation or mediation of inflammation ]  
Inhalation - Rat TCLo - Lowest published toxic concentration : 200 mg/kg [ Lungs, Thorax, or Respiration - Fibrosis, focal (pneumoconiosis) Lungs, Thorax, or Respiration - Other changes Nutritional and Gross Metabolic - Changes in iron ]  
Inhalation - Mouse TCLo - Lowest published toxic concentration : 40 mg/kg [ Lungs, Thorax, or Respiration - Other changes ]  
Inhalation - Mouse TCLo - Lowest published toxic concentration : 40 mg/kg [ Immunological Including Allergic - Decrease in cellular immune response ]  
Inhalation - Rat TCLo - Lowest published toxic concentration : 1 mg/kg (RTECS)



**Ingestion:** Oral - Rat TDLo - Lowest published toxic dose : 120 gm/kg [ Gastrointestinal - Hypermotility, diarrhea Gastrointestinal - Other changes ] (RTECS)

**Talc:**

**RTECS Number:** WW2710000

**Inhalation:** Inhalation - Rat TCLo - Lowest published toxic concentration : 17 mg/m3/6H/26D (Intermittent) [ Lungs, Thorax, or Respiration - Other changes ]  
Inhalation - Mouse TCLo - Lowest published toxic concentration : 20400 ug/m3/6H/26D (Intermittent) [ Lungs, Thorax, or Respiration - Other changes ] (RTECS)

**Titanium Oxide :**

**RTECS Number:** XR2275000

**Inhalation:** Inhalation - Rat TCLo - Lowest published toxic concentration : 1 mg/kg [ Lungs, Thorax, or Respiration - Other changes Biochemical - Metabolism (intermediary) - Effect on inflammation or mediation of inflammation ] (RTECS)

**Ingestion:** Oral - Rat TDLo - Lowest published toxic dose : 60 gm/kg [ Gastrointestinal - Hypermotility, diarrhea Gastrointestinal - Other changes ] (RTECS)

**Trimethylpentanediol monoisobutyrate :**

**RTECS Number:** UF6000000

**Inhalation:** Inhalation - Rat LC - Lethal concentration : >3500 mg/m3/6H [ Details of toxic effects not reported other than lethal dose value ]  
Inhalation - Rat TCLo - Lowest published toxic concentration : 300 mg/m3 [ Behavioral - Alteration of classical conditioning Lungs, Thorax, or Respiration - Respiratory stimulation ] (RTECS)

**Ingestion:** Oral - Rat LD50 - Lethal dose, 50 percent kill : 3200 mg/kg [ Details of toxic effects not reported other than lethal dose value ]  
Oral - Mouse LD50 - Lethal dose, 50 percent kill : 3200 mg/kg [ Details of toxic effects not reported other than lethal dose value ] (RTECS)

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## SECTION 12 - ECOLOGICAL INFORMATION

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**Ecotoxicity:** No environmental information found for this product.

**Environmental Fate:** No environmental information found for this product.

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## SECTION 13 - DISPOSAL CONSIDERATIONS

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**Waste Disposal:** Dispose of in accordance with Local, State, Federal and Provincial regulations.

---

## SECTION 14 - TRANSPORT INFORMATION

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**DOT Shipping Name:** Non regulated.

**DOT Hazard Class:** Non regulated.

IATA Shipping Name: Non regulated.

IMDG UN Number : Non regulated.

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## SECTION 15 - REGULATORY INFORMATION

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**SARA:** This product does not contain any chemicals which are subject to the reporting requirements of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III (40CFR, Part 372).

**California PROP 65:** The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):  
WARNING! This product contains a chemical known to the State of California to cause cancer.

**Canada WHMIS:** Xi - Irritant

**EU Class:** Irritant.  
In accordance to Regulation (EC) No 1272/2008 on the classification, labelling and packaging of substances and mixtures

**Risk Phrases:** R36/37/38 - Irritating to eyes, respiratory system and skin.

**Safety Phrase:** S23 - Do not breathe gas/fumes/vapour/spray.  
S37 - Wear suitable gloves.

### Anhydrous aluminum silicate (Calcined kaolin) :

TSCA Inventory Status: Listed

Canada DSL: Listed

### Calcium carbonate :

TSCA Inventory Status: Listed

### Crystalline silica (Quartz) :

TSCA Inventory Status: Listed

Canada DSL: Listed

### Muscovite Mica :

Canada DSL: Listed

### Talc :

TSCA Inventory Status: Listed

Canada DSL: Listed

### Titanium Oxide :

TSCA Inventory Status: Listed

Canada DSL: Listed

### Trimethylpentanediol monoisobutyrate :

TSCA Inventory Status: Listed

Canada DSL: Listed

## SECTION 16 - ADDITIONAL INFORMATION

HMIS Health Hazard: 1

HMIS Fire Hazard: 1

HMIS Reactivity: 0

HMIS Personal Protection: X

SDS Creation Date: July 08, 2013

SDS Revision Date: July 08, 2013

**Disclaimer:** The information and recommendations contained herein are, to the best of Sto Corp.'s knowledge and belief, accurate and reliable as of the date issued. Sto Corp. does not warrant or guarantee their accuracy or reliability, and Sto Corp. shall not be liable for any loss or damage arising out of their use thereof. The information and recommendations are offered for the users' consideration and examination, and it is the users' responsibility to satisfy itself that they are suitable and complete for its particular use.

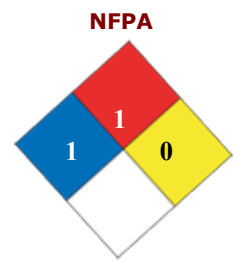
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## SAFETY DATA SHEET

### SECTION 1 - IDENTIFICATION

Product Name: **Sto Primer Sand**  
Product Code: 80801  
SDS Manufacturer Number: 80801  
Product Use/Restriction: Waterbased Acrylic Coating.  
Manufacturer Name: Sto Corp.  
Address: 6175 Riverside Drive, SW  
Atlanta, Georgia 30331  
General Phone Number: (404) 346-3666  
Emergency Phone Number: (800) 424-9300  
SDS Creation Date: July 08, 2013  
SDS Revision Date: July 08, 2013  
(M)SDS Format:



#### HMIS

Health Hazard	1
Fire Hazard	1
Reactivity	0
Personal Protection	X

### SECTION 2 - HAZARD(S) IDENTIFICATION

GHS Pictograms:



GHS Class: Eye Irritant, Category 2  
Skin Irritant, Category 2

Hazard Statements: Causes eye irritation  
Causes skin irritation

Precautionary Statements: Wash hands thoroughly after handling.  
Wear protective gloves/protective clothing/eye protection/face protection.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice/attention.  
IF ON SKIN: Wash with plenty of soap and water.  
If skin irritation or rash occurs: Get medical advice/attention.  
Wash contaminated clothing before reuse.

Emergency Overview: WARNING! Irritant.

Route of Exposure: Eyes. Skin. Inhalation. Ingestion.

Potential Health Effects:

<b>Eye:</b>	May cause irritation.
<b>Skin:</b>	May cause irritation.
<b>Inhalation:</b>	Prolonged or excessive inhalation may cause respiratory tract irritation.
<b>Ingestion:</b>	Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.
<b>Target Organs:</b>	Eyes. Skin. Respiratory system. Digestive system.

## SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Ingredient Percent	EC Num.
Acrylic polymer	No Data	5 - 10 by weight	
Calcium carbonate	1317-65-3	30 - 60 by weight	
Crystalline silica (Quartz)	14808-60-7	10 - 30 by weight	
Talc	14807-96-6	1 - 5 by weight	
Titanium Oxide	13463-67-7	1 - 5 by weight	
Water	7732-18-5	30 - 60 by weight	

## SECTION 4 - FIRST AID MEASURES

<b>Eye Contact:</b>	Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention.
<b>Skin Contact:</b>	Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists.
<b>Inhalation:</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.
<b>Ingestion:</b>	If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.
<b>Other First Aid:</b>	First Responders should provide for their own safety prior to rendering assistance.

## SECTION 5 - FIRE FIGHTING MEASURES

<b>Flash Point:</b>	Not determined.
<b>Auto Ignition Temperature:</b>	Not determined.
<b>Lower Flammable/Explosive Limit:</b>	Not determined.
<b>Upper Flammable/Explosive Limit:</b>	Not determined.
<b>Fire Fighting Instructions:</b>	Evacuate area of unprotected personnel. Use cold water spray to cool fire exposed containers to minimize risk of rupture. Do not enter confined fire space without full protective gear. If possible, contain fire run-off water.

<b>Extinguishing Media:</b>	Use dry chemical or foam when fighting fires involving this material. Water mist may be used to cool closed containers.
<b>Protective Equipment:</b>	As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.
<b>Unusual Fire Hazards:</b>	Material may spatter above 100 °C/212 °F

#### **NFPA Ratings:**

<b>NFPA Health:</b>	1
<b>NFPA Flammability:</b>	1
<b>NFPA Reactivity:</b>	0

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## SECTION 6 - ACCIDENTAL RELEASE MEASURES

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<b>Personnel Precautions:</b>	Evacuate area and keep unnecessary and unprotected personnel from entering the spill area.
<b>Environmental Precautions:</b>	Avoid runoff into storm sewers, ditches, and waterways.
<b>Methods for containment:</b>	Contain spills with an inert absorbent material such as soil, sand or oil dry.
<b>Methods for cleanup:</b>	Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Provide ventilation. Clean up spills immediately observing precautions in the protective equipment section.

---

## SECTION 7 - HANDLING and STORAGE

---


<b>Handling:</b>	Use with adequate ventilation. Avoid breathing vapor, aerosol or mist.
<b>Storage:</b>	Store in a cool, dry, well ventilated area away from sources of heat and incompatible materials. Keep container tightly closed when not in use. Store away from direct heat or sunlight, sources of UV radiation, peroxides, or free radicals. Do not store in temperatures above 120 °F or below 48 °F. Keep away from direct sunlight.
<b>Work Practices:</b>	Handle in accordance with good industrial hygiene and safety practices.
<b>Hygiene Practices:</b>	Wash thoroughly after handling.

---

## SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION - EXPOSURE GUIDELINES

---

<b>Engineering Controls:</b>	Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.
------------------------------	--

Eye/Face Protection:	Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166.
Skin Protection Description:	Wear appropriate protective gloves and other protective apparel to prevent skin contact. Consult manufacturer's data for permeability data.
Hand Protection Description:	Nitrile rubber or natural rubber gloves are recommended.
Respiratory Protection:	A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.
Other Protective:	Facilities storing or utilizing this material should be equipped with an eyewash and a deluge shower safety station.
PPE Pictograms:	

#### EXPOSURE GUIDELINES

##### Crystalline silica (Quartz) :

Guideline ACGIH: TLV-TWA: 0.025 mg/m<sup>3</sup> Respirable fraction (R)

##### Talc :

Guideline ACGIH: TLV-TWA: 2 mg/m<sup>3</sup> Respirable fraction (R)

TLV-TWA: 1 mg/m<sup>3</sup> Respirable fraction (R)

Guideline OSHA:

PEL-TWA: 20 mppcf

##### Titanium Oxide :

Guideline ACGIH: TLV-TWA: 10 mg/m<sup>3</sup>

Notes : Only established PEL and TLV values for the ingredients are listed.

## SECTION 9 - PHYSICAL and CHEMICAL PROPERTIES

Physical State Appearance:	Liquid.
Odor:	Slight
Boiling Point:	Not determined.
Melting Point:	0°C (32°F)
Specific Gravity:	> 1
Solubility:	Miscible in water
Vapor Density:	Not determined.
Vapor Pressure:	Not determined.
Percent Volatile:	Data not available.
Evaporation Rate:	Not determined.
pH:	7.5 - 10
Flash Point:	Not determined.
Auto Ignition Temperature:	Not determined.

## SECTION 10 - STABILITY and REACTIVITY

Chemical Stability:	Stable under recommended handling and storage conditions.
Hazardous Polymerization:	Hazardous polymerization does not occur.
Conditions to Avoid:	Heat, flames, ignition sources, and sparks. Incompatible materials. Freezing or temperatures below 32 deg. F.
Incompatible Materials:	Water reactive materials.
Special Decomposition Products:	Thermal decomposition can lead to release irritant fumes and toxic gases.

## SECTION 11 - TOXICOLOGICAL INFORMATION

### Calcium carbonate :

RTECS Number: EV9580000

Inhalation: Inhalation - Rat TCLo - Lowest published toxic concentration : 250 mg/m3/2H/24W (Intermittent) [ Lungs, Thorax, or Respiration - Fibrosis, focal (pneumoconiosis) ]  
Inhalation - Rat TCLo - Lowest published toxic concentration : 84 mg/m3/4H/40W (Intermittent) [ Lungs, Thorax, or Respiration - Fibrosis (interstitial) Liver - Other changes Kidney/Ureter/Bladder - Other changes ] (RTECS)

### Crystalline silica (Quartz) :

RTECS Number: VV7330000

Inhalation: Inhalation - Rat TCLo - Lowest published toxic concentration : 248 mg/m3/6H [ Lungs, Thorax, or Respiration - Other changes Biochemical - Metabolism (intermediary) - Other proteins Biochemical - Metabolism (intermediary) - Effect on inflammation or mediation of inflammation ]  
Inhalation - Rat TCLo - Lowest published toxic concentration : 248 mg/m3/6H [ Lungs, Thorax, or Respiration - Changes in lung weight Immunological Including Allergic - Increase in cellular immune response Biochemical - Metabolism (intermediary) - Effect on inflammation or mediation of inflammation ]  
Inhalation - Rat TCLo - Lowest published toxic concentration : 200 mg/kg [ Lungs, Thorax, or Respiration - Fibrosis, focal (pneumoconiosis) Lungs, Thorax, or Respiration - Other changes Nutritional and Gross Metabolic - Changes in iron ]  
Inhalation - Mouse TCLo - Lowest published toxic concentration : 40 mg/kg [ Lungs, Thorax, or Respiration - Other changes ]  
Inhalation - Mouse TCLo - Lowest published toxic concentration : 40 mg/kg [ Immunological Including Allergic - Decrease in cellular immune response ]  
Inhalation - Rat TCLo - Lowest published toxic concentration : 1 mg/kg (RTECS)

Ingestion: Oral - Rat TDLo - Lowest published toxic dose : 120 gm/kg [ Gastrointestinal - Hypermotility, diarrhea Gastrointestinal - Other changes ] (RTECS)

### Talc :

RTECS Number: WW2710000

Inhalation: Inhalation - Rat TCLo - Lowest published toxic concentration : 17 mg/m3/6H/26D (Intermittent) [ Lungs, Thorax, or Respiration - Other changes ]  
Inhalation - Mouse TCLo - Lowest published toxic concentration : 20400 ug/m3/6H/26D (Intermittent) [ Lungs, Thorax, or Respiration - Other changes ] (RTECS)



## Titanium Oxide :

**RTECS Number:** XR2275000

**Inhalation:** Inhalation - Rat TCLo - Lowest published toxic concentration : 1 mg/kg [ Lungs, Thorax, or Respiration - Other changes Biochemical - Metabolism (intermediary) - Effect on inflammation or mediation of inflammation ] (RTECS)

**Ingestion:** Oral - Rat TDLo - Lowest published toxic dose : 60 gm/kg [ Gastrointestinal - Hypermotility, diarrhea Gastrointestinal - Other changes ] (RTECS)

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## SECTION 12 - ECOLOGICAL INFORMATION

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**Ecotoxicity:** No environmental information found for this product.

**Environmental Fate:** No environmental information found for this product.

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## SECTION 13 - DISPOSAL CONSIDERATIONS

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**Waste Disposal:** Dispose of in accordance with Local, State, Federal and Provincial regulations.

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## SECTION 14 - TRANSPORT INFORMATION

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**DOT Shipping Name:** Non regulated.

**DOT Hazard Class:** Non regulated.

**IATA Shipping Name:** Non regulated.

**IMDG UN Number :** Non regulated.

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## SECTION 15 - REGULATORY INFORMATION

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**SARA:** This product does not contain any chemicals which are subject to the reporting requirements of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III (40CFR, Part 372).

**California PROP 65:** The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):  
WARNING! This product contains a chemical known to the State of California to cause cancer.

**Canada WHMIS:** Xi - Irritant

EU Class: Irritant.  
In accordance to Regulation (EC) No 1272/2008 on the classification, labelling and packaging of substances and mixtures

Risk Phrases: R36/37/38 - Irritating to eyes, respiratory system and skin.

Safety Phrase: S23 - Do not breathe gas/fumes/vapour/spray.  
S37 - Wear suitable gloves.

**Calcium carbonate :**

TSCA Inventory Status: Listed

**Crystalline silica (Quartz) :**

TSCA Inventory Status: Listed

Canada DSL: Listed

**Talc :**

TSCA Inventory Status: Listed

Canada DSL: Listed

**Titanium Oxide :**

TSCA Inventory Status: Listed

Canada DSL: Listed

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## SECTION 16 - ADDITIONAL INFORMATION

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HMIS Health Hazard: 1

HMIS Fire Hazard: 1

HMIS Reactivity: 0

HMIS Personal Protection: X

SDS Creation Date: July 08, 2013

SDS Revision Date: July 08, 2013

Disclaimer: The information and recommendations contained herein are, to the best of Sto Corp.'s knowledge and belief, accurate and reliable as of the date issued. Sto Corp. does not warrant or guarantee their accuracy or reliability, and Sto Corp. shall not be liable for any loss or damage arising out of their use thereof. The information and recommendations are offered for the users' consideration and examination, and it is the users' responsibility to satisfy itself that they are suitable and complete for its particular use.

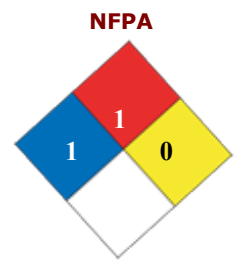
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## SAFETY DATA SHEET

### SECTION 1 - IDENTIFICATION

Product Name: **Sto Primer Smooth**  
Product Code: 80804  
SDS Manufacturer Number: 80804  
Product Use/Restriction: Waterbased Acrylic Coating.  
Manufacturer Name: Sto Corp.  
Address: 6175 Riverside Drive, SW  
Atlanta, Georgia 30331  
  
General Phone Number: (404) 346-3666  
Emergency Phone Number: (800) 424-9300  
SDS Creation Date: July 08, 2013  
SDS Revision Date: July 08, 2013  
(M)SDS Format:



HMIS	
Health Hazard	1*
Fire Hazard	1
Reactivity	0
Personal Protection	X

\* Chronic Health Effects

### SECTION 2 - HAZARD(S) IDENTIFICATION

GHS Pictograms:



GHS Class: Eye Irritant, Category 2  
Skin Irritant, Category 2

Hazard Statements: Causes eye irritation  
Causes skin irritation

Precautionary Statements: Wash hands thoroughly after handling.  
Wear protective gloves/protective clothing/eye protection/face protection.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice/attention.  
IF ON SKIN: Wash with plenty of soap and water.  
If skin irritation or rash occurs: Get medical advice/attention.  
Wash contaminated clothing before reuse.

Emergency Overview: WARNING! Irritant.

Route of Exposure: Eyes. Skin. Inhalation. Ingestion.

**Potential Health Effects:**

<b>Eye:</b>	May cause irritation.
<b>Skin:</b>	May cause irritation.
<b>Inhalation:</b>	Prolonged or excessive inhalation may cause respiratory tract irritation.
<b>Ingestion:</b>	Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.
<b>Target Organs:</b>	Eyes. Skin. Respiratory system. Digestive system.

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**SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS**

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<b>Chemical Name</b>	<b>CAS#</b>	<b>Ingredient Percent</b>	<b>EC Num.</b>
Acrylic polymer	No Data	5 - 10 by weight	
Calcium carbonate	1317-65-3	30 - 60 by weight	
Crystalline Silica (Cristobalite)	14464-46-1	0.1 - 1.0 by weight	
Titanium Oxide	13463-67-7	1 - 5 by weight	
Water	7732-18-5	30 - 60 by weight	

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**SECTION 4 - FIRST AID MEASURES**

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<b>Eye Contact:</b>	Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention.
<b>Skin Contact:</b>	Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists.
<b>Inhalation:</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.
<b>Ingestion:</b>	If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.
<b>Other First Aid:</b>	First Responders should provide for their own safety prior to rendering assistance.

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**SECTION 5 - FIRE FIGHTING MEASURES**

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<b>Flash Point:</b>	Not determined.
<b>Auto Ignition Temperature:</b>	Not determined.
<b>Lower Flammable/Explosive Limit:</b>	Not determined.
<b>Upper Flammable/Explosive Limit:</b>	Not determined.
<b>Fire Fighting Instructions:</b>	Evacuate area of unprotected personnel. Use cold water spray to cool fire exposed containers to minimize risk of rupture. Do not enter confined fire space without full protective gear. If possible, contain fire run-off water.

---

<b>Extinguishing Media:</b>	Use dry chemical or foam when fighting fires involving this material. Water mist may be used to cool closed containers.
<b>Protective Equipment:</b>	As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.
<b>Unusual Fire Hazards:</b>	Material may spatter above 100 °C/212 °F

#### **NFPA Ratings:**

<b>NFPA Health:</b>	1
<b>NFPA Flammability:</b>	1
<b>NFPA Reactivity:</b>	0

---

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

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<b>Personnel Precautions:</b>	Evacuate area and keep unnecessary and unprotected personnel from entering the spill area.
<b>Environmental Precautions:</b>	Avoid runoff into storm sewers, ditches, and waterways.
<b>Methods for containment:</b>	Contain spills with an inert absorbent material such as soil, sand or oil dry.
<b>Methods for cleanup:</b>	Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Provide ventilation. Clean up spills immediately observing precautions in the protective equipment section.

---

## SECTION 7 - HANDLING and STORAGE

---


<b>Handling:</b>	Use with adequate ventilation. Avoid breathing vapor, aerosol or mist.
<b>Storage:</b>	Store in a cool, dry, well ventilated area away from sources of heat and incompatible materials. Keep container tightly closed when not in use. Store away from direct heat or sunlight, sources of UV radiation, peroxides, or free radicals. Do not store in temperatures above 120 °F or below 48 °F. Keep away from direct sunlight.
<b>Work Practices:</b>	Handle in accordance with good industrial hygiene and safety practices.
<b>Hygiene Practices:</b>	Wash thoroughly after handling.

---

## SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION - EXPOSURE GUIDELINES

---

<b>Engineering Controls:</b>	Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.
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Eye/Face Protection:	Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166.
Skin Protection Description:	Wear appropriate protective gloves and other protective apparel to prevent skin contact. Consult manufacturer's data for permeability data.
Hand Protection Description:	Nitrile rubber or natural rubber gloves are recommended.
Respiratory Protection:	A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.
Other Protective:	Facilities storing or utilizing this material should be equipped with an eyewash and a deluge shower safety station.
PPE Pictograms:	

#### EXPOSURE GUIDELINES

##### **Crystalline Silica (Cristobalite) :**

Guideline ACGIH: TLV-TWA: 0.025 mg/m<sup>3</sup> Respirable fraction (R)

##### **Titanium Oxide :**

Guideline ACGIH: TLV-TWA: 10 mg/m<sup>3</sup>

Notes : Only established PEL and TLV values for the ingredients are listed.

## SECTION 9 - PHYSICAL and CHEMICAL PROPERTIES

Physical State Appearance:	Liquid.
Odor:	Slight
Boiling Point:	Not determined.
Melting Point:	0°C (32°F)
Specific Gravity:	> 1
Solubility:	Miscible in water
Vapor Density:	Not determined.
Vapor Pressure:	Not determined.
Percent Volatile:	Data not available.
Evaporation Rate:	Not determined.
pH:	7.5 - 10
Flash Point:	Not determined.
Auto Ignition Temperature:	Not determined.

## SECTION 10 - STABILITY and REACTIVITY

Chemical Stability:	Stable under recommended handling and storage conditions.
Hazardous Polymerization:	Hazardous polymerization does not occur.
Conditions to Avoid:	Heat, flames, ignition sources, and sparks. Incompatible materials. Freezing or temperatures below 32 deg. F.
Incompatible Materials:	Water reactive materials.
Special Decomposition Products:	Thermal decomposition can lead to release irritant fumes and toxic gases.

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## SECTION 11 - TOXICOLOGICAL INFORMATION

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### Calcium carbonate :

RTECS Number:	EV9580000
Inhalation:	Inhalation - Rat TCl <sub>0</sub> - Lowest published toxic concentration : 250 mg/m <sup>3</sup> /2H/24W (Intermittent) [ Lungs, Thorax, or Respiration - Fibrosis, focal (pneumoconiosis) ] Inhalation - Rat TCl <sub>0</sub> - Lowest published toxic concentration : 84 mg/m <sup>3</sup> /4H/40W (Intermittent) [ Lungs, Thorax, or Respiration - Fibrosis (interstitial) Liver - Other changes Kidney/Ureter/Bladder - Other changes ] (RTECS)

### Crystalline Silica (Cristobalite) :

RTECS Number:	VV7325000
Inhalation:	Inhalation - Mouse TCl <sub>0</sub> - Lowest published toxic concentration : 43 mg/m <sup>3</sup> /5H/9D (Intermittent) [ Lungs, Thorax, or Respiration - Pleural effusion Lungs, Thorax, or Respiration - Other changes ] Inhalation - Mouse TCl <sub>0</sub> - Lowest published toxic concentration : 70 mg/m <sup>3</sup> /5H/12D (Intermittent) [ Lungs, Thorax, or Respiration - Fibrosis, focal (pneumoconiosis) Lungs, Thorax, or Respiration - Fibrosis (interstitial) Lungs, Thorax, or Respiration - Other changes ] (RTECS)

### Titanium Oxide :

RTECS Number:	XR2275000
Inhalation:	Inhalation - Rat TCl <sub>0</sub> - Lowest published toxic concentration : 1 mg/kg [ Lungs, Thorax, or Respiration - Other changes Biochemical - Metabolism (intermediary) - Effect on inflammation or mediation of inflammation ] (RTECS)
Ingestion:	Oral - Rat TDLo - Lowest published toxic dose : 60 gm/kg [ Gastrointestinal - Hypermotility, diarrhea Gastrointestinal - Other changes ] (RTECS)

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## SECTION 12 - ECOLOGICAL INFORMATION

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Ecotoxicity:	No environmental information found for this product.
Environmental Fate:	No environmental information found for this product.

---

## SECTION 13 - DISPOSAL CONSIDERATIONS

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Waste Disposal:	Dispose of in accordance with Local, State, Federal and Provincial regulations.
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## SECTION 14 - TRANSPORT INFORMATION

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DOT Shipping Name:	Non regulated.
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DOT Hazard Class:	Non regulated.
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IATA Shipping Name:	Non regulated.
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IMDG UN Number :	Non regulated.
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## SECTION 15 - REGULATORY INFORMATION

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SARA:	This product does not contain any chemicals which are subject to the reporting requirements of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III (40CFR, Part 372).
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California PROP 65:	The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): WARNING! This product contains a chemical known to the State of California to cause cancer.
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Canada WHMIS:	Xi - Irritant
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EU Class:	Irritant. In accordance to Regulation (EC) No 1272/2008 on the classification, labelling and packaging of substances and mixtures
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Risk Phrases:	R36/37/38 - Irritating to eyes, respiratory system and skin.
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Safety Phrase:	S23 - Do not breathe gas/fumes/vapour/spray. S37 - Wear suitable gloves.
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### Calcium carbonate :

TSCA Inventory Status:	Listed
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### Crystalline Silica (Cristobalite) :

TSCA Inventory Status:	Listed
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Canada DSL:	Listed
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### Titanium Oxide :

TSCA Inventory Status:	Listed
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Canada DSL:	Listed
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## SECTION 16 - ADDITIONAL INFORMATION

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HMIS Health Hazard:	1*
HMIS Fire Hazard:	1
HMIS Reactivity:	0
HMIS Personal Protection:	X
SDS Creation Date:	July 08, 2013
SDS Revision Date:	July 08, 2013

**Disclaimer:** The information and recommendations contained herein are, to the best of Sto Corp.'s knowledge and belief, accurate and reliable as of the date issued. Sto Corp. does not warrant or guarantee their accuracy or reliability, and Sto Corp. shall not be liable for any loss or damage arising out of their use thereof. The information and recommendations are offered for the users' consideration and examination, and it is the users' responsibility to satisfy itself that they are suitable and complete for its particular use.

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# Safety Data Sheet

## MasterEmaco A 660 also ACRYL 60

Revision date : 2015/08/11

Version: 3.0

Page: 1/9

(30606293/SDS\_GEN\_US/EN)

### 1. Identification

#### Product identifier used on the label

### MasterEmaco A 660 also ACRYL 60

#### Recommended use of the chemical and restriction on use

Recommended use\*: for industrial and professional users

\* The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

#### Details of the supplier of the safety data sheet

##### Company:

BASF CORPORATION  
100 Park Avenue  
Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

#### Emergency telephone number

CHEMTREC: 1-800-424-9300  
BASF HOTLINE: 1-800-832-HELP (4357)

#### Other means of identification

Chemical family: No data available.

---

### 2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

#### Classification of the product

No need for classification according to GHS criteria for this product.

#### Label elements

The product does not require a hazard warning label in accordance with GHS criteria.

#### Hazards not otherwise classified

# Safety Data Sheet

## MasterEmaco A 660 also ACRYL 60

Revision date : 2015/08/11  
Version: 3.0

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(30606293/SDS\_GEN\_US/EN)

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

### 3. Composition / Information on Ingredients

**According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200**

<u>CAS Number</u>	<u>Weight %</u>	<u>Chemical name</u>
1336-21-6	$\geq 0.0 - < 0.2\%$	Ammonium hydroxide

### 4. First-Aid Measures

#### Description of first aid measures

##### General advice:

First aid personnel should pay attention to their own safety. Immediately remove contaminated clothing.

##### If inhaled:

If difficulties occur after vapour/aerosol has been inhaled, remove to fresh air and seek medical attention.

##### If on skin:

After contact with skin, wash immediately with plenty of water and soap. Under no circumstances should organic solvent be used. If irritation develops, seek medical attention.

##### If in eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

##### If swallowed:

Rinse mouth immediately and then drink plenty of water, seek medical attention. Do not induce vomiting unless told to by a poison control center or doctor.

#### Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Hazards: No applicable information available.

#### Indication of any immediate medical attention and special treatment needed

##### Note to physician

Treatment:	Treat according to symptoms (decontamination, vital functions), no known specific antidote.
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### 5. Fire-Fighting Measures

#### Extinguishing media

# Safety Data Sheet

## MasterEmaco A 660 also ACRYL 60

Revision date : 2015/08/11  
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(30606293/SDS\_GEN\_US/EN)

Suitable extinguishing media:  
foam, water spray, dry powder, carbon dioxide

Unsuitable extinguishing media for safety reasons:  
water jet

### Special hazards arising from the substance or mixture

Hazards during fire-fighting:  
carbon dioxide, carbon monoxide, harmful vapours, nitrogen oxides, fumes/smoke, carbon black

### Advice for fire-fighters

Protective equipment for fire-fighting:  
Wear a self-contained breathing apparatus.

### Further information:

The degree of risk is governed by the burning substance and the fire conditions. If exposed to fire, keep containers cool by spraying with water. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Contaminated extinguishing water must be disposed of in accordance with official regulations.

---

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Do not breathe vapour/aerosol/spray mists. Wear eye/face protection. If exposed to high vapour concentration, leave area immediately. Use personal protective clothing. Handle in accordance with good building materials hygiene and safety practice.

### Environmental precautions

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

### Methods and material for containment and cleaning up

For small amounts: Pick up with inert absorbent material (e.g. sand, earth etc.). Dispose of contaminated material as prescribed.  
For large amounts: Pump off product.

---

## 7. Handling and Storage

### Precautions for safe handling

Avoid aerosol formation. Avoid inhalation of mists/vapours. Avoid skin contact. No special measures necessary provided product is used correctly.

### Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Keep only in the original container in a cool, dry, well-ventilated place away from ignition sources, heat or flame. Protect from direct sunlight.

Protect from temperatures below: 5 °C

The packed product must be protected from temperatures below the indicated one.

Protect from temperatures below: 40 °F

The packed product must be protected from temperatures below the indicated one.

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# Safety Data Sheet

## MasterEmaco A 660 also ACRYL 60

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### 8. Exposure Controls/Personal Protection

No occupational exposure limits known.

#### Advice on system design:

No applicable information available.

#### Personal protective equipment

##### Respiratory protection:

Wear respiratory protection if ventilation is inadequate.

##### Hand protection:

Wear chemical resistant protective gloves., Manufacturer's directions for use should be observed because of great diversity of types.

##### Eye protection:

Safety glasses with side-shields.

##### Body protection:

light protective clothing

##### General safety and hygiene measures:

Do not inhale gases/vapours/aerosols. Avoid contact with the skin, eyes and clothing. Avoid exposure - obtain special instructions before use. Handle in accordance with good building materials hygiene and safety practice. Wearing of closed work clothing is recommended. When using, do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. At the end of the shift the skin should be cleaned and skin-care agents applied. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks).

### 9. Physical and Chemical Properties

Form:	liquid
Odour:	ammonia-like
Odour threshold:	No applicable information available.
Colour:	white
pH value:	10 ( 21 °C)
Melting point:	No applicable information available.
Boiling point:	100 °C
Sublimation temperature:	No applicable information available.
Flash point:	A flash point determination is unnecessary due to the high water content.
Flammability:	No applicable information available.
Lower explosion limit:	No applicable information available.
Upper explosion limit:	No applicable information available.
Vapour pressure:	No applicable information available.
Density:	1.03 g/cm <sup>3</sup> ( 20 °C)
Relative density:	No applicable information available.
Vapour density:	Heavier than air.
Partitioning coefficient n-octanol/water (log Pow):	No data available.

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Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.
Viscosity, dynamic:	approx. 30 mPa.s ( 20 °C)
Viscosity, kinematic:	No applicable information available.
Miscibility with water:	( 20 °C) miscible
Solubility (quantitative):	No applicable information available.
Solubility (qualitative):	No applicable information available.
Evaporation rate:	not determined
Other Information:	If necessary, information on other physical and chemical parameters is indicated in this section.

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## 10. Stability and Reactivity

### Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals:

No corrosive effect on metal.

Oxidizing properties:

Not an oxidizer.

### Chemical stability

The product is stable if stored and handled as prescribed/indicated.

### Possibility of hazardous reactions

The product is stable if stored and handled as prescribed/indicated.

### Conditions to avoid

See MSDS section 7 - Handling and storage.

### Incompatible materials

strong acids, strong bases, strong oxidizing agents, strong reducing agents

### Hazardous decomposition products

Decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:

No decomposition if stored and handled as prescribed/indicated.

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## 11. Toxicological information

### Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

### Acute Toxicity/Effects

Acute toxicity

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Assessment of acute toxicity: Virtually nontoxic after a single ingestion. Based on available Data, the classification criteria are not met.

### Oral

No applicable information available.

### Inhalation

No applicable information available.

### Dermal

No applicable information available.

### Assessment other acute effects

No applicable information available.

### Irritation / corrosion

Assessment of irritating effects: No irritation is expected under intended use and appropriate handling. Based on available Data, the classification criteria are not met.

### Sensitization

Assessment of sensitization: Based on available Data, the classification criteria are not met.

## **Chronic Toxicity/Effects**

### Repeated dose toxicity

Assessment of repeated dose toxicity: No reliable data was available concerning repeated dose toxicity. Based on available Data, the classification criteria are not met.

### Genetic toxicity

Assessment of mutagenicity: The chemical structure does not suggest a specific alert for such an effect. Based on available Data, the classification criteria are not met.

### Carcinogenicity

Assessment of carcinogenicity: The chemical structure does not suggest a specific alert for such an effect. Based on available Data, the classification criteria are not met.

### Reproductive toxicity

Assessment of reproduction toxicity: The chemical structure does not suggest a specific alert for such an effect. Based on available Data, the classification criteria are not met.

### Teratogenicity

Assessment of teratogenicity: The chemical structure does not suggest a specific alert for such an effect. Based on available Data, the classification criteria are not met.

### Other Information

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses. The product has not been tested. The statements on toxicology have been derived from the properties of the individual components.

## **Symptoms of Exposure**

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

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## 12. Ecological Information

### Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:

Based on available Data, the classification criteria are not met. There is a high probability that the product is not acutely harmful to aquatic organisms.

### Persistence and degradability

Assessment biodegradation and elimination (H<sub>2</sub>O)

Inherently biodegradable. The insoluble fraction can be removed by mechanical means in suitable waste water treatment plants.

The polymer component of the product is poorly biodegradable.

### Bioaccumulative potential

Assessment bioaccumulation potential

Discharge into the environment must be avoided.

### Mobility in soil

Assessment transport between environmental compartments

No data available.

### Additional information

Other ecotoxicological advice:

Do not discharge product into the environment without control. The product has not been tested. The statements on ecotoxicology have been derived from the properties of the individual components.

---

## 13. Disposal considerations

### Waste disposal of substance:

Dispose of in accordance with national, state and local regulations. Residues should be disposed of in the same manner as the substance/product. Do not discharge into drains/surface waters/groundwater.

### Container disposal:

Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.

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## 14. Transport Information

### Land transport

USDOT

Not classified as a dangerous good under transport regulations

### Sea transport

IMDG

Not classified as a dangerous good under transport regulations



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**Air transport**  
IATA/ICAO

Not classified as a dangerous good under transport regulations

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## 15. Regulatory Information

### Federal Regulations

**Registration status:**

Chemical TSCA, US released / listed

**EPCRA 311/312 (Hazard categories):** Not hazardous;

**CA Prop. 65:**

WARNING: THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

**NFPA Hazard codes:**

Health : 0 Fire: 0 Reactivity: 0 Special:

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## 16. Other Information

**SDS Prepared by:**

BASF NA Product Regulations  
SDS Prepared on: 2015/08/11

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

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IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE, IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY OUR COMPANY HEREUNDER ARE GIVEN GRATIS AND WE ASSUME NO

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GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK.  
END OF DATA SHEET

# SAFETY DATA SHEET

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## ===== SECTION 1 - IDENTIFICATION =====

MANUFACTURER: SIERRA CORP/TK PRODUCTS EMERGENCY PHONE: 1-800-424-9300  
ADDRESS : 11400 WEST 47TH STREET INFORMATION PHONE: (952) 938-7223  
MINNETONKA, MN 55343 NAME OF PREPARER : Safety Director

PRODUCT NAME: BONDING, LIQUID/AGENT

PRODUCT CODE: TK-225

## ===== SECTION 2 - HAZARDS IDENTIFICATION =====

HAZARD RISK CLASSIFICATION

SIGNAL WORD:

PICTOGRAM:

HAZARD CLASS

HAZARD CATEGORY

HAZARD STATEMENTS:

H303 May be harmful if swallowed

PRECAUTIONARY STATEMENTS:

PREVENTION:

RESPONSE:

P301+P312 If swallowed: Call a Poison Center / doctor if you feel unwell.

P330 Rinse mouth.

STORAGE:

DISPOSAL:

## ===== SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS =====

COMPONENT	CAS NUMBER	WEIGHT	EXPOSURE LIMITS		
		PERCENT	OSHA PEL	ACGIH TLV	OTHER

\*\*\* NO REPORTABLE QUANTITIES OF HAZARDOUS INGREDIENTS ARE PRESENT \*\*\*

PRIMARY ROUTES OF EXPOSURE:

Skin contact.

EFFECTS OF ACUTE EXPOSURE:

EYES: Direct contact with eyes may cause irritation.

SKIN: Prolonged or repeated contact may cause irritation. INHALATION: Inhalation of vapor or mist can cause irritation of nose, throat and lungs and lead to headaches and nausea.

INGESTION: Not an anticipated route of exposure. Small amounts are not expected to be harmful.

CHRONIC HEALTH EFFECTS:

No anticipated chronic effects. MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

No known effects on other illnesses.

## ===== SECTION 4 - FIRST AID MEASURES =====

EYES: Flush with large amounts of water for 15 minutes, lifting upper and lower eyelids. If irritation persists seek medical attention.

SKIN CONTACT: Wash contaminated area with soap and water. Remove and launder contaminated clothing.

INGESTION: If a large amount is ingested, give water or milk and induce vomiting. Seek medical attention.

INHALATION: Remove victim to fresh air and provide oxygen if breathing is difficult. If breathing has stopped administer artificial respiration. Seek medical attention if condition persists.

## ===== SECTION 5 - FIRE AND EXPLOSION HAZARD DATA =====

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FLASH POINT: No flash

METHOD USED: n/a

FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: n/a

UPPER: n/a

## EXTINGUISHING MEDIA:

This material will not burn in its liquid state unless heated above its flash point. Dried films may burn and can be extinguished by water spray, foam, dry chemical or carbon dioxide.

## SPECIAL FIREFIGHTING PROCEDURES:

Persons exposed to products of combustion should wear self-contained breathing apparatus and full protective equipment. Isolate danger area, keep unauthorized personnel out.

## UNUSUAL FIRE AND EXPLOSION HAZARDS:

There is the possibility of pressure buildup in closed containers when heated. Water spray may be used to cool these containers.

## ===== SECTION 6 - ACCIDENTAL RELEASE MEASURES =====

### STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Do not let uncured spilled or leaking material enter watercourse. May be toxic to aquatic life. Absorb with oil-dri or similar inert material. Sweep or scrape up and containerize. Rinse affected area thoroughly with water. Wear appropriate protective equipment.

## ===== SECTION 7 - HANDLING AND STORAGE =====

### HANDLING INFORMATION:

Employees who come in contact with this material must be trained in accordance to 1910.1200 of the Hazard Communication Standard. Wear chemical resistant gloves and protective clothing to minimize contact. The use of respiratory protection is advised when spraying because of mist and dust overspray.

### STORAGE INFORMATION:

Keep from freezing; material may coagulate. The minimum recommended storage temperature is 34F/1C, the maximum recommended storage temperature is 120F/49C. Keep away from incompatible materials (see section 10). Keep containers tightly closed. It is advised that material be used within 1 year of manufacture, rotate stock.

### OTHER PRECAUTIONS:

All empty containers should be disposed of in an environmentally safe manner in accordance with all governmental regulations.

## ===== SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION =====

### RESPIRATORY PROTECTION:

No special requirements under normal use conditions. In confined areas, or areas with poor ventilation, engineering controls should be used to minimize exposure. Use NIOSH/MSHA approved respirator if conditions warrant.

### VENTILATION:

General room ventilation is adequate.

### PROTECTIVE GLOVES:

Prevent prolonged or repeated contact by wearing chemical resistant gloves and other appropriate protective clothing. Launder contaminated clothing before reuse.

### EYE PROTECTION:

Wear safety glasses to reduce eye contact potential. Chemical safety goggles (ANSI Z87.1 or approved equivalent) are appropriate if splashing is likely. Eye washes must be available where eye contact can occur.

### OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

A source of clean water should be available for flushing eyes and skin. Showers should be available if larger spills are possible.

### WORK/HYGIENIC PRACTICES:

Efforts should be made to minimize contact and spills. Always wash hands before eating, drinking, or smoking. Clean up spills promptly. Follow OSHA and company guidelines.

## ===== SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES =====

PHYSICAL STATE: Liquid

COLOR: Various colors

ODOR: Amine or ammonia odor

SOLUBILITY IN WATER: Dilutable

SPECIFIC GRAVITY (H2O=1): 1.06

VAPOR DENSITY: Heavier than air.

BOILING RANGE:

EVAPORATION RATE: Slower than nBuAc

COATING V.O.C.: 5 g/l (0.04 lb/gal )

## ===== SECTION 10 - STABILITY AND REACTIVITY DATA =====

### STABILITY:

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Stable under normal conditions and handling.

## CONDITIONS TO AVOID:

None known

## INCOMPATIBILITY (MATERIALS TO AVOID):

None known. Materials which are not compatible with water or ordinary organics will not be compatible with this material.

## HAZARDOUS DECOMPOSITION OR BYPRODUCTS:

Combustion may liberate toxic byproducts such as carbon dioxide, and carbon monoxide, various oxides of carbon and nitrogen. Thermal decomposition may liberate acrylic monomers and ammonia.

## HAZARDOUS POLYMERIZATION:

Will not occur.

## SECTION 11 - TOXICOLOGICAL INFORMATION

### SENSITIZATION:

None known.

### CARCINOGENICITY:

There is no data available to indicate any components present at greater than 0.1% may present a carcinogenic hazard.

### REPRODUCTIVE TOXICITY:

There is no data available to indicate any components present at greater than 0.1% may present reproductive toxicity.

### TERATOGENICITY (BIRTH DEFECTS):

There is no data available to indicate any components present at greater than 0.1% may cause birth defects.

### MUTAGENICITY:

There is no data to indicate that any component present at greater than 0.1% will alter DNA.

## SECTION 12 - ECOLOGICAL INFORMATION

### ENVIRONMENTAL DATA:

Contains ammonia or amines which may be toxic to aquatic life.

## SECTION 13 - DISPOSAL CONSIDERATIONS

This product does not meet the definition of hazardous waste under the U.S. EPA Hazardous Waste Regulations 40 CFR 261, however, state and local regulations may be more restrictive. Coagulate the emulsion by the stepwise addition of ferric chloride and lime. Remove the clear supernatant and flush to a chemical sewer. Incinerate liquid and contaminated solids in accordance with local, state, and federal regulations.

## SECTION 14 - TRANSPORT INFORMATION

### SHIPPING NAME:

Not regulated.

## SECTION 15 - REGULATORY INFORMATION

All ingredients of this product are listed, or are excluded from listing, on the US Toxic Substances Control Act (TSCA) chemical substance inventory.

This product does not contain a chemical subject to the reporting requirements of SARA Title III, Section 313 (40CFR 372) above de minimis concentrations.

### STATE SPECIFIC REQUIREMENTS:

This product does not contain a chemical known to the state of California to cause cancer, birth defects or reproductive harm, subject to the requirements of California Proposition 65.

STATE LISTED COMPONENTS	CAS NUMBER	STATE CODE	
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## SECTION 16 - OTHER INFORMATION

REVISION DATE: 09/05/13

HMIS CODES: H	F	R	P
2	0	0	B

# Safety Data Sheet

## SENERSHIELD VB

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(30513672/SDS\_GEN\_US/EN)

### 1. Product and Company Identification

Company

BASF CORPORATION  
100 Campus Drive  
Florham Park, NJ 07932, USA

24 Hour Emergency Response Information

CHEMTREC: 1-800-424-9300  
BASF HOTLINE: 1-800-832-HELP

### 2. Hazards Identification

Emergency overview

## WARNING:

MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.

CONTAINS MATERIAL WHICH CAN CAUSE CANCER.

Avoid contact with the skin, eyes and clothing.

Wash thoroughly after handling.

Keep container tightly closed.

No exposure to respirable Crystalline (quartz) Silica anticipated with recommended use of product.

State of matter: liquid

Colour: reddish

Odour: mild

Potential health effects**Primary routes of exposure:**

Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases.

**Acute toxicity:**

Ingestion may cause gastrointestinal disturbances. The product has not been tested. The statement has been derived from the properties of the individual components.

**Irritation / corrosion:**

Not irritating to eyes and skin. No irritation is expected under intended use and appropriate handling.

May cause slight irritation to the eyes. May cause slight irritation to the skin. May cause slight irritation to the respiratory tract. The product has not been tested. The statement has been derived from products of a similar structure or composition.

**Chronic toxicity:**

**Carcinogenicity:** The chemical structure does not suggest a specific alert for such an effect. The product has not been tested. The statement has been derived from the properties of the individual components.

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**Reproductive toxicity:** The chemical structure does not suggest such an effect. The product has not been tested. The statement has been derived from the properties of the individual components.

**Teratogenicity:** The chemical structure does not suggest such an effect. The product has not been tested. The statement has been derived from the properties of the individual components.

**Genotoxicity:** The chemical structure does not suggest a specific alert for such an effect. The product has not been tested. The statement has been derived from the properties of the individual components.

**Signs and symptoms of overexposure:**

No significant symptoms are expected due to the non-classification of the product.

**Potential environmental effects**

**Aquatic toxicity:**

At the present state of knowledge, no negative ecological effects are expected. There is a high probability that the product is not acutely harmful to aquatic organisms. The product has not been tested. The statement has been derived from products of a similar structure or composition.

### 3. Composition / Information on Ingredients

<u>CAS Number</u>	<u>Content (W/W)</u>	<u>Chemical name</u>
14808-60-7	>= 15.0 - <= 40.0 %	crystalline silica
1317-65-3	>= 15.0 - <= 40.0 %	Limestone
12001-26-2	>= 3.0 - <= 7.0 %	Mica-group minerals
13463-67-7	>= 0.5 - <= 1.5 %	Titanium dioxide

### 4. First-Aid Measures

**General advice:**

First aid personnel should pay attention to their own safety. Remove contaminated clothing.

**If inhaled:**

If difficulties occur after vapour/aerosol has been inhaled, remove to fresh air and seek medical attention.

**If on skin:**

After contact with skin, wash immediately with plenty of water and soap. Under no circumstances should organic solvent be used. If irritation develops, seek medical attention.

**If in eyes:**

Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

**If swallowed:**

Rinse mouth immediately with water. Seek medical attention if necessary. Do not induce vomiting unless told to by a poison control center or doctor.

### 5. Fire-Fighting Measures

Flash point:

A flash point determination is unnecessary due to the high water content.

Autoignition:

Based on the water content the product does not ignite.

Self-ignition temperature:

Based on the water content the product does not ignite.

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**Suitable extinguishing media:**

foam, water spray, dry powder, carbon dioxide

**Unsuitable extinguishing media for safety reasons:**

water jet

**Hazards during fire-fighting:**

carbon monoxide, carbon dioxide, harmful vapours, nitrogen oxides, fumes/smoke, carbon black

**Protective equipment for fire-fighting:**

Wear a self-contained breathing apparatus.

**Further information:**

The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

---

## 6. Accidental release measures

**Personal precautions:**

Use personal protective clothing. Do not breathe vapour/aerosol/spray mists. Handle in accordance with good building materials hygiene and safety practice.

**Environmental precautions:**

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

**Cleanup:**

For small amounts: Pick up with inert absorbent material (e.g. sand, earth etc.). Dispose of contaminated material as prescribed.

For large amounts: Pump off product.

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## 7. Handling and Storage

**Handling****General advice:**

Avoid aerosol formation. Avoid inhalation of mists/vapours. Avoid skin contact. No special measures necessary provided product is used correctly.

**Protection against fire and explosion:**

The product does not contribute to the spreading of flames, nor is it self combustible, not explosive.

**Storage****General advice:**

Keep only in the original container in a cool, well-ventilated place. Protect from direct sunlight. Store protected against freezing.

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## 8. Exposure Controls and Personal Protection

**Components with workplace control parameters**



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crystalline silica	OSHA	<p>TWA value 2.4 millions of particles per cubic foot of air Respirable ;</p> <p>The value is calculated from a specified equation using a value of 100%. Lower values of % will give higher exposure limits. See regulation for specific equation.</p> <p>TWA value 0.1 mg/m3 Respirable ;</p> <p>The value is calculated from a specified equation using a value of 100%. Lower values of % will give higher exposure limits. See regulation for specific equation.</p> <p>TWA value 0.3 mg/m3 Total dust ;</p> <p>The value is calculated from a specified equation using a value of 100%. Lower values of % will give higher exposure limits. See regulation for specific equation.</p>
Titanium dioxide	ACGIH	TWA value 0.025 mg/m3 Respirable fraction ;
	OSHA	PEL 15 mg/m3 Total dust ;
	ACGIH	TWA value 10 mg/m3 ;
Mica-group minerals	OSHA	TWA value 20 millions of particles per cubic foot of air ;
	ACGIH	TWA value 3 mg/m3 Respirable fraction ;
Limestone	OSHA	PEL 5 mg/m3 Respirable fraction ; PEL 15 mg/m3 Total dust ;

### **Personal protective equipment**

#### **Respiratory protection:**

When workers are facing concentrations above the occupational exposure limits they must use appropriate certified respirators.

#### **Hand protection:**

Wear chemical resistant protective gloves.

#### **Eye protection:**

Safety glasses with side-shields.

#### **Body protection:**

depending upon conditions of use., Cover as much of the exposed skin as possible to prevent all skin contact., light protective clothing

#### **General safety and hygiene measures:**

Avoid contact with the skin, eyes and clothing. In order to prevent contamination while handling, closed working clothes and working gloves should be used. Handle in accordance with good building materials hygiene and safety practice. When using, do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. At the end of the shift the skin should be cleaned and skin-care agents applied. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks).

## 9. Physical and Chemical Properties

Form:	viscous	
Odour:	mild	
Colour:	reddish	
pH value:	9 - 10	( 23 °C)
Boiling point:		not applicable
Vapour pressure:		not applicable
Density:	1.54 g/cm3	( 23 °C)
	13 lb/USg	
Bulk density:		not applicable
Partitioning coefficient		not applicable
n-octanol/water (log Pow):		
Solubility in water:		miscible
Miscibility with water:		completely (e.g. >=90%)

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### 10. Stability and Reactivity

**Conditions to avoid:**

Avoid extreme temperatures.

**Substances to avoid:**

strong acids, strong bases, strong oxidizing agents

**Hazardous reactions:**

The product is stable if stored and handled as prescribed/indicated.

**Decomposition products:**

No hazardous decomposition products if stored and handled as prescribed/indicated.

**Thermal decomposition:**

No decomposition if stored and handled as prescribed/indicated.

**Oxidizing properties:**

Not an oxidizer.

### 11. Toxicological information

**Carcinogenicity**

*Information on: Titanium dioxide*

*IARC (International Agency for Research on Cancer) has classified this substance as group 2B (The agent is possibly carcinogenic to humans). In long-term studies in rats in which the substance was given by inhalation, a carcinogenic effect was observed. Tumors were only observed in rats after chronic inhalative exposure to high concentrations which caused sustained lung inflammation. In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed. Dermal exposure is not expected to be carcinogenic.*

*Information on: crystalline silica*

*The International Agency for Research on Cancer (IARC) has classified this substance as a Group 1 (known) human carcinogen.*

*NTP listed carcinogen*

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**Other Information:**

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses. The product has not been tested. The statements on toxicology have been derived from products of a similar structure and composition.

### 12. Ecological Information

**Degradability / Persistence**

**Biological / Abiological Degradation**

Evaluation:

Inherently biodegradable.

The insoluble fraction can be removed by mechanical means in suitable waste water treatment plants.

**Bioaccumulation**

No data available concerning bioaccumulation.

**Other adverse effects:**

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Ecological data are not available. Do not allow to enter soil, waterways or waste water channels.

### 13. Disposal considerations

#### Waste disposal of substance:

Recommendations: Use excess product in an alternate beneficial application. Do not discharge into drains/surface waters/groundwater. Dispose of in accordance with local authority regulations.

#### Container disposal:

Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.

### 14. Transport Information

#### Land transport

USDOT

Not classified as a dangerous good under transport regulations

#### Sea transport

IMDG

Not classified as a dangerous good under transport regulations

#### Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

### 15. Regulatory Information

#### Federal Regulations

##### Registration status:

Chemical TSCA, US released / listed

##### OSHA hazard category:

IARC 1, 2A or 2B carcinogen; NTP listed carcinogen; Chronic target organ effects reported; OSHA PEL established; ACGIH TLV established

##### EPCRA 311/312 (Hazard categories):

Acute; Chronic

#### State regulations

##### State RTK

MA, NJ, PA

MA, NJ, PA

MA, NJ, PA

##### CAS Number

14808-60-7

12001-26-2

13463-67-7

##### Chemical name

crystalline silica

Mica-group minerals

Titanium dioxide

##### CA Prop. 65:

THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

# Safety Data Sheet

## SENERSHIELD VB

Revision date : 2011/01/31

Version: 1.2

Page: 7/7

(30513672/SDS\_GEN\_US/EN)

### 16. Other Information

#### HMIS III rating

Health: 1      Flammability: 0      Physical hazard: 0

NFPA and HMIS use a numbering scale ranging from 0 to 4 to indicate the degree of hazard. A value of zero means that the substance possesses essentially no hazard; a rating of four indicates extreme danger. Although similar, the two rating systems are intended for different purposes, and use different criteria. The NFPA system was developed to provide an on-the-spot alert to the hazards of a material, and their severity, to emergency responders. The HMIS system was designed to communicate workplace hazard information to employees who handle hazardous chemicals.

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

#### MSDS Prepared by:

BASF NA Product Regulations

msds@basf.com

MSDS Prepared on: 2011/01/31

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END OF DATA SHEET

# Safety Data Sheet

## WS FLASHING PRIMER

Revision date : 2012/03/14

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(30420546/SDS\_GEN\_US/EN)

### 1. Product and Company Identification

Company

BASF CORPORATION  
100 Campus Drive  
Florham Park, NJ 07932, USA

24 Hour Emergency Response Information

CHEMTREC: 1-800-424-9300  
BASF HOTLINE: 1-800-832-HELP

### 2. Hazards Identification

Emergency overview

## WARNING:

MAY CAUSE EYE IRRITATION.

MAY CAUSE SKIN IRRITATION.

Ingestion may cause irritation to mucous membranes.

Avoid contact with the skin, eyes and clothing.

Wash thoroughly after handling.

Keep container tightly closed.

State of matter: liquid

Colour: pink

Odour: ammonia-like, slight odour

Potential health effects**Primary routes of exposure:**

Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases.

**Acute toxicity:**

Ingestion may cause gastrointestinal disturbances. The product has not been tested. The statement has been derived from the properties of the individual components.

**Irritation / corrosion:**

May cause slight irritation to the eyes. May cause slight irritation to the skin. May cause slight irritation to the respiratory tract. The product has not been tested. The statement has been derived from products of a similar structure or composition.

**Chronic toxicity:**

**Carcinogenicity:** The chemical structure does not suggest a specific alert for such an effect.

**Repeated dose toxicity:** No reliable data was available concerning repeated dose toxicity.

# Safety Data Sheet

## WS FLASHING PRIMER

Revision date : 2012/03/14

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**Reproductive toxicity:** The chemical structure does not suggest such an effect. The product has not been tested. The statement has been derived from the properties of the individual components.

**Teratogenicity:** The chemical structure does not suggest such an effect. The product has not been tested. The statement has been derived from the properties of the individual components.

**Genotoxicity:** The chemical structure does not suggest a specific alert for such an effect. The product has not been tested. The statement has been derived from the properties of the individual components.

### Potential environmental effects

**Aquatic toxicity:**

At the present state of knowledge, no negative ecological effects are expected. There is a high probability that the product is not acutely harmful to aquatic organisms. The product has not been tested. The statement has been derived from products of a similar structure or composition.

**Bioaccumulation / bioconcentration:**

Discharge into the environment must be avoided.

---

## 3. Composition / Information on Ingredients

<u>CAS Number</u>	<u>Content (W/W)</u>	<u>Chemical name</u>
57-55-6	>= 1.0 - <= 5.0 %	Propylene glycol

---

## 4. First-Aid Measures

**General advice:**

First aid personnel should pay attention to their own safety. Remove contaminated clothing.

**If inhaled:**

If difficulties occur after vapour/aerosol has been inhaled, remove to fresh air and seek medical attention.

**If on skin:**

After contact with skin, wash immediately with plenty of water and soap. Under no circumstances should organic solvent be used. If irritation develops, seek medical attention.

**If in eyes:**

Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

**If swallowed:**

Rinse mouth immediately with water. Seek medical attention if necessary. Do not induce vomiting unless told to by a poison control center or doctor.

---

## 5. Fire-Fighting Measures

Flash point:

A flash point determination is unnecessary due to the high water content.

**Suitable extinguishing media:**

foam, water spray, dry powder, carbon dioxide

**Unsuitable extinguishing media for safety reasons:**

water jet

# Safety Data Sheet

## WS FLASHING PRIMER

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**Hazards during fire-fighting:**

carbon monoxide, carbon dioxide, harmful vapours, nitrogen oxides, fumes/smoke, carbon black

**Protective equipment for fire-fighting:**

Wear a self-contained breathing apparatus.

**Further information:**

The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

---

## 6. Accidental release measures

**Personal precautions:**

Use personal protective clothing. Do not breathe vapour/aerosol/spray mists. Handle in accordance with good building materials hygiene and safety practice.

**Environmental precautions:**

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

**Cleanup:**

For small amounts: Pick up with inert absorbent material (e.g. sand, earth etc.). Dispose of contaminated material as prescribed.

For large amounts: Pump off product.

---

## 7. Handling and Storage

**Handling****General advice:**

Avoid aerosol formation. Avoid inhalation of mists/vapours. Avoid skin contact. No special measures necessary provided product is used correctly.

**Protection against fire and explosion:**

The product does not contribute to the spreading of flames, nor is it self combustible, not explosive.

**Storage****General advice:**

Keep only in the original container in a cool, well-ventilated place. Protect from direct sunlight. Store protected against freezing.

---

## 8. Exposure Controls and Personal Protection

**Personal protective equipment****Respiratory protection:**

When workers are facing concentrations above the occupational exposure limits they must use appropriate certified respirators.

**Hand protection:**

Wear chemical resistant protective gloves.

**Eye protection:**

Safety glasses with side-shields.

**Body protection:**

depending upon conditions of use., Cover as much of the exposed skin as possible to prevent all skin contact., light protective clothing

# Safety Data Sheet

## WS FLASHING PRIMER

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### General safety and hygiene measures:

Avoid contact with the skin, eyes and clothing. In order to prevent contamination while handling, closed working clothes and working gloves should be used. Handle in accordance with good building materials hygiene and safety practice. When using, do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. At the end of the shift the skin should be cleaned and skin-care agents applied. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks).

## 9. Physical and Chemical Properties

Form:	liquid	
Odour:	ammonia-like, slight odour	
Colour:	pink	
pH value:		slightly alkaline
Boiling point:	100 °C	
Density:	1.04 g/cm <sup>3</sup>	( 20 °C)
Partitioning coefficient n-octanol/water (log Pow):		not applicable
Other Information:	If necessary, information on other physical and chemical parameters is indicated in this section.	

## 10. Stability and Reactivity

### Conditions to avoid:

Avoid extreme temperatures.

### Substances to avoid:

strong acids

### Hazardous reactions:

The product is stable if stored and handled as prescribed/indicated.

### Decomposition products:

carbon oxides

### Thermal decomposition:

No decomposition if stored and handled as prescribed/indicated.

### Oxidizing properties:

Based on its structural properties the product is not classified as oxidizing.

## 11. Toxicological information

### Other Information:

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses. The product has not been tested. The statements on toxicology have been derived from products of a similar structure and composition.

## 12. Ecological Information

### Degradability / Persistence

#### Biological / Abiological Degradation

Evaluation: Inherently biodegradable.  
The insoluble fraction can be removed by mechanical means in suitable waste



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water treatment plants.

### Other adverse effects:

Ecological data are not available. Do not allow to enter soil, waterways or waste water channels.

---

## 13. Disposal considerations

### Waste disposal of substance:

Recommendations: Use excess product in an alternate beneficial application. Dispose of in accordance with local authority regulations. Do not discharge into drains/surface waters/groundwater.

### Container disposal:

Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.

---

## 14. Transport Information

### Land transport

USDOT

Not classified as a dangerous good under transport regulations

### Sea transport

IMDG

Not classified as a dangerous good under transport regulations

### Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

---

## 15. Regulatory Information

### Federal Regulations

#### Registration status:

Chemical TSCA, US released / listed

OSHA hazard category: Chronic target organ effects reported;

EPCRA 311/312 (Hazard categories): Acute;

### State regulations

#### State RTK

PA

#### CAS Number

57-55-6

#### Chemical name

Propylene glycol

# Safety Data Sheet

## WS FLASHING PRIMER

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(30420546/SDS\_GEN\_US/EN)

### 16. Other Information

#### HMIS III rating

Health: 1      Flammability: 0      Physical hazard: 0

NFPA and HMIS use a numbering scale ranging from 0 to 4 to indicate the degree of hazard. A value of zero means that the substance possesses essentially no hazard; a rating of four indicates extreme danger. Although similar, the two rating systems are intended for different purposes, and use different criteria. The NFPA system was developed to provide an on-the-spot alert to the hazards of a material, and their severity, to emergency responders. The HMIS system was designed to communicate workplace hazard information to employees who handle hazardous chemicals.

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#### MSDS Prepared by:

BASF NA Product Regulations

msds@basf.com

MSDS Prepared on: 2012/03/14

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END OF DATA SHEET

# MATERIAL SAFETY DATA SHEET

PAGE 1

## SECTION I: PRODUCT INFORMATION

PRODUCT: Styroflex  
SYNONYMS: Styroflex Expanded Polystyrene (EPS)  
PRODUCT GRADES: Type I, VIII, II, and IX  
CHEMICAL FAMILY: Polystyrene Thermoplastic  
CAS REGISTRY NO: 9003536  
CAS NAME: Ethenylbenzene Homopolymor  
FORMULA: (C<sub>8</sub> H<sub>8</sub>)<sub>n</sub>  
TSCA INVENTORY STATUS: Listed

CONTACT: Styrotech, Inc.  
8800 Wyoming Ave. No.  
Brooklyn Park, MN 55445-1837  
1-800-451-6963

### HAZARD RATING:

0 = Minimal  
1 = Slight  
2 = Moderate  
3 = Serious  
4 = Severe

HEALTH	0
FIRE	2
REACTIVITY	0

## SECTION II: INGREDIENTS

### HAZARDOUS COMPONENTS:

Pentane  
Halogen Flame Retardants

### CAS REGISTRY NO:

109660  
N/A

### APPROX. WEIGHT %:

1.0% Max.  
.9% Max

### NON-HAZARDOUS COMPONENTS:

Polystyrene

### CAS REGISTRY NO:

9003536

### APPROX. WEIGHT %:

98% Min.

## SECTION III: PHYSICAL DATA

FORM: Rigid cellular foam block, boards and shapes  
BOILING POINT: N/A  
SPECIFIC GRAVITY: (Water = 1) Density 0.6 pcf to 2.0 pcf  
EVAPORATION RATE: None  
VAPOR DENSITY: (Air = 1)  
ODOR: Very slight hydro-carbon odor

COLOR: White  
MELTING POINT: Softens at 175-200 degrees F  
VAPOR PRESSURE: N/A  
VOLATILES BY VOLUME: <4% (pentane and water)  
SOLUBILITY IN WATER: Insoluble

## SECTION IV: FIRE AND EXPLOSION DATA

FLASH POINT AND METHOD USED: 610 degrees F. Min. (ASTM D 1929)

SPECIAL FIRE FIGHTING INSTRUCTIONS: Use approved self-contained breathing apparatus respirator and personal protective clothing. (Turn out gear)

EXTINGUISHING MEDIA: Water fog, carbon dioxide, dry chemical, foam

AUTOIGNITION TEMPERATURE: 850 degrees F. Min.

UNUSUAL FIRE AND EXPLOSION HAZARDS: May produce dense black smoke. Smoke consists of carbon (soot), carbon monoxide, carbon dioxide and water. Dust generated by fabrication, i.e., sanding sawing, etc. will increase fire hazard and should be handled accordingly.

## SECTION V: REACTIVITY DATA

STABILITY (CONDITIONS TO AVOID): Stable. Avoid fire and high temperatures.

INCOMPATIBILITY (MATERIALS TO AVOID): Will dissolve in most organic solvents, and some insecticides, aldehydes and amines.

HAZARDOUS DECOMPOSITION: Carbon monoxide, carbon dioxide, carbon, water, hydrogen halide.

HAZARDOUS POLYMERIZATION: None

# MATERIAL SAFETY DATA SHEET

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## SECTION VI: HEALTH HAZARDS AND FIRST AID

EYE CONTACT: Dust or particles may cause mechanical eye irritation and/or injury.

INHALATION: Dust from mechanical fabrication may cause upper respiratory irritation. Fumes from hot wire cutting can also cause upper respiratory irritation.

SKIN CONTACT: None. May produce slight skin irritation in a few individuals.

INGESTION: Biologically inert. May act as an obstruction if swallowed.

CARCINOGENICITY: None.

SAFETY PRECAUTIONS: Use positive ventilation. Mechanical fabrication, sanding, etc. requires the use of safety glasses or goggles and dust mask.

### FIRST AID

EYES: Rinse with clean water. Remove foreign particles with clean, lint-free cloth. Obtain medical attention if pain, blinking, tears or redness persist.

INHALATION: If overcome by exposure, remove to fresh air. Provide oxygen and artificial respiration. Get medical attention.

SKIN: Not expected to present skin hazard. Wash exposed areas with mild soap and water. Consult physician if irritation persists.

INGESTION: Not expected to present significant ingestion hazard. Consult physician if swallowed.

## SECTION VII: EMPLOYEE PROTECTION

### PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY PROTECTION: Use approved dust mask when sawing or sanding.

SKIN PROTECTION: None required. Wear gloves and/or sleeves if sensitivity noted.

EYE PROTECTION: Use approved safety glasses/goggles when sawing or sanding.

### GENERAL CONTROL MEASURES

Use protective ventilation. Wear safety glasses/goggles and dust mask if mechanical fabrication is to take place.

## SECTION VIII: SPILL OR LEAK PROCEDURES

SPILL, LEAK, OR RELEASE PROCEDURES: Normal good housekeeping should be observed. Material can be swept or picked up and placed into a suitable container for disposal.

REPORTABLE QUANTITY: None

DISPOSAL METHOD: Recycle, incinerate (WTE) or land fill, per local and state regulations.

## SECTION IX: SPECIAL PRECAUTIONS

STORAGE AND HANDLING: Expanded Polystyrene, although it contains a fire retardant additive, is considered to be combustible and adequate protection from sources of ignition should be taken.

TRANSPORTATION REQUIREMENTS: Not a D.O.T. "Hazardous Material".

## DISCLAIMER OF LIABILITY

The information in this MSDS was obtained from sources which we believe are reliable. HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY WARRANTY, EXPRESSED OR IMPLIED, REGARDING ITS CORRECTNESS.

The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF, OR IN ANY WAY, CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT.

## SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT	Dryvit Expanded Polystyrene Insulation Board (generic name: EPS)
PRODUCT USE	Construction, Insulation
SUPPLIER	Dryvit UK Ltd
ADDRESS	Unit 4 Wren Park Hitchin Road Shefford SG17 5JD
E-MAIL	ukenquiries@dryvit.com
TELEPHONE	01462 819555 (Mon – Fri 8:00 am – 5:00 pm)

## SECTION 2 - HAZARDS IDENTIFICATION

EUROPEAN DIRECTIVE 67/548/EEC	Not classified
GHS/CLP REGULATION (CE) No. 1272/2008	Not classified
LABEL ELEMENTS	None
OTHER HAZARDS	Non-hazardous in finished form. Residual quantities of process chemicals and blowing agents are insignificant. The product is combustible if exposed to intense heat or fire. EPS melts at high temperature and molten droplets may cause skin burns.

NOT CLASSIFIED AS HAZARDOUS TO HEALTH IN EU COUNTRIES.

## SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

%	CAS No.	EC No.	REACH No.	CHEMICAL NAME	CHEMICAL FORMULA	HAZARDS CLASSIFICATION	NOTES
	9003-53-6	500-008-9	-	POLYSTYRENE	$[C_8H_8]_n$	-	1

1 – THE PRODUCT IS A FOAM MATERIAL MANUFACTURED BY THE EXPANSION OF THE ORGANIC POLYMER POLYSTYRENE.

## SECTION 4 - FIRST AID MEASURES

INHALATION	Dust particles from cutting are unlikely to be of inhalable dimensions unless power tools are used. If problems are experienced, remove to fresh air and drink water.
SKIN CONTACT	No specific measures for material in its normal state. If in contact with molten material treat affected area immediately with cold water and seek medical attention, do not attempt to remove any molten or solidified material from the skin.
EYE CONTACT	If dust particles enter the eye, wash with water.
INGESTION	Drink plenty of water if accidentally ingested.
MOST IMPORTANT SYMPTOMS AND EFFECTS	EPS melts at high temperature and molten droplets may cause skin burns.

IF ANY ADVERSE REACTION OR DISCOMFORT CONTINUES FROM ANY OF THE ABOVE EXPOSURES, SEEK MEDICAL ADVICE.

## SECTION 5 - FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA	Water, foam, carbon dioxide (CO <sub>2</sub> ), and dry powder
SPECIFIC HAZARDS	Those normally associated with combustion of organic hydrocarbons and should be considered toxic, will include carbon monoxide and carbon dioxide, may contain hydrogen bromide and trace amounts of styrene monomer.
ADVICE FOR FIREFIGHTERS	Dense smoke will be generated and suitable breathing apparatus should be worn when fighting fires. Keep adjacent products cool by spraying with water.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS	No specific measures are required for personal protection.
ENVIRONMENTAL PRECAUTIONS	The product is in solid form and releases no harmful substances.
METHOD FOR CONTAINMENT AND CLEANING UP	N/A
DISPOSE OF IN ACCORDANCE WITH SECTION 13.	

## SECTION 7 - HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING	No special precautions
TECHNICAL MEASURES	If using power tools, provide dust extraction or use suitable respiratory protection, wear eye protection.
TECHNICAL PRECAUTIONS	When cutting, ensure adequate ventilation of workplace is available. When carrying sheet material be aware of strong winds especially when working at heights.
TECHNICAL MEASURES FOR SAFE STORAGE	Avoid heat, flames and other sources of ignition.
STORAGE CONDITIONS	Store under cover in dry conditions, protected from direct sunlight. Stack sheet material flat without bearers.

## SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS	None
ENGINEERING MEASURES	No specific requirements.
RESPIRATORY EQUIPMENT	If cutting using hot wire ensure adequate ventilation to the workplace otherwise no specific requirements.
HAND PROTECTION	No specific requirements.
EYE PROTECTION	If cutting with power tools suitable eye protection is advised otherwise no specific requirements.
SKIN PROTECTION	No specific requirements.
HYGIENE MEASURES	No specific requirements.
NO SPECIFIC PROTECTION IS REQUIRED WHEN HANDLING EXPANDED POLYSTYRENE.	

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Rigid cellular foam boards.
COLOUR	White or grey (LL boards).
ODOUR	Odourless.
pH	N/A
BOILING POINT	N/A
MELTING POINT	240°C
FLASH POINT	350°C
FLAMMABILITY (SOLID, GAS)	N/A
RELATIVE DENSITY	6gl <sup>-1</sup> to 60gl <sup>-1</sup> @ STP
SOLUBILITY	Insoluble in water, soluble in aryl compounds and halogenated solvents and ketones.
EXPLOSIVE PROPERTIES	N/A

## SECTION 10 - STABILITY AND REACTIVITY

REACTIVITY	None.
CHEMICAL STABILITY	Stable and inert under normal conditions of use. Resistant to many chemicals but not to solvents, care should be taken in choice of adhesives used. Decomposes above 200°C.
POSSIBILITY OF HAZARDOUS REACTIONS	None in normal conditions of use.
CONDITIONS TO AVOID	Heating above 110°C, ignition sources, solvents, prolonged sunlight.
INCOMPATIBLE MATERIALS	None.

## SECTION 11 - TOXICOLOGICAL INFORMATION

TOXICOLOGICAL DATA	EPS is non-toxic and not chemically irritating to the skin or eyes.
DUST CAN CAUSE MECHANICAL IRRITATION TO EYES – PLEASE REFER TO SECTION 7.1.	

## SECTION 12 - ECOLOGICAL INFORMATION

ECOTOXICITY	Not expected to be toxic to aquatic organisms in its solid state.
DEGRADABILITY	No significant biodegradation is expected.
BIOACCUMULATIVE POTENTIAL	The product is not expected to bioaccumulate.
MOBILITY IN SOIL	The product is inert.
RESULTS OF PBT AND VPVB ASSESSMENT	No data available.
OTHER ADVERSE EFFECTS	No data available.

EPS HAS A ZERO OZONE DEPLETING POTENTIAL (ODP) AND VIRTUALLY ZERO GLOBAL WARMING POTENTIAL (GWP)

### SECTION 13 - DISPOSAL CONSIDERATIONS

**WASTE DISPOSAL METHOD** Dispose of in accordance with regulations and procedures in force in the country of use or disposal.

**EWG-CODE:** 07.02.13 Non-hazardous substance.

### SECTION 14 - TRANSPORT INFORMATION

**UN NUMBER** Not classified.

**UN PROPER SHIPPING NAME** N/A

**TRANSPORT HAZARD CLASSES** Not classified.

**PACKING GROUP** N/A

**ENVIRONMENTAL HAZARDS** None.

**SPECIAL PRECAUTIONS FOR USER** None.

**TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE** N/A

**TRANSPORT IN BULK**

THE PRODUCT IS NOT COVERED BY INTERNATIONAL REGULATION ON THE TRANSPORT OF DANGEROUS GOODS (IMDG, IATA, ADR/RID).

### SECTION 15 - REGULATORY INFORMATION

**SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE:**

The European Regulation on Chemicals No 1907/2006, Registration, Evaluation, Authorisation of Chemicals (REACH) enacted on June 1st 2007 requires the provision of a Safety Data Sheet for hazardous substances and mixtures/preparations.

Dryvit's EPS products (block, sheet, moulding or bead), are defined as articles under REACH and therefore a Safety Data Sheet for these products is not a legal requirement.

In accordance with industry practice and voluntary commitments, Dryvit has decided to continue to provide its customers with the appropriate information for the purpose of assuring safe handling and use of EPS throughout the product life.

**CSA STATUS:** N/A

### SECTION 16 - OTHER INFORMATION

If using adhesives with this product follow the adhesive manufacturer's instructions carefully.

The information on this data sheet represents data available at the time of writing and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product, which involves using the product in combination with any other product or any other process, is the responsibility of the user.

THIS MATERIAL SAFETY DATA SHEET / PRODUCT DATA SHEET IS IN ACCORDANCE WITH THE EU DIRECTIVES 67/548/EEC, 1999/45/EEC, 1907/2006, 1272/2008 AND 453/2010.



## Field Safety Data Sheet Index

### **Plaster**

1. National Conventional Plaster Products
2. National Veneer Plaster Products
3. USG Plaster Bonder
4. USG Diamond Veneer Basecoat
5. USG Diamond Veneer Finish
6. USG Imperial Veneer Basecoat
7. USG Imperial Finish Plaster
8. USG Red Top Finish Plaster
9. USG Red Top Gauging
10. USG Red Top Gypsum Plaster
11. USG Red Top Keenes Cement
12. USG Acoustical Plaster
13. USG Retarder
14. USG Structo-Base Plaster
15. USG Structo-Lite Plaster
16. GP Plaster Products
17. USG Ivory Finish Lime

**Section 1: Product and Company Identification****Product Name**

Conventional Plaster Products

**Product Identifiers***Gauging Plaster**Gypsolite Plaster**Kal-Kote Base**Moulding Plaster**Plant Stucco**1-C Stucco**Two-Way Hardwall**Tectum Grout***Other means of identification**

Construction plaster

**Recommended Use***Gauging Plaster*- Gypsum plaster added to lime putty, provides and controls set*Gypsolite Plaster*-Basecoat gypsum and perlite mill-mixed plaster*Kal-Kote Base*- Base coat for veneer plaster system*Moulding Plaster*- Used in ornamental plaster work*Two-Way Hardwall*- Basecoat plaster used in conventional plaster systems, job mixed with sand or perlite aggregate

Use per manufacturer's recommendations.

**Restrictions on Use**

Use in well-ventilated area and avoid breathing dust.

Avoid skin contact.

**Manufacturer/Supplier Details**

National Gypsum Company

2001 Rexford Road

Charlotte, NC 28211

**Emergency Telephone Number**

Director Quality Services

(704) 551-5820 - 24 Hour Emergency Response

Website: [www.nationalgypsum.com](http://www.nationalgypsum.com)**Section 2: Hazards Identification****United States (US)**

According to OSHA 29CFR 1910.1200 (HCS)

**GHS Classification of the substance or mixture**

Specific target organ toxicity, repeated exposure – Category 2 (H-373)

Acute toxicity, inhalation - Category 4 (H-332)

Acute toxicity, dermal - Category 4 (H312)

**GHS Label Elements****Pictogram****Signal Word****Warning****Hazard Statements**

H-373

H-312 &amp; 332

Causes damage to organs through prolonged or repeated exposure (lungs)

Harmful in contact with skin or inhaled.

**Section 2: Hazards Identification (Continued)****Precautionary Statements****Prevention**

Do not breathe dust.

Use personal protective equipment as required. (See Section 8)

Use engineering controls and wet methods to minimize dust.

**Response**

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

If on skin, wash with plenty of soap and water.

If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Get medical attention if exposed or concerned.

**Storage**

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

**Disposal**

Dispose of material in accordance with federal, state, and local regulations. Do not wash material down drains.

**Section 3: Composition/Information on Ingredients**

Chemical Name	Common name/ Synonym	Identifiers CAS Number	% (weight)	Impurities
Calcium Sulfate Hemihydrate	Plaster of Paris, Stucco	10034-76-1	>85	Crystalline silica (CAS # 14808-60-7)
<u>And may contain:</u>				
Perlite		93763-70-3	<5	Crystalline silica (CAS # 14808-60-7)

**Section 4: First-Aid Measures**

**Inhalation** Remove exposed individual to fresh air immediately. If breathing difficulty persists, seek medical attention.

**Eye contact** Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes.

Remove contact lenses (if applicable). Seek medical attention if irritation persists.

**Skin contact** Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present.

Seek medical attention if irritation persists.

**Ingestion** This product is not expected to be hazardous and no harmful effects are expected upon ingestion of small amounts. Larger amounts may cause abdominal discomfort or possible obstruction of the digestive tract.

Seek medical attention if problems persist.

**Medical Conditions aggravated by exposure**

Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

**Section 5: Fire-Fighting Measures****Extinguishing Media**

Dry chemical, foam, water, or extinguishing media appropriate for surrounding fire.

**Unusual Fire and Explosion Hazards**

Mixture poses no fire-related hazard.

**Special hazards arising from the mixture**

None known. Above 1450°C, material can decompose and release sulfur dioxide (SO<sub>2</sub>) and oxides of carbon.

**Special Protective Equipment and Precautions for Firefighters**

A SCBA is recommended to limit exposures to combustion products when fighting any fire.

## Section 6: Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures

No special precautions required.

General recommendations:

Wear appropriate Personal Protective Equipment. (See Section 8)

Maintain proper ventilation.

### Environmental precautions

This product does not present an ecological hazard to the environment.

Dispose of in accordance with applicable federal, state, and local regulations.

### Methods and materials for containment and cleaning up

Vacuum spilled material utilizing a vacuum equipped with a HEPA filter. Avoid dry sweeping.

Maintain proper ventilation to minimize dust.

Avoid washing material down drains. This material will eventually set and can cause clogs.

## Section 7: Handling and Storage

### Precautions for safe handling

Avoid breathing dust.

Minimize generation of dust.

Provide appropriate exhaust ventilation at places where dust is formed.

Avoid contact with eyes, skin and clothing.

Wear recommended personal protective equipment when handling. (See Section 8)

### Conditions for safe storage, including any incompatibilities

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

Keep containers closed when not in use.

Avoid contact with acids and water.

## Section 8: Exposure Controls/Personal Protection

### Control Parameters

Component	Exposure Limits	
	OSHA PEL (mg/m3)	ACGIH TLV (mg/m3)
Calcium Sulfate Hemihydrate	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Crystalline Silica <sup>1</sup>	$[(10) / (\%SiO_2+2)]^{(R)}$ $[(30) / (\%SiO_2+2)]^{(T)}$	0.025 <sup>(R)</sup>
Perlite	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>

T- Total Dust

R-Respirable Dust

1 – Present as an impurity in raw materials

### Exposure Controls

#### Appropriate Engineering Controls

Work/Hygiene Practices: Utilize methods to minimize dust production. Utilize wet methods, when appropriate, to reduce generation of dust.

Ventilation: Provide local and general exhaust ventilation sufficient to maintain a dust level below the PEL/TLV.

#### Personal Protective Equipment

##### Respiratory Protection

A NIOSH approved particulate respirator is recommended in poorly ventilated areas or if the PEL/TLV is exceeded. OSHA's 29 CFR 1910.134 (Respiratory Protection Standard) must be followed whenever work conditions require respirator use.

##### Eye Protection

Safety glasses or goggles.

##### Skin

Gloves, protective clothing and/or barrier creams may be utilized if conditions warrant.

## Section 9: Physical and Chemical Properties

- (a) **Appearance:** A white/gray powder
- (b) **Odor:** None
- (c) **Odor threshold:** Not available
- (d) **pH :** ~7
- (e) **Melting point/freezing point:** Not Available
- (f) **Initial boiling point and boiling range:** Not Available
- (g) **Flash point:** Not available
- (h) **Evaporation rate:** Not available
- (i) **Flammability (solid, gas):** Not flammable
- (j) **Upper/lower flammability or explosive limits:** Not available
- (k) **Vapor pressure:** Not available
- (l) **Vapor density:** Not available
- (m) **Relative density:** ~2.2-2.8
- (n) **Solubility(ies):** 2.1 g/L @ 20° C
- (o) **Partition coefficient: n-octanol/water:** Not available
- (p) **Auto-ignition temperature:** Not available
- (q) **Decomposition temperature:** 1450°C
- (r) **Viscosity:** Not available
- (s) **Volatile organic compound (VOC) content:** None

## Section 10: Stability and Reactivity

- (a) **Reactivity:** No data available
- (b) **Chemical stability:** Stable in dry environments
- (c) **Possibility of hazardous reactions:** None known
- (d) **Conditions to avoid (e.g., static discharge, shock, or vibration):** None known
- (e) **Incompatible materials:** Strong acids
- (f) **Hazardous decomposition products:** None known. Above 1450° C gypsum will decompose to calcium oxide (CaO), with releases of sulfur dioxide (SO<sub>2</sub>) and various oxides of carbon.

## Section 11: Toxicological Information

### Information on Toxicological effects

#### Information on likely routes of exposure

- Ingestion** Possible abdominal obstruction.
- Inhalation** Dust may irritate respiratory system. Chronic exposure may result in lung disease. (See below)
- Skin contact** May cause burns, irritation, rash, itching, or dermatitis. (See below)
- Eye contact** Dust may cause mechanical irritation.

### Symptoms related to the physical, chemical and toxicological characteristics

This product becomes extremely hot when mixed with water. Do not use this material to produce a cast with intent to enclose any body part. Continued and prolonged contact may result in dry skin. Contact with dust may produce itching, rash and/or redness. Repeated or prolonged exposure may result in dermatitis.

### Symptoms related to the physical, chemical and toxicological characteristics (Continued)

Acute exposure to airborne dust concentrations in excess of the PEL/TLV may result in coughing, dyspnea, wheezing, and a burning irritation of the nose, throat, and upper respiratory tract, along with possible impaired pulmonary function. Chronic exposure to crystalline silica (a naturally occurring contaminant) in the respirable size has been shown to cause silicosis, a debilitating lung disease, and lung cancer.

#### Toxicological data

No toxicological data is available for this product. Toxicological information for components of this product listed below.

Acute toxicity	Plaster of Paris: Oral LD50 (rat): >5000 mg/kg
Skin corrosion/irritation	Not available
Serious eye damage/eye irritation	Not available
Skin sensitization	Not available
Respiratory sensitization	Not available
Sensitization	Not available
Mutagenicity	No evidence of mutagenicity on Ames Test.
Carcinogenicity	Not available

This product contains crystalline silica (quartz) as a naturally occurring impurity in some of the raw materials. The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen.

Exposures to respirable crystalline silica are not expected during the recommended use of this product. Industrial hygiene monitoring to date has not identified any detectable respirable crystalline silica in dust sampling conducted utilizing recommended application procedures. However, actual levels must be determined by workplace hygiene testing.

Reproductive effects Not available

Specific target organ toxicity –

single exposure Not available

Aspiration toxicity Not available

## Section 12: Ecological Information

(a) **Ecotoxicity (aquatic and terrestrial, where available):** This product does not present an ecological hazard to the environment.

(b) **Persistence and degradability:** Unknown

(c) **Bioaccumulative potential:** Gypsum is a naturally occurring mineral. Biodegradation and/or bioaccumulation potential is not applicable.

(d) **Mobility in soil:** Unknown

(e) **Other adverse effects (such as hazardous to the ozone layer):** None known

## Section 13: Disposal Considerations

This material is not considered a hazardous waste. Dispose of according to Local, State, Federal, and Provincial Environmental Regulations.

## Section 14: Transport Information

This product is not a DOT hazardous material

Shipping Name: Same as product name

ICAO/IATA/IMO: Not applicable

## Section 15: Regulatory Information

### Federal Regulations

**SARA Title III:** Not listed under Sections 302, 304, and 313

**CERCLA:** Not listed

**RCRA:** Not listed

**OSHA:** Dust and potential respirable crystalline silica generated during product use may be hazardous.

### State Regulations

California Prop 65: Respirable crystalline silica is known to the state of California to cause cancer. Industrial hygiene monitoring during recommended use of this product failed to identify any respirable crystalline silica.

### Canada WHMIS

All components of this product are included in the Canadian Domestic Substances List (DSL).

Crystalline silica: WHMIS Classification D2A

## Section 16: Other Information

**SDS Prepared by:** National Gypsum Company  
2001 Rexford Road  
Charlotte, NC 28211  
**Phone Number:** (704) 551-5820

**Date of Preparation:** March 13, 2015

### Revision indicators and Date

**Effective Date Change:** 6/1/2015      **Supersedes:** April 24, 2014  
**Format Changes:** Conforms to OSHA 29CFR 1910.1200 (HCS)

### Key to Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Services Number
CFR	Code of Federal Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
HEPA	High Efficiency Particulate Air
HCS	Hazard Communications Standard
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This safety data sheet was prepared to comply with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

### Disclaimer of Liability:

As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of the material. Information contained herein is believed to be true and accurate, but all statements or suggestions are made without any warranty, express or implied, regarding accuracy of the information, the hazards connected with the use of the material, or the results to be obtained for the use thereof.

**Section 1: Product and Company Identification****Product Name**

Gold Bond® BRAND Veneer Plaster Products

**Product Identifiers**

*Gypsum Kal-Kote® Smooth Finish*

*Kal-Kote® Texture Finish*

*X-KALibur®*

*Uni-Kal® Veneer*

*Multi-Kal*

**Other means of identification**

Finish plaster, Construction plaster

**Recommended Use**

White finish plasters with specific uses in one or two coat veneer systems. For application over basecoat plasters, Kal-Kote baseboard or cementitious base. Use per manufacturer's recommendations.

**Restrictions on Use**

Use in well-ventilated area and avoid breathing dust.

Avoid skin contact.

**Manufacturer/Supplier Details**

National Gypsum Company

2001 Rexford Road

Charlotte, NC 28211

**Emergency Telephone Number**

Director Quality Services

(704) 551-5820 - 24 Hour Emergency Response

Website: [www.nationalgypsum.com](http://www.nationalgypsum.com)

**Section 2: Hazards Identification****United States (US)**

According to OSHA 29CFR 1910.1200 (HCS)

**GHS Classification of the substance or mixture**

Carcinogenicity - Category 1A - (H-350)

Specific target organ toxicity, repeated exposure – Category 1 (H-372)

Acute toxicity, inhalation - Category 4 (H-332)

Skin corrosion/irritation Category 2 (H314)

Serious eye damage/eye irritation – Category 1 (H-318)

**GHS Label Elements****Pictogram****Signal Word**

**Danger**

**Hazard Statements**

H-350

May cause cancer.

H-332, 372

Harmful if inhaled. Causes damage to organs (lungs) through prolonged or repeated exposure.

H-314 ,318

Causes severe skin burns and eye damage



**Section 2: Hazards Identification (Continued)****Prevention**

Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Do not breathe dust.  
Use personal protective equipment as required. (See Section 8)  
Use in a well-ventilated area.  
Use engineering controls and wet methods to minimize dust.

**Response**

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.  
If on skin, wash with plenty of soap and water.  
If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Get medical attention if exposed or concerned.

**Storage**

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

**Disposal**

Dispose of material in accordance with federal, state, and local regulations. Do not wash material down drains.

**Section 3: Composition/Information on Ingredients**

Chemical Name	Common name/ Synonym	Identifiers CAS Number	% (weight)	Impurities
Calcium Sulfate Hemihydrate	Stucco Plaster of Paris	10034-76-1	50-85	Crystalline silica (CAS # 14808-60-7)
Calcium Hydroxide	Hydrated Lime	1305-62-0	20-50	Crystalline silica (CAS # 14808-60-7)

**Section 4: First-Aid Measures**

**Inhalation** Remove exposed individual to fresh air immediately. If breathing difficulty persists, seek medical attention.  
**Eye contact** Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes.  
Remove contact lenses (if applicable). Seek medical attention if irritation persists.  
**Skin contact** Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present. Seek medical attention if irritation persists.  
**Ingestion** May cause abdominal discomfort or possible obstruction of the digestive tract.  
Seek medical attention if problems persist.

**Medical Conditions aggravated by exposure**

Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

**Section 5: Fire-Fighting Measures****Extinguishing Media**

Dry chemical, foam, water, or extinguishing media appropriate for surrounding fire.

**Unusual Fire and Explosion Hazards**

Mixture poses no fire-related hazard.

**Special hazards arising from the mixture**

None known. Above 1450°C, material can decompose and release sulfur dioxide (SO<sub>2</sub>), calcium oxide (CaO) and oxides of carbon.

**Special Protective Equipment and Precautions for Firefighters**

A SCBA is recommended to limit exposures to combustion products when fighting any fire.

## Section 6: Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures

No special precautions required.

General recommendations:

Wear appropriate Personal Protective Equipment. (See Section 8)

Maintain proper ventilation.

### Environmental precautions

This product may be toxic to fish due to its high alkalinity.

Dispose of in accordance with applicable federal, state, and local regulations.

Product should not be discharged directly into sewers or surface water. Material will harden and may plug drains.

### Methods and materials for containment and cleaning up

Vacuum spilled material utilizing a vacuum equipped with a HEPA filter. Avoid dry sweeping.

Maintain proper ventilation to minimize dust.

Avoid washing material down drains.

## Section 7: Handling and Storage

### Precautions for safe handling

Avoid breathing dust.

Minimize generation of dust.

Provide appropriate exhaust ventilation at places where dust is formed.

Avoid contact with eyes, skin and clothing.

Wear recommended personal protective equipment when handling. (See Section 8)

### Conditions for safe storage, including any incompatibilities

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

Keep containers closed when not in use.

Avoid contact with acids and water.

## Section 8: Exposure Controls/Personal Protection

### Control Parameters

Component	Exposure Limits	
	OSHA PEL (mg/m <sup>3</sup> )	ACGIH TLV (mg/m <sup>3</sup> )
Calcium Sulfate Hemihydrate	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Crystalline Silica <sup>1</sup>	$[(10) / (\%SiO_2+2)]^{(R)}$ ; $[(30) / (\%SiO_2+2)]^{(T)}$	0.025 <sup>(R)</sup>
Calcium Hydroxide (Hydrated Lime)	15 <sup>(T)</sup> 5 <sup>(R)</sup>	5 <sup>(R)</sup>

T- Total Dust

R-Respirable Dust

1 – Present as an impurity in raw materials

### Exposure Controls

#### Appropriate Engineering Controls

Work/Hygiene Practices: Utilize methods to minimize dust production. Utilize wet methods, when appropriate, to reduce generation of dust.

Ventilation: Provide local and general exhaust ventilation sufficient to maintain a dust level below the PEL/TLV.

#### Personal Protective Equipment

##### Respiratory Protection

A NIOSH approved particulate respirator is recommended in poorly ventilated areas or if the PEL/TLV is exceeded. OSHA's 29 CFR 1910.134 (Respiratory Protection Standard) must be followed whenever work conditions require respirator use.

##### Eye Protection

Safety glasses or goggles.

##### Skin

Gloves, protective clothing and/or barrier creams may be utilized if conditions warrant.

## Section 9: Physical and Chemical Properties

- (a) **Appearance:** A white/gray powder
- (b) **Odor:** None
- (c) **Odor threshold:** Not available
- (d) **pH :** ~12
- (e) **Melting point/freezing point:** Not Available
- (f) **Initial boiling point and boiling range:** Not Available
- (g) **Flash point:** Not available
- (h) **Evaporation rate:** Not available
- (i) **Flammability (solid, gas):** Not flammable
- (j) **Upper/lower flammability or explosive limits:** Not available
- (k) **Vapor pressure:** Not available
- (l) **Vapor density:** Not available
- (m) **Relative density:** ~2.2-2.8
- (n) **Solubility(ies):** slightly soluble in water
- (o) **Partition coefficient: n-octanol/water:** Not available
- (p) **Auto-ignition temperature:** Not available
- (q) **Decomposition temperature:** 1450°C
- (r) **Viscosity:** Not available
- (s) **Volatile organic compound (VOC) content:** None

## Section 10: Stability and Reactivity

- (a) **Reactivity:** No data available
- (b) **Chemical stability:** Stable in dry environments
- (c) **Possibility of hazardous reactions:** None known
- (d) **Conditions to avoid (e.g., static discharge, shock, or vibration):** None known
- (e) **Incompatible materials:** Strong acids
- (f) **Hazardous decomposition products:** None known. Above 1450°C gypsum will decompose to calcium oxide (CaO), with releases of sulfur dioxide (SO<sub>2</sub>) and various oxides of carbon.

## Section 11: Toxicological Information

### Information on Toxicological effects

#### Information on likely routes of exposure

- Ingestion** May cause gastrointestinal irritation.
- Inhalation** Dust may irritate respiratory system. Chronic exposure may result in lung disease. (See below)
- Skin contact** May cause burns, irritation, or dermatitis. (See below)
- Eye contact** Contact with dust may cause burns and/or mechanical irritation.

#### Symptoms related to the physical, chemical and toxicological characteristics

This product becomes extremely hot when mixed with water. Do not use this material to produce a cast with intent to enclose any body part. Continued and prolonged contact may result in serious burns or dry skin. Contact with dust may produce itching, rash and/or redness. Repeated or prolonged exposure may result in dermatitis.

Due to its alkalinity, material may also cause severe irritation and/or burns to the eyes and digestive system if ingested.

Acute exposure to airborne dust concentrations in excess of the PEL/TLV may result in coughing, dyspnea, wheezing, and a burning irritation of the nose, throat, and upper respiratory tract, along with possible impaired pulmonary function. Chronic exposure to crystalline silica (a naturally occurring contaminant) in the respirable size has been shown to cause silicosis, a debilitating lung disease, and lung cancer.

### Section 11: Toxicological Information (Continued)

#### Toxicological data

No toxicological data is available for this product. Toxicological information for components of this product listed below.

<b>Acute toxicity</b>	Plaster of Paris: Oral LD50 (rat): >5000 mg/kg
<b>Skin corrosion/irritation</b>	Not available
<b>Serious eye damage/eye irritation</b>	Not available
<b>Skin sensitization</b>	Not available
<b>Respiratory sensitization</b>	Not available
<b>Sensitization</b>	Not available
<b>Mutagenicity</b>	Plaster of Paris: No evidence of mutagenicity on Ames Test.
<b>Carcinogenicity</b>	Not available

This product contains crystalline silica (quartz) as a naturally occurring impurity in some of the raw materials. The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen.

Exposures to respirable crystalline silica are not expected during the recommended use of this product. Industrial hygiene monitoring to date has not identified any detectable respirable crystalline silica in dust sampling conducted utilizing recommended application procedures. However, actual levels must be determined by workplace hygiene testing.

<b>Reproductive effects</b>	Not available
<b>Specific target organ toxicity – single exposure</b>	Not available
<b>Aspiration toxicity</b>	Not available

### Section 12: Ecological Information

**(a) Ecotoxicity (aquatic and terrestrial, where available):** This product could be toxic to fish due to its high alkalinity.

**(b) Persistence and degradability:** Unknown

**(c) Bioaccumulative potential:** Gypsum is a naturally occurring mineral. Biodegradation and/or bioaccumulation potential is not applicable.

**(d) Mobility in soil:** Unknown

**(e) Other adverse effects (such as hazardous to the ozone layer):** None known

### Section 13: Disposal Considerations

This material is not considered a hazardous waste. Dispose of according to Local, State, Federal, and Provincial Environmental Regulations.

### Section 14: Transport Information

This product is not a DOT hazardous material

Shipping Name: Same as product name

ICAO/IATA/IMO: Not applicable

### Section 15: Regulatory Information

All ingredients are included on the TSCA inventory.

#### Federal Regulations

**SARA Title III:** Not listed under Sections 302, 304, and 313

**CERCLA:** Not listed

**RCRA:** Not listed

**OSHA:** Dust and potential respirable crystalline silica generated during product use may be hazardous.

**State Regulations**

California Prop 65: Respirable crystalline silica is known to the state of California to cause cancer. Industrial hygiene monitoring during recommended use of this product failed to identify any respirable crystalline silica.

**Canada WHMIS**

All components of this product are included in the Canadian Domestic Substances List (DSL).

Crystalline silica: WHMIS Classification D2A

**Section 16: Other Information**

**SDS Prepared by:** National Gypsum Company

2001 Rexford Road  
Charlotte, NC 28211

**Phone Number:** (704) 551-5820

**Date of Preparation:** March 20, 2015

**Revision indicators and Date**

Effective Date Change: 6/1/2015 Supersedes: July 1, 2009

Format Changes: Conforms to OSHA 29CFR 1910.1200 (HCS)

**Key to Abbreviations**

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Services Number
CFR	Code of Federal Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
HEPA	High Efficiency Particulate Air
HCS	Hazard Communications Standard
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This safety data sheet was prepared to comply with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Disclaimer of Liability:**

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## 1. Identification

<b>Product identifier</b>	<b>USG® Plaster Bonding Agent Clear</b>
<b>Other means of identification</b>	
<b>SDS number</b>	53000020004
<b>Synonyms</b>	Sealer
<b>Recommended use</b>	Interior use.
<b>Recommended restrictions</b>	Use in accordance with manufacturer's recommendations.

### Manufacturer / Importer / Supplier / Distributor information

<b>Company name</b>	United States Gypsum Company
<b>Address</b>	550 West Adams Street Chicago, Illinois 60661-3637
<b>Telephone</b>	1-800-874-4968
<b>Website</b>	www.usg.com
<b>Emergency phone number</b>	1-800-507-8899

## 2. Hazard(s) identification

<b>Physical hazards</b>	Not classified.	
<b>Health hazards</b>	Sensitization, skin	Category 1
	Reproductive toxicity (oral)	Category 1B
	Specific target organ toxicity, repeated exposure (oral)	Category 2 (Kidney)
<b>OSHA defined hazards</b>	Not classified.	


### Label elements



<b>Signal word</b>	Danger
<b>Hazard statement</b>	May cause an allergic skin reaction. May damage fertility or the unborn child. May cause damage to organs (Kidney) through prolonged or repeated exposure.
<b>Precautionary statement</b>	
<b>Prevention</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe mist/vapors/spray.
<b>Response</b>	If exposed or concerned: Get medical advice/attention. If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
<b>Storage</b>	Store locked up.
<b>Disposal</b>	Dispose of in accordance with local, state, and federal regulations.
<b>Hazard(s) not otherwise classified (HNOC)</b>	Not classified.

<b>Environmental hazards</b>	Hazardous to the aquatic environment, acute hazard	Category 2
	Hazardous to the aquatic environment, long-term hazard	Category 2

### Supplemental information

<b>Hazard symbol</b>	
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<b>Hazard statement</b>	Toxic to aquatic life with long lasting effects.
<b>Precautionary statement</b>	
<b>Prevention</b>	Avoid release to the environment.

### 3. Composition/information on ingredients

#### Mixtures

Chemical name	CAS number	%
Benzyl butyl phthalate	85-68-7	< 5
Ethylene glycol	107-21-1	< 3
5-Chloro-2-methyl-2H-isothiazol-3-one	26172-55-4	< 0.005

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

### 4. First-aid measures

<b>Inhalation</b>	Exposure to mists may cause temporary irritation to eyes, skin, nose, throat, and upper respiratory tract. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.
<b>Skin contact</b>	Rinse area with plenty of water. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Do not rub eyes. Flush thoroughly with water. If burning, redness, itching, pain, or other symptoms develop or persist get medical attention.
<b>Ingestion</b>	Rinse mouth. Get medical attention if any discomfort occurs.
<b>Most important symptoms/effects, acute and delayed</b>	Under normal conditions of intended use, this product is not expected to be a health risk. Overexposure is highly unlikely at concentrations present in this product.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved.

### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	Not applicable.
<b>Specific hazards arising from the chemical</b>	Not a fire hazard.
<b>Special protective equipment and precautions for firefighters</b>	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>Specific methods</b>	Cool material exposed to heat with water spray and remove it if no risk is involved.

### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	See Section 8 of the SDS for Personal Protective Equipment.
<b>Methods and materials for containment and cleaning up</b>	Prevent entry into confined areas or water systems. Dilute with water and mop or wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Dispose of waste according to local regulations.
<b>Environmental precautions</b>	Avoid discharge to drains, sewers, and other water systems.

### 7. Handling and storage

<b>Precautions for safe handling</b>	Minimize exposure to mists. In case of insufficient ventilation, wear suitable respiratory equipment. Observe good industrial hygiene practices. Use proper lifting techniques.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in a cool, dry place. Store in a closed container away from incompatible materials, food, or drinking water. Protect from moisture. Keep away from heat. Do not use if material has spoiled, i.e., there is a moldy appearance or an unpleasant odor. Keep containers closed when not in use.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Ethylene glycol (CAS 107-21-1)	Ceiling	100 mg/m3	Aerosol.

#### Biological limit values

No biological exposure limits noted for the ingredient(s).

#### Exposure guidelines

No exposure standards allocated.

#### Appropriate engineering controls

Provide sufficient ventilation for operations causing mist formation. Observe occupational exposure limits and minimize the risk of exposure.

#### Individual protection measures, such as personal protective equipment

##### Eye/face protection

Wear approved safety goggles.

##### Skin protection

##### Hand protection

It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

##### Other

Normal work clothing (long sleeved shirts and long pants) is recommended.

##### Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.

##### Thermal hazards

None.

#### General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Observe any medical surveillance requirements.

## 9. Physical and chemical properties

### Appearance

#### Physical state

Liquid.

#### Form

Acrylic emulsion.

#### Color

Gray to off-white.

#### Odor

Slight acrylic.

#### Odor threshold

Not applicable.

#### pH

8.5 - 9.5

#### Melting point/freezing point

32 °F (0 °C)

#### Initial boiling point and boiling range

212 °F (100 °C)

#### Flash point

Not applicable.

#### Evaporation rate

Not applicable.

#### Flammability (solid, gas)

Not applicable.

#### Upper/lower flammability or explosive limits

##### Flammability limit - lower (%)

Not applicable.

##### Flammability limit - upper (%)

Not applicable.

##### Explosive limit - lower (%)

Not applicable.

##### Explosive limit - upper (%)

Not applicable.

#### Vapor pressure

Not applicable.

#### Vapor density

Same as water.

#### Relative density

1 - 1.2 (H<sub>2</sub>O=1)

#### Solubility(ies)

Soluble in water.

#### Partition coefficient (n-octanol/water)

Not applicable.



<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition temperature</b>	Not applicable.
<b>Viscosity</b>	Not applicable.
<b>Other information</b>	
<b>Bulk density</b>	7.8 - 8.5 lb/gal
<b>VOC (Weight %)</b>	39.7 g/l (EPA Method 24)

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non reactive under normal conditions of storage and transport.
<b>Chemical stability</b>	Stable at normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	None known.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	May cause discomfort if swallowed.
<b>Inhalation</b>	Spray mist may irritate the respiratory system.
<b>Skin contact</b>	May cause an allergic skin reaction after a single exposure. Prolonged or repeated skin contact may cause irritation and/or sensitization.
<b>Eye contact</b>	Direct contact with eyes may cause temporary irritation.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Irritation of eyes and mucous membranes. Skin irritation.

### Information on toxicological effects

<b>Acute toxicity</b>	Low hazard for usual industrial or commercial handling by trained personnel.
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Components	Species	Test Results
Benzyl butyl phthalate (CAS 85-68-7)		
Acute		
Dermal		
LD50	Rat	6700 mg/kg
Oral		
LD50	Rat	2330 mg/kg
Ethylene glycol (CAS 107-21-1)		
Acute		
Dermal		
LD50	Rabbit	9530 mg/kg
Oral		
LD50	Rat	6140 mg/kg
Skin corrosion/irritation	Prolonged or repeated skin contact may cause irritation.	
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.	
Respiratory sensitization	Not classified but possible due to skin sensitization effect.	
Skin sensitization	May cause an allergic skin reaction after a single exposure or with repeated or prolonged skin contact.	
Germ cell mutagenicity	Not mutagenic in bacterial or mammalian systems.	
Carcinogenicity	This product is not classified as a carcinogen.	
IARC Monographs. Overall Evaluation of Carcinogenicity		
Benzyl butyl phthalate (CAS 85-68-7)	3 Not classifiable as to carcinogenicity to humans.	
Reproductive toxicity	May damage fertility or the unborn child.	
Specific target organ toxicity - single exposure	No data available, but none expected.	

<b>Specific target organ toxicity - repeated exposure</b>	May cause damage to organs (Kidney) through prolonged or repeated exposure.
<b>Aspiration hazard</b>	Not classified.
<b>Chronic effects</b>	Prolonged exposure may cause chronic effects.

## 12. Ecological information

<b>Ecotoxicity</b>	The product contains a substance which is very toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.
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Components		Species	Test Results
Benzyl butyl phthalate (CAS 85-68-7)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	> 0.96 mg/l, 48 hours
Fish	LC50	Sheepshead minnow (Cyprinodon variegatus)	> 0.68 mg/l, 96 hours
Ethylene glycol (CAS 107-21-1)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	8050 mg/l, 96 hours

<b>Persistence and degradability</b>	No data available.
<b>Bioaccumulative potential</b>	No data available for this product.

<b>Partition coefficient n-octanol / water (log Kow)</b>	
Ethylene glycol (CAS 107-21-1)	-1.36
Benzyl butyl phthalate (CAS 85-68-7)	4.91

<b>Mobility in soil</b>	Not available.
<b>Other adverse effects</b>	None expected.

## 13. Disposal considerations

<b>Disposal instructions</b>	Dispose waste and residues in accordance with applicable federal, state, and local regulations. Avoid discharge into water courses or onto the ground.
<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Since emptied containers retain product residue, follow label warnings even after container is emptied.

## 14. Transport information

<b>DOT</b>	
<b>UN number</b>	UN3082
<b>UN proper shipping name</b>	Environmentally hazardous substances, liquid, n.o.s. (Benzyl butyl phthalate RQ = 2016 lbs)
<b>Transport hazard class(es)</b>	9
<b>Subsidiary class(es)</b>	-
<b>Packing group</b>	III
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Special provisions</b>	8, 146, 335, IB3, T4, TP1, TP29
<b>Packaging exceptions</b>	155
<b>Packaging non bulk</b>	203
<b>Packaging bulk</b>	241

<b>IATA</b>	
<b>UN number</b>	UN3082
<b>UN proper shipping name</b>	Environmentally hazardous substance, liquid, n.o.s. (Benzyl butyl phthalate)
<b>Transport hazard class(es)</b>	9
<b>Subsidiary class(es)</b>	-
<b>Packaging group</b>	III
<b>Environmental hazards</b>	Yes
<b>Labels required</b>	9
<b>ERG Code</b>	9L
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

<b>IMDG</b>	
<b>UN number</b>	UN3082
<b>UN proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Benzyl butyl phthalate)

**Transport hazard class(es)** 9  
**Subsidiary class(es)** -  
**Packaging group** III  
**Environmental hazards**  
**Marine pollutant** Yes  
**Labels required** 9  
**EmS** F-A, S-F  
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** This substance/mixture is not intended to be transported in bulk.

## 15. Regulatory information

**US federal regulations** This product is hazardous according to OSHA 29 CFR 1910.1200.

### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

5-Chloro-2-methyl-2H-isothiazol-3-one (CAS 26172-55-4) 1.0 % One-Time Export Notification only.

### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

### CERCLA Hazardous Substance List (40 CFR 302.4)

Benzyl butyl phthalate (CAS 85-68-7)	LISTED
Ethylene glycol (CAS 107-21-1)	LISTED

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories**  
 Immediate Hazard - Yes  
 Delayed Hazard - Yes  
 Fire Hazard - No  
 Pressure Hazard - No  
 Reactivity Hazard - No

**SARA 302 Extremely hazardous substance** No

**SARA 311/312 Hazardous chemical** Yes

### SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Ethylene glycol	107-21-1	< 3

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Ethylene glycol (CAS 107-21-1)

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

**Food and Drug Administration (FDA)** Not regulated.

### US state regulations

#### US. Massachusetts RTK - Substance List

Benzyl butyl phthalate (CAS 85-68-7)  
 Ethylene glycol (CAS 107-21-1)

#### US. New Jersey Worker and Community Right-to-Know Act

Benzyl butyl phthalate (CAS 85-68-7)	500 lbs
Ethylene glycol (CAS 107-21-1)	500 lbs

#### US. Pennsylvania RTK - Hazardous Substances

Benzyl butyl phthalate (CAS 85-68-7)  
 Ethylene glycol (CAS 107-21-1)

#### US. Rhode Island RTK

Benzyl butyl phthalate (CAS 85-68-7)  
 Ethylene glycol (CAS 107-21-1)

#### US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

#### US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Benzyl butyl phthalate (CAS 85-68-7)

## International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

**Issue date** 31-December-2013

**Revision date** -

**Version #** 01

**Further information** Vinyl acetic monomer, formaldehyde and acetaldehyde: Trace amounts of vinyl acetate monomer and formaldehyde may be found in this product. They are present as trace residuals in many common raw materials that are used to formulate joint compounds, and any emissions from them are expected to be well below ACGIH and OSHA occupational exposure limits.

NFPA Ratings:

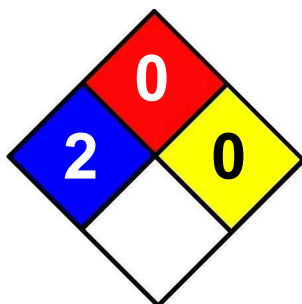
Health: 2

Flammability: 0

Physical hazard: 0

NFPA Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

### NFPA Ratings



### List of abbreviations

NFPA: National Fire Protection Association.

### Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.

## 1. Identification

**Product identifier** **DIAMOND® Veneer Basecoat Plaster**

**Other means of identification**

**SDS number** 53000010002

**Synonyms** Construction Plaster.

**Recommended use** Interior use.

**Recommended restrictions** Use in accordance with manufacturer's recommendations.

### Manufacturer / Importer / Supplier / Distributor information

**Company name** United States Gypsum Company

**Address** 550 West Adams Street  
Chicago, Illinois 60661-3637

**Telephone** 1-800-874-4968

**Website** www.usg.com

**Emergency phone number** 1-800-507-8899

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Carcinogenicity Category 1A

**OSHA defined hazards** Not classified.

### Label elements



**Signal word** Danger

**Hazard statement** May cause cancer.

**Precautionary statement**

**Prevention** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.

**Response** If exposed or concerned: Get medical advice/attention.

**Storage** Store locked up.

**Disposal** Dispose of in accordance with local, state, and federal regulations.

**Hazard(s) not otherwise classified (HNOC)** None known.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1)	26499-65-0	>50
Quartz (Sand)	14808-60-7	>40
Attapulgit	12174-11-7	<5

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas.

Raw materials in this product contain respirable crystalline silica as an impurity. The weight percent of respirable crystalline silica found in this product is <1.0%. Exposures to respirable crystalline silica during the normal use of this product must be determined by workplace hygiene testing.

## 4. First-aid measures

<b>Inhalation</b>	Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.
<b>Skin contact</b>	Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.
<b>Eye contact</b>	Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.
<b>Ingestion</b>	Plaster of Paris hardens and if ingested may result in stomach and intestinal blockage. Drinking gelatin solutions or large volumes of water may delay setting.
<b>Most important symptoms/effects, acute and delayed</b>	Under normal conditions of intended use, this product is not expected to be a health risk. Dust may irritate throat and respiratory system and cause coughing.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	Not applicable.
<b>Specific hazards arising from the chemical</b>	Not a fire hazard.
<b>Special protective equipment and precautions for firefighters</b>	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>Specific methods</b>	Cool material exposed to heat with water spray and remove it if no risk is involved.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	See Section 8 of the SDS for Personal Protective Equipment.
<b>Methods and materials for containment and cleaning up</b>	Vacuum up the spilled material. Vacuums used for this purpose should be equipped with HEPA filters. Containers must be labeled. Collect in approved containers and seal securely. For waste disposal, see Section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge to drains, sewers, and other water systems.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Minimize dust production when mixing, or opening and closing bags. Avoid inhalation of dust. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices and use appropriate lifting techniques.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Avoid contact with acids, water, and moisture.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	PEL	5 mg/m <sup>3</sup>	Respirable fraction.
		15 mg/m <sup>3</sup>	Total dust.

#### US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Quartz (Sand) (CAS 14808-60-7)	TWA	0.3 mg/m <sup>3</sup>	Total dust.
		0.1 mg/m <sup>3</sup>	Respirable.
		2.4 mppcf	Respirable.

## US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	10 mg/m3	Inhalable fraction.
Quartz (Sand) (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

## US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	5 mg/m3	Respirable.
Quartz (Sand) (CAS 14808-60-7)	TWA	10 mg/m3 0.05 mg/m3	Total Respirable dust.

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Appropriate engineering controls** Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear approved safety goggles.

#### Skin protection

**Hand protection** It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

**Other** Normal work clothing (long sleeved shirts and long pants) is recommended.

**Respiratory protection** If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.

**Thermal hazards** None.

**General hygiene considerations** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash. Observe any medical surveillance requirements.

## 9. Physical and chemical properties

### Appearance

**Physical state** Solid.  
**Form** Powder.  
**Color** White to off-white.

**Odor** Low to no odor.

**Odor threshold** Not applicable.

**pH** 6 - 8

**Melting point/freezing point** Not applicable.

**Initial boiling point and boiling range** Not applicable.

**Flash point** Not applicable.

**Evaporation rate** Not applicable.

**Flammability (solid, gas)** Not applicable.

### Upper/lower flammability or explosive limits

**Flammability limit - lower (%)** Not applicable.

**Flammability limit - upper (%)** Not applicable.

**Explosive limit - lower (%)** Not applicable.

**Explosive limit - upper (%)** Not applicable.

<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	2.4 - 2.8 (H <sub>2</sub> O=1)
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	0.15-0.40 g/100g (H <sub>2</sub> O)
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition temperature</b>	2642 °F (1450 °C)
<b>Viscosity</b>	Not applicable.
<b>Other information</b>	
<b>Bulk density</b>	45 - 55 lb/ft <sup>3</sup> (dry)
<b>VOC (Weight %)</b>	0 %

## 10. Stability and reactivity

<b>Reactivity</b>	Not available.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	When mixed with water this product can become very hot. Encasing or making moulds of any body part can cause serious burns that may require surgical removal of affected tissue and even amputation of encased body part.
<b>Incompatible materials</b>	Acids. Exposure to water and acids must be supervised because the reactions are vigorous and produce large amounts of heat. Crystalline silica in contact with powerful oxidizing agents, such as fluorine, chlorine trifluoride and oxygen difluoride, may cause fires. Crystalline silica will dissolve in hydrofluoric acid and produce a corrosive gas, silicon tetrafluoride.
<b>Hazardous decomposition products</b>	Calcium oxides. Sulfur oxides. Silicon oxides.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	May cause discomfort if swallowed.
<b>Inhalation</b>	Inhalation of dusts may cause respiratory irritation. Prolonged and repeated exposure to airborne respirable crystalline silica can cause silicosis and/or lung cancer.
<b>Skin contact</b>	Under normal conditions of intended use, this product does not pose a skin hazard.
<b>Eye contact</b>	Direct contact with airborne particulates may cause temporary irritation.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Dust may irritate eyes and mucous membranes of the nose, throat and upper respiratory system causing sneezing and/or coughing.

### Information on toxicological effects

<b>Acute toxicity</b>	Not expected to be a hazard under normal conditions of intended use.
<b>Skin corrosion/irritation</b>	Prolonged or repeated skin contact may cause drying, cracking, or irritation.
<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.
<b>Skin sensitization</b>	Not a skin sensitizer. Plaster of Paris has displayed little sensitization potential.
<b>Germ cell mutagenicity</b>	Data does not suggest that this product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	Repeated and prolonged exposure to high levels of respirable crystalline silica may cause cancer.
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>	
Attapulgit (CAS 12174-11-7)	2B Possibly carcinogenic to humans. 3 Not classifiable as to carcinogenicity to humans.
Quartz (Sand) (CAS 14808-60-7)	1 Carcinogenic to humans.
<b>NTP Report on Carcinogens</b>	
Quartz (Sand) (CAS 14808-60-7)	Known To Be Human Carcinogen.
<b>Reproductive toxicity</b>	Not expected to be a reproductive hazard.
<b>Specific target organ toxicity - single exposure</b>	No data available, but none expected.



<b>Specific target organ toxicity - repeated exposure</b>	Not classified. For detailed information, see section 16.
<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.
<b>Chronic effects</b>	Prolonged and routine inhalation of high levels of respirable crystalline silica particles can lead to the lung disease known as silicosis. Some studies show excess numbers of cases of scleroderma, connective tissue disorders, lupus, rheumatoid arthritis, chronic kidney diseases and end-stage kidney disease in workers exposed to respirable crystalline silica. Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

## 12. Ecological information

<b>Ecotoxicity</b>	The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
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Components	Species	Test Results
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours
<b>Persistence and degradability</b>	Calcium sulfate dissolves in water forming calcium and sulfate ions.	
<b>Bioaccumulative potential</b>	Bioaccumulation is not expected.	
<b>Mobility in soil</b>	No data available.	
<b>Other adverse effects</b>	None expected.	

## 13. Disposal considerations

<b>Disposal instructions</b>	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.
<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.

## 14. Transport information

### DOT

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

## 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories** Immediate Hazard - No  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312 Hazardous chemical** Yes

**SARA 313 (TRI reporting)**

Not regulated.

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)**

Not regulated.

**US state regulations****US. Massachusetts RTK - Substance List**

Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

Quartz (Sand) (CAS 14808-60-7)

**US. New Jersey Worker and Community Right-to-Know Act**

Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

Quartz (Sand) (CAS 14808-60-7)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

Quartz (Sand) (CAS 14808-60-7)

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

WARNING: This product contains a chemical known to the State of California to cause cancer.

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Attapulgit (CAS 12174-11-7)

Quartz (Sand) (CAS 14808-60-7)

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision****Issue date** 24-January-2014**Revision date** -**Version #** 01

**Further information** Crystalline silica: Raw materials in this product may contain respirable crystalline silica. Exposures to respirable crystalline silica are not expected during the normal use of this product. However, actual levels must be determined by workplace hygiene testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.

Attapulgit: Carcinogenic to experimental animals via a route of exposure not relevant to human exposure.

Plaster of Paris: Is classified as a hazardous substance but is generally considered a safe material for routine use. When plaster of Paris is used responsibly it is not considered as a dangerous material. However, when mixed with water this product can become very hot. DO NOT attempt to make a cast enclosing any part of the body. Encasing any body part can cause serious burns and even amputation of the encased body part.

NFPA Ratings:

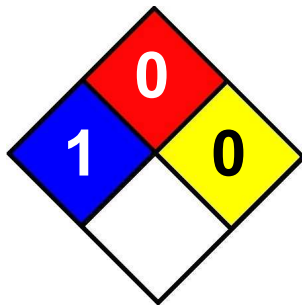
Health: 1

Flammability: 0

Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

## NFPA Ratings



## Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** DIAMOND® Veneer Finish Plaster

**Other means of identification**

**SDS number** 53000010003

**Synonyms** Construction Plaster.

**Recommended use** Interior use.

**Recommended restrictions** Use in accordance with manufacturer's recommendations.

### Manufacturer / Importer / Supplier / Distributor information

**Company name** United States Gypsum Company

**Address** 550 West Adams Street  
Chicago, Illinois 60661-3637

**Telephone** 1-800-874-4968

**Website** www.usg.com

**Emergency phone number** 1-800-507-8899

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards**

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 1A
Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation
Specific target organ toxicity, repeated exposure (inhalation)	Category 2 (Lung)

**OSHA defined hazards** Not classified.

### Label elements



**Signal word** Danger

**Hazard statement** Causes skin irritation. Causes serious eye damage. May cause respiratory irritation. May cause cancer. May cause damage to organs (Lung) through prolonged or repeated exposure.

### Precautionary statement

**Prevention** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling.

**Response** If exposed or concerned: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. If on skin: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor.

**Storage** Store in a well-ventilated place. Keep container tightly closed. Store locked up.

**Disposal** Dispose of in accordance with local, state, and federal regulations.

**Hazard(s) not otherwise classified (HNOC)** None known.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1)	26499-65-0	> 80

Dolomitic hydroxide	39445-23-3	< 20
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#### Impurities

Chemical name	CAS number	%
Crystalline silica (Quartz)	14808-60-7	< 1.5

#### Composition comments

All concentrations are in percent by weight unless ingredient is a gas.

Raw materials in this product contain respirable crystalline silica as an impurity. The weight percent of respirable crystalline silica found in this product is <1.5%. Exposures to respirable crystalline silica during the normal use of this product must be determined by workplace hygiene testing.

## 4. First-aid measures

#### Inhalation

Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

#### Skin contact

Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

#### Eye contact

Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical attention immediately.

#### Ingestion

Plaster of Paris hardens and if ingested may result in stomach and intestinal blockage. Drinking gelatin solutions or large volumes of water may delay setting. Get medical attention if symptoms occur.

#### Most important symptoms/effects, acute and delayed

Skin irritation. Severe eye irritation. Permanent eye damage including blindness could result. Dust may irritate throat and respiratory system and cause coughing.

#### Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically.

#### General information

Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

#### Suitable extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

#### Unsuitable extinguishing media

Not applicable.

#### Specific hazards arising from the chemical

Not a fire hazard.

#### Special protective equipment and precautions for firefighters

Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

#### Fire-fighting equipment/instructions

Use standard firefighting procedures and consider the hazards of other involved materials.

#### Specific methods

Cool material exposed to heat with water spray and remove it if no risk is involved.

## 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

See Section 8 of the SDS for Personal Protective Equipment.

#### Methods and materials for containment and cleaning up

Vacuum up the spilled material. Vacuums used for this purpose should be equipped with HEPA filters. Containers must be labeled. Collect in approved containers and seal securely. For waste disposal, see Section 13 of the SDS.

#### Environmental precautions

Avoid discharge to drains, sewers, and other water systems.

## 7. Handling and storage

#### Precautions for safe handling

Minimize dust production when mixing, or opening and closing bags. Avoid inhalation of dust. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices and use appropriate lifting techniques.

#### Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Avoid contact with acids, water, and moisture.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

#### US. OSHA Table Z-3 (29 CFR 1910.1000)

Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.3 mg/m3	Total dust.
		0.1 mg/m3	Respirable.
		2.4 mppcf	Respirable.

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	10 mg/m3	Inhalable fraction.
Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.

#### Biological limit values

No biological exposure limits noted for the ingredient(s).

#### Appropriate engineering controls

Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

#### Individual protection measures, such as personal protective equipment

##### Eye/face protection

Wear approved safety goggles.

##### Skin protection

##### Hand protection

Wear protective gloves.

##### Other

Normal work clothing (long sleeved shirts and long pants) is recommended.

##### Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.

##### Thermal hazards

None.

#### General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash. Observe any medical surveillance requirements.

## 9. Physical and chemical properties

### Appearance

Physical state	Solid.
Form	Powder.
Color	White to off-white.

<b>Odor</b>	Low to no odor.
<b>Odor threshold</b>	Not applicable.
<b>pH</b>	12
<b>Melting point/freezing point</b>	Not applicable.
<b>Initial boiling point and boiling range</b>	Not applicable.
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not applicable.
<b>Flammability limit - upper (%)</b>	Not applicable.
<b>Explosive limit - lower (%)</b>	Not applicable.
<b>Explosive limit - upper (%)</b>	Not applicable.
<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	2.4 - 2.8 (H <sub>2</sub> O=1)
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	0.15-0.40 g/100g (H <sub>2</sub> O)
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition temperature</b>	2642 °F (1450 °C)
<b>Viscosity</b>	Not applicable.
<b>Other information</b>	
<b>Bulk density</b>	45 - 55 lb/ft <sup>3</sup>
<b>VOC (Weight %)</b>	0 %

## 10. Stability and reactivity

<b>Reactivity</b>	Not available.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Contact with incompatible materials. Exposure to moisture. When mixed with water this product can become very hot. Encasing or making moulds of any body part can cause serious burns that may require surgical removal of affected tissue and even amputation of encased body part.
<b>Incompatible materials</b>	Acids. Exposure to water and acids must be supervised because the reactions are vigorous and produce large amounts of heat. Crystalline silica in contact with powerful oxidizing agents, such as fluorine, chlorine trifluoride and oxygen difluoride, may cause fires. Crystalline silica will dissolve in hydrofluoric acid and produce a corrosive gas, silicon tetrafluoride.
<b>Hazardous decomposition products</b>	Calcium oxides. Sulfur oxides. Magnesium oxides.

## 11. Toxicological information

<b>Information on likely routes of exposure</b>	
<b>Ingestion</b>	May cause burns to mouth, throat and stomach.
<b>Inhalation</b>	Inhalation of dusts may cause severe respiratory tract irritation. Prolonged and repeated exposure to airborne respirable crystalline silica can cause silicosis and/or lung cancer.
<b>Skin contact</b>	Causes severe skin irritation and burning, especially in the presence of moisture.
<b>Eye contact</b>	Causes severe irritation and burning of the eyes, may cause permanent damage.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Skin irritation. Irritation of eyes and mucous membranes. Irritation of nose and throat. Dust may irritate throat and respiratory system and cause coughing.
<b>Information on toxicological effects</b>	
<b>Acute toxicity</b>	Contact may cause serious skin and eye damage that can be permanent; ingestion can cause burns in mouth, esophagus and stomach.

<b>Skin corrosion/irritation</b>	Causes severe skin irritation or burns that may be irreversible.
<b>Serious eye damage/eye irritation</b>	Can cause severe eye damage that may be irreversible.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.
<b>Skin sensitization</b>	Not a skin sensitizer. Plaster of Paris has displayed little sensitization potential.
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	Repeated and prolonged exposures to high levels of respirable crystalline silica may cause cancer.
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>	
Crystalline silica (Quartz) (CAS 14808-60-7)	1 Carcinogenic to humans.
<b>NTP Report on Carcinogens</b>	
Crystalline silica (Quartz) (CAS 14808-60-7)	Known To Be Human Carcinogen.
<b>Reproductive toxicity</b>	Not expected to be a reproductive hazard.
<b>Specific target organ toxicity - single exposure</b>	May cause respiratory irritation.
<b>Specific target organ toxicity - repeated exposure</b>	May damage lung tissue through repeated and prolonged exposure to high levels of respirable crystalline silica particles.
<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.
<b>Chronic effects</b>	Prolonged and routine inhalation of high levels of respirable crystalline silica particles can lead to the lung disease known as silicosis. Some studies show excess numbers of cases of scleroderma, connective tissue disorders, lupus, rheumatoid arthritis, chronic kidney diseases and end-stage kidney disease in workers exposed to respirable crystalline silica. Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

## 12. Ecological information

<b>Ecotoxicity</b>	The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
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Components	Species	Test Results
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours
<b>Persistence and degradability</b>	Calcium sulfate dissolves in water forming calcium and sulfate ions.	
<b>Bioaccumulative potential</b>	Bioaccumulation is not expected.	
<b>Mobility in soil</b>	No data available.	
<b>Other adverse effects</b>	None expected.	

## 13. Disposal considerations

<b>Disposal instructions</b>	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.
<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.

## 14. Transport information

<b>DOT</b>	Not regulated as dangerous goods.
<b>IATA</b>	Not regulated as dangerous goods.
<b>IMDG</b>	Not regulated as dangerous goods.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable.



## 15. Regulatory information

### US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

#### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### Hazard categories

Immediate Hazard - Yes  
Delayed Hazard - Yes  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

#### SARA 302 Extremely hazardous substance

Not listed.

#### SARA 311/312 Hazardous chemical

Yes

#### SARA 313 (TRI reporting)

Not regulated.

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

#### Safe Drinking Water Act (SDWA)

Not regulated.

### US state regulations

#### US. Massachusetts RTK - Substance List

Crystalline silica (Quartz) (CAS 14808-60-7)

Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

#### US. New Jersey Worker and Community Right-to-Know Act

Crystalline silica (Quartz) (CAS 14808-60-7)

Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

#### US. Pennsylvania Worker and Community Right-to-Know Law

Crystalline silica (Quartz) (CAS 14808-60-7)

Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

#### US. Rhode Island RTK

Not regulated.

#### US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

#### US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Crystalline silica (Quartz) (CAS 14808-60-7)

### International Inventories

#### Country(s) or region

#### Inventory name

#### On inventory (yes/no)\*

United States & Puerto Rico

Toxic Substances Control Act (TSCA) Inventory

Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

#### Issue date

03-February-2014

#### Revision date

-

#### Version #

01

## Further information

Crystalline silica: Raw materials in this product may contain respirable crystalline silica. Actual levels must be determined by workplace hygiene testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.

Plaster of Paris: Is classified as a hazardous substance but is generally considered a safe material for routine use. When plaster of Paris is used responsibly it is not considered as a dangerous material. However, when mixed with water this product can become very hot. DO NOT attempt to make a cast enclosing any part of the body. Encasing any body part can cause serious burns and even amputation of the encased body part.

The burns caused by the caustic nature of this product may be delayed and painless at the time of contact.

NFPA Ratings:

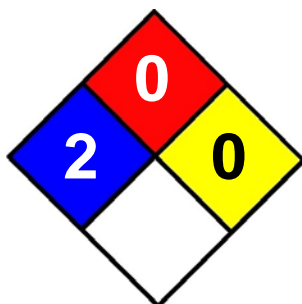
Health: 2

Flammability: 0

Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

## NFPA Ratings



## Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** IMPERIAL® Veneer Basecoat

**Other means of identification**

**SDS number** 53000010025

**Recommended use** Interior use.

**Recommended restrictions** Use in accordance with manufacturer's recommendations.

### Manufacturer/Importer/Supplier/Distributor information

**Company name** United States Gypsum Company

**Address** 550 West Adams Street  
Chicago, Illinois 60661-3637

**Telephone** 1-800-874-4968

**Website** www.usg.com

**Emergency phone number** 1-800-507-8899

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Carcinogenicity Category 1A

**OSHA defined hazards** Not classified.

### Label elements



**Signal word** Danger

**Hazard statement** May cause cancer.

### Precautionary statement

**Prevention** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection.

**Response** If exposed or concerned: Get medical advice/attention.

**Storage** Store locked up.

**Disposal** Dispose of in accordance with local, state, and federal regulations.

**Hazard(s) not otherwise classified (HNOC)** None known.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1)	26499-65-0	> 50
Quartz (Sand)	14808-60-7	< 50

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas.

Raw materials in this product contain respirable crystalline silica as an impurity. The weight percent of respirable crystalline silica found in this product is < 0.25%. Exposures to respirable crystalline silica during the normal use of this product must be determined by workplace hygiene testing.

## 4. First-aid measures

<b>Inhalation</b>	Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.
<b>Skin contact</b>	Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.
<b>Eye contact</b>	Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.
<b>Ingestion</b>	Plaster of Paris hardens and if ingested may result in stomach and intestinal blockage. Drinking gelatin solutions or large volumes of water may delay setting.
<b>Most important symptoms/effects, acute and delayed</b>	Under normal conditions of intended use, this product is not expected to be a health risk. Dust may irritate throat and respiratory system and cause coughing.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	Not applicable.
<b>Specific hazards arising from the chemical</b>	Not a fire hazard.
<b>Special protective equipment and precautions for firefighters</b>	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>Specific methods</b>	Cool material exposed to heat with water spray and remove it if no risk is involved.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	See Section 8 of the SDS for Personal Protective Equipment.
<b>Methods and materials for containment and cleaning up</b>	Vacuum up the spilled material. Vacuums used for this purpose should be equipped with HEPA filters. Containers must be labeled. Collect in approved containers and seal securely. For waste disposal, see Section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge to drains, sewers, and other water systems.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Minimize dust production when mixing, or opening and closing bags. Avoid inhalation of dust. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices and use appropriate lifting techniques.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Avoid contact with acids, water, and moisture.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	PEL	5 mg/m <sup>3</sup>	Respirable fraction.
		15 mg/m <sup>3</sup>	Total dust.

**US. OSHA Table Z-3 (29 CFR 1910.1000)**

Components	Type	Value	Form
Quartz (Sand) (CAS 14808-60-7)	TWA	0.3 mg/m3	Total dust.
		0.1 mg/m3	Respirable.
		2.4 mppcf	Respirable.

**US. ACGIH Threshold Limit Values**

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	10 mg/m3	Inhalable fraction.
Quartz (Sand) (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

**US. NIOSH: Pocket Guide to Chemical Hazards**

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	5 mg/m3	Respirable.
Quartz (Sand) (CAS 14808-60-7)	TWA	10 mg/m3 0.05 mg/m3	Total Respirable dust.

<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Appropriate engineering controls</b>	Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Wear approved safety goggles.
<b>Skin protection</b>	
<b>Hand protection</b>	It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.
<b>Other</b>	Normal work clothing (long sleeved shirts and long pants) is recommended.
<b>Respiratory protection</b>	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.
<b>Thermal hazards</b>	None.
<b>General hygiene considerations</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash. Observe any medical surveillance requirements.

**9. Physical and chemical properties****Appearance**

<b>Physical state</b>	Solid.
<b>Form</b>	Powder.
<b>Color</b>	White to off-white.
<b>Odor</b>	Low to no odor.
<b>Odor threshold</b>	Not applicable.
<b>pH</b>	6 - 8
<b>Melting point/freezing point</b>	Not applicable.

	Not applicable.
<b>Initial boiling point and boiling range</b>	Not applicable.
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not applicable.
<b>Flammability limit - upper (%)</b>	Not applicable.
<b>Explosive limit - lower (%)</b>	Not applicable.
<b>Explosive limit - upper (%)</b>	Not applicable.
<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	2.4 - 2.8 (H <sub>2</sub> O=1)
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	0.15 - 0.4 g/100 g (H <sub>2</sub> O)
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition temperature</b>	2642 °F (1450 °C)
<b>Viscosity</b>	Not applicable.
<b>Other information</b>	
<b>Bulk density</b>	45 - 55 lb/ft <sup>3</sup>
<b>Particle size</b>	Varies.
<b>VOC (Weight %)</b>	0 %

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	When mixed with water this product can become very hot. Encasing or making moulds of any body part can cause serious burns that may require surgical removal of affected tissue and even amputation of encased body part.
<b>Incompatible materials</b>	Acids. Exposure to water and acids must be supervised because the reactions are vigorous and produce large amounts of heat. Crystalline silica in contact with powerful oxidizing agents, such as fluorine, chlorine trifluoride and oxygen difluoride, may cause fires. Crystalline silica will dissolve in hydrofluoric acid and produce a corrosive gas, silicon tetrafluoride.
<b>Hazardous decomposition products</b>	Calcium oxides. Sulfur oxides.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	May cause discomfort if swallowed.
<b>Inhalation</b>	Inhalation of dusts may cause severe respiratory tract irritation. Prolonged and repeated exposure to airborne respirable crystalline silica can cause silicosis and/or lung cancer.
<b>Skin contact</b>	Under normal conditions of intended use, this product does not pose a skin hazard.
<b>Eye contact</b>	Direct contact with airborne particulates may cause temporary irritation.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Dust may irritate eyes and mucous membranes of the nose, throat and upper respiratory system causing sneezing and/or coughing.

### Information on toxicological effects

<b>Acute toxicity</b>	Not expected to be a hazard under normal conditions of intended use.
<b>Skin corrosion/irritation</b>	Prolonged or repeated skin contact may cause drying, cracking, or irritation.
<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.
<b>Skin sensitization</b>	Not a skin sensitizer. Plaster of Paris has displayed little sensitization potential.
<b>Germ cell mutagenicity</b>	Data does not suggest that this product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	Repeated and prolonged exposure to high levels of respirable crystalline silica may cause cancer.
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>	
Quartz (Sand) (CAS 14808-60-7)	1 Carcinogenic to humans.
<b>NTP Report on Carcinogens</b>	
Quartz (Sand) (CAS 14808-60-7)	Known To Be Human Carcinogen.
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	
Not listed.	
<b>Reproductive toxicity</b>	Not expected to be a reproductive hazard.
<b>Specific target organ toxicity - single exposure</b>	No data available, but none expected.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified. For detailed information, see section 16.
<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.
<b>Chronic effects</b>	Prolonged and routine inhalation of high levels of respirable crystalline silica particles can lead to the lung disease known as silicosis. Some studies show excess numbers of cases of scleroderma, connective tissue disorders, lupus, rheumatoid arthritis, chronic kidney diseases and end-stage kidney disease in workers exposed to respirable crystalline silica. Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

## 12. Ecological information

<b>Ecotoxicity</b>	The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
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Components	Species	Test Results
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours
<b>Persistence and degradability</b>	Calcium sulfate dissolves in water forming calcium and sulfate ions.	
<b>Bioaccumulative potential</b>	Bioaccumulation is not expected.	
<b>Mobility in soil</b>	No data available.	
<b>Other adverse effects</b>	None expected.	

## 13. Disposal considerations

<b>Disposal instructions</b>	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.
<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.

## 14. Transport information

<b>DOT</b>	Not regulated as dangerous goods.
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## IATA

Not regulated as dangerous goods.

## IMDG

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

## 15. Regulatory information

### US federal regulations

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### Hazard categories

Immediate Hazard - No  
Delayed Hazard - Yes  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

#### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312 Hazardous chemical** Yes

#### SARA 313 (TRI reporting)

Not regulated.

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

### US state regulations

#### US. Massachusetts RTK - Substance List

Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)  
Quartz (Sand) (CAS 14808-60-7)

#### US. New Jersey Worker and Community Right-to-Know Act

Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)  
Quartz (Sand) (CAS 14808-60-7)

#### US. Pennsylvania Worker and Community Right-to-Know Law

Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)  
Quartz (Sand) (CAS 14808-60-7)

#### US. Rhode Island RTK

Not regulated.

#### US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

#### US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Quartz (Sand) (CAS 14808-60-7)



## International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

**Issue date** 17-July-2014

**Revision date** -

**Version #** 01

**Further information** Plaster of Paris: Is classified as a hazardous substance but is generally considered a safe material for routine use. When plaster of Paris is used responsibly it is not considered as a dangerous material. However, when mixed with water this product can become very hot. DO NOT attempt to make a cast enclosing any part of the body. Encasing any body part can cause serious burns and even amputation of the encased body part.

Crystalline silica: Raw materials in this product may contain respirable crystalline silica. Exposures to respirable crystalline silica are not expected during the normal use of this product. However, actual levels must be determined by workplace hygiene testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.

NFPA Ratings:

Health: 1

Flammability: 0

Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

### NFPA ratings



### Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.

## 1. Identification

<b>Product identifier</b>	<b>IMPERIAL® Veneer Finish</b>
<b>Other means of identification</b>	
<b>SDS number</b>	53000010006
<b>Synonyms</b>	Construction Plaster.
<b>Recommended use</b>	Interior use.
<b>Recommended restrictions</b>	Use in accordance with manufacturer's recommendations.

### Manufacturer/Importer/Supplier/Distributor information

<b>Company name</b>	United States Gypsum Company
<b>Address</b>	550 West Adams Street Chicago, Illinois 60661-3637
<b>Telephone</b>	1-800-874-4968
<b>Website</b>	www.usg.com
<b>Emergency phone number</b>	1-800-507-8899

## 2. Hazard(s) identification

<b>Physical hazards</b>	Not classified.	
<b>Health hazards</b>	Carcinogenicity	Category 1A
	Specific target organ toxicity, repeated exposure (inhalation)	Category 2 (Lung)
<b>OSHA defined hazards</b>	Not classified.	

### Label elements



<b>Signal word</b>	Danger
<b>Hazard statement</b>	May cause cancer. May cause damage to organs (Lung) through prolonged or repeated exposure.

### Precautionary statement

<b>Prevention</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust.
<b>Response</b>	If exposed or concerned: Get medical advice/attention.
<b>Storage</b>	Store locked up.
<b>Disposal</b>	Dispose of in accordance with local, state, and federal regulations.

**Hazard(s) not otherwise classified (HNOC)** None known.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1)	26499-65-0	> 65
Quartz (sand)	14808-60-7	< 35

### Impurities

Chemical name	CAS number	%
Crystalline silica (Quartz)	14808-60-7	< 3.5

## Composition comments

All concentrations are in percent by weight unless ingredient is a gas.

Raw materials in this product contain respirable crystalline silica as an impurity. The weight percent of respirable crystalline silica found in this product is < 3.5%. Exposures to respirable crystalline silica during the normal use of this product must be determined by workplace hygiene testing.

## 4. First-aid measures

### Inhalation

Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

### Skin contact

Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

### Eye contact

Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.

### Ingestion

Plaster of Paris hardens and if ingested may result in stomach and intestinal blockage. Drinking gelatin solutions or large volumes of water may delay setting.

### Most important symptoms/effects, acute and delayed

Under normal conditions of intended use, this product is not expected to be a health risk. Dust may irritate throat and respiratory system and cause coughing.

### Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically.

### General information

Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

### Suitable extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

### Unsuitable extinguishing media

Not applicable.

### Specific hazards arising from the chemical

Not a fire hazard.

### Special protective equipment and precautions for firefighters

Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

### Fire-fighting equipment/instructions

Use standard firefighting procedures and consider the hazards of other involved materials.

### Specific methods

Cool material exposed to heat with water spray and remove it if no risk is involved.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

See Section 8 of the SDS for Personal Protective Equipment.

### Methods and materials for containment and cleaning up

Vacuum up the spilled material. Vacuums used for this purpose should be equipped with HEPA filters. Containers must be labeled. Collect in approved containers and seal securely. For waste disposal, see Section 13 of the SDS.

### Environmental precautions

Avoid discharge to drains, sewers, and other water systems.

## 7. Handling and storage

### Precautions for safe handling

Minimize dust production when mixing, or opening and closing bags. Avoid inhalation of dust. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices and use appropriate lifting techniques.

### Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Avoid contact with acids, water, and moisture.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

**US. OSHA Table Z-3 (29 CFR 1910.1000)**

Components	Type	Value	Form
Quartz (sand) (CAS 14808-60-7)	TWA	0.3 mg/m3	Total dust.
		0.1 mg/m3	Respirable.
		2.4 mppcf	Respirable.
Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.3 mg/m3	Total dust.
		0.1 mg/m3	Respirable.
		2.4 mppcf	Respirable.

**US. ACGIH Threshold Limit Values**

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	10 mg/m3	Inhalable fraction.
Quartz (sand) (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

**US. NIOSH: Pocket Guide to Chemical Hazards**

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Quartz (sand) (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.
Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.

<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Appropriate engineering controls</b>	Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Wear approved safety goggles.
<b>Skin protection</b>	
<b>Hand protection</b>	It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.
<b>Other</b>	Normal work clothing (long sleeved shirts and long pants) is recommended.
<b>Respiratory protection</b>	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.
<b>Thermal hazards</b>	None.
<b>General hygiene considerations</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash. Observe any medical surveillance requirements.

**9. Physical and chemical properties****Appearance**

<b>Physical state</b>	Solid.
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<b>Form</b>	Powder.
<b>Color</b>	White to off-white.
<b>Odor</b>	Low to no odor.
<b>Odor threshold</b>	Not applicable.
<b>pH</b>	6 - 8
<b>Melting point/freezing point</b>	Not applicable.
<b>Initial boiling point and boiling range</b>	Not applicable.
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not applicable.
<b>Flammability limit - upper (%)</b>	Not applicable.
<b>Explosive limit - lower (%)</b>	Not applicable.
<b>Explosive limit - upper (%)</b>	Not applicable.
<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	2.4 - 2.8 (H <sub>2</sub> O=1)
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	0.15-0.40 g/100g (H <sub>2</sub> O)
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition temperature</b>	2642 °F (1450 °C)
<b>Viscosity</b>	Not applicable.
<b>Other information</b>	
<b>Bulk density</b>	45 - 55 lb/ft <sup>3</sup> (dry)
<b>VOC (Weight %)</b>	0 %

## 10. Stability and reactivity

<b>Reactivity</b>	Not available.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	When mixed with water this product can become very hot. Encasing or making moulds of any body part can cause serious burns that may require surgical removal of affected tissue and even amputation of encased body part.
<b>Incompatible materials</b>	Acids. Exposure to water and acids must be supervised because the reactions are vigorous and produce large amounts of heat. Crystalline silica in contact with powerful oxidizing agents, such as fluorine, chlorine trifluoride and oxygen difluoride, may cause fires. Crystalline silica will dissolve in hydrofluoric acid and produce a corrosive gas, silicon tetrafluoride.
<b>Hazardous decomposition products</b>	Calcium oxides. Sulfur oxides. Silicon oxides.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	May cause discomfort if swallowed.
<b>Inhalation</b>	Inhalation of dusts may cause respiratory irritation. Prolonged and repeated exposure to airborne respirable crystalline silica can cause silicosis and/or lung cancer.
<b>Skin contact</b>	Under normal conditions of intended use, this product does not pose a skin hazard.
<b>Eye contact</b>	Direct contact with airborne particulates may cause temporary irritation.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Dust may irritate eyes and mucous membranes of the nose, throat and upper respiratory system causing sneezing and/or coughing.

### Information on toxicological effects

<b>Acute toxicity</b>	Not expected to be a hazard under normal conditions of intended use.
<b>Skin corrosion/irritation</b>	Prolonged or repeated skin contact may cause drying, cracking, or irritation.
<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.
<b>Skin sensitization</b>	Not a skin sensitizer. Plaster of Paris has displayed little sensitization potential.
<b>Germ cell mutagenicity</b>	Data does not suggest that this product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	Repeated and prolonged exposure to high levels of respirable crystalline silica may cause cancer.
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>	
Crystalline silica (Quartz) (CAS 14808-60-7)	1 Carcinogenic to humans.
Quartz (sand) (CAS 14808-60-7)	1 Carcinogenic to humans.
<b>NTP Report on Carcinogens</b>	
Crystalline silica (Quartz) (CAS 14808-60-7)	Known To Be Human Carcinogen.
Quartz (sand) (CAS 14808-60-7)	Known To Be Human Carcinogen.
<b>Reproductive toxicity</b>	Not expected to be a reproductive hazard.
<b>Specific target organ toxicity - single exposure</b>	No data available, but none expected.
<b>Specific target organ toxicity - repeated exposure</b>	May damage lung tissue through repeated and prolonged exposure to high levels of respirable crystalline silica particles.
<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.
<b>Chronic effects</b>	Prolonged and routine inhalation of high levels of respirable crystalline silica particles can lead to the lung disease known as silicosis. Some studies show excess numbers of cases of scleroderma, connective tissue disorders, lupus, rheumatoid arthritis, chronic kidney diseases and end-stage kidney disease in workers exposed to respirable crystalline silica. Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

## 12. Ecological information

<b>Ecotoxicity</b>	The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
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Components	Species	Test Results
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours
<b>Persistence and degradability</b>	Calcium sulfate dissolves in water forming calcium and sulfate ions.	
<b>Bioaccumulative potential</b>	Bioaccumulation is not expected.	
<b>Mobility in soil</b>	No data available.	
<b>Other adverse effects</b>	None expected.	

## 13. Disposal considerations

<b>Disposal instructions</b>	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.
<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.

## 14. Transport information

<b>DOT</b>	Not regulated as dangerous goods.
<b>IATA</b>	Not regulated as dangerous goods.
<b>IMDG</b>	Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

## 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories** Immediate Hazard - Yes  
Delayed Hazard - Yes  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical** Yes

**SARA 313 (TRI reporting)**

Not regulated.

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

**US state regulations**

**US. Massachusetts RTK - Substance List**

Crystalline silica (Quartz) (CAS 14808-60-7)  
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)  
Quartz (sand) (CAS 14808-60-7)

**US. New Jersey Worker and Community Right-to-Know Act**

Crystalline silica (Quartz) (CAS 14808-60-7)  
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)  
Quartz (sand) (CAS 14808-60-7)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Crystalline silica (Quartz) (CAS 14808-60-7)  
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)  
Quartz (sand) (CAS 14808-60-7)

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

WARNING: This product contains a chemical known to the State of California to cause cancer.

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Crystalline silica (Quartz) (CAS 14808-60-7)  
Quartz (sand) (CAS 14808-60-7)

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

**Issue date** 16-April-2014

**Revision date** -

**Version #** 01

### Further information

Crystalline silica: Raw materials in this product may contain respirable crystalline silica. Exposures to respirable crystalline silica are not expected during the normal use of this product. However, actual levels must be determined by workplace hygiene testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.

Plaster of Paris: Is classified as a hazardous substance but is generally considered a safe material for routine use. When plaster of Paris is used responsibly it is not considered as a dangerous material. However, when mixed with water this product can become very hot. DO NOT attempt to make a cast enclosing any part of the body. Encasing any body part can cause serious burns and even amputation of the encased body part.

NFPA Ratings:

Health: 1

Flammability: 0

Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

### NFPA Ratings



### Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.





# SAFETY DATA SHEET

## 1. Identification

**Product identifier** RED TOP® Finish Plaster

**Other means of identification**

**SDS number** 53000010007

**Synonyms** Construction Plaster.

**Recommended use** Interior use.

**Recommended restrictions** Use in accordance with manufacturer's recommendations.

### Manufacturer / Importer / Supplier / Distributor information

**Company name** United States Gypsum Company

**Address** 550 West Adams Street  
Chicago, Illinois 60661-3637

**Telephone** 1-800-874-4968

**Website** www.usg.com

**Emergency phone number** 1-800-507-8899

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards**

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 1A
Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation

**OSHA defined hazards** Not classified.

### Label elements



**Signal word** Danger

**Hazard statement** Causes skin irritation. Causes serious eye damage. May cause respiratory irritation. May cause cancer.

### Precautionary statement

**Prevention** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling.

**Response** If exposed or concerned: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. If on skin: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor.

**Storage** Store in a well-ventilated place. Keep container tightly closed. Store locked up.

**Disposal** Dispose of in accordance with local, state, and federal regulations.

**Hazard(s) not otherwise classified (HNOC)** None known.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1)	26499-65-0	> 45
Dolomitic hydroxide	39445-23-3	< 50

## Impurities

Chemical name	CAS number	%
Crystalline silica (Quartz)	14808-60-7	< 1

### Composition comments

All concentrations are in percent by weight unless ingredient is a gas.

Raw materials in this product contain respirable crystalline silica as an impurity. The weight percent of respirable crystalline silica found in this product is <1.0%. Exposures to respirable crystalline silica during the normal use of this product must be determined by workplace hygiene testing.

## 4. First-aid measures

### Inhalation

Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

### Skin contact

Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

### Eye contact

Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical attention immediately.

### Ingestion

Plaster of Paris hardens and if ingested may result in stomach and intestinal blockage. Drinking gelatin solutions or large volumes of water may delay setting. Get medical attention if symptoms occur.

### Most important symptoms/effects, acute and delayed

Skin irritation. Severe eye irritation. Permanent eye damage including blindness could result. Dust may irritate throat and respiratory system and cause coughing.

### Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically.

### General information

Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

### Suitable extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

### Unsuitable extinguishing media

Not applicable.

### Specific hazards arising from the chemical

Not a fire hazard.

### Special protective equipment and precautions for firefighters

Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

### Fire-fighting equipment/instructions

Use standard firefighting procedures and consider the hazards of other involved materials.

### Specific methods

Cool material exposed to heat with water spray and remove it if no risk is involved.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

See Section 8 of the SDS for Personal Protective Equipment.

### Methods and materials for containment and cleaning up

Vacuum up the spilled material. Vacuums used for this purpose should be equipped with HEPA filters. Containers must be labeled. Collect in approved containers and seal securely. For waste disposal, see Section 13 of the SDS.

### Environmental precautions

Avoid discharge to drains, sewers, and other water systems.

## 7. Handling and storage

### Precautions for safe handling

Minimize dust production when mixing, or opening and closing bags. Avoid inhalation of dust. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices and use appropriate lifting techniques.

### Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Avoid contact with acids, water, and moisture.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

#### US. OSHA Table Z-3 (29 CFR 1910.1000)

Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.3 mg/m3	Total dust.
		0.1 mg/m3	Respirable.
		2.4 mppcf	Respirable.

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	10 mg/m3	Inhalable fraction.
Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.

#### Biological limit values

No biological exposure limits noted for the ingredient(s).

#### Appropriate engineering controls

Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

#### Individual protection measures, such as personal protective equipment

##### Eye/face protection

Wear approved safety goggles.

##### Skin protection

##### Hand protection

Wear protective gloves.

##### Other

Normal work clothing (long sleeved shirts and long pants) is recommended.

##### Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.

##### Thermal hazards

None.

#### General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash. Observe any medical surveillance requirements.

## 9. Physical and chemical properties

### Appearance

#### Physical state

Solid.

#### Form

Powder.

#### Color

White to off-white.

<b>Odor</b>	Low to no odor.
<b>Odor threshold</b>	Not applicable.
<b>pH</b>	12
<b>Melting point/freezing point</b>	Not applicable.
<b>Initial boiling point and boiling range</b>	Not applicable.
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not applicable.
<b>Flammability limit - upper (%)</b>	Not applicable.
<b>Explosive limit - lower (%)</b>	Not applicable.
<b>Explosive limit - upper (%)</b>	Not applicable.
<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	2.4 - 2.8 (H <sub>2</sub> O=1)
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	0.15-0.40 g/100g (H <sub>2</sub> O)
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition temperature</b>	2642 °F (1450 °C)
<b>Viscosity</b>	Not applicable.
<b>Other information</b>	
<b>Bulk density</b>	45 - 55 lb/ft <sup>3</sup>
<b>VOC (Weight %)</b>	0 %

## 10. Stability and reactivity

<b>Reactivity</b>	Not available.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Contact with incompatible materials. Exposure to moisture. When mixed with water this product can become very hot. Encasing or making moulds of any body part can cause serious burns that may require surgical removal of affected tissue and even amputation of encased body part.
<b>Incompatible materials</b>	Acids. Exposure to water and acids must be supervised because the reactions are vigorous and produce large amounts of heat. Crystalline silica in contact with powerful oxidizing agents, such as fluorine, chlorine trifluoride and oxygen difluoride, may cause fires. Crystalline silica will dissolve in hydrofluoric acid and produce a corrosive gas, silicon tetrafluoride.
<b>Hazardous decomposition products</b>	Calcium oxides. Sulfur oxides. Magnesium oxides.

## 11. Toxicological information

<b>Information on likely routes of exposure</b>	
<b>Ingestion</b>	May cause burns to mouth, throat and stomach.
<b>Inhalation</b>	Inhalation of dusts may cause severe respiratory tract irritation. Prolonged and repeated exposure to airborne respirable crystalline silica can cause silicosis and/or lung cancer.
<b>Skin contact</b>	Causes severe skin irritation and burning, especially in the presence of moisture.
<b>Eye contact</b>	Causes severe irritation and burning of the eyes, may cause permanent damage.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Skin irritation. Irritation of eyes and mucous membranes. Irritation of nose and throat. Dust may irritate throat and respiratory system and cause coughing.
<b>Information on toxicological effects</b>	
<b>Acute toxicity</b>	Contact may cause serious skin and eye damage that can be permanent; ingestion can cause burns in mouth, esophagus and stomach.

<b>Skin corrosion/irritation</b>	Causes severe skin irritation or burns that may be irreversible.
<b>Serious eye damage/eye irritation</b>	Can cause severe eye damage that may be irreversible.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.
<b>Skin sensitization</b>	Not a skin sensitizer. Plaster of Paris has displayed little sensitization potential.
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	Repeated and prolonged exposures to high levels of respirable crystalline silica may cause cancer.
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>	
Crystalline silica (Quartz) (CAS 14808-60-7)	1 Carcinogenic to humans.
<b>NTP Report on Carcinogens</b>	
Crystalline silica (Quartz) (CAS 14808-60-7)	Known To Be Human Carcinogen.
<b>Reproductive toxicity</b>	Not expected to be a reproductive hazard.
<b>Specific target organ toxicity - single exposure</b>	May cause respiratory irritation.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified. For detailed information, see section 16.
<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.
<b>Chronic effects</b>	Prolonged and routine inhalation of high levels of respirable crystalline silica particles can lead to the lung disease known as silicosis. Some studies show excess numbers of cases of scleroderma, connective tissue disorders, lupus, rheumatoid arthritis, chronic kidney diseases and end-stage kidney disease in workers exposed to respirable crystalline silica. Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

## 12. Ecological information

<b>Ecotoxicity</b>	The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
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Components	Species	Test Results
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours
<b>Persistence and degradability</b>	Calcium sulfate dissolves in water forming calcium and sulfate ions.	
<b>Bioaccumulative potential</b>	Bioaccumulation is not expected.	
<b>Mobility in soil</b>	No data available.	
<b>Other adverse effects</b>	None expected.	

## 13. Disposal considerations

<b>Disposal instructions</b>	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.
<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.

## 14. Transport information

<b>DOT</b>	Not regulated as dangerous goods.
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<b>IATA</b>	Not regulated as dangerous goods.
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<b>IMDG</b>	Not regulated as dangerous goods.
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<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable.
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## 15. Regulatory information

### US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

#### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### Hazard categories

Immediate Hazard - Yes  
Delayed Hazard - Yes  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

#### SARA 302 Extremely hazardous substance

Not listed.

#### SARA 311/312 Hazardous chemical

Yes

#### SARA 313 (TRI reporting)

Not regulated.

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

#### Safe Drinking Water Act (SDWA)

Not regulated.

### US state regulations

#### US. Massachusetts RTK - Substance List

Crystalline silica (Quartz) (CAS 14808-60-7)

Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

#### US. New Jersey Worker and Community Right-to-Know Act

Crystalline silica (Quartz) (CAS 14808-60-7)

Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

#### US. Pennsylvania Worker and Community Right-to-Know Law

Crystalline silica (Quartz) (CAS 14808-60-7)

Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

#### US. Rhode Island RTK

Not regulated.

#### US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

#### US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Crystalline silica (Quartz) (CAS 14808-60-7)

### International Inventories

#### Country(s) or region

#### Inventory name

#### On inventory (yes/no)\*

United States & Puerto Rico

Toxic Substances Control Act (TSCA) Inventory

Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

#### Issue date

03-February-2014

#### Revision date

-

#### Version #

01

## Further information

Crystalline silica: Raw materials in this product may contain respirable crystalline silica. Actual levels must be determined by workplace hygiene testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.

Plaster of Paris: Is classified as a hazardous substance but is generally considered a safe material for routine use. When plaster of Paris is used responsibly it is not considered as a dangerous material. However, when mixed with water this product can become very hot. DO NOT attempt to make a cast enclosing any part of the body. Encasing any body part can cause serious burns and even amputation of the encased body part.

The burns caused by the caustic nature of this product may be delayed and painless at the time of contact.

NFPA Ratings:

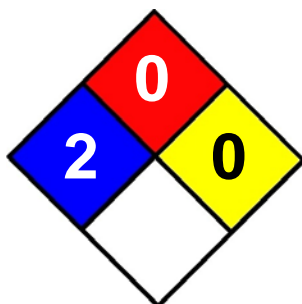
Health: 2

Flammability: 0

Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

## NFPA Ratings



## Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** RED TOP® Gauging Plaster - Perlite Aggregate

**Other means of identification**

**SDS number** 53000010008

**Recommended use** Interior use.

**Recommended restrictions** Use in accordance with manufacturer's recommendations.

### Manufacturer / Importer / Supplier / Distributor information

**Company name** United States Gypsum Company

**Address** 550 West Adams Street  
Chicago, Illinois 60661-3637

**Telephone** 1-800-874-4968

**Website** www.usg.com

**Emergency phone number** 1-800-507-8899

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Not classified.

**OSHA defined hazards** Not classified.

### Label elements

**Hazard symbol** None.

**Signal word** None.

**Hazard statement** None.

### Precautionary statement

**Prevention** Observe good industrial hygiene practices.

**Response** Get medical attention/advice if you feel unwell.

**Storage** Store as indicated in Section 7.

**Disposal** Dispose of in accordance with local, state, and federal regulations.

**Hazard(s) not otherwise classified (HNOC)** None known.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1)	26499-65-0	> 90
Perlite	93763-70-3	< 5

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas.

## 4. First-aid measures

**Inhalation** Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

**Skin contact** Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

**Eye contact** Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.

**Ingestion** Plaster of Paris hardens and if ingested may result in stomach and intestinal blockage. Drinking gelatin solutions or large volumes of water may delay setting.

**Most important symptoms/effects, acute and delayed** Under normal conditions of intended use, this product is not expected to be a health risk. Dust may irritate throat and respiratory system and cause coughing.



**Indication of immediate medical attention and special treatment needed**

Provide general supportive measures and treat symptomatically.

**General information**

Ensure that medical personnel are aware of the material(s) involved.

**5. Fire-fighting measures****Suitable extinguishing media**

Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media**

Not applicable.

**Specific hazards arising from the chemical**

Not a fire hazard.

**Special protective equipment and precautions for firefighters**

Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Fire-fighting equipment/instructions**

Use standard firefighting procedures and consider the hazards of other involved materials.

**Specific methods**

Cool material exposed to heat with water spray and remove it if no risk is involved.

**6. Accidental release measures****Personal precautions, protective equipment and emergency procedures**

See Section 8 of the SDS for Personal Protective Equipment.

**Methods and materials for containment and cleaning up**

Vacuum up the spilled material. Vacuums used for this purpose should be equipped with HEPA filters. Containers must be labeled. Collect in approved containers and seal securely. For waste disposal, see Section 13 of the SDS.

**Environmental precautions**

Avoid discharge to drains, sewers, and other water systems.

**7. Handling and storage****Precautions for safe handling**

Minimize dust production when mixing, or opening and closing bags. Avoid inhalation of dust. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices and use appropriate lifting techniques.

**Conditions for safe storage, including any incompatibilities**

Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Avoid contact with acids, water, and moisture.

**8. Exposure controls/personal protection****Occupational exposure limits****US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

**US. ACGIH Threshold Limit Values**

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	10 mg/m3	Inhalable fraction.

**US. NIOSH: Pocket Guide to Chemical Hazards**

Components	Type	Value	Form
Perlite (CAS 93763-70-3)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total

**Biological limit values**

No biological exposure limits noted for the ingredient(s).

**Appropriate engineering controls**

Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

**Individual protection measures, such as personal protective equipment**

<b>Eye/face protection</b>	Wear approved safety goggles.
<b>Skin protection</b>	
<b>Hand protection</b>	It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.
<b>Other</b>	Normal work clothing (long sleeved shirts and long pants) is recommended.
<b>Respiratory protection</b>	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.
<b>Thermal hazards</b>	None.
<b>General hygiene considerations</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash. Observe any medical surveillance requirements.

**9. Physical and chemical properties****Appearance**

<b>Physical state</b>	Solid.
<b>Form</b>	Powder.
<b>Color</b>	White to off-white.
<b>Odor</b>	Low to no odor.
<b>Odor threshold</b>	Not applicable.
<b>pH</b>	6 - 8
<b>Melting point/freezing point</b>	Not applicable.
<b>Initial boiling point and boiling range</b>	Not applicable.
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Not applicable.

**Upper/lower flammability or explosive limits**

<b>Flammability limit - lower (%)</b>	Not applicable.
<b>Flammability limit - upper (%)</b>	Not applicable.
<b>Explosive limit - lower (%)</b>	Not applicable.
<b>Explosive limit - upper (%)</b>	Not applicable.
<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	2.4 - 2.8 (H <sub>2</sub> O=1)
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	0.15-0.40 g/100g (H <sub>2</sub> O)
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition temperature</b>	2642 °F (1450 °C)
<b>Viscosity</b>	Not applicable.
<b>Other information</b>	
<b>Bulk density</b>	45 - 55 lb/ft <sup>3</sup> (dry)
<b>VOC (Weight %)</b>	0 %

**10. Stability and reactivity**

<b>Reactivity</b>	Not available.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.

<b>Conditions to avoid</b>	When mixed with water this product can become very hot. Encasing or making moulds of any body part can cause serious burns that may require surgical removal of affected tissue and even amputation of encased body part.
<b>Incompatible materials</b>	Acids. Exposure to water and acids must be supervised because the reactions are vigorous and produce large amounts of heat.
<b>Hazardous decomposition products</b>	Calcium oxides. Sulfur oxides.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	Ingestion may cause irritation and stomach discomfort.
<b>Inhalation</b>	Airborne dust may irritate throat and upper respiratory system causing coughing.
<b>Skin contact</b>	Under normal conditions of intended use, this product does not pose a skin hazard.
<b>Eye contact</b>	Direct contact with airborne particulates may cause temporary irritation.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Dust may irritate eyes and mucous membranes of the nose, throat and upper respiratory system causing sneezing and/or coughing.

### Information on toxicological effects

<b>Acute toxicity</b>	Not expected to be a hazard under normal conditions of intended use.
<b>Skin corrosion/irritation</b>	Not a skin irritant.
<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not expected to cause respiratory sensitization based on non-skin sensitization history.
<b>Skin sensitization</b>	Not a skin sensitizer. Plaster of Paris has displayed little sensitization potential.
<b>Germ cell mutagenicity</b>	No evidence of mutagenicity found in Ames bacterial tests.
<b>Carcinogenicity</b>	This material is not classified as a carcinogen by IARC, ACGIH, NTP or OSHA.
<b>Reproductive toxicity</b>	Not expected to be a reproductive hazard.
<b>Specific target organ toxicity - single exposure</b>	No data available, but none expected.
<b>Specific target organ toxicity - repeated exposure</b>	No data available, but none expected.
<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.
<b>Chronic effects</b>	No other specific acute or chronic health impact noted.

## 12. Ecological information

<b>Ecotoxicity</b>	The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
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Components	Species	Test Results
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours
<b>Persistence and degradability</b>	Calcium sulfate dissolves in water forming calcium and sulfate ions.	
<b>Bioaccumulative potential</b>	Bioaccumulation is not expected.	
<b>Mobility in soil</b>	No data available.	
<b>Other adverse effects</b>	None expected.	

## 13. Disposal considerations

<b>Disposal instructions</b>	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.
<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.

## 14. Transport information

### DOT

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

## 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200 (OSHA) and 8 CCR § 5194 (Cal/OSHA).

### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### Hazard categories

Immediate Hazard - Yes  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

#### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312 Hazardous chemical** Yes

#### SARA 313 (TRI reporting)

Not regulated.

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

### US state regulations

#### US. Massachusetts RTK - Substance List

Perlite (CAS 93763-70-3)

Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

#### US. New Jersey Worker and Community Right-to-Know Act

Perlite (CAS 93763-70-3)

Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

#### US. Pennsylvania Worker and Community Right-to-Know Law

Perlite (CAS 93763-70-3)

Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

#### US. Rhode Island RTK

Not regulated.

#### US. California Proposition 65

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

#### US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Not listed.

## International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

**Issue date** 03-February-2014

**Revision date** -

**Version #** 01

**Further information** Plaster of Paris: Is classified as a hazardous substance but is generally considered a safe material for routine use. When plaster of Paris is used responsibly it is not considered as a dangerous material. However, when mixed with water this product can become very hot. DO NOT attempt to make a cast enclosing any part of the body. Encasing any body part can cause serious burns and even amputation of the encased body part.

NFPA Ratings:

Health: 1

Flammability: 0

Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

### NFPA Ratings



### Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** RED TOP® Gypsum Plaster

**Other means of identification**

**SDS number** 53000010024

**Recommended use** Interior use.

**Recommended restrictions** Use in accordance with manufacturer's recommendations.

### Manufacturer/Importer/Supplier/Distributor information

**Company name** United States Gypsum Company

**Address** 550 West Adams Street  
Chicago, Illinois 60661-3637

**Telephone** 1-800-874-4968

**Website** www.usg.com

**Emergency phone number** 1-800-507-8899

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Carcinogenicity Category 1A

**OSHA defined hazards** Not classified.

### Label elements



**Signal word** Danger

**Hazard statement** May cause cancer.

### Precautionary statement

**Prevention** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection.

**Response** If exposed or concerned: Get medical advice/attention.

**Storage** Store locked up.

**Disposal** Dispose of in accordance with local, state, and federal regulations.

**Hazard(s) not otherwise classified (HNOC)** None known.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1)	26499-65-0	> 95

### Impurities

Chemical name	CAS number	%
Crystalline silica (Quartz)	14808-60-7	< 0.50

## Composition comments

All concentrations are in percent by weight unless ingredient is a gas.

Raw materials in this product contain respirable crystalline silica as an impurity. The weight percent of respirable crystalline silica found in this product is < 0.50%. Exposures to respirable crystalline silica during the normal use of this product must be determined by workplace hygiene testing.

## 4. First-aid measures

### Inhalation

Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

### Skin contact

Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

### Eye contact

Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.

### Ingestion

Plaster of Paris hardens and if ingested may result in stomach and intestinal blockage. Drinking gelatin solutions or large volumes of water may delay setting.

### Most important symptoms/effects, acute and delayed

Under normal conditions of intended use, this product is not expected to be a health risk. Dust may irritate throat and respiratory system and cause coughing.

### Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically.

### General information

Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

### Suitable extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

### Unsuitable extinguishing media

Not applicable.

### Specific hazards arising from the chemical

Not a fire hazard.

### Special protective equipment and precautions for firefighters

Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

### Fire-fighting equipment/instructions

Use standard firefighting procedures and consider the hazards of other involved materials.

### Specific methods

Cool material exposed to heat with water spray and remove it if no risk is involved.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

See Section 8 of the SDS for Personal Protective Equipment.

### Methods and materials for containment and cleaning up

Vacuum up the spilled material. Vacuums used for this purpose should be equipped with HEPA filters. Containers must be labeled. Collect in approved containers and seal securely. For waste disposal, see Section 13 of the SDS.

### Environmental precautions

Avoid discharge to drains, sewers, and other water systems.

## 7. Handling and storage

### Precautions for safe handling

Minimize dust production when mixing, or opening and closing bags. Avoid inhalation of dust. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices and use appropriate lifting techniques.

### Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Avoid contact with acids, water, and moisture.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

#### US. OSHA Table Z-3 (29 CFR 1910.1000)

Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.3 mg/m3	Total dust.
		0.1 mg/m3	Respirable.
		2.4 mppcf	Respirable.

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	10 mg/m3	Inhalable fraction.
Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.

#### Biological limit values

No biological exposure limits noted for the ingredient(s).

#### Appropriate engineering controls

Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

#### Individual protection measures, such as personal protective equipment

##### Eye/face protection

Wear approved safety goggles.

##### Skin protection

##### Hand protection

It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

##### Other

Normal work clothing (long sleeved shirts and long pants) is recommended.

##### Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.

##### Thermal hazards

None.

#### General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash. Observe any medical surveillance requirements.



## 9. Physical and chemical properties

### Appearance

Physical state	Solid.
Form	Powder.
Color	White to off-white.

**Odor** Low to no odor.

**Odor threshold** Not applicable.

**pH** 6 - 8

**Melting point/freezing point** Not applicable.  
Not applicable.

**Initial boiling point and boiling range** Not applicable.

**Flash point** Not applicable.

**Evaporation rate** Not applicable.

**Flammability (solid, gas)** Not applicable.

### Upper/lower flammability or explosive limits

**Flammability limit - lower (%)** Not applicable.

**Flammability limit - upper (%)** Not applicable.

**Explosive limit - lower (%)** Not applicable.

**Explosive limit - upper (%)** Not applicable.

**Vapor pressure** Not applicable.

**Vapor density** Not applicable.

**Relative density** 2.4 - 2.8 (H<sub>2</sub>O=1)

### Solubility(ies)

**Solubility (water)** 0.15 - 0.4 g/100 g (H<sub>2</sub>O)

**Partition coefficient (n-octanol/water)** Not applicable.

**Auto-ignition temperature** Not applicable.

**Decomposition temperature** 2642 °F (1450 °C)

**Viscosity** Not applicable.

### Other information

**Bulk density** 45 - 55 lb/ft<sup>3</sup>

**Particle size** Varies.

**VOC (Weight %)** 0 %

## 10. Stability and reactivity

**Reactivity** Not available.

**Chemical stability** Material is stable under normal conditions.

**Possibility of hazardous reactions** Hazardous polymerization does not occur.

**Conditions to avoid** When mixed with water this product can become very hot. Encasing or making moulds of any body part can cause serious burns that may require surgical removal of affected tissue and even amputation of encased body part.

**Incompatible materials** Acids. Exposure to water and acids must be supervised because the reactions are vigorous and produce large amounts of heat. Crystalline silica in contact with powerful oxidizing agents, such as fluorine, chlorine trifluoride and oxygen difluoride, may cause fires. Crystalline silica will dissolve in hydrofluoric acid and produce a corrosive gas, silicon tetrafluoride.

**Hazardous decomposition products** Calcium oxides. Sulfur oxides.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	May cause discomfort if swallowed.
<b>Inhalation</b>	Inhalation of dusts may cause severe respiratory tract irritation. Prolonged and repeated exposure to airborne respirable crystalline silica can cause silicosis and/or lung cancer.
<b>Skin contact</b>	Under normal conditions of intended use, this product does not pose a skin hazard.
<b>Eye contact</b>	Direct contact with airborne particulates may cause temporary irritation.

<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Dust may irritate eyes and mucous membranes of the nose, throat and upper respiratory system causing sneezing and/or coughing.
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### Information on toxicological effects

<b>Acute toxicity</b>	Not expected to be a hazard under normal conditions of intended use.
<b>Skin corrosion/irritation</b>	Prolonged or repeated skin contact may cause drying, cracking, or irritation.
<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.
<b>Skin sensitization</b>	Not a skin sensitizer. Plaster of Paris has displayed little sensitization potential.
<b>Germ cell mutagenicity</b>	Data does not suggest that this product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	Repeated and prolonged exposure to high levels of respirable crystalline silica may cause cancer.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

Crystalline silica (Quartz) (CAS 14808-60-7)	1 Carcinogenic to humans.
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#### NTP Report on Carcinogens

Crystalline silica (Quartz) (CAS 14808-60-7)	Known To Be Human Carcinogen.
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<b>Reproductive toxicity</b>	Not expected to be a reproductive hazard.
<b>Specific target organ toxicity - single exposure</b>	No data available, but none expected.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified. For detailed information, see section 16.
<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.
<b>Chronic effects</b>	Prolonged and routine inhalation of high levels of respirable crystalline silica particles can lead to the lung disease known as silicosis. Some studies show excess numbers of cases of scleroderma, connective tissue disorders, lupus, rheumatoid arthritis, chronic kidney diseases and end-stage kidney disease in workers exposed to respirable crystalline silica. Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

## 12. Ecological information

<b>Ecotoxicity</b>	The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
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Components	Species	Test Results
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours
<b>Persistence and degradability</b>	Calcium sulfate dissolves in water forming calcium and sulfate ions.	
<b>Bioaccumulative potential</b>	Bioaccumulation is not expected.	
<b>Mobility in soil</b>	No data available.	
<b>Other adverse effects</b>	None expected.	

## 13. Disposal considerations

<b>Disposal instructions</b>	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
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<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.
<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.

## 14. Transport information

### DOT

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

## 15. Regulatory information

### US federal regulations

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

#### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

<b>Hazard categories</b>	Immediate Hazard - Yes Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
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#### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312 Hazardous chemical** Yes

**SARA 313 (TRI reporting)**  
Not regulated.

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

**US state regulations** WARNING: This product contains chemical(s) known to the State of California to cause cancer.

#### US. Massachusetts RTK - Substance List

Crystalline silica (Quartz) (CAS 14808-60-7)

Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

#### US. New Jersey Worker and Community Right-to-Know Act

Crystalline silica (Quartz) (CAS 14808-60-7)

Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

#### US. Pennsylvania Worker and Community Right-to-Know Law

Crystalline silica (Quartz) (CAS 14808-60-7)

Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

#### US. Rhode Island RTK

Not regulated.

## US. California Proposition 65

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

### US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Crystalline silica (Quartz) (CAS 14808-60-7)

#### International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

Issue date 17-June-2014

Revision date -

Version # 01

**Further information** Plaster of Paris: Is classified as a hazardous substance but is generally considered a safe material for routine use. When plaster of Paris is used responsibly it is not considered as a dangerous material. However, when mixed with water this product can become very hot. DO NOT attempt to make a cast enclosing any part of the body. Encasing any body part can cause serious burns and even amputation of the encased body part.

Crystalline silica: Raw materials in this product may contain respirable crystalline silica. Exposures to respirable crystalline silica are not expected during the normal use of this product. However, actual levels must be determined by workplace hygiene testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.

NFPA Ratings:

Health: 1

Flammability: 0

Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

#### NFPA Ratings



#### Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** RED TOP® Keenes Regular Cement

**Other means of identification**

**SDS number** 53000000033

**Synonyms** Troweling Cement

**Recommended use** Construction plaster.

**Recommended restrictions** Use in accordance with manufacturer's recommendations.

### Manufacturer / Importer / Supplier / Distributor information

**Company name** United States Gypsum Company

**Address** 550 West Adams Street  
Chicago, Illinois 60661-3637

**Telephone** 1-800-874-4968

**Website** www.usg.com

**Emergency phone number** 1-800-507-8899

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Not classified.

**Environmental hazards** Not classified.

**OSHA defined hazards** Not classified.

### Label elements

**Hazard symbol** None.

**Signal word** None.

**Hazard statement** None.

### Precautionary statement

**Prevention** Observe good industrial hygiene practices.

**Response** Get medical attention/advice if you feel unwell.

**Storage** Store as indicated in Section 7.

**Disposal** Dispose of in accordance with local, state, and federal regulations.

**Hazard(s) not otherwise classified (HNOC)** None known.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Calcium sulfate anhydrite	7778-18-9	>95
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1)	26499-65-0	<5

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas.

## 4. First-aid measures

**Inhalation** Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

**Skin contact** Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

**Eye contact** Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.

**Ingestion** Plaster of Paris hardens and if ingested may result in stomach and intestinal blockage. Drinking gelatin solutions or large volumes of water may delay setting.

<b>Most important symptoms/effects, acute and delayed</b>	Under normal conditions of intended use, this product is not expected to be a health risk. Dust may irritate throat and respiratory system and cause coughing.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	Not applicable.
<b>Specific hazards arising from the chemical</b>	Not a fire hazard.
<b>Special protective equipment and precautions for firefighters</b>	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>Specific methods</b>	Cool material exposed to heat with water spray and remove it if no risk is involved.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	See Section 8 of the SDS for Personal Protective Equipment.
<b>Methods and materials for containment and cleaning up</b>	Vacuum up the spilled material. Vacuums used for this purpose should be equipped with HEPA filters. Containers must be labeled. Collect in approved containers and seal securely. For waste disposal, see Section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge to drains, sewers, and other water systems.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Minimize dust production when mixing, or opening and closing bags. Avoid inhalation of dust. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices and use appropriate lifting techniques.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Avoid contact with acids, water, and moisture.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium sulfate anhydrite (CAS 7778-18-9)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Calcium sulfate anhydrite (CAS 7778-18-9)	TWA	10 mg/m3	Inhalable fraction.
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	10 mg/m3	Inhalable fraction.

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Calcium sulfate anhydrite (CAS 7778-18-9)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total

## US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Biological limit values	No biological exposure limits noted for the ingredient(s).		
Appropriate engineering controls	Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.		
Individual protection measures, such as personal protective equipment			
Eye/face protection	Wear approved safety goggles.		
Skin protection			
Hand protection	It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.		
Other	Normal work clothing (long sleeved shirts and long pants) is recommended.		
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.		
Thermal hazards	None.		
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash. Observe any medical surveillance requirements.		

## 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	Solid.
<b>Form</b>	Powder.
<b>Color</b>	White to off-white.
<b>Odor</b>	Low to no odor.
<b>Odor threshold</b>	Not applicable.
<b>pH</b>	6 - 8
<b>Melting point/freezing point</b>	Not applicable. Not applicable.
<b>Initial boiling point and boiling range</b>	Not applicable.
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not applicable.
<b>Flammability limit - upper (%)</b>	Not applicable.
<b>Explosive limit - lower (%)</b>	Not applicable.
<b>Explosive limit - upper (%)</b>	Not applicable.
<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	2.96 (H2O=1)
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	0.15 - 0.4 g/100 g (H2O)
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not applicable.

<b>Decomposition temperature</b>	2642 °F (1450 °C)
<b>Viscosity</b>	Not applicable.
<b>Other information</b>	
<b>Bulk density</b>	55 - 70 lb/ft³
<b>Particle size</b>	Varies.
<b>VOC (Weight %)</b>	0 %

## 10. Stability and reactivity

<b>Reactivity</b>	Not available.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	When mixed with water this product can become very hot. Encasing or making moulds of any body part can cause serious burns that may require surgical removal of affected tissue and even amputation of encased body part.
<b>Incompatible materials</b>	Acids. Exposure to water and acids must be supervised because the reactions are vigorous and produce large amounts of heat.
<b>Hazardous decomposition products</b>	Calcium oxides. Sulfur oxides.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	Ingestion may cause irritation and stomach discomfort.
<b>Inhalation</b>	Airborne dust may irritate throat and upper respiratory system causing coughing.
<b>Skin contact</b>	Under normal conditions of intended use, this product does not pose a skin hazard.
<b>Eye contact</b>	Direct contact with airborne particulates may cause temporary irritation.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Dust may irritate eyes and mucous membranes of the nose, throat and upper respiratory system causing sneezing and/or coughing.

### Information on toxicological effects

<b>Acute toxicity</b>	Not expected to be a hazard under normal conditions of intended use.
<b>Skin corrosion/irritation</b>	Not a skin irritant.
<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not expected to cause respiratory sensitization based on non-skin sensitization history.
<b>Skin sensitization</b>	Not a skin sensitizer. Plaster of Paris has displayed little sensitization potential.
<b>Germ cell mutagenicity</b>	No evidence of mutagenicity found in Ames bacterial tests.
<b>Carcinogenicity</b>	This material is not classified as a carcinogen by IARC, ACGIH, NTP or OSHA.
<b>Reproductive toxicity</b>	Not expected to be a reproductive hazard.
<b>Specific target organ toxicity - single exposure</b>	No data available, but none expected.
<b>Specific target organ toxicity - repeated exposure</b>	No data available, but none expected.
<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.
<b>Chronic effects</b>	No other specific acute or chronic health impact noted.

## 12. Ecological information

<b>Ecotoxicity</b>	The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
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Components	Species	Test Results
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours
<b>Persistence and degradability</b>	Calcium sulfate dissolves in water forming calcium and sulfate ions.	
<b>Bioaccumulative potential</b>	Bioaccumulation is not expected.	
<b>Mobility in soil</b>	No data available.	



**Other adverse effects** None expected.

### 13. Disposal considerations

**Disposal instructions** Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.

**Local disposal regulations** Dispose of in accordance with local regulations.

**Hazardous waste code** Not regulated.

**Waste from residues / unused products** Dispose of in accordance with local regulations.

**Contaminated packaging** Dispose of in accordance with local regulations.

### 14. Transport information

**DOT**  
Not regulated as dangerous goods.

**IATA**  
Not regulated as dangerous goods.

**IMDG**  
Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

### 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200 (OSHA) and 8 CCR § 5194 (Cal/OSHA).

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories** Immediate Hazard - Yes  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical** Yes

**SARA 313 (TRI reporting)**  
Not regulated.

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

**US state regulations**

**US. Massachusetts RTK - Substance List**

Calcium sulfate anhydrite (CAS 7778-18-9)  
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

**US. New Jersey Worker and Community Right-to-Know Act**

Calcium sulfate anhydrite (CAS 7778-18-9)  
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Calcium sulfate anhydrite (CAS 7778-18-9)  
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

**US. Rhode Island RTK**

Not regulated.

## US. California Proposition 65

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

### US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Not listed.

## International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

Issue date 27-March-2014

Revision date -

Version # 01

**Further information** Plaster of Paris: Is classified as a hazardous substance but is generally considered a safe material for routine use. When plaster of Paris is used responsibly it is not considered as a dangerous material. However, when mixed with water this product can become very hot. DO NOT attempt to make a cast enclosing any part of the body. Encasing any body part can cause serious burns and even amputation of the encased body part.

NFPA Ratings:

Health: 1

Flammability: 0

Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

### NFPA Ratings



### Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



# SAFETY DATA SHEET

## 1. Identification

Product identifier	USG® Acoustical Plaster Finish
Other means of identification	
SDS number	48000020008
Synonyms	Plaster Finish
Recommended use	Interior use.
Recommended restrictions	Use in accordance with manufacturer's recommendations.

### Manufacturer / Importer / Supplier / Distributor information

Company name	United States Gypsum Company
Address	550 West Adams Street Chicago, Illinois 60661-3637
Telephone	1-800-874-4968
Website	www.usg.com
Emergency phone number	1-800-507-8899

## 2. Hazard(s) identification

Physical hazards	Not classified.
Health hazards	Not classified.
OSHA defined hazards	Not classified.

### Label elements

Hazard symbol	None.
Signal word	None.
Hazard statement	None.
Precautionary statement	
Prevention	Observe good industrial hygiene practices.
Response	Get medical attention/advice if you feel unwell.
Storage	Store as indicated in Section 7.
Disposal	Dispose of in accordance with local, state, and federal regulations.

Hazard(s) not otherwise classified (HNOC)	None known.
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## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1)	26499-65-0	> 80
Perlite	93763-70-3	< 5
Zinc dimethyldithiocarbamate	137-30-4	< 0.1

Composition comments	All concentrations are in percent by weight unless ingredient is a gas.
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## 4. First-aid measures

Inhalation	Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.
Skin contact	Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.
Eye contact	Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.
Ingestion	Plaster of Paris hardens and if ingested may result in stomach and intestinal blockage. Drinking gelatin solutions or large volumes of water may delay setting.

<b>Most important symptoms/effects, acute and delayed</b>	Under normal conditions of intended use, this product is not expected to be a health risk. Dust may irritate throat and respiratory system and cause coughing.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	Not applicable.
<b>Specific hazards arising from the chemical</b>	Not a fire hazard.
<b>Special protective equipment and precautions for firefighters</b>	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>Specific methods</b>	Cool material exposed to heat with water spray and remove it if no risk is involved.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	See Section 8 of the SDS for Personal Protective Equipment.
<b>Methods and materials for containment and cleaning up</b>	Vacuum up the spilled material. Vacuums used for this purpose should be equipped with HEPA filters. Containers must be labeled. Collect in approved containers and seal securely. For waste disposal, see Section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge to drains, sewers, and other water systems.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Minimize dust production when mixing, sanding, or opening and closing bags. Avoid inhalation of dust. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices and use appropriate lifting techniques.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Avoid contact with acids, water, and moisture.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	10 mg/m3	Inhalable fraction.

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Perlite (CAS 93763-70-3)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total

<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
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<b>Appropriate engineering controls</b>	Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Wear approved safety goggles.
<b>Skin protection</b>	
<b>Hand protection</b>	It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.
<b>Other</b>	Normal work clothing (long sleeved shirts and long pants) is recommended.
<b>Respiratory protection</b>	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.
<b>Thermal hazards</b>	None.
<b>General hygiene considerations</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash. Observe any medical surveillance requirements.

## 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	Solid.
<b>Form</b>	Powder.
<b>Color</b>	White to off-white.

**Odor** Low to no odor.

**Odor threshold** Not applicable.

**pH** 6 - 8

**Melting point/freezing point** Not applicable.

**Initial boiling point and boiling range** Not applicable.

**Flash point** Not applicable.

**Evaporation rate** Not applicable.

**Flammability (solid, gas)** Not applicable.

### Upper/lower flammability or explosive limits

<b>Flammability limit - lower (%)</b>	Not applicable.
<b>Flammability limit - upper (%)</b>	Not applicable.
<b>Explosive limit - lower (%)</b>	Not applicable.
<b>Explosive limit - upper (%)</b>	Not applicable.

**Vapor pressure** Not applicable.

**Vapor density** Not applicable.

**Relative density** 1.7 - 2.1 (H<sub>2</sub>O=1)

### Solubility(ies)

**Solubility (water)** 0.15 - 0.4 g/100 g (H<sub>2</sub>O)

**Partition coefficient (n-octanol/water)** Not applicable.

**Auto-ignition temperature** Not applicable.

**Decomposition temperature** 2642 °F (1450 °C)

**Viscosity** Not applicable.

### Other information

<b>Bulk density</b>	10 - 20 lb/ft <sup>3</sup>
<b>Particle size</b>	Varies.
<b>VOC (Weight %)</b>	0 %

## 10. Stability and reactivity

**Reactivity** Not available.

<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	When mixed with water this product can become very hot. Encasing or making moulds of any body part can cause serious burns that may require surgical removal of affected tissue and even amputation of encased body part.
<b>Incompatible materials</b>	Acids. Exposure to water and acids must be supervised because the reactions are vigorous and produce large amounts of heat.
<b>Hazardous decomposition products</b>	Calcium oxides. Sulfur oxides. Silicon oxides.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	Ingestion may cause irritation and stomach discomfort.
<b>Inhalation</b>	Airborne dust may irritate throat and upper respiratory system causing coughing.
<b>Skin contact</b>	Under normal conditions of intended use, this product does not pose a skin hazard.
<b>Eye contact</b>	Direct contact with airborne particulates may cause temporary irritation.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Dust may irritate eyes and mucous membranes of the nose, throat and upper respiratory system causing sneezing and/or coughing.

### Information on toxicological effects

<b>Acute toxicity</b>	Not expected to be a hazard under normal conditions of intended use.
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Components	Species	Test Results
Zinc dimethyldithiocarbamate (CAS 137-30-4)		
<b>Acute</b>		
<i>Inhalation</i>		
LC50	Rat	0.081 mg/l, 4 Hours
<i>Oral</i>		
LD50	Guinea pig	100 mg/kg
	Rabbit	100 mg/kg
	Rat	320 mg/kg
<i>Other</i>		
LD50	Mouse	17 mg/kg
	Rat	23 mg/kg

\* Estimates for product may be based on additional component data not shown.

<b>Skin corrosion/irritation</b>	Not a skin irritant.
<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not expected to cause respiratory sensitization based on non-skin sensitization history.
<b>Skin sensitization</b>	Not a skin sensitizer. Plaster of Paris has displayed little sensitization potential.
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	This material is not classified as a carcinogen by IARC, ACGIH, NTP or OSHA.
<b>Reproductive toxicity</b>	Not expected to be a reproductive hazard.
<b>Specific target organ toxicity - single exposure</b>	No data available, but none expected.
<b>Specific target organ toxicity - repeated exposure</b>	No data available, but none expected.
<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.
<b>Chronic effects</b>	Prolonged exposure may cause chronic effects.

## 12. Ecological information

<b>Ecotoxicity</b>	The product contains a substance which is very toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.
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Components	Species	Test Results
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)		
Aquatic		
Fish	LC50	Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours
Zinc dimethyldithiocarbamate (CAS 137-30-4)		
Aquatic		
Fish	LC50	Bluegill (Lepomis macrochirus) 0.0097 mg/l, 96 hours
Persistence and degradability	No data available.	
Bioaccumulative potential	Bioaccumulation is not expected.	
Partition coefficient n-octanol / water (log Kow)		
Zinc dimethyldithiocarbamate (CAS 137-30-4)	1.23	
Mobility in soil	No data available.	
Other adverse effects	None expected.	
13. Disposal considerations		
Disposal instructions	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.	
Local disposal regulations	Dispose of in accordance with local regulations.	
Hazardous waste code	Not regulated.	
US RCRA Hazardous Waste P List: Reference		
Zinc dimethyldithiocarbamate (CAS 137-30-4)	P205	
Waste from residues / unused products	Dispose of in accordance with local regulations.	
Contaminated packaging	Dispose of in accordance with local regulations.	
14. Transport information		
DOT		
Not regulated as dangerous goods.		
IATA		
Not regulated as dangerous goods.		
IMDG		
Not regulated as dangerous goods.		
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.	
15. Regulatory information		
US federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200 (OSHA) and 8 CCR § 5194 (Cal/OSHA).	
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)		
Not regulated.		
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)		
Not listed.		
CERCLA Hazardous Substance List (40 CFR 302.4)		
Zinc dimethyldithiocarbamate (CAS 137-30-4)	LISTED	
Superfund Amendments and Reauthorization Act of 1986 (SARA)		
Hazard categories	Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No	
SARA 302 Extremely hazardous substance		
Not listed.		
SARA 311/312 Hazardous chemical	Yes	
SARA 313 (TRI reporting)		
Not regulated.		
Other federal regulations		
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List		
Not regulated.		

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)**

Not regulated.

**US state regulations**

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

**US. Massachusetts RTK - Substance List**

Perlite (CAS 93763-70-3)

Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

Zinc dimethyldithiocarbamate (CAS 137-30-4)

**US. New Jersey Worker and Community Right-to-Know Act**

Perlite (CAS 93763-70-3)

Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

Zinc dimethyldithiocarbamate (CAS 137-30-4)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Perlite (CAS 93763-70-3)

Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

**US. Rhode Island RTK**

Zinc dimethyldithiocarbamate (CAS 137-30-4)

**US. California Proposition 65****US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Not listed.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision****Issue date** 04-February-2014**Revision date** -**Version #** 01**Further information**

Crystalline silica: Raw materials in this product may contain respirable crystalline silica. Exposures to respirable crystalline silica are not expected during the normal use of this product. However, actual levels must be determined by workplace hygiene testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.

Plaster of Paris: Is classified as a hazardous substance but is generally considered a safe material for routine use. When plaster of Paris is used responsibly it is not considered as a dangerous material. However, when mixed with water this product can become very hot. DO NOT attempt to make a cast enclosing any part of the body. Encasing any body part can cause serious burns and even amputation of the encased body part.

Zinc dimethyldithiocarbamate (Ziram): In concentrations <0.1% Ziram is dangerous for the environment. Environmental exposure may cause long-term adverse effects in aquatic ecosystems.

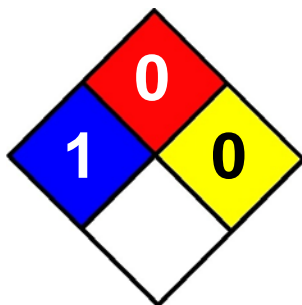
NFPA Ratings:

Health: 1

Flammability: 0

Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

**NFPA Ratings**



**Disclaimer**

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** USG® Standard Strength Retarder

**Other means of identification**

**SDS number** 53000010022

**Recommended use** Retarder/Interior use

**Recommended restrictions** Use in accordance with manufacturer's recommendations.

### Manufacturer/Importer/Supplier/Distributor information

**Company name** United States Gypsum Company

**Address** 550 West Adams Street  
Chicago, Illinois 60661-3637

**Telephone** 1-800-874-4968

**Website** www.usg.com

**Emergency phone number** 1-800-507-8899

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Skin corrosion/irritation Category 2  
Serious eye damage/eye irritation Category 1

**OSHA defined hazards** Not classified.

**Label elements**



**Signal word** Danger

**Hazard statement** Causes skin irritation. Causes serious eye damage.

**Precautionary statement**

**Prevention** Wash thoroughly after handling. Wear protective gloves and eye/face protection.

**Response** If on skin: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. Take off contaminated clothing and wash before reuse.

**Storage** Store as indicated in Section 7.

**Disposal** Dispose of in accordance with local, state, and federal regulations.

**Hazard(s) not otherwise classified (HNOC)** None known.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1)	26499-65-0	> 55
Dolomitic Lime	39445-23-3	< 10
Sodium hydroxide	1310-73-2	0.8

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas.

## 4. First-aid measures

<b>Inhalation</b>	Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.
<b>Skin contact</b>	Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.
<b>Eye contact</b>	Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.
<b>Ingestion</b>	Plaster of Paris hardens and if ingested may result in stomach and intestinal blockage. Drinking gelatin solutions or large volumes of water may delay setting.
<b>Most important symptoms/effects, acute and delayed</b>	Skin irritation. Severe eye irritation. Permanent eye damage including blindness could result. Dust may irritate throat and respiratory system and cause coughing.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	Not applicable.
<b>Specific hazards arising from the chemical</b>	Not a fire hazard.
<b>Special protective equipment and precautions for firefighters</b>	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>Specific methods</b>	Cool material exposed to heat with water spray and remove it if no risk is involved.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	See Section 8 of the SDS for Personal Protective Equipment.
<b>Methods and materials for containment and cleaning up</b>	Vacuum up the spilled material. Vacuums used for this purpose should be equipped with HEPA filters. Containers must be labeled. Collect in approved containers and seal securely. For waste disposal, see Section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge to drains, sewers, and other water systems.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Minimize dust production when mixing, or opening and closing bags. Avoid inhalation of dust. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices and use appropriate lifting techniques.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Avoid contact with acids, water, and moisture.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	PEL	5 mg/m <sup>3</sup>	Respirable fraction.
Sodium hydroxide (CAS 1310-73-2)	PEL	15 mg/m <sup>3</sup> 2 mg/m <sup>3</sup>	Total dust.

## US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	10 mg/m3	Inhalable fraction.
Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m3	

## US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	5 mg/m3	Respirable.
Sodium hydroxide (CAS 1310-73-2)	Ceiling	10 mg/m3 2 mg/m3	Total

<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Appropriate engineering controls</b>	Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Wear approved safety goggles.
<b>Skin protection</b>	
<b>Hand protection</b>	Wear appropriate chemical resistant gloves.
<b>Other</b>	Wear long-sleeved shirts, pants and rubber boots.
<b>Respiratory protection</b>	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.
<b>Thermal hazards</b>	None.
<b>General hygiene considerations</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash. Observe any medical surveillance requirements.

## 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	Solid.
<b>Form</b>	Powder.
<b>Color</b>	Gray/brown.
<b>Odor</b>	Low to no odor.
<b>Odor threshold</b>	Not applicable.
<b>pH</b>	10.2
<b>Melting point/freezing point</b>	Not applicable.
<b>Initial boiling point and boiling range</b>	Not applicable.
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Not applicable.

### Upper/lower flammability or explosive limits

<b>Flammability limit - lower (%)</b>	Not applicable.
<b>Flammability limit - upper (%)</b>	Not applicable.

<b>Explosive limit - lower (%)</b>	Not applicable.
<b>Explosive limit - upper (%)</b>	Not applicable.
<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	2 - 2.8 (H <sub>2</sub> O=1)
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	0.15-0.40 g/100g (H <sub>2</sub> O)
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition temperature</b>	2642 °F (1450 °C)
<b>Viscosity</b>	Not applicable.
<b>Other information</b>	
<b>Bulk density</b>	45 - 55.2 lb/ft <sup>3</sup> (dry)
<b>VOC (Weight %)</b>	0 %

## 10. Stability and reactivity

<b>Reactivity</b>	Not available.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	When mixed with water this product can become very hot. Encasing or making moulds of any body part can cause serious burns that may require surgical removal of affected tissue and even amputation of encased body part.
<b>Incompatible materials</b>	Acids. Exposure to water and acids must be supervised because the reactions are vigorous and produce large amounts of heat.
<b>Hazardous decomposition products</b>	Calcium oxides. Sulfur oxides.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Inhalation of dusts may cause respiratory irritation.
<b>Skin contact</b>	Causes skin irritation.
<b>Eye contact</b>	Exposure to airborne dust may cause immediate or delayed irritation of the eyes. Depending on the level of exposure, effects may range from redness to chemical burns and blindness.
<b>Ingestion</b>	Ingestion may cause irritation and stomach discomfort.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Dust may irritate throat and respiratory system and cause coughing. May cause serious chemical burns to the skin. May cause chemical eye burns. Permanent eye damage including blindness could result.

### Information on toxicological effects

<b>Acute toxicity</b>	Not expected to be a hazard under normal conditions of intended use.
<b>Skin corrosion/irritation</b>	Causes skin irritation.
<b>Serious eye damage/eye irritation</b>	Causes serious eye damage.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.
<b>Skin sensitization</b>	Not a skin sensitizer. Plaster of Paris has displayed little sensitization potential.
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	This material is not classified as a carcinogen by IARC, ACGIH, NTP or OSHA.
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	
Not listed.	
<b>Reproductive toxicity</b>	Not expected to be a reproductive hazard.

<b>Specific target organ toxicity - single exposure</b>	No data available, but none expected.
<b>Specific target organ toxicity - repeated exposure</b>	No data available, but none expected.
<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.
<b>Chronic effects</b>	No other specific acute or chronic health impact noted.

## 12. Ecological information

<b>Ecotoxicity</b>	The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
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Components	Species		Test Results
Sodium hydroxide (CAS 1310-73-2)			
Aquatic			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	34.59 - 47.13 mg/l, 48 hours
Acute			
Fish	LC50	Bluegill (Lepomis macrochirus)	99 mg/l, 48 hours
		Mosquitofish (Gambusia affinis affinis)	125 mg/l, 96 hours
Persistence and degradability	Calcium sulfate dissolves in water forming calcium and sulfate ions.		
Bioaccumulative potential	Bioaccumulation is not expected.		
Mobility in soil	No data available.		
Other adverse effects	None expected.		

## 13. Disposal considerations

<b>Disposal instructions</b>	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.
<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.

## 14. Transport information

<b>DOT</b>	Not regulated as dangerous goods.
<b>IATA</b>	Not regulated as dangerous goods.
<b>IMDG</b>	Not regulated as dangerous goods.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

## 15. Regulatory information

<b>US federal regulations</b>	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200 (OSHA) and 8 CCR § 5194 (Cal/OSHA).	
<b>TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)</b>	Not regulated.	
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	Not listed.	
<b>CERCLA Hazardous Substance List (40 CFR 302.4)</b>		
Sodium hydroxide (CAS 1310-73-2)	LISTED	

## Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories**      Immediate Hazard - Yes  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312 Hazardous chemical**      Yes

### SARA 313 (TRI reporting)

Not regulated.

## Other federal regulations

### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act (SDWA)**      Not regulated.

## US state regulations

### US. Massachusetts RTK - Substance List

Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)  
Sodium hydroxide (CAS 1310-73-2)

### US. New Jersey Worker and Community Right-to-Know Act

Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)  
Sodium hydroxide (CAS 1310-73-2)

### US. Pennsylvania Worker and Community Right-to-Know Law

Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)  
Sodium hydroxide (CAS 1310-73-2)

### US. Rhode Island RTK

Sodium hydroxide (CAS 1310-73-2)

### US. California Proposition 65

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

## International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

**Issue date**      06-January-2015

**Revision date**      -

**Version #**      01

**Further information**      Plaster of Paris: Is classified as a hazardous substance but is generally considered a safe material for routine use. When plaster of Paris is used responsibly it is not considered as a dangerous material. However, when mixed with water this product can become very hot. DO NOT attempt to make a cast enclosing any part of the body. Encasing any body part can cause serious burns and even amputation of the encased body part.

NFPA Ratings:  
Health: 2  
Flammability: 0  
Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

**NFPA ratings****Disclaimer**

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



## 1. Identification

**Product identifier** **STRUCTO-BASE® Gypsum Plaster**

**Other means of identification**

**SDS number** 53000010023

**Synonyms** Construction Plaster

**Recommended use** Interior use.

**Recommended restrictions** Use in accordance with manufacturer's recommendations.

### Manufacturer/Importer/Supplier/Distributor information

**Company name** United States Gypsum Company

**Address** 550 West Adams Street  
Chicago, Illinois 60661-3637

**Telephone** 1-800-874-4968

**Website** www.usg.com

**Emergency phone number** 1-800-507-8899

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Carcinogenicity Category 1A

**OSHA defined hazards** Not classified.

### Label elements



**Signal word** Danger

**Hazard statement** May cause cancer.

**Precautionary statement**

**Prevention** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection.

**Response** If exposed or concerned: Get medical advice/attention.

**Storage** Store locked up.

**Disposal** Dispose of in accordance with local, state, and federal regulations.

**Hazard(s) not otherwise classified (HNOC)** None known.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1)	26499-65-0	> 95

### Impurities

Chemical name	CAS number	%
Crystalline silica (Quartz)	14808-60-7	< 0.25

### Composition comments

All concentrations are in percent by weight unless ingredient is a gas.

Raw materials in this product contain respirable crystalline silica as an impurity. The weight percent of respirable crystalline silica found in this product is < 0.25%. Exposures to respirable crystalline silica during the normal use of this product must be determined by workplace hygiene testing.

## 4. First-aid measures

<b>Inhalation</b>	Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.
<b>Skin contact</b>	Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.
<b>Eye contact</b>	Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.
<b>Ingestion</b>	Plaster of Paris hardens and if ingested may result in stomach and intestinal blockage. Drinking gelatin solutions or large volumes of water may delay setting.
<b>Most important symptoms/effects, acute and delayed</b>	Under normal conditions of intended use, this product is not expected to be a health risk. Dust may irritate throat and respiratory system and cause coughing.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	Not applicable.
<b>Specific hazards arising from the chemical</b>	Not a fire hazard.
<b>Special protective equipment and precautions for firefighters</b>	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>Specific methods</b>	Cool material exposed to heat with water spray and remove it if no risk is involved.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	See Section 8 of the SDS for Personal Protective Equipment.
<b>Methods and materials for containment and cleaning up</b>	Vacuum up the spilled material. Vacuums used for this purpose should be equipped with HEPA filters. Containers must be labeled. Collect in approved containers and seal securely. For waste disposal, see Section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge to drains, sewers, and other water systems.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Minimize dust production when mixing, or opening and closing bags. Avoid inhalation of dust. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices and use appropriate lifting techniques.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Avoid contact with acids, water, and moisture.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	PEL	5 mg/m <sup>3</sup>	Respirable fraction.
		15 mg/m <sup>3</sup>	Total dust.

#### US. OSHA Table Z-3 (29 CFR 1910.1000)

Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.3 mg/m <sup>3</sup>	Total dust.
		0.1 mg/m <sup>3</sup>	Respirable.
		2.4 mppcf	Respirable.

## US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	10 mg/m3	Inhalable fraction.
Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

## US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	5 mg/m3	Respirable.
Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.

<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Appropriate engineering controls</b>	Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Wear approved safety goggles.
<b>Skin protection</b>	
<b>Hand protection</b>	It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.
<b>Other</b>	Normal work clothing (long sleeved shirts and long pants) is recommended.
<b>Respiratory protection</b>	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.
<b>Thermal hazards</b>	None.
<b>General hygiene considerations</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash. Observe any medical surveillance requirements.

## 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	Solid.
<b>Form</b>	Powder.
<b>Color</b>	White to off-white.

**Odor** Low to no odor.

**Odor threshold** Not applicable.

**pH** 6 - 8

**Melting point/freezing point** Not applicable.  
Not applicable.

**Initial boiling point and boiling range** Not applicable.

**Flash point** Not applicable.

**Evaporation rate** Not applicable.

**Flammability (solid, gas)** Not applicable.

### Upper/lower flammability or explosive limits

**Flammability limit - lower (%)** Not applicable.

**Flammability limit - upper (%)** Not applicable.

<b>Explosive limit - lower (%)</b>	Not applicable.
<b>Explosive limit - upper (%)</b>	Not applicable.
<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	2.4 - 2.8 (H <sub>2</sub> O=1)
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	0.15 - 0.4 g/100 g (H <sub>2</sub> O)
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition temperature</b>	2642 °F (1450 °C)
<b>Viscosity</b>	Not applicable.
<b>Other information</b>	
<b>Bulk density</b>	45 - 55 lb/ft <sup>3</sup>
<b>Particle size</b>	Varies.
<b>VOC (Weight %)</b>	0 %

## 10. Stability and reactivity

<b>Reactivity</b>	Not available.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	When mixed with water this product can become very hot. Encasing or making moulds of any body part can cause serious burns that may require surgical removal of affected tissue and even amputation of encased body part.
<b>Incompatible materials</b>	Acids. Exposure to water and acids must be supervised because the reactions are vigorous and produce large amounts of heat. Crystalline silica in contact with powerful oxidizing agents, such as fluorine, chlorine trifluoride and oxygen difluoride, may cause fires. Crystalline silica will dissolve in hydrofluoric acid and produce a corrosive gas, silicon tetrafluoride.
<b>Hazardous decomposition products</b>	Calcium oxides. Sulfur oxides.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	May cause discomfort if swallowed.
<b>Inhalation</b>	Inhalation of dusts may cause severe respiratory tract irritation. Prolonged and repeated exposure to airborne respirable crystalline silica can cause silicosis and/or lung cancer.
<b>Skin contact</b>	Under normal conditions of intended use, this product does not pose a skin hazard.
<b>Eye contact</b>	Direct contact with airborne particulates may cause temporary irritation.

<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Dust may irritate eyes and mucous membranes of the nose, throat and upper respiratory system causing sneezing and/or coughing.
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### Information on toxicological effects

<b>Acute toxicity</b>	Not expected to be a hazard under normal conditions of intended use.
<b>Skin corrosion/irritation</b>	Prolonged or repeated skin contact may cause drying, cracking, or irritation.
<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.
<b>Skin sensitization</b>	Not a skin sensitizer. Plaster of Paris has displayed little sensitization potential.
<b>Germ cell mutagenicity</b>	Data does not suggest that this product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	Repeated and prolonged exposure to high levels of respirable crystalline silica may cause cancer.

### IARC Monographs. Overall Evaluation of Carcinogenicity

Crystalline silica (Quartz) (CAS 14808-60-7) 1 Carcinogenic to humans.

### NTP Report on Carcinogens

Crystalline silica (Quartz) (CAS 14808-60-7) Known To Be Human Carcinogen.

<b>Reproductive toxicity</b>	Not expected to be a reproductive hazard.
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<b>Specific target organ toxicity - single exposure</b>	No data available, but none expected.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified. For detailed information, see section 16.
<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.
<b>Chronic effects</b>	Prolonged and routine inhalation of high levels of respirable crystalline silica particles can lead to the lung disease known as silicosis. Some studies show excess numbers of cases of scleroderma, connective tissue disorders, lupus, rheumatoid arthritis, chronic kidney diseases and end-stage kidney disease in workers exposed to respirable crystalline silica. Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

## 12. Ecological information

<b>Ecotoxicity</b>	The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
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Components	Species	Test Results
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours
<b>Persistence and degradability</b>	Calcium sulfate dissolves in water forming calcium and sulfate ions.	
<b>Bioaccumulative potential</b>	Bioaccumulation is not expected.	
<b>Mobility in soil</b>	No data available.	
<b>Other adverse effects</b>	None expected.	

## 13. Disposal considerations

<b>Disposal instructions</b>	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.
<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.

## 14. Transport information

<b>DOT</b>	Not regulated as dangerous goods.
<b>IATA</b>	Not regulated as dangerous goods.
<b>IMDG</b>	Not regulated as dangerous goods.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

## 15. Regulatory information

<b>US federal regulations</b>	
<b>TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)</b>	Not regulated.
<b>US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	Not listed.
<b>CERCLA Hazardous Substance List (40 CFR 302.4)</b>	Not listed.
<b>Superfund Amendments and Reauthorization Act of 1986 (SARA)</b>	
<b>Hazard categories</b>	Immediate Hazard - Yes Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
<b>SARA 302 Extremely hazardous substance</b>	Not listed.

**SARA 311/312 Hazardous chemical**      Yes

**SARA 313 (TRI reporting)**  
Not regulated.

#### Other federal regulations

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)**      Not regulated.

**US state regulations**      WARNING: This product contains chemical(s) known to the State of California to cause cancer.

**US. Massachusetts RTK - Substance List**

Crystalline silica (Quartz) (CAS 14808-60-7)

Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

**US. New Jersey Worker and Community Right-to-Know Act**

Crystalline silica (Quartz) (CAS 14808-60-7)

Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Crystalline silica (Quartz) (CAS 14808-60-7)

Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Crystalline silica (Quartz) (CAS 14808-60-7)

#### International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

#### 16. Other information, including date of preparation or last revision

**Issue date**      18-April-2014

**Revision date**      -

**Version #**      01

**Further information**      Plaster of Paris: Is classified as a hazardous substance but is generally considered a safe material for routine use. When plaster of Paris is used responsibly it is not considered as a dangerous material. However, when mixed with water this product can become very hot. DO NOT attempt to make a cast enclosing any part of the body. Encasing any body part can cause serious burns and even amputation of the encased body part.

Crystalline silica: Raw materials in this product may contain respirable crystalline silica. Exposures to respirable crystalline silica are not expected during the normal use of this product. However, actual levels must be determined by workplace hygiene testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.

NFPA Ratings:

Health: 1

Flammability: 0

Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

## NFPA Ratings



## Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.

## 1. Identification

**Product identifier** **STRUCTO-LITE® Basecoat Plaster**

**Other means of identification**

**SDS number** 53000010015

**Synonyms** Construction Plaster.

**Recommended use** Interior use.

**Recommended restrictions** Use in accordance with manufacturer's recommendations.

### Manufacturer / Importer / Supplier / Distributor information

**Company name** United States Gypsum Company

**Address** 550 West Adams Street  
Chicago, Illinois 60661-3637

**Telephone** 1-800-874-4968

**Website** www.usg.com

**Emergency phone number** 1-800-507-8899

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Carcinogenicity Category 1A  
Specific target organ toxicity, repeated exposure (inhalation) Category 2 (Lung)

**OSHA defined hazards** Not classified.

### Label elements



**Signal word** Danger

**Hazard statement** May cause cancer. May cause damage to organs (Lung) through prolonged or repeated exposure.

### Precautionary statement

**Prevention** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust.

**Response** If exposed or concerned: Get medical advice/attention.

**Storage** Store locked up.

**Disposal** Dispose of in accordance with local, state, and federal regulations.

**Hazard(s) not otherwise classified (HNOC)** None known.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1)	26499-65-0	> 90
Perlite	93763-70-3	< 10

### Impurities

Chemical name	CAS number	%
Crystalline silica (Quartz)	14808-60-7	< 2



**Composition comments**

All concentrations are in percent by weight unless ingredient is a gas.

Raw materials in this product contain respirable crystalline silica as an impurity. The weight percent of respirable crystalline silica found in this product is < 2%. Exposures to respirable crystalline silica during the normal use of this product must be determined by workplace hygiene testing.

**4. First-aid measures****Inhalation**

Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

**Skin contact**

Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

**Eye contact**

Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.

**Ingestion**

Plaster of Paris hardens and if ingested may result in stomach and intestinal blockage. Drinking gelatin solutions or large volumes of water may delay setting.

**Most important symptoms/effects, acute and delayed**

Under normal conditions of intended use, this product is not expected to be a health risk. Dust may irritate throat and respiratory system and cause coughing.

**Indication of immediate medical attention and special treatment needed**

Provide general supportive measures and treat symptomatically.

**General information**

Ensure that medical personnel are aware of the material(s) involved.

**5. Fire-fighting measures****Suitable extinguishing media**

Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media**

Not applicable.

**Specific hazards arising from the chemical**

Not a fire hazard.

**Special protective equipment and precautions for firefighters**

Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Fire-fighting equipment/instructions**

Use standard firefighting procedures and consider the hazards of other involved materials.

**Specific methods**

Cool material exposed to heat with water spray and remove it if no risk is involved.

**6. Accidental release measures****Personal precautions, protective equipment and emergency procedures**

See Section 8 of the SDS for Personal Protective Equipment.

**Methods and materials for containment and cleaning up**

Vacuum up the spilled material. Vacuums used for this purpose should be equipped with HEPA filters. Containers must be labeled. Collect in approved containers and seal securely. For waste disposal, see Section 13 of the SDS.

**Environmental precautions**

Avoid discharge to drains, sewers, and other water systems.

**7. Handling and storage****Precautions for safe handling**

Minimize dust production when mixing, or opening and closing bags. Avoid inhalation of dust. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices and use appropriate lifting techniques.

**Conditions for safe storage, including any incompatibilities**

Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Avoid contact with acids, water, and moisture.

**8. Exposure controls/personal protection****Occupational exposure limits****US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

**US. OSHA Table Z-3 (29 CFR 1910.1000)**

Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.3 mg/m3	Total dust.
		0.1 mg/m3	Respirable.
		2.4 mppcf	Respirable.

**US. ACGIH Threshold Limit Values**

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	10 mg/m3	Inhalable fraction.
Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

**US. NIOSH: Pocket Guide to Chemical Hazards**

Components	Type	Value	Form
Perlite (CAS 93763-70-3)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.

**Biological limit values**

No biological exposure limits noted for the ingredient(s).

**Appropriate engineering controls**

Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

**Individual protection measures, such as personal protective equipment****Eye/face protection**

Wear approved safety goggles.

**Skin protection****Hand protection**

It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

**Other**

Normal work clothing (long sleeved shirts and long pants) is recommended.

**Respiratory protection**

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.

**Thermal hazards**

None.

**General hygiene considerations**

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash. Observe any medical surveillance requirements.

**9. Physical and chemical properties****Appearance****Physical state**

Solid.

**Form**

Powder.

**Color**

White to off-white.

**Odor**

Low to no odor.

**Odor threshold**

Not applicable.

**pH**

6 - 8

**Melting point/freezing point**

Not applicable.

<b>Initial boiling point and boiling range</b>	Not applicable.
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not applicable.
<b>Flammability limit - upper (%)</b>	Not applicable.
<b>Explosive limit - lower (%)</b>	Not applicable.
<b>Explosive limit - upper (%)</b>	Not applicable.
<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	2.4 - 2.8 (H <sub>2</sub> O=1)
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	0.15-0.40 g/100g (H <sub>2</sub> O)
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition temperature</b>	2642 °F (1450 °C)
<b>Viscosity</b>	Not applicable.
<b>Other information</b>	
<b>Bulk density</b>	45 - 55 lb/ft <sup>3</sup> (dry)
<b>VOC (Weight %)</b>	0 %

## 10. Stability and reactivity

<b>Reactivity</b>	Not available.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	When mixed with water this product can become very hot. Encasing or making moulds of any body part can cause serious burns that may require surgical removal of affected tissue and even amputation of encased body part.
<b>Incompatible materials</b>	Acids. Exposure to water and acids must be supervised because the reactions are vigorous and produce large amounts of heat. Crystalline silica in contact with powerful oxidizing agents, such as fluorine, chlorine trifluoride and oxygen difluoride, may cause fires. Crystalline silica will dissolve in hydrofluoric acid and produce a corrosive gas, silicon tetrafluoride.
<b>Hazardous decomposition products</b>	Calcium oxides. Sulfur oxides. Silicon oxides.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	May cause discomfort if swallowed.
<b>Inhalation</b>	Inhalation of dusts may cause respiratory irritation. Prolonged and repeated exposure to airborne respirable crystalline silica can cause silicosis and/or lung cancer.
<b>Skin contact</b>	Under normal conditions of intended use, this product does not pose a skin hazard.
<b>Eye contact</b>	Direct contact with airborne particulates may cause temporary irritation.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Dust may irritate eyes and mucous membranes of the nose, throat and upper respiratory system causing sneezing and/or coughing.

### Information on toxicological effects

<b>Acute toxicity</b>	Not expected to be a hazard under normal conditions of intended use.
<b>Skin corrosion/irritation</b>	Prolonged or repeated skin contact may cause drying, cracking, or irritation.
<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.

<b>Skin sensitization</b>	Not a skin sensitizer. Plaster of Paris has displayed little sensitization potential.
<b>Germ cell mutagenicity</b>	Data does not suggest that this product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	Repeated and prolonged exposure to high levels of respirable crystalline silica may cause cancer.
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>	
Crystalline silica (Quartz) (CAS 14808-60-7)	1 Carcinogenic to humans.
<b>NTP Report on Carcinogens</b>	
Crystalline silica (Quartz) (CAS 14808-60-7)	Known To Be Human Carcinogen.
<b>Reproductive toxicity</b>	Not expected to be a reproductive hazard.
<b>Specific target organ toxicity - single exposure</b>	No data available, but none expected.
<b>Specific target organ toxicity - repeated exposure</b>	May damage lung tissue through repeated and prolonged exposure to high levels of respirable crystalline silica particles.
<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.
<b>Chronic effects</b>	Prolonged and routine inhalation of high levels of respirable crystalline silica particles can lead to the lung disease known as silicosis. Some studies show excess numbers of cases of scleroderma, connective tissue disorders, lupus, rheumatoid arthritis, chronic kidney diseases and end-stage kidney disease in workers exposed to respirable crystalline silica. Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

## 12. Ecological information

<b>Ecotoxicity</b>	The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
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Components	Species	Test Results
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours
<b>Persistence and degradability</b>	Calcium sulfate dissolves in water forming calcium and sulfate ions.	
<b>Bioaccumulative potential</b>	Bioaccumulation is not expected.	
<b>Mobility in soil</b>	No data available.	
<b>Other adverse effects</b>	None expected.	

## 13. Disposal considerations

<b>Disposal instructions</b>	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.
<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.

## 14. Transport information

<b>DOT</b>	Not regulated as dangerous goods.
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<b>IATA</b>	Not regulated as dangerous goods.
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<b>IMDG</b>	Not regulated as dangerous goods.
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<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable.
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## 15. Regulatory information

<b>US federal regulations</b>	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
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<b>TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)</b>	
Not regulated.	

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

<b>Hazard categories</b>	Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
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**SARA 302 Extremely hazardous substance**

Not listed.

<b>SARA 311/312 Hazardous chemical</b>	Yes
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**SARA 313 (TRI reporting)**

Not regulated.

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

<b>Safe Drinking Water Act (SDWA)</b>	Not regulated.
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**US state regulations****US. Massachusetts RTK - Substance List**

Crystalline silica (Quartz) (CAS 14808-60-7)  
Perlite (CAS 93763-70-3)  
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

**US. New Jersey Worker and Community Right-to-Know Act**

Crystalline silica (Quartz) (CAS 14808-60-7)  
Perlite (CAS 93763-70-3)  
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Crystalline silica (Quartz) (CAS 14808-60-7)  
Perlite (CAS 93763-70-3)  
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

WARNING: This product contains a chemical known to the State of California to cause cancer.

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Crystalline silica (Quartz) (CAS 14808-60-7)

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

<b>Issue date</b>	29-January-2014
<b>Revision date</b>	-
<b>Version #</b>	01

## Further information

Crystalline silica: Raw materials in this product may contain respirable crystalline silica. Exposures to respirable crystalline silica are not expected during the normal use of this product. However, actual levels must be determined by workplace hygiene testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.

Plaster of Paris: Is classified as a hazardous substance but is generally considered a safe material for routine use. When plaster of Paris is used responsibly it is not considered as a dangerous material. However, when mixed with water this product can become very hot. DO NOT attempt to make a cast enclosing any part of the body. Encasing any body part can cause serious burns and even amputation of the encased body part.

NFPA Ratings:

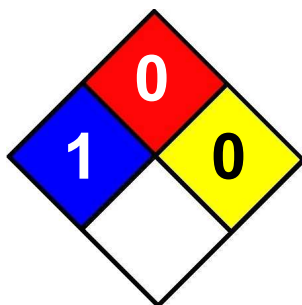
Health: 1

Flammability: 0

Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

## NFPA Ratings



## Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.

# SAFETY DATA SHEET

## 1. Identification

<b>Product identifier</b>	<b>42A PLASTERS</b>
<b>Other means of identification</b>	
<b>SDS number</b>	GP-42A
<b>Product code</b>	GP-42A
<b>Synonyms</b>	See Product List found in Section 16
<b>Recommended use</b>	Industrial Plasters
<b>Recommended restrictions</b>	Workers (and your customers or users in the case of resale) should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

### Manufacturer/Importer/Supplier/Distributor information

<b>Company name</b>	Georgia-Pacific Gypsum LLC	
<b>Address</b>	133 Peachtree Street, NE Atlanta, GA 30303	
<b>Telephone</b>	Technical Information	800.225.6119
	(M)SDS Request	404.652.5119
<b>E-mail</b>	Not available.	
<b>Emergency phone number</b>	Chemtrec - Emergency	800.424.9300

## 2. Hazard(s) identification

<b>Emergency overview</b>	<b>WARNING</b>  Harmful if swallowed. Causes eye irritation. A natural chemical reaction during hardening (rehydration) develops sufficient heat that may cause severe burns in the event of contact with skin. These burns may possibly result in permanent injury. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. Crushing, mixing, sanding, or otherwise working with this product may generate large amounts of dust. Dust can be irritating to the eyes.	
<b>Physical hazards</b>	Not classified.	
<b>Health hazards</b>	Acute toxicity, oral	Category 4
	Serious eye damage/eye irritation	Category 2B
<b>Environmental hazards</b>	Not classified.	
<b>OSHA defined hazards</b>	Not classified.	
<b>Label elements</b>		



<b>Signal word</b>	Warning
<b>Hazard statement</b>	Harmful if swallowed. Causes eye irritation.
<b>Precautionary statement</b>	
<b>Prevention</b>	Wash thoroughly after handling. Do not eat, drink or smoke when using this product. After mixing with water, do not allow prolonged contact with skin until the product has completely hardened and cooled.
<b>Response</b>	If swallowed: Rinse mouth. Call a poison center/doctor if you feel unwell. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>Storage</b>	Store away from acids, phosphorus, diazomethane, and aluminum (at high temperatures). Protect from moisture.
<b>Disposal</b>	Dispose of contents/container in accordance with applicable regulations.

**Hazard(s) not otherwise classified (HNOC)**  
**Supplemental information**

Heat develops as product hardens. May cause serious burns during hardening (rehydration) resulting in possible permanent injury.  
None.

### 3. Composition/information on ingredients

#### Mixtures

Chemical name	Common name and synonyms	CAS number	%
CALCIUM SULFATE HEMIHYDRATE		10034-76-1	60 - 100
CRYSTALLINE SILICA (QUARTZ)*		14808-60-7	1 - 5

**Composition comments** Gypsum (calcium sulfate) contains naturally occurring crystalline silica (quartz) which is listed as a lung carcinogen. See Section 8 for exposure information.

\*The weight percent for crystalline silica represents total crystalline silica and not the respirable fraction. Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

### 4. First-aid measures

<b>Inhalation</b>	Remove to fresh air. If symptoms persist, get medical attention.
<b>Skin contact</b>	For skin contact, wash immediately with soap and water. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. May result in obstruction and irritation if ingested. Get medical attention.
<b>Most important symptoms/effects, acute and delayed</b>	Causes eye irritation. Exposed individuals may experience eye tearing, redness, and discomfort. Skin contact during hardening (rehydration) may slowly develop sufficient heat that may cause severe burns possibly resulting in permanent injury. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. Handling can cause dry skin.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Unsuitable extinguishing media</b>	None known.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	Firefighters should wear full protective clothing including self contained breathing apparatus. Use water spray to cool unopened containers.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep upwind. Keep unnecessary personnel away from the release. Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of dust from the spilled material. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Ensure adequate ventilation. Use personal protection recommended in Section 8.
<b>Methods and materials for containment and cleaning up</b>	Sweep up or gather material and place in appropriate container for disposal. If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product. Contain the spill, then place in a suitable container. Minimize dust generation. For waste disposal, see section 13 of the SDS.



**Environmental precautions** Keep out of drains, sewers, ditches, and waterways.

## 7. Handling and storage

**Precautions for safe handling** Provide appropriate exhaust ventilation at places where dust is formed. Minimize dust generation and accumulation. Do not breathe dust. Do not get this material in contact with eyes. Avoid contact with skin. Avoid prolonged exposure. Do not taste or swallow. Use only in well-ventilated areas. Handle and open container with care. Wear appropriate NIOSH approved dust mask or filtering facepiece if dust is generated. Do not eat or drink while using the product. Wash hands before eating, drinking, or smoking.

**Conditions for safe storage, including any incompatibilities** Keep the container tightly closed and dry. Store in a covered, dry, climate controlled area, away from incompatibles.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US OSHA Table Z-3: Calculated Time Weighted Average (TWA) (mg/m<sup>3</sup>)

Components	Type	Value	Form
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	4.3 mg/m <sup>3</sup>	Total dust.
		1.4 mg/m <sup>3</sup>	Respirable.

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
CALCIUM SULFATE HEMIHYDRATE (CAS 10034-76-1)	PEL	5 mg/m <sup>3</sup>	Respirable fraction.
		15 mg/m <sup>3</sup>	Total dust.

#### US ACGIH Threshold Limit Values: Time Weighted Average (TWA): mg/m<sup>3</sup>, non-standard units

Components	Type	Value	Form
CALCIUM SULFATE HEMIHYDRATE (CAS 10034-76-1)	TWA	10 mg/m <sup>3</sup>	Inhalable fraction.
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	0.025 mg/m <sup>3</sup>	Respirable fraction.

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	0.05 mg/m <sup>3</sup>	Respirable dust.

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Exposure guidelines** Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled. Exposure limits for CRYSTALLINE SILICA - The US OSHA exposure limits 8 hour TWA for CRYSTALLINE SILICA (QUARTZ) are calculated from the following equations: 30/(%SiO<sub>2</sub>+2) mg/m<sup>3</sup> for total dust; and 10/(%SiO<sub>2</sub>+2) mg/m<sup>3</sup> for the respirable fraction.

\*Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

**Appropriate engineering controls** When using product, provide local and general exhaust ventilation to keep airborne dust concentrations below exposure limits. Use wet methods, if appropriate, to reduce the generation of dust.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Safety glasses or goggles are recommended when using this product. Ensure compliance with OSHA's PPE standard (29 CFR 1910.132 and .133) for eye and face protection. Safety shower/eye wash fountain must be readily available in the workplace area (29 CFR 1910.151(c)).

#### Skin protection

**Hand protection** Wear appropriate chemical resistant gloves.

<b>Other</b>	Impervious protective clothing and gloves recommended to prevent drying or irritation of skin. Ensure compliance with OSHA's PPE standards (29 CFR 1910.132 (general) and 138 (hand protection)). Safety shower/eye wash fountain is recommended in the workplace area (29 CFR 1910.151 (c)).
<b>Respiratory protection</b>	A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).
<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.
<b>General hygiene considerations</b>	Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

<b>Appearance</b>	Powder
<b>Physical state</b>	Solid.
<b>Form</b>	Powder.
<b>Color</b>	Light grey to white
<b>Odor</b>	Low odor
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	2642 °F (1450 °C) estimated Not applicable
<b>Initial boiling point and boiling range</b>	Not applicable
<b>Flash point</b>	Not applicable
<b>Evaporation rate</b>	Not available
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not applicable
<b>Flammability limit - upper (%)</b>	Not applicable
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	Not applicable
<b>Vapor density</b>	Not applicable
<b>Relative density</b>	2.3 - 2.7
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	0.2 - 1 % at 22°C
<b>Partition coefficient (n-octanol/water)</b>	Not available
<b>Auto-ignition temperature</b>	Not applicable
<b>Decomposition temperature</b>	Not available
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Flash point class</b>	Not flammable

## 10. Stability and reactivity

<b>Reactivity</b>	Reacts with water (normal condition of use).
<b>Chemical stability</b>	Stable at normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.

<b>Conditions to avoid</b>	Contact with incompatible materials. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Exposure to moisture.
<b>Incompatible materials</b>	Acids. Phosphorus. Diazomethane. Aluminum (at high temperatures).
<b>Hazardous decomposition products</b>	May include and are not limited to: calcium oxide and sulfur dioxide.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	Harmful if swallowed.
<b>Inhalation</b>	Prolonged inhalation may be harmful. Inhalation of dusts may cause respiratory irritation.
<b>Skin contact</b>	Skin contact during hardening (rehydration) may slowly develop sufficient heat that may cause severe burns possibly resulting in permanent injury. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. Handling can cause dry skin.
<b>Eye contact</b>	Causes eye irritation. Dust in the eyes will cause irritation.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. Upper respiratory tract irritation. Skin contact during hardening (rehydration) may slowly develop sufficient heat that may cause severe burns possibly resulting in permanent injury. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. Handling can cause dry skin.

### Information on toxicological effects

<b>Acute toxicity</b>	Harmful if swallowed.
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Product	Species	Test Results
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42A PLASTERS (CAS Mixture)

#### Acute

##### Oral

LD50

Rat

1664.2106 mg/kg estimated

Components	Species	Test Results
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CALCIUM SULFATE HEMIHYDRATE (CAS 10034-76-1)

#### Acute

##### Oral

LD50

Rat

> 1581 mg/kg

\* Estimates for product may be based on additional component data not shown.

<b>Skin corrosion/irritation</b>	Skin contact during hardening (rehydration) may slowly develop sufficient heat that may cause severe burns possibly resulting in permanent injury. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. Handling can cause dry skin.
<b>Serious eye damage/eye irritation</b>	Dust in the eyes will cause irritation. Causes eye irritation.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not classified.
<b>Skin sensitization</b>	Not classified.
<b>Germ cell mutagenicity</b>	Not classified.
<b>Carcinogenicity</b>	Not expected to be hazardous by OSHA criteria.

Exposure to respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by IARC and NTP as a lung carcinogen. Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given exposure to a respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of respirable crystalline silica exposure and the length of time (usually years) of exposure. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

### IARC Monographs. Overall Evaluation of Carcinogenicity

CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7) 1 Carcinogenic to humans.

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

<b>Reproductive toxicity</b>	Not classified.
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<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not available.
<b>Chronic effects</b>	Not hazardous under normal conditions of use.
<b>Further information</b>	*Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

## 12. Ecological information

**Ecotoxicity** Not considered to be harmful to aquatic life.

Product	Species	Test Results
42A PLASTERS (CAS Mixture)		
<b>Aquatic</b>		
Fish	LC50	3137 mg/L, 96 Hours
Components	Species	Test Results
CALCIUM SULFATE HEMIHYDRATE (CAS 10034-76-1)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow ( <i>Pimephales promelas</i> ) > 1970 mg/l, 96 hours
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50	Zebra danio ( <i>Danio rerio</i> ) > 10000 mg/l, 96 Hours OECD SIDS

\* Estimates for product may be based on additional component data not shown.

<b>Persistence and degradability</b>	No data is available on the degradability of this product.
<b>Bioaccumulative potential</b>	No data available.
<b>Mobility in soil</b>	No data available.
<b>Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

<b>Disposal instructions</b>	Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

## 14. Transport information

<b>DOT</b>	Not regulated as dangerous goods.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable.
<b>General information</b>	This product is not regulated as a hazardous material by the United States (DOT) transportation regulations.

## 15. Regulatory information

<b>US federal regulations</b>	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
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**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.

**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

<b>Hazard categories</b>	Immediate Hazard - Yes
	Delayed Hazard - No
	Fire Hazard - No
	Pressure Hazard - No
	Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**

Not listed.

<b>SARA 311/312 Hazardous chemical</b>	Yes
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**SARA 313 (TRI reporting)**

Not regulated.

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

<b>Safe Drinking Water Act (SDWA)</b>	Not regulated.
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**US state regulations****US. Massachusetts RTK - Substance List**

CALCIUM SULFATE HEMIHYDRATE (CAS 10034-76-1)  
CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)

**US. New Jersey Worker and Community Right-to-Know Act**

CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)

**US. Pennsylvania Worker and Community Right-to-Know Law**

CRYSTALLINE SILICA (QUARTZ)\* (CAS 14808-60-7)

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

<b>Product list</b>	BASECOAT PLASTER BR-170 DENSICAL® BASE BR-700 DENSICAL® BLEND BR-707 DENSICAL® IC LOW EXPANSION BR-704 DENSICAL® IC REGULAR BR-703 DENSICAL® OIL WELL BR-735, 736, 835 DENSICAL® SLOW SET BR-706 DENSICAL® WH BR-705 DENSITE® BASE BR-800 DENSITE® BASE - FINE GRIND BR-850 DENSITE® HL BR-853, NV-853 DENSITE® HS BR-854 DENSITE® K-11 BR-811 DENSITE® K-16 BR-816 DENSITE® K-4 BR-864 DENSITE® K-4 LE BR-865, NV-872 DENSITE® K-5 BR-805 DENSITE® K-6 BR-806 DENSITE® K-7 BR-807 DENSITE® K-7 WHITE BR-810 DENSITE® K-8 YELLOW BR-808 DENSITE® K-9 BR-809 DENSITE® MEDIUM LOW EXPANSION BR-815 DENSITE® RA BR-868 DENSITE® STATUARY PLASTER BR-856, NV-856 DRYCAST BR-863 GAUGING PLASTER - QUICK SET BR-155 GAUGING PLASTER - SLOW SET BR-158 GAUGING PLASTER - STABILIZED SET BR-231 IMPRESSION PLASTER BR-265 INDUSTRIAL MOLDING PLASTER BR-232 INDUSTRIAL MOLDING PLASTER - MEDIUM SET NV-233 LABORATORY PLASTER BR-264 MANUFACTURERS STUCCO - TUBED BR-244 MANUFACTURERS STUCCO - UNTUBED BR-240 MOLDING PLASTER - FAST SET NV-234 MOLDING PLASTER - SLOW SET BR-230, CNJ-230, NV-230 NOVEX #3 PLASTER BR-171 NS GROUT STATUARY BR-624 OIL WELL ULTRA DENSITE® BR-861 POTTERY PLASTER BR-251 POTTERY PLASTER K-55 BR-255 POTTERY PLASTER K-58 BR-658 POTTERY PLASTER K-59 BR-659 POTTERY PLASTER K-60 BR-660 POTTERY PLASTER K-62 BR-662 POTTERY PLASTER K-63 BR-663 PREMIX PLASTER BR-822 SAFE FILLER BR-241 STATUARY CASTING PLASTER BR-252, 646, 648, 649 STUCCO BR/CNJ/NV - 35, 46, 48, 53 SUPER ANHYDRITE BR-400 ULTRA DENSITE® BASE BR-860 ULTRA RH BR-862 WHITE MOLDING PLASTER BR-236, NV-236 WHITE MOLDING PLASTER (90 MINUTE MOLDING) NV-237 SUNFLOWER MOLDING PLASTER BR-233
<b>Issue date</b>	March-03-2015
<b>Revision date</b>	04-Mar-2015
<b>Version #</b>	02
<b>HMIS® ratings</b>	Health: 1 Flammability: 0 Physical hazard: 0
<b>NFPA ratings</b>	Health: 1 Flammability: 0 Instability: 0

## Disclaimer

This SDS is intended to quickly provide useful information to the user(s) of this material or product. It is not intended to serve as a comprehensive discussion of all possible risks or hazards, and it assumes a reasonable use of the product. The information contained in this SDS is believed to be accurate as of the date of preparation of this SDS and has been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. The user or handler (or their employer) should consider the specific conditions in which this material will be used, handled, or stored and determine what specific safety or other precautions are required. Employers should ensure that their employees, agents, contractors, and customers who will use the product receive adequate warnings and safe handling procedures, including a current SDS. Product users or handlers (or their employer) who are unsure of what specific precautions are required should consult their employer, product supplier, or safety or health professionals before handling or working with this product. Please notify us immediately if you believe this SDS or other safety and health information about this product is inaccurate or incomplete.



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** USG® Ivory Finish Lime

**Other means of identification**

**SDS number** 53000010019

**Synonyms** Finishing Lime

**Recommended use** Interior use.

**Recommended restrictions** Use in accordance with manufacturer's recommendations.

### Manufacturer/Importer/Supplier/Distributor information

**Company name** United States Gypsum Company

**Address** 550 West Adams Street  
Chicago, Illinois 60661-3637

**Telephone** 1-800-874-4968

**Website** www.usg.com

**Emergency phone number** 1-800-507-8899

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health Hazards**

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 1A
Specific Target Organ Toxicity, Single Exposure	Category 3 respiratory tract irritation

**OSHA defined hazards** Not classified.

**Label elements**



**Signal word** Danger

**Hazard statement** Causes skin irritation. Causes serious eye damage. May cause cancer. May cause respiratory irritation.

### Precautionary statement

**Prevention** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Wear protective gloves and eye/face protection.

**Response** If exposed or concerned: Get medical advice/attention. If on skin: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. If inhaled: Remove person to fresh air and keep comfortable for breathing. Take off contaminated clothing and wash before reuse.

**Storage** Store in a well-ventilated place. Keep container tightly closed. Store locked up.

**Disposal** Dispose of in accordance with local, state, and federal regulations.

**Hazard(s) not otherwise classified (HNOC)** None known.

## 3. Composition/information on ingredients

### Mixtures



Chemical name	CAS number	%
Dolomitic hydroxide	39445-23-3	>95

Impurities		
Chemical name	CAS number	%
Crystalline silica (Quartz)	14808-60-7	< 1

**Composition comments** Raw materials in this product contain respirable crystalline silica as an impurity. The weight percent of respirable crystalline silica found in this product is < 1%. Exposures to respirable crystalline silica during the normal use of this product must be determined by workplace hygiene testing.

#### 4. First-aid measures

**Inhalation** Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

**Skin contact** Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

**Eye contact** Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.

**Ingestion** Rinse mouth. Get medical attention if symptoms occur.

**Most important symptoms/effects, acute and delayed** Skin irritation. Severe eye irritation. Permanent eye damage including blindness could result. Dust may irritate throat and respiratory system and cause coughing.

**Indication of immediate medical attention and special treatment needed** Provide general supportive measures and treat symptomatically.

**General information** Ensure that medical personnel are aware of the material(s) involved.

#### 5. Fire-fighting measures

**Suitable extinguishing media** Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media** Not applicable.

**Specific hazards arising from the chemical** Above 600°C, dolomite decomposes into calcium-magnesium oxide which releases heat when in contact with water, with the risk of fire to surrounding flammable substances.

**Special protective equipment and precautions for firefighters** Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Fire fighting equipment/instructions** Use standard firefighting procedures and consider the hazards of other involved materials.

**Specific methods** Cool material exposed to heat with water spray and remove it if no risk is involved.

#### 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures** See Section 8 of the SDS for Personal Protective Equipment.

**Methods and materials for containment and cleaning up** Vacuum up the spilled material. Vacuums used for this purpose should be equipped with HEPA filters. Containers must be labeled. Collect in approved containers and seal securely. For waste disposal, see Section 13 of the SDS.

**Environmental precautions** Avoid discharge to drains, sewers, and other water systems.

#### 7. Handling and storage

**Precautions for safe handling** Minimize dust production when mixing, or opening and closing bags. Avoid inhalation of dust. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices and use appropriate lifting techniques.

**Conditions for safe storage, including any incompatibilities** Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Avoid contact with acids, water, and moisture.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-3 (29 CFR 1910.1000)

Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.3 mg/m3	Total dust.
		0.1 mg/m3	Respirable.
		2.4 mppcf	Respirable.

#### US. ACGIH Threshold Limit Values

Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

#### US. NIOSH: Pocket Guide to Chemical Hazards

Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.

#### Biological limit values

No biological exposure limits noted for the ingredient(s).

#### Appropriate engineering controls

Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

#### Individual protection measures, such as personal protective equipment

##### Eye/face protection

Wear approved safety goggles.

##### Skin protection

##### Hand protection

It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

##### Other

Normal work clothing (long sleeved shirts and long pants) is recommended.

##### Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.

##### Thermal hazards

None.

#### General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash. Observe any medical surveillance requirements.

## 9. Physical and chemical properties

### Appearance

Physical state	Solid.
Form	Powder.
Color	White to off-white.

Odor Low to no odor.

Odor threshold Not applicable.

pH 12

Melting point/freezing point Not applicable.

Initial boiling point and boiling range Not applicable.

Flash point Not applicable.

Evaporation rate Not applicable.

Flammability (solid, gas) Not applicable.

### Upper/lower flammability or explosive limits

Flammability limit - lower (%)	Not applicable.
Flammability limit - lower (%) temperature	Not applicable.
Flammability limit - upper (%)	Not applicable.
Flammability limit - upper (%) temperature	Not applicable.
Explosive limit - lower (%)	Not applicable.
Explosive limit - lower (%) temperature	Not applicable.
Explosive limit - upper (%)	Not applicable.
Explosive limit - upper (%) temperature	Not applicable.
Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative density	2 - 2.4 (H2O = 1)
Solubility(ies)	
Solubility (water)	0.15 - 0.4 g/100g (H2O)
Partition coefficient (n-octanol/water)	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition temperature	953.6 °F (512 °C)
Viscosity	Not applicable.
Other information	
Bulk density	45 - 55 lb/ft³
Flammability	Not applicable.
VOC (Weight %)	0 g/l

## 10. Stability and reactivity

Reactivity	Not available.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Contact with incompatible materials. Exposure to moisture.
Incompatible materials	Oxidizing agents. Acids.
Hazardous decomposition products	Decomposes at temperatures at > 953.6 °F (512 °C) to form calcium-magnesium oxide.

## 11. Toxicological information

### Information on likely routes of exposure

Inhalation	Inhalation of dusts may cause respiratory irritation.
Skin contact	Causes severe skin irritation and burning, especially in the presence of moisture.
Eye contact	Exposure to airborne dust may cause immediate or delayed irritation of the eyes. Depending on the level of exposure, effects may range from redness to chemical burns and blindness.
Ingestion	May cause burns to mouth, throat and stomach.
Symptoms related to the physical, chemical and toxicological characteristics	Skin irritation. May cause serious chemical burns to the skin. May cause chemical eye burns. Permanent eye damage including blindness could result. Irritation of eyes and mucous membranes. Irritation of nose and throat. Dust may irritate throat and respiratory system and cause coughing.

### Information on toxicological effects

Acute toxicity	Contact may cause serious skin and eye damage that can be permanent; ingestion can cause burns in mouth, esophagus and stomach.
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<b>Skin corrosion/irritation</b>	Causes severe skin irritation or burns that may be irreversible.
<b>Serious eye damage/eye irritation</b>	Can cause severe eye damage that may be irreversible.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	No data available.
<b>Skin sensitization</b>	No data available.
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	May cause cancer.
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>	
Crystalline silica (Quartz) (CAS 14808-60-7)	1 Carcinogenic to humans.
<b>NTP Report on Carcinogens</b>	
Crystalline silica (Quartz) (CAS 14808-60-7)	Known To Be Human Carcinogen.
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	
Not listed.	
<b>Reproductive toxicity</b>	Not expected to be a reproductive hazard.
<b>Specific target organ toxicity - single exposure</b>	May cause respiratory irritation.
<b>Specific target organ toxicity - repeated exposure</b>	No data available, but none expected.
<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.
<b>Chronic effects</b>	Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure. May cause eczema-like skin disorders (dermatitis).

## 12. Ecological information

<b>Ecotoxicity</b>	The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
<b>Persistence and degradability</b>	No data available.
<b>Bioaccumulative potential</b>	Bioaccumulation is not expected.
<b>Mobility in soil</b>	No data available.
<b>Other adverse effects</b>	None expected.

## 13. Disposal considerations

<b>Disposal instructions</b>	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.
<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.

## 14. Transport information

<b>DOT</b>	Not regulated as dangerous goods.
<b>IATA</b>	Not regulated as dangerous goods.
<b>IMDG</b>	Not regulated as dangerous goods.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

## 15. Regulatory information

<b>US federal regulations</b>	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200 (OSHA) and 8 CCR § 5194 (Cal/OSHA).
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**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

<b>Hazard categories</b>	Immediate Hazard - Yes
	Delayed Hazard - Yes
	Fire Hazard - No
	Pressure Hazard - No
	Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**

Not listed.

<b>SARA 311/312 Hazardous chemical</b>	Yes
--	-----

**SARA 313 (TRI reporting)**

Not regulated.

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

<b>Safe Drinking Water Act (SDWA)</b>	Not regulated.
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**US state regulations****US. Massachusetts RTK - Substance List**

Crystalline silica (Quartz) (CAS 14808-60-7)

**US. New Jersey Worker and Community Right-to-Know Act**

Crystalline silica (Quartz) (CAS 14808-60-7)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Crystalline silica (Quartz) (CAS 14808-60-7)

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

WARNING: This product contains a chemical known to the State of California to cause cancer.

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Crystalline silica (Quartz) (CAS 14808-60-7)

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

<b>Issue date</b>	03-October-2014
<b>Revision date</b>	-
<b>Version #</b>	01

**Further information**

Crystalline silica: Raw materials in this product may contain respirable crystalline silica. Exposures to respirable crystalline silica are not expected during the normal use of this product. However, actual levels must be determined by workplace hygiene testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.

NFPA Ratings:

Health: 2

Flammability: 0

Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

**NFPA ratings****Disclaimer**

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.

## Field Material Safety Data Sheet Index

### **Fireproofing**

1. Monokote MK-6 Extended Set
2. Monokote MK-6 HY
3. Monokote Retro-Guard
4. Monokote Z-146
5. Monokote Z-106G
6. Monokote Z-106hy
7. Monokote Spatterkote SK-3
8. Monokote Z-3306
9. Monokote Accelerator
10. Grace Firebond Concentrate (7460) & Adhesive (7450)
11. Cafco Blaze Shield II
12. Cafco 300, SB, ES
13. Cafco Qwik-Set
14. Cafco 400
15. Fendolite M-11
16. Cafco Heat Shield
17. Cafco Bond Seal, Bond Seal Type X
18. Cafco Top-Coat
19. Cafco Fiber Patch
20. Cafco Board
21. Hilti CP 606 Fire Caulk
22. Hilti CP 672 Speed Spray
23. Hilti FS-One High Performance Firestop Sealant
24. Hilti CFS\_SP WB Firestop Joint Spray
25. Hilti CP 777 Speed Plugs

## **Field Material Safety Data Sheet Index - continued**

### **Fireproofing – continued**

- 26. Hilti CP 572 Smoke & Acoustic Spray
- 27. 3M Firedam 150+ Caulk
- 28. 3M Firedam Spray 200



## Safety Data Sheet

Printing date 06/09/2015

Version Number 1.0

Reviewed on 06/09/2015

**1 Identification****Product identifier**Trade name: MK-6 Extended Set

SDS ID Number: 3001A

**Relevant identified uses of the substance or mixture and uses advised against**

Specialty construction product. Not intended for other uses

**Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

W.R. Grace & Co. -Conn.  
62 Whittemore Avenue  
Cambridge, MA 02140 USA

Grace Canada, Inc.  
294 Clements Road W.  
Ajax, Ontario L1S 3C6 Canada

**Information department:**

Environmental Health &amp; Safety

USA: +1-617-876-1400 (24 hours)

+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts

CAN: 1-905-683-8561 (24 hours)

**Transport Emergency:** Chemtrec +1-800-424-9300 (24 hours)**2 Hazard(s) identification****Classification of the substance or mixture**

Depending on the type of handling and use, airborne respirable crystalline silica may be generated. Prolonged and/or massive inhalation of respirable silica dust may cause silicosis. Occupational exposure to respirable crystalline silica should be monitored and controlled.

This product should be handled with care to avoid dust generation.

May cause cancer. Route of exposure: Inhalation.

**GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

**Hazard pictograms**

GHS08

Danger

**Precautionary statements**

Do not handle until all safety precautions have been read and understood.

Avoid breathing dust.

Wash thoroughly after handling.

In case of inadequate ventilation wear respiratory protection.

Dispose of contents container in accordance with all applicable regulations.

(Cont. on page 2)

USGHS

## Safety Data Sheet

Printing date 06/09/2015

Version Number 1.0

Reviewed on 06/09/2015

Trade name: *MK-6 Extended Set*

(Cont. from page 1)

Wash contaminated clothing before reuse.  
If inhaled, get medical advice/attention if you feel unwell.

May cause skin and eye irritation.  
Use personal protection equipment as required.

FOR PROFESSIONAL USE ONLY

NFPA ratings (scale 0 - 4)



Health = 1  
Fire = 0  
Reactivity = 0

HMIS-ratings (scale 0 - 4)



Health = \*1  
Flammability = 0  
Reactivity = 0

**Other hazards****Results of PBT and vPvB assessment**

PBT: Not applicable.

vPvB: Not applicable.

**3 Composition/information on ingredients****Chemical characterization: Mixtures****Description:** Mixture of the substances listed below with additional nonhazardous ingredients.**Hazardous components:**

7778-18-9	Calcium sulfate, natural	50-100%
14808-60-7	Quartz (SiO <sub>2</sub> )	2.0-5.0%
1317-65-3	Calcium carbonate	1-10%

**Additional information:** For the wording of the listed risk phrases refer to section 16.**4 First-aid measures****Description of first aid measures****General information:** Get medical advice/attention if you feel unwell.**After inhalation:** If breathing has stopped, give artificial respiration then oxygen if needed.**After skin contact:**

Immediately wash contaminated skin with soap or mild detergent and water. If this chemical soaks clothing, immediately remove clothing and wash skin.

If skin irritation occurs, consult a doctor.

**After eye contact:**

Rinse cautiously with water for several minutes.

If eye irritation occurs, consult a doctor.

**After swallowing:**

Rinse mouth.

(Cont. on page 3)

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## Safety Data Sheet

Printing date 06/09/2015

Version Number 1.0

Reviewed on 06/09/2015

**Trade name:** *MK-6 Extended Set*

Do not induce vomiting.

(Cont. from page 2)

**Information for doctor:****Most important symptoms and effects, both acute and delayed** No further relevant information available.**Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

**5 Fire-fighting measures****Special hazards arising from the substance or mixture** No further relevant information available.**Additional information** No further relevant information available.**6 Accidental release measures****Personal precautions, protective equipment and emergency procedures**Wear protective equipment. Keep unprotected persons away.  
Avoid formation of dust.**Methods and material for containment and cleaning up:**Sweep up spilled product into receptacles.  
Avoid formation of dust.  
Vacuuming or wet sweeping may be used to avoid dust dispersal.  
Dispose contaminated material as waste according to section 13 of the SDS.**Reference to other sections**See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.**7 Handling and storage****Handling:****Precautions for safe handling**Fit dust covers to mixers.  
Prior to welding or cutting, Monokote must be removed from steel surfaces likely to be exposed to excessive heating.  
Avoid contact with skin.  
Avoid contact with eyes.  
Do not breathe dust.**Conditions for safe storage, including any incompatibilities****Storage:****Further information about storage conditions:** Store in cool, dry conditions in well sealed original receptacles.**Specific end use(s)** No further relevant information available.

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(Cont. on page 4)

## Safety Data Sheet

Printing date 06/09/2015

Version Number 1.0

Reviewed on 06/09/2015

Trade name: *MK-6 Extended Set*

(Cont. from page 3)

**8 Exposure controls/personal protection****Additional information about design of technical systems:** No further data; see item 7.**Control parameters****Components with limit values that require monitoring at the workplace:****1317-65-3 Calcium carbonate**

TWA (USA)	Short-term value: 10 mg/m <sup>3</sup> , mg/m <sup>3</sup> ppm Long-term value: 10 mg/m <sup>3</sup> , mg/m <sup>3</sup> ppm (Particulate matter no asbestos)
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**14808-60-7 Quartz (SiO<sub>2</sub>)**

PEL (USA)	see Quartz listing
REL (USA)	Long-term value: 0.05* mg/m <sup>3</sup> *respirable dust; See Pocket Guide App. A
TLV (USA)	Long-term value: 0.025* mg/m <sup>3</sup> * as respirable fraction

**Additional information:** The lists that were valid during the creation were used as basis.**Work/Hygienic Practices:** The usual precautionary measures for handling chemicals should be followed.**Exposure controls**

Minimize airborne dust generation. Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below specified exposure limits. If user operations generate dust, or mist, use ventilation to keep exposure to airborne particles below the exposure limit. Apply organizational measures, eg. by isolating personnel from dusty areas. Remove and wash soiled clothing.

**Personal protective equipment:****General protective and hygienic measures:**

Store protective clothing separately.

The usual precautionary measures for handling chemicals should be followed.

**Breathing equipment:**

Wear NIOSH-approved respiratory protection (generally a N-95 dust/mist respirator is appropriate) to prevent employee exposures from exceeding the limits specified in this section.

**Protection of hands:**

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

**Material of gloves**

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

**Eye protection:**

Safety glasses with side shield protection.

Safety glasses with side shields should be worn to prevent contact due to splashing. Under high vapor mist concentrations, tightly sealed goggles should be worn.

**Body protection:**

Use personal protective equipment as required.

Take off contaminated clothing and wash before reuse.

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(Cont. on page 5)

## Safety Data Sheet

Printing date 06/09/2015

Version Number 1.0

Reviewed on 06/09/2015

Trade name: *MK-6 Extended Set*

(Cont. from page 4)

## \* 9 Physical and chemical properties

## Information on basic physical and chemical properties

## General Information

## Appearance:

Form:	Powder
Color:	Grey
Odor:	Earthy
Odour threshold:	Not determined.

pH-value (~): Not applicable.

## Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
Flash point:	Not applicable.

Flammability (solid, gaseous): Not determined.

Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.

## Explosion limits:

Lower:	Not determined.
Upper:	Not determined.
VOC Content (max):	Not determined.

Vapor pressure:	Not applicable.
Density: (~)	Not determined.
Relative density	Not determined.
Vapour density	Not applicable.
Evaporation rate	Not applicable.

## Solubility in / Miscibility with

Water: Not miscible or difficult to mix.

Partition coefficient (n-octanol/water): Not determined.

## Viscosity:

Dynamic:	Not applicable.
Kinematic:	Not applicable.
Molecular weight	Not applicable.

Other information No further relevant information available.

## \* 10 Stability and reactivity

**Reactivity** Stable under normal conditions.

## Chemical stability

**Thermal decomposition:** No decomposition if used according to specifications.**Conditions to avoid** No further relevant information available.**Incompatible materials:** No further relevant information available.**Hazardous decomposition products:**Carbon monoxide and carbon dioxide  
Cutting or welding may generate Sulfur dioxide.

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## Safety Data Sheet

Printing date 06/09/2015

Version Number 1.0

Reviewed on 06/09/2015

Trade name: *MK-6 Extended Set*

(Cont. from page 5)

**Additional information:** See section 7 for information on handling, storage and conditions to be avoided.**11 Toxicological information**

Prolonged and or massive exposure to respirable crystalline silica containing dust may cause silicosis, a nodular pulmonary fibrosis caused by deposition in the lungs of fine respirable particles of crystalline silica.

**Information on toxicological effects****Acute toxicity:****LD/LC50 values relevant for classification:****1317-65-3 Calcium carbonate**

Oral	LD50	6450 mg/kg (rat)
	LC50, 96h	10.000 mg/l (fish)

**Primary irritant effect:****on the skin:** No irritating effect expected**on the eye:** No irritating effect expected**inhalation:** No irritating effect expected**Additional toxicological information:**

Prolonged exposure may cause risk of lung disease (i.e. silicosis and/or lung cancer).

**Carcinogenic categories****IARC (International Agency for Research on Cancer) Human Carcinogenicity:**  
**Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable**

14808-60-7	Quartz (SiO <sub>2</sub> )	1
9003-53-6	Expanded Polystyrene	3

**NTP (National Toxicology Program)****K–Known to be carcinogenic, R–May reasonably be anticipated to be carcinogenic**

14808-60-7	Quartz (SiO <sub>2</sub> )	K
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**OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

**12 Ecological information****Toxicity****Aquatic toxicity:****1317-65-3 Calcium carbonate**

EC50, 48h	1.000 mg/l (daphnia magna)
EC50, 72h	10.000 mg/l (algae)

**Persistence and degradability** No further relevant information available.**Behavior in environmental systems:****Bioaccumulative potential** No further relevant information available.**Mobility in soil** No further relevant information available.

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USGHS

## Safety Data Sheet

Printing date 06/09/2015

Version Number 1.0

Reviewed on 06/09/2015

Trade name: *MK-6 Extended Set*

(Cont. from page 6)

**Additional ecological information:****General notes:** Not known to be hazardous to water.**Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**Other adverse effects** No further relevant information available.**13 Disposal considerations****Waste treatment methods** Comply with Federal, State and local regulations.**Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packagings:****Recommendation:** Disposal must be made according to official regulations.

\*

**14 Transport information****UN-Number**

DOT, ADR, ADN, IMDG, IATA Not applicable.

**UN proper shipping name**

DOT, ADR, ADN, IMDG, IATA Not applicable.

**Transport hazard class(es)**

DOT, ADR, ADN, IMDG, IATA

Class Not applicable.

**Packing group**

DOT, ADR, IMDG, IATA Not applicable.

**Environmental hazards:****Marine pollutant:** No**Special precautions for user** Not applicable.**Transport/Additional information:****DOT****Remarks:** Not Regulated.**Note:** Not Regulated for Canada TDG.**UN "Model Regulation":** -

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## Safety Data Sheet

Printing date 06/09/2015

Version Number 1.0

Reviewed on 06/09/2015

Trade name: *MK-6 Extended Set*

(Cont. from page 7)

**15 Regulatory information****SARA (Superfund Amendments and Reauthorization Act)****Section 302/304 (extremely hazardous substances):**

None of the ingredients is listed.

**Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):**

None of the ingredients is listed.

**SARA Section 312/Tier I & II Hazard Categories:**

Health Delayed (chronic)	Yes
Health Immediate (acute)	Yes
Flammable	No
Reactive	No
Pressure	No

**North America Chemical Inventory Status****TSCA (Toxic Substances Control Act - United States):**

All ingredients are listed or exempt from listing unless otherwise noted below.

**CEPA (Canadian DSL):**

All ingredients are listed or exempt from listing unless otherwise noted below.

**Right to Know Ingredient Disclosure**

7778-18-9	Calcium sulfate, natural
65996-61-4	Cellulosic Fiber
9003-53-6	Expanded Polystyrene

**California Proposition 65****Chemicals known to cause cancer:**Quartz (SiO<sub>2</sub>)**Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

**Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

**Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

**Carcinogenicity Categories****EPA (Environmental Protection Agency)**

None of the ingredients is listed.

**TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)  
Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable**

Quartz (SiO <sub>2</sub> )	A2
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**NIOSH-Cancer (National Institute for Occupational Safety and Health)**14808-60-7 | Quartz (SiO<sub>2</sub>)**Volatile Organic Compounds (VOC) reported per the Emission Standards.** 0 g/L**16 Other information**

"The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection."

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USGHS



## Safety Data Sheet

Printing date 06/09/2015

Version Number 1.0

Reviewed on 06/09/2015

**Trade name:** *MK-6 Extended Set*

(Cont. from page 8)

**Department issuing SDS:**

W.R. Grace & Co. -Conn.  
62 Whittemore Avenue  
Cambridge, MA 02140 USA  
USA: +1-617-876-1400 (24 hours)  
+1-800-354-5414

**Other Information:**

There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis.  
Therefore preventing the onset of silicosis will also reduce the cancer risk.

**Date of preparation / last revision** 06/09/2015 / -

**The first date of preparation** 05/29/2015

**Number of revision times and the latest revision date** 1.0 / 06/09/2015

USGHS

## Safety Data Sheet

Printing date 06/10/2015

Version Number 1.0

Reviewed on 06/10/2015

**1 Identification****Product identifier**Trade name: MK6-HY

SDS ID Number: 3001D

**Relevant identified uses of the substance or mixture and uses advised against**

Specialty construction product. Not intended for other uses

**Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

W.R. Grace & Co. -Conn.  
62 Whittemore Avenue  
Cambridge, MA 02140 USA

Grace Canada, Inc.  
294 Clements Road W.  
Ajax, Ontario L1S 3C6 Canada

**Information department:**

Environmental Health &amp; Safety

USA: +1-617-876-1400 (24 hours)

+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts

CAN: 1-905-683-8561 (24 hours)

**Transport Emergency:** Chemtrec +1-800-424-9300 (24 hours)**2 Hazard(s) identification****Classification of the substance or mixture**

Depending on the type of handling and use, airborne respirable crystalline silica may be generated. Prolonged and/or massive inhalation of respirable silica dust may cause silicosis. Occupational exposure to respirable crystalline silica should be monitored and controlled.

This product should be handled with care to avoid dust generation.

May cause cancer. Route of exposure: Inhalation.

**GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

**Hazard pictograms**

GHS08

Danger

**Precautionary statements**

Do not handle until all safety precautions have been read and understood.

Avoid breathing dust.

Wash thoroughly after handling.

In case of inadequate ventilation wear respiratory protection.

Dispose of contents container in accordance with all applicable regulations.

(Cont. on page 2)

USGHS

## Safety Data Sheet

Printing date 06/10/2015

Version Number 1.0

Reviewed on 06/10/2015

Trade name: **MK6-HY**

(Cont. from page 1)

Wash contaminated clothing before reuse.  
If inhaled, get medical advice/attention if you feel unwell.

May cause skin and eye irritation.  
Use personal protection equipment as required.

FOR PROPSSSIONAL USE ONLY

NFPA ratings (scale 0 - 4)



Health = 1  
Fire = 0  
Reactivity = 0

HMIS-ratings (scale 0 - 4)



Health = \*1  
Flammability = 0  
Reactivity = 0

**Other hazards****Results of PBT and vPvB assessment**

PBT: Not applicable.

vPvB: Not applicable.

**3 Composition/information on ingredients****Chemical characterization: Mixtures****Description:** Mixture of the substances listed below with additional nonhazardous ingredients.**Hazardous components:**

7778-18-9	Calcium sulfate, natural	50-100%
14808-60-7	Quartz (SiO <sub>2</sub> )	1.0-2.0%
1317-65-3	Calcium carbonate	1.0-10%

**Additional information:** For the wording of the listed risk phrases refer to section 16.**4 First-aid measures****Description of first aid measures****General information:** Get medical advice/attention if you feel unwell.**After inhalation:** If breathing has stopped, give artificial respiration then oxygen if needed.**After skin contact:**

Immediately wash contaminated skin with soap or mild detergent and water. If this chemical soaks clothing, immediately remove clothing and wash skin.

If skin irritation occurs, consult a doctor.

**After eye contact:**

Rinse cautiously with water for several minutes.

If eye irritation occurs, consult a doctor.

**After swallowing:**

Rinse mouth.

(Cont. on page 3)

USGHS

## Safety Data Sheet

Printing date 06/10/2015

Version Number 1.0

Reviewed on 06/10/2015

**Trade name: MK6-HY**

Do not induce vomiting.

(Cont. from page 2)

**Information for doctor:****Most important symptoms and effects, both acute and delayed** No further relevant information available.**Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

**5 Fire-fighting measures****Special hazards arising from the substance or mixture** No further relevant information available.**Additional information** No further relevant information available.**6 Accidental release measures****Personal precautions, protective equipment and emergency procedures**Wear protective equipment. Keep unprotected persons away.  
Avoid formation of dust.**Methods and material for containment and cleaning up:**Sweep up spilled product into receptacles.  
Avoid formation of dust.  
Vacuuming or wet sweeping may be used to avoid dust dispersal.  
Dispose contaminated material as waste according to section 13 of the SDS.**Reference to other sections**See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.**7 Handling and storage****Handling:****Precautions for safe handling**Fit dust covers to mixers.  
Prior to welding or cutting, Monokote must be removed from steel surfaces likely to be exposed to excessive heating.  
Avoid contact with skin.  
Avoid contact with eyes.  
Do not breathe dust.**Conditions for safe storage, including any incompatibilities****Storage:****Further information about storage conditions:** Store in cool, dry conditions in well sealed original receptacles.**Specific end use(s)** No further relevant information available.

USGHS

(Cont. on page 4)

## Safety Data Sheet

Printing date 06/10/2015

Version Number 1.0

Reviewed on 06/10/2015

Trade name: *MK6-HY*

(Cont. from page 3)

**8 Exposure controls/personal protection****Additional information about design of technical systems:** No further data; see item 7.**Control parameters****Components with limit values that require monitoring at the workplace:****1317-65-3 Calcium carbonate**

TWA (USA)	Short-term value: 10 mg/m <sup>3</sup> , mg/m <sup>3</sup> ppm Long-term value: 10 mg/m <sup>3</sup> , mg/m <sup>3</sup> ppm (Particulate matter no asbestos)
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**14808-60-7 Quartz (SiO<sub>2</sub>)**

PEL (USA)	see Quartz listing
REL (USA)	Long-term value: 0.05* mg/m <sup>3</sup> *respirable dust; See Pocket Guide App. A
TLV (USA)	Long-term value: 0.025* mg/m <sup>3</sup> * as respirable fraction

**Additional information:** The lists that were valid during the creation were used as basis.**Work/Hygienic Practices:** The usual precautionary measures for handling chemicals should be followed.**Exposure controls**

Minimize airborne dust generation. Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below specified exposure limits. If user operations generate dust, or mist, use ventilation to keep exposure to airborne particles below the exposure limit. Apply organizational measures, eg. by isolating personnel from dusty areas. Remove and wash soiled clothing.

**Personal protective equipment:****General protective and hygienic measures:**

Store protective clothing separately.

The usual precautionary measures for handling chemicals should be followed.

**Breathing equipment:**

Wear NIOSH-approved respiratory protection (generally a N-95 dust/mist respirator is appropriate) to prevent employee exposures from exceeding the limits specified in this section.

**Protection of hands:**

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

**Material of gloves**

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

**Eye protection:**

Safety glasses with side shield protection.

Safety glasses with side shields should be worn to prevent contact due to splashing. Under high vapor mist concentrations, tightly sealed goggles should be worn.

**Body protection:**

Use personal protective equipment as required.

Take off contaminated clothing and wash before reuse.

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## Safety Data Sheet

Printing date 06/10/2015

Version Number 1.0

Reviewed on 06/10/2015

Trade name: *MK6-HY*

(Cont. from page 4)

## \* 9 Physical and chemical properties

## Information on basic physical and chemical properties

## General Information

## Appearance:

Form:	Powder
Color:	Grey
Odor:	Earthy
Odour threshold:	Not determined.

pH-value (~): Not applicable.

## Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
Flash point:	Not applicable.

Flammability (solid, gaseous): Not determined.

Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.

## Explosion limits:

Lower:	Not determined.
Upper:	Not determined.
VOC Content (max):	Not determined.

Vapor pressure:	Not applicable.
Density: (~)	Not determined.
Relative density	Not determined.
Vapour density	Not applicable.
Evaporation rate	Not applicable.

Solubility in / Miscibility with  
Water: Not miscible or difficult to mix.

Partition coefficient (n-octanol/water): Not determined.

## Viscosity:

Dynamic:	Not applicable.
Kinematic:	Not applicable.
Molecular weight	Not applicable.

Other information No further relevant information available.

## \* 10 Stability and reactivity

**Reactivity** Stable under normal conditions.

## Chemical stability

**Thermal decomposition:** No decomposition if used according to specifications.**Conditions to avoid** No further relevant information available.**Incompatible materials:** No further relevant information available.**Hazardous decomposition products:**Carbon monoxide and carbon dioxide  
Cutting or welding may generate Sulfur dioxide.

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## Safety Data Sheet

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Version Number 1.0

Reviewed on 06/10/2015

Trade name: **MK6-HY**

(Cont. from page 5)

**Additional information:** See section 7 for information on handling, storage and conditions to be avoided.**11 Toxicological information**

Prolonged and or massive exposure to respirable crystalline silica containing dust may cause silicosis, a nodular pulmonary fibrosis caused by deposition in the lungs of fine respirable particles of crystalline silica.

**Information on toxicological effects****Acute toxicity:****LD/LC50 values relevant for classification:****1317-65-3 Calcium carbonate**

Oral	LD50	6450 mg/kg (rat)
	LC50, 96h	10.000 mg/l (fish)

**Primary irritant effect:****on the skin:** No irritating effect expected**on the eye:** No irritating effect expected**inhalation:** No irritating effect expected**Additional toxicological information:**

Prolonged exposure may cause risk of lung disease (i.e. silicosis and/or lung cancer).

**Carcinogenic categories****IARC (International Agency for Research on Cancer) Human Carcinogenicity:**  
**Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable**

14808-60-7	Quartz (SiO <sub>2</sub> )	1
9003-53-6	Expanded Polystyrene	3

**NTP (National Toxicology Program)****K-Known to be carcinogenic, R-May reasonably be anticipated to be carcinogenic**

14808-60-7	Quartz (SiO <sub>2</sub> )	K
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**OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

**12 Ecological information****Toxicity****Aquatic toxicity:****1317-65-3 Calcium carbonate**

EC50, 48h	1.000 mg/l (daphnia magna)
EC50, 72h	10.000 mg/l (algae)

**Persistence and degradability** No further relevant information available.**Behavior in environmental systems:****Bioaccumulative potential** No further relevant information available.**Mobility in soil** No further relevant information available.

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## Safety Data Sheet

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Version Number 1.0

Reviewed on 06/10/2015

Trade name: *MK6-HY*

(Cont. from page 6)

**Additional ecological information:****General notes:** Not known to be hazardous to water.**Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**Other adverse effects** No further relevant information available.**13 Disposal considerations****Waste treatment methods** Comply with Federal, State and local regulations.**Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packagings:****Recommendation:** Disposal must be made according to official regulations.**14 Transport information****UN-Number**

DOT, ADR, ADN, IMDG, IATA Not applicable.

**UN proper shipping name**

DOT, ADR, ADN, IMDG, IATA Not applicable.

**Transport hazard class(es)**

DOT, ADR, ADN, IMDG, IATA

Class Not applicable.

**Packing group**

DOT, ADR, IMDG, IATA Not applicable.

**Environmental hazards:****Marine pollutant:** No**Special precautions for user** Not applicable.**Transport/Additional information:****DOT****Remarks:** Not Regulated.**Note:** Not Regulated for Canada TDG.**UN "Model Regulation":** -

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Reviewed on 06/10/2015

Trade name: **MK6-HY**

(Cont. from page 7)

**15 Regulatory information****SARA (Superfund Amendments and Reauthorization Act)****Section 302/304 (extremely hazardous substances):**

None of the ingredients is listed.

**Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):**

None of the ingredients is listed.

**SARA Section 312/Tier I & II Hazard Categories:**

Health Delayed (chronic)	Yes
Health Immediate (acute)	Yes
Flammable	No
Reactive	No
Pressure	No

**North America Chemical Inventory Status****TSCA (Toxic Substances Control Act - United States):**

All ingredients are listed or exempt from listing unless otherwise noted below.

**CEPA (Canadian DSL):**

All ingredients are listed or exempt from listing unless otherwise noted below.

**Right to Know Ingredient Disclosure**

7778-18-9	Calcium sulfate, natural
65996-61-4	Cellulosic Fiber
9003-53-6	Expanded Polystyrene

**California Proposition 65****Chemicals known to cause cancer:**Quartz (SiO<sub>2</sub>)**Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

**Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

**Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

**Carcinogenicity Categories****EPA (Environmental Protection Agency)**

None of the ingredients is listed.

**TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)  
Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable**

Quartz (SiO <sub>2</sub> )	A2
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**NIOSH-Cancer (National Institute for Occupational Safety and Health)**14808-60-7 | Quartz (SiO<sub>2</sub>)**Volatile Organic Compounds (VOC) reported per the Emission Standards.** 0 g/L**16 Other information**

"The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection."

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Reviewed on 06/10/2015

**Trade name: MK6-HY**

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**Department issuing SDS:**

W.R. Grace & Co. -Conn.  
62 Whittemore Avenue  
Cambridge, MA 02140 USA  
USA: +1-617-876-1400 (24 hours)  
+1-800-354-5414

**Other Information:**

There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis.  
Therefore preventing the onset of silicosis will also reduce the cancer risk.

**Date of preparation / last revision** 06/10/2015 / -

**The first date of preparation** 05/29/2015

**Number of revision times and the latest revision date** 1.0 / 06/10/2015

USGHS

## Safety Data Sheet

Printing date 06/10/2015

Version Number 1.0

Reviewed on 06/10/2015

**1 Identification****Product identifier****Trade name:** Retroguard**SDS ID Number:** 3001I**Relevant identified uses of the substance or mixture and uses advised against**

Specialty construction product. Not intended for other uses

**Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

W.R. Grace & Co. -Conn.  
62 Whittemore Avenue  
Cambridge, MA 02140 USA

Grace Canada, Inc.  
294 Clements Road W.  
Ajax, Ontario L1S 3C6 Canada

**Information department:**

Environmental Health &amp; Safety

USA: +1-617-876-1400 (24 hours)

+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts

CAN: 1-905-683-8561 (24 hours)

**Transport Emergency:** Chemtrec +1-800-424-9300 (24 hours)**2 Hazard(s) identification****Classification of the substance or mixture**

Depending on the type of handling and use, airborne respirable crystalline silica may be generated. Prolonged and/or massive inhalation of respirable silica dust may cause silicosis. Occupational exposure to respirable crystalline silica should be monitored and controlled.

This product should be handled with care to avoid dust generation.

May cause cancer. Route of exposure: Inhalation.

**GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

**Hazard pictograms**

GHS08

Danger

**Precautionary statements**

Do not handle until all safety precautions have been read and understood.

Avoid breathing dust.

Wash thoroughly after handling.

In case of inadequate ventilation wear respiratory protection.

Dispose of contents container in accordance with all applicable regulations.

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## Safety Data Sheet

Printing date 06/10/2015

Version Number 1.0

Reviewed on 06/10/2015

**Trade name: Retroguard**

(Cont. from page 1)

Wash contaminated clothing before reuse.  
If inhaled, get medical advice/attention if you feel unwell.

May cause skin and eye irritation.  
Use personal protection equipment as required.

FOR PROFESSIONAL USE ONLY

NFPA ratings (scale 0 - 4)



Health = 1  
Fire = 0  
Reactivity = 0

HMIS-ratings (scale 0 - 4)



Health = \*1  
Flammability = 0  
Reactivity = 0

**Other hazards****Results of PBT and vPvB assessment**

PBT: Not applicable.

vPvB: Not applicable.

**3 Composition/information on ingredients****Chemical characterization: Mixtures****Description:** Mixture of the substances listed below with additional nonhazardous ingredients.**Hazardous components:**

7778-18-9	Calcium sulfate, natural	30-50%
14808-60-7	Quartz (SiO <sub>2</sub> )	0.1-1.0%
26499-65-0	Calcium sulphate hemihydrate	30-50%
12174-11-7	Clay	2.0-5.0%

**Additional information:** For the wording of the listed risk phrases refer to section 16.**4 First-aid measures****Description of first aid measures****General information:** Get medical advice/attention if you feel unwell.**After inhalation:** If breathing has stopped, give artificial respiration then oxygen if needed.**After skin contact:**

Immediately wash contaminated skin with soap or mild detergent and water. If this chemical soaks clothing, immediately remove clothing and wash skin.

If skin irritation occurs, consult a doctor.

**After eye contact:**

Rinse cautiously with water for several minutes.

If eye irritation occurs, consult a doctor.

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Reviewed on 06/10/2015

**Trade name: Retroguard**

(Cont. from page 2)

**After swallowing:**

Rinse mouth.  
Do not induce vomiting.

**Information for doctor:**

**Most important symptoms and effects, both acute and delayed** No further relevant information available.

**Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

\* **5 Fire-fighting measures**

**Special hazards arising from the substance or mixture** No further relevant information available.

**Additional information** No further relevant information available.

\* **6 Accidental release measures****Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.  
Avoid formation of dust.

**Methods and material for containment and cleaning up:**

Sweep up spilled product into receptacles.  
Avoid formation of dust.  
Vacuuming or wet sweeping may be used to avoid dust dispersal.  
Dispose contaminated material as waste according to section 13 of the SDS.

**Reference to other sections**

See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

\* **7 Handling and storage****Handling:****Precautions for safe handling**

Fit dust covers to mixers.  
Prior to welding or cutting, Monokote must be removed from steel surfaces likely to be exposed to excessive heating.  
Avoid contact with skin.  
Avoid contact with eyes.  
Do not breathe dust.

**Conditions for safe storage, including any incompatibilities****Storage:**

**Further information about storage conditions:** Store in cool, dry conditions in well sealed original receptacles.

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USGHS

## Safety Data Sheet

Printing date 06/10/2015

Version Number 1.0

Reviewed on 06/10/2015

Trade name: *Retroguard*

(Cont. from page 3)

Specific end use(s) No further relevant information available.

**8 Exposure controls/personal protection****Additional information about design of technical systems:** No further data; see item 7.**Control parameters****Components with limit values that require monitoring at the workplace:****1317-65-3 Calcium carbonate**

TWA (USA)	Short-term value: 10 mg/m <sup>3</sup> , mg/m <sup>3</sup> ppm Long-term value: 10 mg/m <sup>3</sup> , mg/m <sup>3</sup> ppm (Particulate matter no asbestos)
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**14808-60-7 Quartz (SiO<sub>2</sub>)**

PEL (USA)	see Quartz listing
REL (USA)	Long-term value: 0.05* mg/m <sup>3</sup> *respirable dust; See Pocket Guide App. A
TLV (USA)	Long-term value: 0.025* mg/m <sup>3</sup> * as respirable fraction

**Additional information:** The lists that were valid during the creation were used as basis.**Work/Hygienic Practices:** The usual precautionary measures for handling chemicals should be followed.**Exposure controls**

Minimize airborne dust generation. Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below specified exposure limits. If user operations generate dust, or mist, use ventilation to keep exposure to airborne particles below the exposure limit. Apply organizational measures, eg. by isolating personnel from dusty areas. Remove and wash soiled clothing.

**Personal protective equipment:****General protective and hygienic measures:**

Store protective clothing separately.

The usual precautionary measures for handling chemicals should be followed.

**Breathing equipment:**

Wear NIOSH-approved respiratory protection (generally a N-95 dust/mist respirator is appropriate) to prevent employee exposures from exceeding the limits specified in this section.

**Protection of hands:**

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

**Material of gloves**

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

**Eye protection:**

Safety glasses with side shield protection.

Safety glasses with side shields should be worn to prevent contact due to splashing. Under high vapor mist concentrations, tightly sealed goggles should be worn.

**Body protection:**

Use personal protective equipment as required.

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## Safety Data Sheet

Printing date 06/10/2015

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Reviewed on 06/10/2015

Trade name: *Retroguard*

(Cont. from page 4)

Take off contaminated clothing and wash before reuse.

## \* 9 Physical and chemical properties

## Information on basic physical and chemical properties

## General Information

## Appearance:

Form:	Powder
Color:	Grey
Odor:	Earthy
Odour threshold:	Not determined.

pH-value (~): Not applicable.

## Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
Flash point:	Not applicable.

Flammability (solid, gaseous): Not determined.

Decomposition temperature: Not determined.

Auto igniting: Product is not selfigniting.

Danger of explosion: Product does not present an explosion hazard.

## Explosion limits:

Lower:	Not determined.
Upper:	Not determined.
VOC Content (max):	Not determined.

Vapor pressure:	Not applicable.
Density: (~)	Not determined.
Relative density	Not determined.
Vapour density	Not applicable.
Evaporation rate	Not applicable.

Solubility in / Miscibility with  
Water: Not miscible or difficult to mix.

Partition coefficient (n-octanol/water): Not determined.

## Viscosity:

Dynamic:	Not applicable.
Kinematic:	Not applicable.
Molecular weight	Not applicable.

Other information No further relevant information available.

## \* 10 Stability and reactivity

**Reactivity** Stable under normal conditions.

## Chemical stability

**Thermal decomposition:** No decomposition if used according to specifications.**Conditions to avoid** No further relevant information available.**Incompatible materials:** No further relevant information available.

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## Safety Data Sheet

Printing date 06/10/2015

Version Number 1.0

Reviewed on 06/10/2015

Trade name: *Retroguard*

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**Hazardous decomposition products:**

Carbon monoxide and carbon dioxide  
Cutting or welding may generate Sulfur dioxide.

**Additional information:** See section 7 for information on handling, storage and conditions to be avoided.

**11 Toxicological information**

Prolonged and or massive exposure to respirable crystalline silica containing dust may cause silicosis, a nodular pulmonary fibrosis caused by deposition in the lungs of fine respirable particles of crystalline silica.

**Information on toxicological effects****Acute toxicity:****LD/LC50 values relevant for classification:****1317-65-3 Calcium carbonate**

Oral	LD50	6450 mg/kg (rat)
	LC50, 96h	10.000 mg/l (fish)

**Primary irritant effect:**

**on the skin:** No irritating effect expected

**on the eye:** No irritating effect expected

**inhalation:** No irritating effect expected

**Additional toxicological information:**

Prolonged exposure may cause risk of lung disease (i.e. silicosis and/or lung cancer).

**Carcinogenic categories****IARC (International Agency for Research on Cancer) Human Carcinogenicity:**

**Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable**

14808-60-7	Quartz (SiO <sub>2</sub> )	1
9003-53-6	Expanded Polystyrene	3

**NTP (National Toxicology Program)**

**K–Known to be carcinogenic, R–May reasonably be anticipated to be carcinogenic**

14808-60-7	Quartz (SiO <sub>2</sub> )	K
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**OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

**12 Ecological information****Toxicity****Aquatic toxicity:****1317-65-3 Calcium carbonate**

EC50, 48h	1.000 mg/l (daphnia magna)
EC50, 72h	10.000 mg/l (algae)

**Persistence and degradability** No further relevant information available.

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Reviewed on 06/10/2015

Trade name: *Retroguard*

(Cont. from page 6)

**Behavior in environmental systems:****Bioaccumulative potential** No further relevant information available.**Mobility in soil** No further relevant information available.**Additional ecological information:****General notes:** Not known to be hazardous to water.**Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**Other adverse effects** No further relevant information available.**13 Disposal considerations****Waste treatment methods** Comply with Federal, State and local regulations.**Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packagings:****Recommendation:** Disposal must be made according to official regulations.**14 Transport information****UN-Number**

DOT, ADR, ADN, IMDG, IATA Not applicable.

**UN proper shipping name**

DOT, ADR, ADN, IMDG, IATA Not applicable.

**Transport hazard class(es)**

DOT, ADR, ADN, IMDG, IATA

Class Not applicable.

**Packing group**

DOT, ADR, IMDG, IATA Not applicable.

**Environmental hazards:****Marine pollutant:** No**Special precautions for user** Not applicable.**Transport/Additional information:****DOT****Remarks:** Not Regulated.**Note:** Not Regulated for Canada TDG.

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## Safety Data Sheet

Printing date 06/10/2015

Version Number 1.0

Reviewed on 06/10/2015

Trade name: *Retroguard*

(Cont. from page 7)

UN "Model Regulation": -

## \* 15 Regulatory information

## SARA (Superfund Amendments and Reauthorization Act)

## Section 302/304 (extremely hazardous substances):

None of the ingredients is listed.

## Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):

None of the ingredients is listed.

## SARA Section 312/Tier I &amp; II Hazard Categories:

Health Delayed (chronic)	Yes
Health Immediate (acute)	Yes
Flammable	No
Reactive	No
Pressure	No

## North America Chemical Inventory Status

## TSCA (Toxic Substances Control Act - United States):

All ingredients are listed or exempt from listing unless otherwise noted below.

## CEPA (Canadian DSL):

All ingredients are listed or exempt from listing unless otherwise noted below.

## Right to Know Ingredient Disclosure

7778-18-9	Calcium sulfate, natural
65996-61-4	Cellulosic Fiber
9003-53-6	Expanded Polystyrene

## California Proposition 65

## Chemicals known to cause cancer:

Quartz (SiO<sub>2</sub>)

## Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

## Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

## Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

## Carcinogenicity Categories

## EPA (Environmental Protection Agency)

None of the ingredients is listed.

## TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)

## Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable

Quartz (SiO<sub>2</sub>) A2

## NIOSH-Cancer (National Institute for Occupational Safety and Health)

14808-60-7 Quartz (SiO<sub>2</sub>)

Volatile Organic Compounds (VOC) reported per the Emission Standards. 0 g/L

## 16 Other information

"The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design

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## Safety Data Sheet

Printing date 06/10/2015

Version Number 1.0

Reviewed on 06/10/2015

**Trade name: *Retroguard***

(Cont. from page 8)

and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection."

**Department issuing SDS:**

W.R. Grace & Co. -Conn.  
62 Whittemore Avenue  
Cambridge, MA 02140 USA  
USA: +1-617-876-1400 (24 hours)  
+1-800-354-5414

**Other Information:**

There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis. Therefore preventing the onset of silicosis will also reduce the cancer risk.

**Date of preparation / last revision** 06/10/2015 / -

**The first date of preparation** 05/29/2015

**Number of revision times and the latest revision date** 1.0 / 06/10/2015

USGHS

## Safety Data Sheet

Printing date 06/03/2015

Version Number 1.0

Reviewed on 06/03/2015

**1 Identification****Product identifier**Trade name: MONOKOTE Z-146

SDS ID Number: 3002A

**Relevant identified uses of the substance or mixture and uses advised against**

Specialty construction product. Not intended for other uses

**Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

W.R. Grace & Co. -Conn.  
62 Whittemore Avenue  
Cambridge, MA 02140 USA

Grace Canada, Inc.  
294 Clements Road W.  
Ajax, Ontario L1S 3C6 Canada

**Information department:**

Environmental Health &amp; Safety

USA: +1-617-876-1400 (24 hours)

+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts

CAN: 1-905-683-8561 (24 hours)

**Transport Emergency:** Chemtrec +1-800-424-9300 (24 hours)**2 Hazard(s) identification****Classification of the substance or mixture**

Depending on the type of handling and use, airborne respirable crystalline silica may be generated. Prolonged and/or massive inhalation of respirable silica dust may cause silicosis. Occupational exposure to respirable crystalline silica should be monitored and controlled.

This product should be handled with care to avoid dust generation.

May cause damage to the lung through prolonged or repeated exposure. Route of exposure: Inhalation.

Causes serious eye damage.

Causes skin irritation.

Sensitization possible through skin contact.

May cause respiratory irritation.

**GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

**Hazard pictograms**

GHS05

GHS07

GHS08

Danger

(Cont. on page 2)

USGHS

## Safety Data Sheet

Printing date 06/03/2015

Version Number 1.0

Reviewed on 06/03/2015

Trade name: **MONOKOTE Z-146**

(Cont. from page 1)

**Precautionary statements**

Do not handle until all safety precautions have been read and understood.

Avoid breathing dust.

Wash thoroughly after handling.

In case of inadequate ventilation wear respiratory protection.

Wear protective gloves/protective clothing/eye protection.

If swallowed, rinse mouth. Do not induce vomiting. Call a poison center or doctor/physician if you feel unwell.

If on Skin, wash with plenty of soap and water. Wash contaminated clothing before reuse.

If inhaled, get medical advice/attention if you feel unwell.

If in eyes, remove contact lenses, if present and easy to do so. Rinse cautiously with water for several minutes.

If eye irritation persists: Get medical advice/attention.

If skin irritation occurs: Get medical advice/attention.

Dispose of contents/container in accordance with local/regional/national/international regulations.

**Hazard description:** Danger

NFPA ratings (scale 0 - 4)



Health = 2

Fire = 0

Reactivity = 0

**HMIS-ratings (scale 0 - 4)**

Health = \*2

Flammability = 0

Reactivity = 0

**Other hazards****Results of PBT and vPvB assessment**

PBT: Not applicable.

vPvB: Not applicable.

**3 Composition/information on ingredients****Chemical characterization: Mixtures****Description:** Mixture of the substances listed below with additional nonhazardous ingredients.**Hazardous components:**

65997-15-1	Portland cement	50-100%
14808-60-7	Quartz (SiO <sub>2</sub> )	2.0-5.0%

**Additional information:** For the wording of the listed risk phrases refer to section 16.**4 First-aid measures****Description of first aid measures****General information:** Get medical advice/attention if you feel unwell.**After inhalation:** If breathing has stopped, give artificial respiration then oxygen if needed.**After skin contact:**

Immediately wash contaminated skin with soap or mild detergent and water. If this chemical soaks clothing, immediately remove clothing and wash skin.

If skin irritation continues, consult a doctor.

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USGHS

## Safety Data Sheet

Printing date 06/03/2015

Version Number 1.0

Reviewed on 06/03/2015

**Trade name: MONOKOTE Z-146**

(Cont. from page 2)

**After eye contact:**

Rinse cautiously with water for several minutes.  
Seek immediate medical advice.

**After swallowing:**

Rinse mouth.  
Do not induce vomiting.

**Information for doctor:**

**Most important symptoms and effects, both acute and delayed** No further relevant information available.

**Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

**5 Fire-fighting measures**

**Special hazards arising from the substance or mixture** No further relevant information available.

**Additional information** No further relevant information available.

**6 Accidental release measures****Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.  
Avoid formation of dust.

**Environmental precautions:**

Inform respective authorities in case of seepage into water course or sewage system.

**Methods and material for containment and cleaning up:**

Sweep up spilled product into receptacles.  
Avoid formation of dust.  
Vacuuming or wet sweeping may be used to avoid dust dispersal.  
Dispose contaminated material as waste according to section 13 of the SDS.

**Reference to other sections**

See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

**7 Handling and storage****Handling:****Precautions for safe handling**

Risk of serious damage to eyes.  
Fit dust covers to mixers.  
Prior to welding or cutting, Monokote must be removed from steel surfaces likely to be exposed to excessive heating.  
Do not breathe dust.

(Cont. on page 4)

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## Safety Data Sheet

Printing date 06/03/2015

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Reviewed on 06/03/2015

Trade name: **MONOKOTE Z-146**

(Cont. from page 3)

Avoid contact with skin.  
Danger of wet slippery surfaces.

**Information about protection against explosions and fires:** Keep respiratory protective device available.

### Conditions for safe storage, including any incompatibilities

#### Storage:

**Further information about storage conditions:** Store in cool, dry conditions in well sealed original receptacles.

**Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

**Additional information about design of technical systems:** No further data; see item 7.

### Control parameters

**Components with limit values that require monitoring at the workplace:**

#### 14808-60-7 Quartz (SiO<sub>2</sub>)

PEL (USA)	see Quartz listing
REL (USA)	Long-term value: 0.05* mg/m <sup>3</sup> *respirable dust; See Pocket Guide App. A
TLV (USA)	Long-term value: 0.025* mg/m <sup>3</sup> *as respirable fraction

**Additional information:** The lists that were valid during the creation were used as basis.

**Work/Hygienic Practices:** The usual precautionary measures for handling chemicals should be followed.

### Exposure controls

Minimize airborne dust generation. Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below specified exposure limits. If user operations generate dust, or mist, use ventilation to keep exposure to airborne particles below the exposure limit. Apply organizational measures, eg. by isolating personnel from dusty areas. Remove and wash soiled clothing.

#### Personal protective equipment:

##### General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Store protective clothing separately.

##### Breathing equipment:

Wear NIOSH-approved respiratory protection (generally a N-95 dust/mist respirator is appropriate) to prevent employee exposures from exceeding the limits specified in this section.

If Exposure Limits in Section 8.1 are exceeded, approved respiratory protection filter type P should be used.

##### Protection of hands:



Alkaline resistant gloves

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

##### Material of gloves

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

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Trade name: **MONOKOTE Z-146**

(Cont. from page 4)

**Eye protection:**

Safety glasses with side shield protection.

Safety glasses with side shields should be worn to prevent contact due to splashing. Under high vapor mist concentrations, tightly sealed goggles should be worn.

**Body protection:**

Use personal protective equipment as required.

Take off contaminated clothing and wash before reuse.

**9 Physical and chemical properties****Information on basic physical and chemical properties****General Information****Appearance:**

<b>Form:</b>	Powder
<b>Color:</b>	According to product specification
<b>Odor:</b>	Characteristic
<b>Odour threshold:</b>	Not determined.

**pH-value (~):** Not applicable.

**Change in condition**

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	Undetermined.
<b>Flash point:</b>	Not applicable.

**Flammability (solid, gaseous):** Not determined.

<b>Decomposition temperature:</b>	Not determined.
<b>Auto igniting:</b>	Product is not selfigniting.
<b>Danger of explosion:</b>	Product does not present an explosion hazard.

**Explosion limits:**

<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
<b>VOC Content (max):</b>	Not determined.

<b>Vapor pressure:</b>	Not applicable.
<b>Density: (~) at 20 °C (68 °F)</b>	21 g/cm <sup>3</sup> (175.245 lbs/gal)
<b>Relative density</b>	Not determined.
<b>Vapour density</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.

**Solubility in / Miscibility with Water:** Not miscible or difficult to mix.

**Partition coefficient (n-octanol/water):** Not determined.

**Viscosity:**

<b>Dynamic:</b>	Not applicable.
<b>Kinematic:</b>	Not applicable.
<b>Molecular weight</b>	Not applicable.

(Cont. on page 6)

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Trade name: **MONOKOTE Z-146**

(Cont. from page 5)

**Other information**

No further relevant information available.

**10 Stability and reactivity****Reactivity** Stable under normal conditions.**Chemical stability****Thermal decomposition:** No decomposition if used according to specifications.**Conditions to avoid** No further relevant information available.**Incompatible materials:** No further relevant information available.**Hazardous decomposition products:**Carbon monoxide and carbon dioxide  
Cutting or welding may generate Sulfur dioxide.**Additional information:** See section 7 for information on handling, storage and conditions to be avoided.**11 Toxicological information**

Prolonged and or massive exposure to respirable crystalline silica containing dust may cause silicosis, a nodular pulmonary fibrosis caused by deposition in the lungs of fine respirable particles of crystalline silica.

**Information on toxicological effects****Acute toxicity:****Primary irritant effect:****on the skin:** Causes skin irritation.**on the eye:** Causes serious eye damage.**inhalation:** May cause respiratory irritation.**Ingestion:** May cause damage to the lung through prolonged or repeated exposure. Route of exposure: Inhalation.**Additional toxicological information:**

Cementitious grouts and mortars are known to cause both irritant and allergic contact dermatitis. Prolonged skin contact can result in chemical burns.

Prolonged exposure may cause risk of lung disease (i.e. silicosis and/or lung cancer).

**Carcinogenic categories****IARC (International Agency for Research on Cancer) Human Carcinogenicity:**  
**Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable**

14808-60-7	Quartz (SiO <sub>2</sub> )	1
9003-53-6	Expanded Polystyrene	3

**NTP (National Toxicology Program)****K-Known to be carcinogenic, R-May reasonably be anticipated to be carcinogenic**

14808-60-7	Quartz (SiO <sub>2</sub> )	K
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**OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

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(Cont. on page 7)

## Safety Data Sheet

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Trade name: **MONOKOTE Z-146**

(Cont. from page 6)

\* **12 Ecological information****Toxicity**

Aquatic toxicity: No further relevant information available.

**Persistence and degradability** No further relevant information available.**Behavior in environmental systems:****Bioaccumulative potential** No further relevant information available.**Mobility in soil** No further relevant information available.**Additional ecological information:****General notes:** Not known to be hazardous to water.**Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**Other adverse effects** No further relevant information available.\* **13 Disposal considerations****Waste treatment methods** Comply with Federal, State and local regulations.**Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packagings:****Recommendation:** Disposal must be made according to official regulations.\* **14 Transport information****UN-Number**

DOT, ADR, ADN, IMDG, IATA

Not applicable.

**UN proper shipping name**

DOT, ADR, ADN, IMDG, IATA

Not applicable.

**Transport hazard class(es)**

DOT, ADR, ADN, IMDG, IATA

Class

Not applicable.

**Packing group**

DOT, ADR, IMDG, IATA

Not applicable.

**Environmental hazards:****Marine pollutant:**

No

**Special precautions for user**

Not applicable.

(Cont. on page 8)

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## Safety Data Sheet

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Reviewed on 06/03/2015

Trade name: **MONOKOTE Z-146**

(Cont. from page 7)

**Transport/Additional information:** Not classified as a dangerous good for transport by road, rail or air.**DOT****Remarks:**

Not Regulated.

**Note:**

Not Regulated for Canada TDG.

**UN "Model Regulation":**

-

**15 Regulatory information****SARA (Superfund Amendments and Reauthorization Act)****Section 302/304 (extremely hazardous substances):**

None of the ingredients is listed.

**Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):**

None of the ingredients is listed.

**SARA Section 312/Tier I & II Hazard Categories:**

Health Delayed (chronic)	Yes
Health Immediate (acute)	Yes
Flammable	No
Reactive	No
Pressure	No

**North America Chemical Inventory Status****TSCA (Toxic Substances Control Act - United States):**

All ingredients are listed or exempt from listing unless otherwise noted below.

**CEPA (Canadian DSL):**

All ingredients are listed or exempt from listing unless otherwise noted below.

**Right to Know Ingredient Disclosure**

65996-61-4	Cellulosic Fiber
9003-53-6	Expanded Polystyrene

**California Proposition 65****Chemicals known to cause cancer:**Quartz (SiO<sub>2</sub>)**Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

**Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

**Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

**Carcinogenicity Categories****EPA (Environmental Protection Agency)**

None of the ingredients is listed.

**TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)****Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable**Quartz (SiO<sub>2</sub>)

A2

**NIOSH-Cancer (National Institute for Occupational Safety and Health)**14808-60-7 Quartz (SiO<sub>2</sub>)

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USGHS

## Safety Data Sheet

Printing date 06/03/2015

Version Number 1.0

Reviewed on 06/03/2015

**Trade name: MONOKOTE Z-146****Volatile Organic Compounds (VOC) reported per the Emission Standards. 0 g/L**

(Cont. from page 8)

\*

**16 Other information**

"The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection."

**Department issuing SDS:**

W.R. Grace & Co. -Conn.  
62 Whittemore Avenue  
Cambridge, MA 02140 USA  
USA: +1-617-876-1400 (24 hours)  
+1-800-354-5414

**Other Information:**

There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis. Therefore preventing the onset of silicosis will also reduce the cancer risk.

**Date of preparation / last revision** 06/03/2015 / -

**The first date of preparation** 02/19/2015

**Number of revision times and the latest revision date** 1.0 / 06/03/2015

USGHS

## Safety Data Sheet

Printing date 06/10/2015

Version Number 1.0

Reviewed on 06/10/2015

**1 Identification****Product identifier****Trade name:** Z-106G**SDS ID Number:** 3001J**Relevant identified uses of the substance or mixture and uses advised against**

Specialty construction product. Not intended for other uses

**Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

W.R. Grace & Co. -Conn.  
62 Whittemore Avenue  
Cambridge, MA 02140 USA

Grace Canada, Inc.  
294 Clements Road W.  
Ajax, Ontario L1S 3C6 Canada

**Information department:**

Environmental Health &amp; Safety

USA: +1-617-876-1400 (24 hours)

+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts

CAN: 1-905-683-8561 (24 hours)

**Transport Emergency:** Chemtrec +1-800-424-9300 (24 hours)**2 Hazard(s) identification****Classification of the substance or mixture**

Depending on the type of handling and use, airborne respirable crystalline silica may be generated. Prolonged and/or massive inhalation of respirable silica dust may cause silicosis. Occupational exposure to respirable crystalline silica should be monitored and controlled.

This product should be handled with care to avoid dust generation.

May cause cancer. Route of exposure: Inhalation.

**GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

**Hazard pictograms**

GHS08

Danger

**Precautionary statements**

Do not handle until all safety precautions have been read and understood.

Avoid breathing dust.

Wash thoroughly after handling.

In case of inadequate ventilation wear respiratory protection.

Dispose of contents container in accordance with all applicable regulations.

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## Safety Data Sheet

Printing date 06/10/2015

Version Number 1.0

Reviewed on 06/10/2015

**Trade name: Z-106G**

(Cont. from page 1)

Wash contaminated clothing before reuse.  
If inhaled, get medical advice/attention if you feel unwell.

May cause skin and eye irritation.  
Use personal protection equipment as required.

FOR PROFESSIONAL USE ONLY

NFPA ratings (scale 0 - 4)



Health = 1  
Fire = 0  
Reactivity = 0

HMIS-ratings (scale 0 - 4)



Health = \*1  
Flammability = 0  
Reactivity = 0

**Other hazards****Results of PBT and vPvB assessment**

PBT: Not applicable.

vPvB: Not applicable.

**3 Composition/information on ingredients****Chemical characterization: Mixtures****Description:** Mixture of the substances listed below with additional nonhazardous ingredients.**Hazardous components:**

7778-18-9	Calcium sulfate, natural	50-100%
14808-60-7	Quartz (SiO <sub>2</sub> )	1.0-10%

**Additional information:** For the wording of the listed risk phrases refer to section 16.**4 First-aid measures****Description of first aid measures****General information:** Get medical advice/attention if you feel unwell.**After inhalation:** If breathing has stopped, give artificial respiration then oxygen if needed.**After skin contact:**

Immediately wash contaminated skin with soap or mild detergent and water. If this chemical soaks clothing, immediately remove clothing and wash skin.

If skin irritation occurs, consult a doctor.

**After eye contact:**

Rinse cautiously with water for several minutes.

If eye irritation occurs, consult a doctor.

**After swallowing:**

Rinse mouth.

Do not induce vomiting.

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Reviewed on 06/10/2015

**Trade name: Z-106G**

(Cont. from page 2)

**Information for doctor:****Most important symptoms and effects, both acute and delayed** No further relevant information available.**Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

**5 Fire-fighting measures****Special hazards arising from the substance or mixture** No further relevant information available.**Additional information** No further relevant information available.**6 Accidental release measures****Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

Avoid formation of dust.

**Methods and material for containment and cleaning up:**

Sweep up spilled product into receptacles.

Avoid formation of dust.

Vacuuming or wet sweeping may be used to avoid dust dispersal.

Dispose contaminated material as waste according to section 13 of the SDS.

**Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

**7 Handling and storage****Handling:****Precautions for safe handling**

Fit dust covers to mixers.

Prior to welding or cutting, Monokote must be removed from steel surfaces likely to be exposed to excessive heating.

Avoid contact with skin.

Avoid contact with eyes.

Do not breathe dust.

**Conditions for safe storage, including any incompatibilities****Storage:****Further information about storage conditions:** Store in cool, dry conditions in well sealed original receptacles.**Specific end use(s)** No further relevant information available.

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(Cont. on page 4)

## Safety Data Sheet

Printing date 06/10/2015

Version Number 1.0

Reviewed on 06/10/2015

Trade name: Z-106G

(Cont. from page 3)

## 8 Exposure controls/personal protection

**Additional information about design of technical systems:** No further data; see item 7.

### Control parameters

**Components with limit values that require monitoring at the workplace:**

#### 1317-65-3 Calcium carbonate

TWA (USA)	Short-term value: 10 mg/m <sup>3</sup> , mg/m <sup>3</sup> ppm Long-term value: 10 mg/m <sup>3</sup> , mg/m <sup>3</sup> ppm (Particulate matter no asbestos)
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#### 14808-60-7 Quartz (SiO<sub>2</sub>)

PEL (USA)	see Quartz listing
REL (USA)	Long-term value: 0.05* mg/m <sup>3</sup> *respirable dust; See Pocket Guide App. A
TLV (USA)	Long-term value: 0.025* mg/m <sup>3</sup> * as respirable fraction

**Additional information:** The lists that were valid during the creation were used as basis.

**Work/Hygienic Practices:** The usual precautionary measures for handling chemicals should be followed.

### Exposure controls

Minimize airborne dust generation. Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below specified exposure limits. If user operations generate dust, or mist, use ventilation to keep exposure to airborne particles below the exposure limit. Apply organizational measures, eg. by isolating personnel from dusty areas. Remove and wash soiled clothing.

### Personal protective equipment:

#### General protective and hygienic measures:

Store protective clothing separately.

The usual precautionary measures for handling chemicals should be followed.

#### Breathing equipment:

Wear NIOSH-approved respiratory protection (generally a N-95 dust/mist respirator is appropriate) to prevent employee exposures from exceeding the limits specified in this section.

#### Protection of hands:

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

#### Material of gloves

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

#### Eye protection:



Safety glasses with side shield protection.

Safety glasses with side shields should be worn to prevent contact due to splashing. Under high vapor mist concentrations, tightly sealed goggles should be worn.

#### Body protection:

Use personal protective equipment as required.

Take off contaminated clothing and wash before reuse.

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(Cont. on page 5)



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Version Number 1.0

Reviewed on 06/10/2015

Trade name: Z-106G

(Cont. from page 4)

## \* 9 Physical and chemical properties

## Information on basic physical and chemical properties

## General Information

## Appearance:

Form:	Powder
Color:	Grey
Odor:	Earthy
Odour threshold:	Not determined.

pH-value (~): Not applicable.

## Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
Flash point:	Not applicable.

Flammability (solid, gaseous): Not determined.

Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.

## Explosion limits:

Lower:	Not determined.
Upper:	Not determined.
VOC Content (max):	Not determined.

Vapor pressure:	Not applicable.
Density: (~)	Not determined.
Relative density	Not determined.
Vapour density	Not applicable.
Evaporation rate	Not applicable.

## Solubility in / Miscibility with

Water: Not miscible or difficult to mix.

Partition coefficient (n-octanol/water): Not determined.

## Viscosity:

Dynamic:	Not applicable.
Kinematic:	Not applicable.
Molecular weight	Not applicable.

Other information No further relevant information available.

## \* 10 Stability and reactivity

**Reactivity** Stable under normal conditions.

## Chemical stability

**Thermal decomposition:** No decomposition if used according to specifications.**Conditions to avoid** No further relevant information available.**Incompatible materials:** No further relevant information available.**Hazardous decomposition products:**Carbon monoxide and carbon dioxide  
Cutting or welding may generate Sulfur dioxide.

(Cont. on page 6)

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## Safety Data Sheet

Printing date 06/10/2015

Version Number 1.0

Reviewed on 06/10/2015

Trade name: Z-106G

(Cont. from page 5)

**Additional information:** See section 7 for information on handling, storage and conditions to be avoided.**11 Toxicological information**

Prolonged and or massive exposure to respirable crystalline silica containing dust may cause silicosis, a nodular pulmonary fibrosis caused by deposition in the lungs of fine respirable particles of crystalline silica.

**Information on toxicological effects****Acute toxicity:****LD/LC50 values relevant for classification:****1317-65-3 Calcium carbonate**

Oral	LD50	6450 mg/kg (rat)
	LC50, 96h	10.000 mg/l (fish)

**Primary irritant effect:****on the skin:** No irritating effect expected**on the eye:** No irritating effect expected**inhalation:** No irritating effect expected**Additional toxicological information:**

Prolonged exposure may cause risk of lung disease (i.e. silicosis and/or lung cancer).

**Carcinogenic categories****IARC (International Agency for Research on Cancer) Human Carcinogenicity:**  
**Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable**

14808-60-7	Quartz (SiO <sub>2</sub> )	1
9003-53-6	Expanded Polystyrene	3

**NTP (National Toxicology Program)****K-Known to be carcinogenic, R-May reasonably be anticipated to be carcinogenic**

14808-60-7	Quartz (SiO <sub>2</sub> )	K
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**OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

**12 Ecological information****Toxicity****Aquatic toxicity:****1317-65-3 Calcium carbonate**

EC50, 48h	1.000 mg/l (daphnia magna)
EC50, 72h	10.000 mg/l (algae)

**Persistence and degradability** No further relevant information available.**Behavior in environmental systems:****Bioaccumulative potential** No further relevant information available.**Mobility in soil** No further relevant information available.

(Cont. on page 7)

USGHS

## Safety Data Sheet

Printing date 06/10/2015

Version Number 1.0

Reviewed on 06/10/2015

Trade name: Z-106G

(Cont. from page 6)

**Additional ecological information:****General notes:** Not known to be hazardous to water.**Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**Other adverse effects** No further relevant information available.**13 Disposal considerations****Waste treatment methods** Comply with Federal, State and local regulations.**Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packagings:****Recommendation:** Disposal must be made according to official regulations.**14 Transport information****UN-Number**

DOT, ADR, ADN, IMDG, IATA Not applicable.

**UN proper shipping name**

DOT, ADR, ADN, IMDG, IATA Not applicable.

**Transport hazard class(es)**

DOT, ADR, ADN, IMDG, IATA

Class Not applicable.

**Packing group**

DOT, ADR, IMDG, IATA Not applicable.

**Environmental hazards:****Marine pollutant:** No**Special precautions for user** Not applicable.**Transport/Additional information:****DOT****Remarks:** Not Regulated.**Note:** Not Regulated for Canada TDG.**UN "Model Regulation":** -

USGHS

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## Safety Data Sheet

Printing date 06/10/2015

Version Number 1.0

Reviewed on 06/10/2015

Trade name: Z-106G

(Cont. from page 7)

## 15 Regulatory information

### SARA (Superfund Amendments and Reauthorization Act)

#### Section 302/304 (extremely hazardous substances):

None of the ingredients is listed.

#### Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):

None of the ingredients is listed.

#### SARA Section 312/Tier I & II Hazard Categories:

Health Delayed (chronic)	Yes
Health Immediate (acute)	Yes
Flammable	No
Reactive	No
Pressure	No

### North America Chemical Inventory Status

#### TSCA (Toxic Substances Control Act - United States):

All ingredients are listed or exempt from listing unless otherwise noted below.

#### CEPA (Canadian DSL):

All ingredients are listed or exempt from listing unless otherwise noted below.

#### Right to Know Ingredient Disclosure

7778-18-9	Calcium sulfate, natural
65996-61-4	Cellulosic Fiber
9003-53-6	Expanded Polystyrene

### California Proposition 65

#### Chemicals known to cause cancer:

Quartz (SiO<sub>2</sub>)

#### Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

#### Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

#### Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

### Carcinogenicity Categories

#### EPA (Environmental Protection Agency)

None of the ingredients is listed.

#### TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists) Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable

Quartz (SiO <sub>2</sub> )	A2
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#### NIOSH-Cancer (National Institute for Occupational Safety and Health)

14808-60-7 | Quartz (SiO<sub>2</sub>)

Volatile Organic Compounds (VOC) reported per the Emission Standards. 0 g/L

## 16 Other information

"The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection."

(Cont. on page 9)  
USGHS

## Safety Data Sheet

Printing date 06/10/2015

Version Number 1.0

Reviewed on 06/10/2015

**Trade name: Z-106G**

(Cont. from page 8)

**Department issuing SDS:**

W.R. Grace & Co. -Conn.  
62 Whittemore Avenue  
Cambridge, MA 02140 USA  
USA: +1-617-876-1400 (24 hours)  
+1-800-354-5414

**Other Information:**

There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis.  
Therefore preventing the onset of silicosis will also reduce the cancer risk.

**Date of preparation / last revision** 06/10/2015 / -

**The first date of preparation** 05/29/2015

**Number of revision times and the latest revision date** 1.0 / 06/10/2015

USGHS

## Safety Data Sheet

Printing date 06/04/2015

Version Number 1.0

Reviewed on 06/04/2015

**1 Identification****Product identifier**Trade name: MONOKOTE Z-106 HY

SDS ID Number: 3002G

**Relevant identified uses of the substance or mixture and uses advised against**

Specialty construction product. Not intended for other uses

**Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

W.R. Grace & Co. -Conn.  
62 Whittemore Avenue  
Cambridge, MA 02140 USA

Grace Canada, Inc.  
294 Clements Road W.  
Ajax, Ontario L1S 3C6 Canada

**Information department:**

Environmental Health &amp; Safety

USA: +1-617-876-1400 (24 hours)

+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts

CAN: 1-905-683-8561 (24 hours)

**Transport Emergency:** Chemtrec +1-800-424-9300 (24 hours)**2 Hazard(s) identification****Classification of the substance or mixture**

Depending on the type of handling and use, airborne respirable crystalline silica may be generated. Prolonged and/or massive inhalation of respirable silica dust may cause silicosis. Occupational exposure to respirable crystalline silica should be monitored and controlled.

This product should be handled with care to avoid dust generation.

May cause damage to the lung through prolonged or repeated exposure. Route of exposure: Inhalation.

Causes serious eye damage.

Causes skin irritation.

May cause an allergic skin reaction.

May cause respiratory irritation.

**GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).**Hazard pictograms**

GHS05

GHS07

GHS08

Danger

(Cont. on page 2)

USGHS

## Safety Data Sheet

Printing date 06/04/2015

Version Number 1.0

Reviewed on 06/04/2015

Trade name: **MONOKOTE Z-106 HY**

(Cont. from page 1)

**Precautionary statements**

Do not handle until all safety precautions have been read and understood.

Avoid breathing dust.

Wash thoroughly after handling.

In case of inadequate ventilation wear respiratory protection.

Wear protective gloves/protective clothing/eye protection.

If swallowed, rinse mouth. Do not induce vomiting. Call a poison center or doctor/physician if you feel unwell.

If on Skin, wash with plenty of soap and water. Wash contaminated clothing before reuse.

If inhaled, get medical advice/attention if you feel unwell.

If in eyes, remove contact lenses, if present and easy to do so. Rinse cautiously with water for several minutes.

If eye irritation persists: Get medical advice/attention.

If skin irritation occurs: Get medical advice/attention.

Dispose of contents/container in accordance with local/regional/national/international regulations.

**Hazard description:** Danger

NFPA ratings (scale 0 - 4)



Health = 2

Fire = 0

Reactivity = 0

**HMIS-ratings (scale 0 - 4)**

Health = \*2

Flammability = 0

Reactivity = 0

**Other hazards****Results of PBT and vPvB assessment**

PBT: Not applicable.

vPvB: Not applicable.

**3 Composition/information on ingredients****Chemical characterization: Mixtures****Description:** Mixture of the substances listed below with additional nonhazardous ingredients.**Hazardous components:**

65997-15-1	Portland cement	50-100%
14808-60-7	Quartz (SiO <sub>2</sub> )	1.0-2.0%
7778-18-9	Calcium sulfate, natural	10-20%

**Additional information:** For the wording of the listed risk phrases refer to section 16.**4 First-aid measures****Description of first aid measures****General information:** Get medical advice/attention if you feel unwell.**After inhalation:** If breathing has stopped, give artificial respiration then oxygen if needed.**After skin contact:**

Immediately wash contaminated skin with soap or mild detergent and water. If this chemical soaks clothing, immediately remove clothing and wash skin.

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**Trade name: MONOKOTE Z-106 HY**

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If skin irritation continues, consult a doctor.

**After eye contact:**

Rinse cautiously with water for several minutes.

Seek immediate medical advice.

**After swallowing:**

Rinse mouth.

Do not induce vomiting.

**Information for doctor:**

**Most important symptoms and effects, both acute and delayed** No further relevant information available.

**Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

**5 Fire-fighting measures**

**Special hazards arising from the substance or mixture** No further relevant information available.

**Additional information** No further relevant information available.

**6 Accidental release measures****Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

Avoid formation of dust.

**Environmental precautions:**

Inform respective authorities in case of seepage into water course or sewage system.

**Methods and material for containment and cleaning up:**

Sweep up spilled product into receptacles.

Avoid formation of dust.

Vacuuming or wet sweeping may be used to avoid dust dispersal.

Dispose contaminated material as waste according to section 13 of the SDS.

**Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

**7 Handling and storage****Handling:****Precautions for safe handling**

Risk of serious damage to eyes.

Fit dust covers to mixers.

Prior to welding or cutting, Monokote must be removed from steel surfaces likely to be exposed to excessive heating.

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Trade name: **MONOKOTE Z-106 HY**

(Cont. from page 3)

Do not breathe dust.

Avoid contact with skin.

Danger of wet slippery surfaces.

**Information about protection against explosions and fires:** Keep respiratory protective device available.**Conditions for safe storage, including any incompatibilities****Storage:****Further information about storage conditions:** Store in cool, dry conditions in well sealed original receptacles.**Specific end use(s)** No further relevant information available.**8 Exposure controls/personal protection****Additional information about design of technical systems:** No further data; see item 7.**Control parameters****Components with limit values that require monitoring at the workplace:****14808-60-7 Quartz (SiO<sub>2</sub>)**

PEL (USA)	see Quartz listing
REL (USA)	Long-term value: 0.05* mg/m <sup>3</sup> *respirable dust; See Pocket Guide App. A
TLV (USA)	Long-term value: 0.025* mg/m <sup>3</sup> *as respirable fraction

**Additional information:** The lists that were valid during the creation were used as basis.**Work/Hygienic Practices:** The usual precautionary measures for handling chemicals should be followed.**Exposure controls**

Minimize airborne dust generation. Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below specified exposure limits. If user operations generate dust, or mist, use ventilation to keep exposure to airborne particles below the exposure limit. Apply organizational measures, eg. by isolating personnel from dusty areas. Remove and wash soiled clothing.

**Personal protective equipment:****General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

Store protective clothing separately.

**Breathing equipment:**

Wear NIOSH-approved respiratory protection (generally a N-95 dust/mist respirator is appropriate) to prevent employee exposures from exceeding the limits specified in this section.

If Exposure Limits in Section 8.1 are exceeded, approved respiratory protection filter type P should be used.

**Protection of hands:**

Alkaline resistant gloves

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

**Material of gloves**

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

(Cont. on page 5)

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Trade name: **MONOKOTE Z-106 HY**

(Cont. from page 4)

**Eye protection:**

Safety glasses with side shield protection.

Safety glasses with side shields should be worn to prevent contact due to splashing. Under high vapor mist concentrations, tightly sealed goggles should be worn.

**Body protection:**

Use personal protective equipment as required.

Take off contaminated clothing and wash before reuse.

**9 Physical and chemical properties****Information on basic physical and chemical properties****General Information****Appearance:**

<b>Form:</b>	Powder
<b>Color:</b>	According to product specification
<b>Odor:</b>	Characteristic
<b>Odour threshold:</b>	Not determined.

**pH-value (~):** Not applicable.

**Change in condition**

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	Undetermined.
<b>Flash point:</b>	Not applicable.

**Flammability (solid, gaseous):** Not determined.

<b>Decomposition temperature:</b>	Not determined.
<b>Auto igniting:</b>	Product is not selfigniting.
<b>Danger of explosion:</b>	Product does not present an explosion hazard.

**Explosion limits:**

<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
<b>VOC Content (max):</b>	Not determined.

<b>Vapor pressure:</b>	Not applicable.
<b>Density: (~) at 20 °C (68 °F)</b>	21 g/cm <sup>3</sup> (175.245 lbs/gal)
<b>Relative density</b>	Not determined.
<b>Vapour density</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.

**Solubility in / Miscibility with Water:** Not miscible or difficult to mix.

**Partition coefficient (n-octanol/water):** Not determined.

**Viscosity:**

<b>Dynamic:</b>	Not applicable.
<b>Kinematic:</b>	Not applicable.
<b>Molecular weight</b>	Not applicable.

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Trade name: **MONOKOTE Z-106 HY**

(Cont. from page 5)

**Other information**

No further relevant information available.

**10 Stability and reactivity****Reactivity** Stable under normal conditions.**Chemical stability****Thermal decomposition:** No decomposition if used according to specifications.**Conditions to avoid** No further relevant information available.**Incompatible materials:** No further relevant information available.**Hazardous decomposition products:**Carbon monoxide and carbon dioxide  
Cutting or welding may generate Sulfur dioxide.**Additional information:** See section 7 for information on handling, storage and conditions to be avoided.**11 Toxicological information**

Prolonged and or massive exposure to respirable crystalline silica containing dust may cause silicosis, a nodular pulmonary fibrosis caused by deposition in the lungs of fine respirable particles of crystalline silica.

**Information on toxicological effects****Acute toxicity:****Primary irritant effect:****on the skin:** Causes skin irritation.**on the eye:** Causes serious eye damage.**inhalation:** May cause respiratory irritation.**Ingestion:** May cause damage to the lung through prolonged or repeated exposure. Route of exposure: Inhalation.**Additional toxicological information:**

Cementitious grouts and mortars are known to cause both irritant and allergic contact dermatitis. Prolonged skin contact can result in chemical burns.

Prolonged exposure may cause risk of lung disease (i.e. silicosis and/or lung cancer).

**Carcinogenic categories****IARC (International Agency for Research on Cancer) Human Carcinogenicity:**  
**Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable**

14808-60-7	Quartz (SiO <sub>2</sub> )	1
9003-53-6	Expanded Polystyrene	3

**NTP (National Toxicology Program)****K-Known to be carcinogenic, R-May reasonably be anticipated to be carcinogenic**

14808-60-7	Quartz (SiO <sub>2</sub> )	K
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**OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

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Trade name: **MONOKOTE Z-106 HY**

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**12 Ecological information****Toxicity**

Aquatic toxicity: No further relevant information available.

**Persistence and degradability** No further relevant information available.**Behavior in environmental systems:****Bioaccumulative potential** No further relevant information available.**Mobility in soil** No further relevant information available.**Additional ecological information:****General notes:** Not known to be hazardous to water.**Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**Other adverse effects** No further relevant information available.**13 Disposal considerations****Waste treatment methods** Comply with Federal, State and local regulations.**Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packagings:****Recommendation:** Disposal must be made according to official regulations.**14 Transport information****UN-Number**

DOT, ADR, ADN, IMDG, IATA Not applicable.

**UN proper shipping name**

DOT, ADR, ADN, IMDG, IATA Not applicable.

**Transport hazard class(es)**DOT, ADR, ADN, IMDG, IATA  
Class Not applicable.**Packing group**

DOT, ADR, IMDG, IATA Not applicable.

**Environmental hazards:****Marine pollutant:** No**Special precautions for user**

Not applicable.

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Trade name: **MONOKOTE Z-106 HY**

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**Transport/Additional information:** Not classified as a dangerous good for transport by road, rail or air.**DOT****Remarks:**

Not Regulated.

**Note:**

Not Regulated for Canada TDG.

**UN "Model Regulation":**

-

**15 Regulatory information****SARA (Superfund Amendments and Reauthorization Act)****Section 302/304 (extremely hazardous substances):**

None of the ingredients is listed.

**Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):**

None of the ingredients is listed.

**SARA Section 312/Tier I & II Hazard Categories:**

Health Delayed (chronic)	Yes
Health Immediate (acute)	Yes
Flammable	No
Reactive	No
Pressure	No

**North America Chemical Inventory Status****TSCA (Toxic Substances Control Act - United States):**

All ingredients are listed or exempt from listing unless otherwise noted below.

**CEPA (Canadian DSL):**

All ingredients are listed or exempt from listing unless otherwise noted below.

**Right to Know Ingredient Disclosure**

65996-61-4 Cellulosic Fiber

9003-53-6 Expanded Polystyrene

**California Proposition 65****Chemicals known to cause cancer:**Quartz (SiO<sub>2</sub>)**Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

**Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

**Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

**Carcinogenicity Categories****EPA (Environmental Protection Agency)**

None of the ingredients is listed.

**TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)****Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable**Quartz (SiO<sub>2</sub>)

A2

**NIOSH-Cancer (National Institute for Occupational Safety and Health)**14808-60-7 Quartz (SiO<sub>2</sub>)

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Reviewed on 06/04/2015

**Trade name: MONOKOTE Z-106 HY****Volatile Organic Compounds (VOC) reported per the Emission Standards. 0 g/L**

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\*

**16 Other information**

"The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection."

**Department issuing SDS:**

W.R. Grace & Co. -Conn.  
62 Whittemore Avenue  
Cambridge, MA 02140 USA  
USA: +1-617-876-1400 (24 hours)  
+1-800-354-5414

**Other Information:**

There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis. Therefore preventing the onset of silicosis will also reduce the cancer risk.

**Date of preparation / last revision** 06/04/2015 / -

**The first date of preparation** 02/19/2015

**Number of revision times and the latest revision date** 1.0 / 06/04/2015

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## Safety Data Sheet

Printing date 06/03/2015

Version Number 1.0

Reviewed on 06/03/2015

**1 Identification****Product identifier**Trade name: SPATTERKOTE III

SDS ID Number: 3002F

**Relevant identified uses of the substance or mixture and uses advised against**

Specialty construction product. Not intended for other uses

**Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

W.R. Grace & Co. -Conn.  
62 Whittemore Avenue  
Cambridge, MA 02140 USA

Grace Canada, Inc.  
294 Clements Road W.  
Ajax, Ontario L1S 3C6 Canada

**Information department:**

Environmental Health &amp; Safety

USA: +1-617-876-1400 (24 hours)

+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts

CAN: 1-905-683-8561 (24 hours)

**Transport Emergency:** Chemtrec +1-800-424-9300 (24 hours)**2 Hazard(s) identification****Classification of the substance or mixture**

Depending on the type of handling and use, airborne respirable crystalline silica may be generated. Prolonged and/or massive inhalation of respirable silica dust may cause silicosis. Occupational exposure to respirable crystalline silica should be monitored and controlled.

This product should be handled with care to avoid dust generation.

May cause damage to the lung through prolonged or repeated exposure. Route of exposure: Inhalation.

Causes serious eye damage.

Causes skin irritation.

Sensitization possible through skin contact.

May cause respiratory irritation.

**GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

**Hazard pictograms**

GHS05

GHS07

GHS08

Danger

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Trade name: **SPATTERKOTE III**

(Cont. from page 1)

**Precautionary statements**

Do not handle until all safety precautions have been read and understood.

Avoid breathing dust.

Wash thoroughly after handling.

In case of inadequate ventilation wear respiratory protection.

Wear protective gloves/protective clothing/eye protection.

If swallowed, rinse mouth. Do not induce vomiting. Call a poison center or doctor/physician if you feel unwell.

If on Skin, wash with plenty of soap and water. Wash contaminated clothing before reuse.

If inhaled, get medical advice/attention if you feel unwell.

If in eyes, remove contact lenses, if present and easy to do so. Rinse cautiously with water for several minutes.

If eye irritation persists: Get medical advice/attention.

If skin irritation occurs: Get medical advice/attention.

Dispose of contents/container in accordance with local/regional/national/international regulations.

**Hazard description:** Danger

NFPA ratings (scale 0 - 4)



Health = 2

Fire = 0

Reactivity = 0

**HMIS-ratings (scale 0 - 4)**

Health = \*2

Flammability = 0

Reactivity = 0

**Other hazards****Results of PBT and vPvB assessment**

PBT: Not applicable.

vPvB: Not applicable.

**3 Composition/information on ingredients****Chemical characterization: Mixtures****Description:** Mixture of the substances listed below with additional nonhazardous ingredients.**Hazardous components:**

65997-15-1	Portland cement	50-100%
14808-60-7	Quartz (SiO <sub>2</sub> )	2.0-5.0%

**Additional information:** For the wording of the listed risk phrases refer to section 16.**4 First-aid measures****Description of first aid measures****General information:** Get medical advice/attention if you feel unwell.**After inhalation:** If breathing has stopped, give artificial respiration then oxygen if needed.**After skin contact:**

Immediately wash contaminated skin with soap or mild detergent and water. If this chemical soaks clothing, immediately remove clothing and wash skin.

If skin irritation continues, consult a doctor.

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Reviewed on 06/03/2015

Trade name: *SPATTERKOTE III*

(Cont. from page 2)

**After eye contact:**

Rinse cautiously with water for several minutes.  
Seek immediate medical advice.

**After swallowing:**

Rinse mouth.  
Do not induce vomiting.

**Information for doctor:**

**Most important symptoms and effects, both acute and delayed** No further relevant information available.

**Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

**5 Fire-fighting measures**

**Special hazards arising from the substance or mixture** No further relevant information available.

**Additional information** No further relevant information available.

**6 Accidental release measures****Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.  
Avoid formation of dust.

**Environmental precautions:**

Inform respective authorities in case of seepage into water course or sewage system.

**Methods and material for containment and cleaning up:**

Sweep up spilled product into receptacles.  
Avoid formation of dust.  
Vacuuming or wet sweeping may be used to avoid dust dispersal.  
Dispose contaminated material as waste according to section 13 of the SDS.

**Reference to other sections**

See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

**7 Handling and storage****Handling:****Precautions for safe handling**

Risk of serious damage to eyes.  
Fit dust covers to mixers.  
Prior to welding or cutting, Monokote must be removed from steel surfaces likely to be exposed to excessive heating.  
Do not breathe dust.

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Trade name: **SPATTERKOTE III**

(Cont. from page 3)

Avoid contact with skin.  
Danger of wet slippery surfaces.

**Information about protection against explosions and fires:** Keep respiratory protective device available.

**Conditions for safe storage, including any incompatibilities**

**Storage:**

**Further information about storage conditions:** Store in cool, dry conditions in well sealed original receptacles.

**Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

**Additional information about design of technical systems:** No further data; see item 7.

**Control parameters**

**Components with limit values that require monitoring at the workplace:**

**14808-60-7 Quartz (SiO<sub>2</sub>)**

PEL (USA)	see Quartz listing
REL (USA)	Long-term value: 0.05* mg/m <sup>3</sup> *respirable dust; See Pocket Guide App. A
TLV (USA)	Long-term value: 0.025* mg/m <sup>3</sup> *as respirable fraction

**Additional information:** The lists that were valid during the creation were used as basis.

**Work/Hygienic Practices:** The usual precautionary measures for handling chemicals should be followed.

**Exposure controls**

Minimize airborne dust generation. Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below specified exposure limits. If user operations generate dust, or mist, use ventilation to keep exposure to airborne particles below the exposure limit. Apply organizational measures, eg. by isolating personnel from dusty areas. Remove and wash soiled clothing.

**Personal protective equipment:**

**General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

Store protective clothing separately.

**Breathing equipment:**

Wear NIOSH-approved respiratory protection (generally a N-95 dust/mist respirator is appropriate) to prevent employee exposures from exceeding the limits specified in this section.

If Exposure Limits in Section 8.1 are exceeded, approved respiratory protection filter type P should be used.

**Protection of hands:**



Alkaline resistant gloves

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

**Material of gloves**

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

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Trade name: *SPATTERKOTE III*

(Cont. from page 4)

**Eye protection:**

Safety glasses with side shield protection.

Safety glasses with side shields should be worn to prevent contact due to splashing. Under high vapor mist concentrations, tightly sealed goggles should be worn.

**Body protection:**

Use personal protective equipment as required.

Take off contaminated clothing and wash before reuse.

## 9 Physical and chemical properties

### Information on basic physical and chemical properties

**General Information****Appearance:**

<b>Form:</b>	Powder
<b>Color:</b>	According to product specification
<b>Odor:</b>	Characteristic
<b>Odour threshold:</b>	Not determined.

**pH-value (~):** Not applicable.

**Change in condition**

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	Undetermined.
<b>Flash point:</b>	Not applicable.

**Flammability (solid, gaseous):** Not determined.

<b>Decomposition temperature:</b>	Not determined.
<b>Auto igniting:</b>	Product is not selfigniting.
<b>Danger of explosion:</b>	Product does not present an explosion hazard.

**Explosion limits:**

<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
<b>VOC Content (max):</b>	Not determined.

<b>Vapor pressure:</b>	Not applicable.
<b>Density: (~) at 20 °C (68 °F)</b>	21 g/cm <sup>3</sup> (175.245 lbs/gal)
<b>Relative density</b>	Not determined.
<b>Vapour density</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.

**Solubility in / Miscibility with Water:** Not miscible or difficult to mix.

**Partition coefficient (n-octanol/water):** Not determined.

**Viscosity:**

<b>Dynamic:</b>	Not applicable.
<b>Kinematic:</b>	Not applicable.
<b>Molecular weight</b>	Not applicable.

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Trade name: *SPATTERKOTE III*

(Cont. from page 5)

**Other information**

No further relevant information available.

**10 Stability and reactivity****Reactivity** Stable under normal conditions.**Chemical stability****Thermal decomposition:** No decomposition if used according to specifications.**Conditions to avoid** No further relevant information available.**Incompatible materials:** No further relevant information available.**Hazardous decomposition products:**Carbon monoxide and carbon dioxide  
Cutting or welding may generate Sulfur dioxide.**Additional information:** See section 7 for information on handling, storage and conditions to be avoided.**11 Toxicological information**

Prolonged and or massive exposure to respirable crystalline silica containing dust may cause silicosis, a nodular pulmonary fibrosis caused by deposition in the lungs of fine respirable particles of crystalline silica.

**Information on toxicological effects****Acute toxicity:****Primary irritant effect:****on the skin:** Causes skin irritation.**on the eye:** Causes serious eye damage.**inhalation:** May cause respiratory irritation.**Ingestion:** May cause damage to the lung through prolonged or repeated exposure. Route of exposure: Inhalation.**Additional toxicological information:**

Cementitious grouts and mortars are known to cause both irritant and allergic contact dermatitis. Prolonged skin contact can result in chemical burns.

Prolonged exposure may cause risk of lung disease (i.e. silicosis and/or lung cancer).

**Carcinogenic categories****IARC (International Agency for Research on Cancer) Human Carcinogenicity:**  
**Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable**

14808-60-7	Quartz (SiO <sub>2</sub> )	1
9003-53-6	Expanded Polystyrene	3

**NTP (National Toxicology Program)****K-Known to be carcinogenic, R-May reasonably be anticipated to be carcinogenic**

14808-60-7	Quartz (SiO <sub>2</sub> )	K
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**OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

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Trade name: *SPATTERKOTE III*

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## \* 12 Ecological information

**Toxicity**

Aquatic toxicity: No further relevant information available.

**Persistence and degradability** No further relevant information available.**Behavior in environmental systems:****Bioaccumulative potential** No further relevant information available.**Mobility in soil** No further relevant information available.**Additional ecological information:****General notes:** Not known to be hazardous to water.**Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**Other adverse effects** No further relevant information available.

## \* 13 Disposal considerations

**Waste treatment methods** Comply with Federal, State and local regulations.**Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packagings:****Recommendation:** Disposal must be made according to official regulations.

## \* 14 Transport information

**UN-Number**

DOT, ADR, ADN, IMDG, IATA Not applicable.

**UN proper shipping name**

DOT, ADR, ADN, IMDG, IATA Not applicable.

**Transport hazard class(es)**DOT, ADR, ADN, IMDG, IATA  
Class Not applicable.**Packing group**

DOT, ADR, IMDG, IATA Not applicable.

**Environmental hazards:****Marine pollutant:** No**Special precautions for user**

Not applicable.

(Cont. on page 8)

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## Safety Data Sheet

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Version Number 1.0

Reviewed on 06/03/2015

Trade name: **SPATTERKOTE III**

(Cont. from page 7)

**Transport/Additional information:** Not classified as a dangerous good for transport by road, rail or air.**DOT****Remarks:**

Not Regulated.

**Note:**

Not Regulated for Canada TDG.

**UN "Model Regulation":**

-

**15 Regulatory information****SARA (Superfund Amendments and Reauthorization Act)****Section 302/304 (extremely hazardous substances):**

None of the ingredients is listed.

**Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):**

None of the ingredients is listed.

**SARA Section 312/Tier I & II Hazard Categories:**

Health Delayed (chronic)	Yes
Health Immediate (acute)	Yes
Flammable	No
Reactive	No
Pressure	No

**North America Chemical Inventory Status****TSCA (Toxic Substances Control Act - United States):**

All ingredients are listed or exempt from listing unless otherwise noted below.

**CEPA (Canadian DSL):**

All ingredients are listed or exempt from listing unless otherwise noted below.

**Right to Know Ingredient Disclosure**

65996-61-4 Cellulosic Fiber

9003-53-6 Expanded Polystyrene

**California Proposition 65****Chemicals known to cause cancer:**Quartz (SiO<sub>2</sub>)**Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

**Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

**Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

**Carcinogenicity Categories****EPA (Environmental Protection Agency)**

None of the ingredients is listed.

**TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)****Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable**Quartz (SiO<sub>2</sub>)

A2

**NIOSH-Cancer (National Institute for Occupational Safety and Health)**14808-60-7 Quartz (SiO<sub>2</sub>)

(Cont. on page 9)

USGHS

## Safety Data Sheet

Printing date 06/03/2015

Version Number 1.0

Reviewed on 06/03/2015

**Trade name: SPATTERKOTE III****Volatile Organic Compounds (VOC) reported per the Emission Standards. 0 g/L**

(Cont. from page 8)

**16 Other information**

"The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection."

**Department issuing SDS:**

W.R. Grace & Co. -Conn.  
62 Whittemore Avenue  
Cambridge, MA 02140 USA  
USA: +1-617-876-1400 (24 hours)  
+1-800-354-5414

**Other Information:**

There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis. Therefore preventing the onset of silicosis will also reduce the cancer risk.

**Date of preparation / last revision** 06/03/2015 / -

**The first date of preparation** 02/19/2015

**Number of revision times and the latest revision date** 1.0 / 06/03/2015

USGHS

## Safety Data Sheet

Printing date 06/04/2015

Version Number 1.0

Reviewed on 06/04/2015

**1 Identification****Product identifier**Trade name: MONOKOTE Z-3306

SDS ID Number: 3002I

**Relevant identified uses of the substance or mixture and uses advised against**

Specialty construction product. Not intended for other uses

**Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

W.R. Grace & Co. -Conn.  
62 Whittemore Avenue  
Cambridge, MA 02140 USA

Grace Canada, Inc.  
294 Clements Road W.  
Ajax, Ontario L1S 3C6 Canada

**Information department:**

Environmental Health &amp; Safety

USA: +1-617-876-1400 (24 hours)

+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts

CAN: 1-905-683-8561 (24 hours)

**Transport Emergency:** Chemtrec +1-800-424-9300 (24 hours)**2 Hazard(s) identification****Classification of the substance or mixture**

Depending on the type of handling and use, airborne respirable crystalline silica may be generated. Prolonged and/or massive inhalation of respirable silica dust may cause silicosis. Occupational exposure to respirable crystalline silica should be monitored and controlled.

This product should be handled with care to avoid dust generation.

May cause damage to the lung through prolonged or repeated exposure. Route of exposure: Inhalation.

Causes serious eye damage.

Causes skin irritation.

May cause an allergic skin reaction.

May cause respiratory irritation.

**GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).**Hazard pictograms**

GHS05

GHS07

GHS08

Danger

(Cont. on page 2)

USGHS



## Safety Data Sheet

Printing date 06/04/2015

Version Number 1.0

Reviewed on 06/04/2015

Trade name: **MONOKOTE Z-3306**

(Cont. from page 1)

**Precautionary statements**

Do not handle until all safety precautions have been read and understood.

Avoid breathing dust.

Wash thoroughly after handling.

In case of inadequate ventilation wear respiratory protection.

Wear protective gloves/protective clothing/eye protection.

If swallowed, rinse mouth. Do not induce vomiting. Call a poison center or doctor/physician if you feel unwell.

If on Skin, wash with plenty of soap and water. Wash contaminated clothing before reuse.

If inhaled, get medical advice/attention if you feel unwell.

If in eyes, remove contact lenses, if present and easy to do so. Rinse cautiously with water for several minutes.

If eye irritation persists: Get medical advice/attention.

If skin irritation occurs: Get medical advice/attention.

Dispose of contents/container in accordance with local/regional/national/international regulations.

**Hazard description:** Danger

NFPA ratings (scale 0 - 4)



Health = 2

Fire = 0

Reactivity = 0

**HMIS-ratings (scale 0 - 4)**

Health = \*2

Flammability = 0

Reactivity = 0

**Other hazards****Results of PBT and vPvB assessment**

PBT: Not applicable.

vPvB: Not applicable.

**3 Composition/information on ingredients****Chemical characterization: Mixtures****Description:** Mixture of the substances listed below with additional nonhazardous ingredients.**Hazardous components:**

65997-15-1	Portland cement	50-100%
14808-60-7	Quartz (SiO <sub>2</sub> )	2.0-5.0%

**Additional information:** For the wording of the listed risk phrases refer to section 16.**4 First-aid measures****Description of first aid measures****General information:** Get medical advice/attention if you feel unwell.**After inhalation:** If breathing has stopped, give artificial respiration then oxygen if needed.**After skin contact:**

Immediately wash contaminated skin with soap or mild detergent and water. If this chemical soaks clothing, immediately remove clothing and wash skin.

If skin irritation continues, consult a doctor.

(Cont. on page 3)

USGHS

## Safety Data Sheet

Printing date 06/04/2015

Version Number 1.0

Reviewed on 06/04/2015

**Trade name: MONOKOTE Z-3306**

(Cont. from page 2)

**After eye contact:**

Rinse cautiously with water for several minutes.  
Seek immediate medical advice.

**After swallowing:**

Rinse mouth.  
Do not induce vomiting.

**Information for doctor:**

**Most important symptoms and effects, both acute and delayed** No further relevant information available.

**Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

**5 Fire-fighting measures**

**Special hazards arising from the substance or mixture** No further relevant information available.

**Additional information** No further relevant information available.

**6 Accidental release measures****Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.  
Avoid formation of dust.

**Environmental precautions:**

Inform respective authorities in case of seepage into water course or sewage system.

**Methods and material for containment and cleaning up:**

Sweep up spilled product into receptacles.  
Avoid formation of dust.  
Vacuuming or wet sweeping may be used to avoid dust dispersal.  
Dispose contaminated material as waste according to section 13 of the SDS.

**Reference to other sections**

See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

**7 Handling and storage****Handling:****Precautions for safe handling**

Risk of serious damage to eyes.  
Fit dust covers to mixers.  
Prior to welding or cutting, Monokote must be removed from steel surfaces likely to be exposed to excessive heating.  
Do not breathe dust.

(Cont. on page 4)

USGHS

## Safety Data Sheet

Printing date 06/04/2015

Version Number 1.0

Reviewed on 06/04/2015

Trade name: **MONOKOTE Z-3306**

(Cont. from page 3)

Avoid contact with skin.  
Danger of wet slippery surfaces.

**Information about protection against explosions and fires:** Keep respiratory protective device available.

**Conditions for safe storage, including any incompatibilities**

**Storage:**

**Further information about storage conditions:** Store in cool, dry conditions in well sealed original receptacles.

**Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

**Additional information about design of technical systems:** No further data; see item 7.

**Control parameters**

**Components with limit values that require monitoring at the workplace:**

**14808-60-7 Quartz (SiO<sub>2</sub>)**

PEL (USA)	see Quartz listing
REL (USA)	Long-term value: 0.05* mg/m <sup>3</sup> *respirable dust; See Pocket Guide App. A
TLV (USA)	Long-term value: 0.025* mg/m <sup>3</sup> *as respirable fraction

**Additional information:** The lists that were valid during the creation were used as basis.

**Work/Hygienic Practices:** The usual precautionary measures for handling chemicals should be followed.

**Exposure controls**

Minimize airborne dust generation. Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below specified exposure limits. If user operations generate dust, or mist, use ventilation to keep exposure to airborne particles below the exposure limit. Apply organizational measures, eg. by isolating personnel from dusty areas. Remove and wash soiled clothing.

**Personal protective equipment:**

**General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

Store protective clothing separately.

**Breathing equipment:**

Wear NIOSH-approved respiratory protection (generally a N-95 dust/mist respirator is appropriate) to prevent employee exposures from exceeding the limits specified in this section.

If Exposure Limits in Section 8.1 are exceeded, approved respiratory protection filter type P should be used.

**Protection of hands:**



Alkaline resistant gloves

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

**Material of gloves**

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

(Cont. on page 5)

USGHS

## Safety Data Sheet

Printing date 06/04/2015

Version Number 1.0

Reviewed on 06/04/2015

Trade name: **MONOKOTE Z-3306**

(Cont. from page 4)

**Eye protection:**

Safety glasses with side shield protection.

Safety glasses with side shields should be worn to prevent contact due to splashing. Under high vapor mist concentrations, tightly sealed goggles should be worn.

**Body protection:**

Use personal protective equipment as required.

Take off contaminated clothing and wash before reuse.

**9 Physical and chemical properties****Information on basic physical and chemical properties****General Information****Appearance:**

<b>Form:</b>	Powder
<b>Color:</b>	According to product specification
<b>Odor:</b>	Characteristic
<b>Odour threshold:</b>	Not determined.

**pH-value (~):** Not applicable.

**Change in condition**

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	Undetermined.
<b>Flash point:</b>	Not applicable.

**Flammability (solid, gaseous):** Not determined.

<b>Decomposition temperature:</b>	Not determined.
<b>Auto igniting:</b>	Product is not selfigniting.
<b>Danger of explosion:</b>	Product does not present an explosion hazard.

**Explosion limits:**

<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
<b>VOC Content (max):</b>	Not determined.

<b>Vapor pressure:</b>	Not applicable.
<b>Density: (~) at 20 °C (68 °F)</b>	21 g/cm <sup>3</sup> (175.245 lbs/gal)
<b>Relative density</b>	Not determined.
<b>Vapour density</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.

**Solubility in / Miscibility with Water:** Not miscible or difficult to mix.

**Partition coefficient (n-octanol/water):** Not determined.

**Viscosity:**

<b>Dynamic:</b>	Not applicable.
<b>Kinematic:</b>	Not applicable.
<b>Molecular weight</b>	Not applicable.

(Cont. on page 6)

USGHS

## Safety Data Sheet

Printing date 06/04/2015

Version Number 1.0

Reviewed on 06/04/2015

Trade name: **MONOKOTE Z-3306**

(Cont. from page 5)

**Other information**

No further relevant information available.

**10 Stability and reactivity****Reactivity** Stable under normal conditions.**Chemical stability****Thermal decomposition:** No decomposition if used according to specifications.**Conditions to avoid** No further relevant information available.**Incompatible materials:** No further relevant information available.**Hazardous decomposition products:**Carbon monoxide and carbon dioxide  
Cutting or welding may generate Sulfur dioxide.**Additional information:** See section 7 for information on handling, storage and conditions to be avoided.**11 Toxicological information**

Prolonged and or massive exposure to respirable crystalline silica containing dust may cause silicosis, a nodular pulmonary fibrosis caused by deposition in the lungs of fine respirable particles of crystalline silica.

**Information on toxicological effects****Acute toxicity:****Primary irritant effect:****on the skin:** Causes skin irritation.**on the eye:** Causes serious eye damage.**inhalation:** May cause respiratory irritation.**Ingestion:** May cause damage to the lung through prolonged or repeated exposure. Route of exposure: Inhalation.**Additional toxicological information:**

Cementitious grouts and mortars are known to cause both irritant and allergic contact dermatitis. Prolonged skin contact can result in chemical burns.

Prolonged exposure may cause risk of lung disease (i.e. silicosis and/or lung cancer).

**Carcinogenic categories****IARC (International Agency for Research on Cancer) Human Carcinogenicity:**  
**Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable**

14808-60-7	Quartz (SiO <sub>2</sub> )	1
9003-53-6	Expanded Polystyrene	3

**NTP (National Toxicology Program)****K-Known to be carcinogenic, R-May reasonably be anticipated to be carcinogenic**

14808-60-7	Quartz (SiO <sub>2</sub> )	K
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**OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

USGHS  
(Cont. on page 7)

## Safety Data Sheet

Printing date 06/04/2015

Version Number 1.0

Reviewed on 06/04/2015

Trade name: **MONOKOTE Z-3306**

(Cont. from page 6)

\* **12 Ecological information****Toxicity**

Aquatic toxicity: No further relevant information available.

**Persistence and degradability** No further relevant information available.**Behavior in environmental systems:****Bioaccumulative potential** No further relevant information available.**Mobility in soil** No further relevant information available.**Additional ecological information:****General notes:** Not known to be hazardous to water.**Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**Other adverse effects** No further relevant information available.\* **13 Disposal considerations****Waste treatment methods** Comply with Federal, State and local regulations.**Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packagings:****Recommendation:** Disposal must be made according to official regulations.\* **14 Transport information****UN-Number****DOT, ADR, ADN, IMDG, IATA** Not applicable.**UN proper shipping name****DOT, ADR, ADN, IMDG, IATA** Not applicable.**Transport hazard class(es)****DOT, ADR, ADN, IMDG, IATA**  
**Class** Not applicable.**Packing group****DOT, ADR, IMDG, IATA** Not applicable.**Environmental hazards:****Marine pollutant:** No**Special precautions for user**

Not applicable.

(Cont. on page 8)

USGHS

## Safety Data Sheet

Printing date 06/04/2015

Version Number 1.0

Reviewed on 06/04/2015

Trade name: **MONOKOTE Z-3306**

(Cont. from page 7)

**Transport/Additional information:** Not classified as a dangerous good for transport by road, rail or air.**DOT****Remarks:**

Not Regulated.

**Note:**

Not Regulated for Canada TDG.

**UN "Model Regulation":**

-

**15 Regulatory information****SARA (Superfund Amendments and Reauthorization Act)****Section 302/304 (extremely hazardous substances):**

None of the ingredients is listed.

**Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):**

None of the ingredients is listed.

**SARA Section 312/Tier I & II Hazard Categories:**

Health Delayed (chronic)	Yes
Health Immediate (acute)	Yes
Flammable	No
Reactive	No
Pressure	No

**North America Chemical Inventory Status****TSCA (Toxic Substances Control Act - United States):**

All ingredients are listed or exempt from listing unless otherwise noted below.

**CEPA (Canadian DSL):**

All ingredients are listed or exempt from listing unless otherwise noted below.

**Right to Know Ingredient Disclosure**

65996-61-4 Cellulosic Fiber

9003-53-6 Expanded Polystyrene

**California Proposition 65****Chemicals known to cause cancer:**Quartz (SiO<sub>2</sub>)**Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

**Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

**Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

**Carcinogenicity Categories****EPA (Environmental Protection Agency)**

None of the ingredients is listed.

**TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)****Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable**Quartz (SiO<sub>2</sub>)

A2

**NIOSH-Cancer (National Institute for Occupational Safety and Health)**14808-60-7 Quartz (SiO<sub>2</sub>)

(Cont. on page 9)

USGHS

## Safety Data Sheet

Printing date 06/04/2015

Version Number 1.0

Reviewed on 06/04/2015

**Trade name: MONOKOTE Z-3306****Volatile Organic Compounds (VOC) reported per the Emission Standards. 0 g/L**

(Cont. from page 8)

\*

**16 Other information**

"The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection."

**Department issuing SDS:**

W.R. Grace & Co. -Conn.  
62 Whittemore Avenue  
Cambridge, MA 02140 USA  
USA: +1-617-876-1400 (24 hours)  
+1-800-354-5414

**Other Information:**

There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis. Therefore preventing the onset of silicosis will also reduce the cancer risk.

**Date of preparation / last revision** 06/04/2015 / -

**The first date of preparation** 02/19/2015

**Number of revision times and the latest revision date** 1.0 / 06/04/2015

USGHS



## Safety Data Sheet

Printing date 06/10/2015

Version Number 1.2

Reviewed on 06/10/2015

**1 Identification****Product identifier**Trade name: Monokote® Accelerator

SDS ID Number: 1179

**Relevant identified uses of the substance or mixture and uses advised against**

Specialty construction product. Not intended for other uses

**Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

W.R. Grace & Co. -Conn.  
62 Whittemore Avenue  
Cambridge, MA 02140 USA

Grace Canada, Inc.  
294 Clements Road W.  
Ajax, Ontario L1S 3C6 Canada

**Transport Emergency:** Chemtrec +1-800-424-9300 (24 hours)**2 Hazard(s) identification****Classification of the substance or mixture**

Causes serious eye damage.

**GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).**Hazard pictograms**

GHS05

Danger

**Precautionary statements**

Wear protective gloves /protective clothing/eye protection/face protection.

"If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
Continue rinsing. "

Avoid breathing dust.

Call a poison center/doctor.

Dispose of contents container in accordance with all applicable regulations.

**NFPA ratings (scale 0 - 4)**

Health = 2

Fire = 0

Reactivity = 0

(Cont. on page 2)

USGHS

## Safety Data Sheet

Printing date 06/10/2015

Version Number 1.2

Reviewed on 06/10/2015

Trade name: **Monokote® Accelerator**

## HMIS-ratings (scale 0 - 4)

(Cont. from page 1)

HEALTH	2	Health = 2
FIRE	0	Flammability = 0
REACTIVITY	0	Reactivity = 0

## Other hazards

## Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

## \* 3 Composition/information on ingredients

## Chemical characterization: Mixtures

Description: Mixture of the substances listed below with additional nonhazardous ingredients.

## Hazardous components:

10043-01-3	Aluminium sulphate	50-100%
------------	--------------------	---------

Additional information: For the wording of the listed risk phrases refer to section 16.

## \* 4 First-aid measures

## Description of first aid measures

General information: Get medical advice/attention if you feel unwell.

## After inhalation:

If symptoms develop, supply fresh air. If required, provide artificial respiration and seek immediate medical treatment.

## After skin contact:

Immediately wash contaminated skin with soap or mild detergent and water. If this chemical soaks clothing, immediately remove clothing and wash skin.

If skin irritation continues, consult a doctor.

## After eye contact:

Rinse opened eye for several minutes under running water.

Seek immediate medical advice.

## After swallowing:

Wash out mouth with water

Do not induce vomiting; immediately call for medical help.

## Information for doctor:

Most important symptoms and effects, both acute and delayed No further relevant information available.

## Indication of any immediate medical attention and special treatment needed

No further relevant information available.

## 5 Fire-fighting measures

Special hazards arising from the substance or mixture No further relevant information available.

(Cont. on page 3)

USGHS

## Safety Data Sheet

Printing date 06/10/2015

Version Number 1.2

Reviewed on 06/10/2015

Trade name: *Monokote® Accelerator*

(Cont. from page 2)

**Additional information** Collect contaminated fire fighting water separately. It must not enter the sewage system.**6 Accidental release measures****Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

**Methods and material for containment and cleaning up:**

Contain and/or absorb spill with inert material (i.e. sand, vermiculite) then place in a suitable container.

Sweep up spilled product into receptacles.

Dispose contaminated material as waste according to section 13 of the SDS.

**Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

**7 Handling and storage****Handling:****Precautions for safe handling**

Open and handle receptacle with care.

Risk of serious damage to eyes.

Prevent formation of dust.

**Conditions for safe storage, including any incompatibilities****Storage:****Information about storage in one common storage facility:** No special measures required.**Further information about storage conditions:** Keep receptacle tightly sealed.**Specific end use(s)** No further relevant information available.**8 Exposure controls/personal protection****Additional information about design of technical systems:** No further data; see item 7.**Control parameters****Components with limit values that require monitoring at the workplace:****10043-01-3 Aluminium sulphate**REL (USA) Long-term value: 2 mg/m<sup>3</sup>  
as AlTLV (USA) Long-term value: 1 \* mg/m<sup>3</sup>  
as Al; \*as respirable fraction**Additional information:** The lists that were valid during the creation were used as basis.

(Cont. on page 4)

USGHS

## Safety Data Sheet

Printing date 06/10/2015

Version Number 1.2

Reviewed on 06/10/2015

Trade name: **Monokote® Accelerator**

(Cont. from page 3)

**Exposure controls****Personal protective equipment:****General protective and hygienic measures:**

Avoid contact with the eyes and skin.

The usual precautionary measures for handling chemicals should be followed.

**Breathing equipment:**

Wear NIOSH-approved respiratory protection (generally a N-95 dust/mist respirator is appropriate) to prevent employee exposures from exceeding the limits specified in this section.

**Protection of hands:**

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

**Material of gloves**

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

**Eye protection:**

Protective goggles

**Body protection:** Protective work clothing**9 Physical and chemical properties****Information on basic physical and chemical properties****General Information****Appearance:****Form:**

Solid

**Color:**

According to product specification

**Odor:**

Characteristic

**Odour threshold:**

Not determined.

**pH-value (~) at 20 °C (68 °F):**

4

**Change in condition****Melting point/Melting range:**

Undetermined.

**Boiling point/Boiling range:**

Undetermined.

**Flash point:**

Not applicable.

**Flammability (solid, gaseous):**

Not determined.

**Decomposition temperature:**

Not determined.

**Auto igniting:**

Product is not selfigniting.

**Danger of explosion:**

Product does not present an explosion hazard.

**Explosion limits:****Lower:**

Not determined.

**Upper:**

Not determined.

**VOC Content (max):**

Not determined.

**Vapor pressure:**

Not applicable.

**Density: (~) at 20 °C (68 °F)**2.71 g/cm<sup>3</sup> (22.615 lbs/gal)**Relative density**

Not determined.

**Vapour density**

Not applicable.

**Evaporation rate**

Not applicable.

(Cont. on page 5)

USGHS

## Safety Data Sheet

Printing date 06/10/2015

Version Number 1.2

Reviewed on 06/10/2015

Trade name: **Monokote® Accelerator**

(Cont. from page 4)

Solubility in / Miscibility with  
Water:Not miscible or difficult to mix.  
Insoluble.

Partition coefficient (n-octanol/water): Not determined.

Viscosity:

Dynamic:

Not applicable.

Kinematic:

Not applicable.

Molecular weight

Not applicable.

Other information

No further relevant information available.

## \* 10 Stability and reactivity

**Reactivity** Stable under normal conditions.**Chemical stability****Thermal decomposition:** No decomposition if used according to specifications.**Conditions to avoid** No further relevant information available.**Incompatible materials:** No further relevant information available.**Hazardous decomposition products:** Carbon monoxide and carbon dioxide**Additional information:** See section 7 for information on handling, storage and conditions to be avoided.

## \* 11 Toxicological information

**Information on toxicological effects****Acute toxicity:****LD/LC50 values relevant for classification:****10043-01-3 Aluminium sulphate**

Dermal | LD50 | 6200 mg/kg (microorganisms)

**Primary irritant effect:****on the skin:** No irritating effect expected**on the eye:** Causes serious eye damage.**inhalation:** No irritating effect expected**Additional toxicological information:****Carcinogenic categories****IARC (International Agency for Research on Cancer) Human Carcinogenicity:****Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable**

None of the ingredients is listed.

**NTP (National Toxicology Program)****K-Known to be carcinogenic, R-May reasonably be anticipated to be carcinogenic**

None of the ingredients is listed.

(Cont. on page 6)

USGHS

## Safety Data Sheet

Printing date 06/10/2015

Version Number 1.2

Reviewed on 06/10/2015

Trade name: **Monokote® Accelerator**

(Cont. from page 5)

**OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

**12 Ecological information****Toxicity****Aquatic toxicity:** No further relevant information available.**Persistence and degradability** No further relevant information available.**Behavior in environmental systems:****Bioaccumulative potential** No further relevant information available.**Mobility in soil** No further relevant information available.**Additional ecological information:****General notes:** Not known to be hazardous to water.**Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**Other adverse effects** No further relevant information available.**13 Disposal considerations****Waste treatment methods** Comply with Federal, State and local regulations.**Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packagings:****Recommendation:** Disposal must be made according to official regulations.**14 Transport information****UN-Number**

DOT, ADR, ADN, IMDG, IATA

Not applicable.

**UN proper shipping name**

DOT, ADN, IMDG, IATA

Not applicable.

ADR

Not applicable.

**Transport hazard class(es)**

DOT, ADR, ADN, IMDG, IATA

Class

Not applicable.

(Cont. on page 7)

USGHS

## Safety Data Sheet

Printing date 06/10/2015

Version Number 1.2

Reviewed on 06/10/2015

Trade name: **Monokote® Accelerator**

(Cont. from page 6)

**Packing group**

DOT, ADR, IMDG, IATA

Not applicable.

**Environmental hazards:**

Marine pollutant:

No

**Special precautions for user**

Not applicable.

**Transport/Additional information:** Not classified as a dangerous good for transport by road, rail or air.**DOT**

Remarks:

Not Regulated.

**UN "Model Regulation":**

-

**15 Regulatory information****SARA (Superfund Amendments and Reauthorization Act)****Section 302/304 (extremely hazardous substances):**

None of the ingredients is listed.

**Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):**

None of the ingredients is listed.

**SARA Section 312/Tier I & II Hazard Categories:**

Health Delayed (chronic)	Yes
Health Immediate (acute)	No
Flammable	No
Reactive	No
Pressure	No

**North America Chemical Inventory Status****TSCA (Toxic Substances Control Act - United States):**

All ingredients are listed or exempt from listing unless otherwise noted below.

**CEPA (Canadian DSL):**

All ingredients are listed or exempt from listing unless otherwise noted below.

**California Proposition 65****Chemicals known to cause cancer:**

None of the ingredients is listed.

**Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

**Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

**Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

**Carcinogenicity Categories****EPA (Environmental Protection Agency)**

None of the ingredients is listed.

**TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)****Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable**

None of the ingredients is listed.

(Cont. on page 8)

USGHS

## Safety Data Sheet

Printing date 06/10/2015

Version Number 1.2

Reviewed on 06/10/2015

**Trade name: Monokote® Accelerator**

(Cont. from page 7)

**NIOSH-Cancer (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

**Volatile Organic Compounds (VOC) reported per the Emission Standards.**

If no g/L value is provided this product is not subject to above standard.

\*

**16 Other information**

"The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection."

**Department issuing SDS:**

W.R. Grace & Co. -Conn.  
62 Whittemore Avenue  
Cambridge, MA 02140 USA  
USA: +1-617-876-1400 (24 hours)  
+1-800-354-5414

**Date of preparation / last revision** 06/10/2015 / 1.1**The first date of preparation** 10/07/2010**Number of revision times and the latest revision date** 1.2 / 06/10/2015

USGHS



# Safety Data Sheet

## Per GHS Standard Format

### SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Product Identifier

**Product Name:** Firebond Concentrate No. 7460 Clear & Firebond Tints No. 7460-SPCL

**Recommended Use of Product:** Bonding Agent for Fireproofing

#### Information on the Supplier of the Safety Data Sheet

Manufactured For:  
Fiberlock Technologies, Inc.  
150 Dascomb Road  
Andover, MA 01810

Emergency Telephone Numbers:  
CHEM TEL: (U.S.): 1-800-255-3924  
(Outside the U.S.): 813-248-0585

P: 978-342-3755 F: 978-475-6205

### SECTION 2: HAZARDS IDENTIFICATION

**GHS Classification:** Not classified under any GHS hazard classes.

#### GHS Label Elements

**Signal Word:** None

**Hazard Pictogram:** None

**Hazard Statement(s):** None

#### PRECAUTIONARY STATEMENTS

**Prevention:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

**Response:** If on skin, wash with plenty of soap and water. If in eyes, rinse cautiously for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If exposed or concerned, get medical advice.

**Storage:** Keep closures tight and containers upright to prevent leakage. KEEP FROM FREEZING. Product is non-combustible.

**Disposal:** The coating and any contaminated diking material should be thoroughly air dried and collected into drums. The drums should be sealed and labeled and land-filled or incinerated according to local, regional and national regulations.

**Hazards Not Otherwise Classified (NHOC):** Not applicable

**Unknown Toxicity:** Non applicable

### SECTION 3: COMPOSITION INFORMATION ON INGREDIENTS

Chemical Name

Acrylic resin solids

CAS No.

Proprietary

Weight, %\*\*

40-50

Bicyclic oxazolidine	056709-13-8	0.1-1
Aqua ammonia	1336-21-6	0.1-1.0
*Phthalocyanine blue or green colorants	Proprietary	0.3-2.0

**\*Only in Firebond Tints No. 7460 SPCL**

**\*\*The exact concentration of composition has been withheld as a trade secret.**

## **SECTION 4: FIRST AID MEASURES**

### **General Advice**

Show this safety data sheet to the doctor in attendance.

### **Eye Contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area.

### **Skin Contact**

Wash skin with soap and water.

### **Inhalation**

Remove to fresh air.

### **Ingestion**

Do NOT induce vomiting. Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person.

### **Most important symptoms and effects, both acute and delayed**

### **Most Important Symptoms and Effects**

No data available

### **Indication of any immediate medical attention and special treatment needed**

### **Notes to Physician**

Treat symptomatically.

## **SECTION 5: FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media:** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media:** Not combustible

**Specific Hazards Arising from the Chemical:** No data available

**Hazardous Combustion Products:** Carbon oxides

## **Explosion Data**

Sensitivity to mechanical impact No.

Sensitivity to static impact No.

**Protective Equipment and Precautions for Firefighters:** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

### **Personal Precautions, Protective Equipment and Emergency Procedures**

**Personal Precautions:** Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Ensure adequate ventilation. Avoid breathing vapors or mists. Avoid generation of dust.

**Other Information:** Refer to protective measures listed in Sections 7 & 8

### **Environmental Precautions**

**Environmental Precautions:** Refer to protective measures listed in Sections 7 & 8.

### **Methods and Material for Containment and Cleaning Up**

**Methods for Containment:** Prevent further leakage or spillage if safe to do so

**Methods for Cleaning Up:** Immediately place absorbent material in a sealed water-filled metal container to avoid spontaneous combustion of absorbent material contaminated with this product. Pick up and transfer to properly labeled containers.

## **SECTION 7: HANDLING AND STORAGE**

### **Precautions for Safe Handling**

**Handling:** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Avoid breathing vapors or mists. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Take off contaminated clothing and wash before reuse. Keep away from contact with clothing and other combustible materials to avoid fire.

### **Conditions for Safe Storage, Including any Incompatibilities**

**Storage:** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.

**Incompatible Products:** None known based on information supplied.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

<b>Chemical Name</b>	<b>ACGIH TLV</b>	<b>OSHA PEL</b>	<b>NIOSH IDLH</b>
Bicyclic oxazolidine 056709-13-8	*****	Not Established	*****
Phthalocyanine blue or green colorants	*****	Not Established	*****
Proprietary			
Aqua ammonia	TWA 25 ppm	PEL 35 ppm	No data available

ACGIH TLV: American Conference of Governmental Industrial Hygienists – Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration – Permissible Exposure Limits NIOSH IDLH Immediately Dangerous to Life or Health

### Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11<sup>th</sup> Cir., 1992). See section 15 for national exposure control parameters

### Appropriate Engineering Controls

**Engineering Measures:** Showers / Eyewash Stations / Ventilation Systems

### Individual Protection Measures, such as Personal Protective Equipment

**Eye/Face Protection:** If splashes are likely to occur, wear safety glasses with side shields (or goggles). None required for consumer use.

**Skin and body Protection:** Wear protective gloves and protective clothing

**Respiratory Protection:** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety practice. Take off contaminated clothing and wash before reuse. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State:</b>	Liquid	<b>Odor:</b>	Very Slight
<b>Appearance:</b>	Clear (blue or green tints)	<b>Odor Threshold:</b>	No information available
<b>Color:</b>	No information available		

<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks/Method</u></b>
pH	8.5	None known
Melting/freezing point	No data available	None known
Boiling point/boiling range	No data available	None known
Flash Point	No data available	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known

Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Water Solubility	Miscible in water	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Autoignition temperature	No data available	None known
Gravity	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	
Oxidizing properties	No data available	

#### **Other Information**

Softening Point	No data available
VOC Content (%)	No data available
Particle size	No data available
Particle size distribution	No data available

### **SECTION 10: STABILITY AND REACTIVITY**

#### **Reactivity**

No data available

#### **Conditions to Avoid**

Excessive heat

#### **Chemical Stability**

Stable under recommended storage conditions

#### **Incompatible Materials**

None known based on information supplied

#### **Possibility of Hazardous Reactions**

None under normal processing

#### **Hazardous Decomposition Products**

Carbon oxides

#### **Hazardous Polymerization**

Hazardous polymerization does not occur

### **SECTION 11: TOXICOLOGICAL INFORMATION**

#### **Information on Likely Routes of Exposure**

**Product Information:** Product does not present an acute toxicity hazard based on known or supplied information

**Inhalation:** Specific test data for the substance or mixture is not available.

**Eye Contact:** Specific test data for the substance or mixture is not available.

**Skin Contact:** Specific test data for the substance or mixture is not available.

**Ingestion:** Specific test data for the substance or mixture is not available.

### **Component Information**

<b><i>Chemical Name</i></b>	<b><i>Oral LD50</i></b>	<b><i>Dermal LD50</i></b>	<b><i>Inhalation LC50</i></b>
Bicyclic oxazolidine 056709-13-8	2974 mg/kg (Rat)	2000 mg/kg (Rabbit)	<1.8-4.0 mg/L (Rat) 4 hr
Aqua ammonia 1336-21-6	350 mg/kg (Rat)	No data available	No data available

### **Information on Toxicological Effects**

**Symptoms:** May cause redness and tearing of the eyes, coughing and/or wheezing, itching, rashes and hives.

### **Delayed and Immediate Effects as well as Chronic Effects from Short and Long-Term Exposure**

**Sensitization:** May cause sensitization of susceptible persons. May cause sensitization by skin contact.

**Mutagenic Effects:** No information available

**Carcinogenicity:** See Section 15

**Reproductive Toxicity, STOT Single Exposure, STOT Repeated Exposure:** No information available

**Chronic Toxicity:** No data available

**Target Organ Effects:** Eyes, respiratory system, skin, gastrointestinal tract (GI) & lungs.

**Aspiration Hazard:** No information available

### **Numerical Measures of Toxicity Product Information**

No data available

## **SECTION 12: ECOLOGICAL INFORMATION**

### **Persistence and Degradability**

No information available

### **Bioaccumulation**

No data available

### **Other Adverse Effects**

No information available

## SECTION 13: DISPOSAL CONSIDERATIONS

### Waste Treatment Methods

**Disposal Methods:** This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

**Contaminated Packaging:** Dispose of contents/containers in accordance with local regulations

**California Hazardous Waste Codes:** 331

## SECTION 14: TRANSPORT INFORMATION

<u>DOT</u>	Not Regulated
Proper Shipping Name	Non-Regulated
Hazard Class	N/A

TDG  
No data available

IATA  
No data available

IMDG/IMO  
No data available

## SECTION 15: REGULATORY INFORMATION

### International Inventories

TSCA	Complies
DSL	All components are listed either on the DSL or NDSL

**TSCA** – United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** – Canadian Domestic Substances List/Non-Domestic Substances List

### US Federal Regulations

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains no chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

#### **SARA 311/312 Hazard Categories**

Acute Health Hazard	No
Chronic Health Hazard	No

Fire Hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

### **CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

### **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

### **US State Regulations**

#### **California Proposition 65**

This product contains the following Proposition 65 chemicals (level present should not present a problem):

#### ***Chemical Name***

Bicyclic oxazolidine – 056709-13-8

#### ***California Proposition 65***

Carcinogen & Reproductive toxicant

### **U.S. State Right-to-Know Regulations**

No data available

### **International Regulations**

None listed



## **SECTION 16: OTHER INFORMATION**

NFPA	Health Hazards 1	Flammability 0	Instability 0	Physical and Chemical Hazards
				Personal Protection
HMIS	Health Hazards 2	Flammability 0	Physical Hazard 0	X

**WARNING!** If you scrape, sand or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD (5323) or log on to: [www.epa.gov/lead](http://www.epa.gov/lead)





## SAFETY DATA SHEET

### Section 1 – Chemical Product / Company Information

**Product Name:** CAFCO® BLAZE-SHIELD®,  
CAFCC BLAZE-SHIELD WHITE,  
CAFCC BLAZE-SHIELD CHARCOAL,  
CAFCC BLAZE-SHIELD II, CAFCC BLAZE-SHIELD II WHITE,  
CAFCC BLAZE-SHIELD II CHARCOAL,  
CAFCC BLAZE-SHIELD HP, CAFCC BLAZE-SHIELD HP WHITE,  
CAFCC BLAZE-SHIELD HP CHARCOAL

**Effective Date:** August 19, 2014

**Product Use/Class:** Spray-Applied Fire Resistive Materials (SFRM)

**Manufacturer:** United States Mineral Products Company  
Isolatek International  
41 Furnace Street  
Stanhope, NJ 07874 USA  
(973)-347-1200

**Preparer:** R&D Department

**In Case of Emergency Call:** CHEMTREC  
(800)-424-9300 (USA) (703)-527-3887 (Int'l)

**Supersedes:** July 10, 2014

### Section 2 – Hazards Identification

#### GHS Classification:

Hazard Class	Hazard Category	Route of Exposure
Skin Irritation	2	Skin
Skin Sensitizer	1	Skin
Eye Irritation	2B	Eye
Inhalation Toxicity	4	Nose/Mouth

#### GHS Labeling:

**Contains:** Slag Wool (CAS 65997-17-3), Portland Cement (CAS 65997-15-1), Calcium Sulfate (CAS 26499-65-0), Quartz (CAS 14808-60-7)

**Signal word:** Warning



**Symbol(s):**

#### Hazard statements:

Causes skin irritation  
May cause an allergic skin reaction  
Causes eye irritation  
Harmful if inhaled

#### Precautionary statements:

Wash thoroughly after handling  
Wear protective gloves  
Avoid breathing dust  
Use only outdoors or in well-ventilated area

## Section 2 – Hazards Identification

### Response:

If in eyes: rinse copiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: get medical advice/attention  
If on skin: wash with plenty of water and soap  
If skin irritation persists: get medical attention  
Take off contaminated clothing and wash before reuse  
If inhaled: remove person to fresh air and keep comfortable for breathing

### Storage:

Keep container tightly sealed and in a well ventilated place

### Disposal:

Dispose of contents/container in accordance with local/regional/national/international regulations (see section 13)

## Section 3 – Composition / Information On Ingredients

Chemical Name	CAS Number	Wt. % (Max.)
Slag Wool	65997-17-3	50 - 80
Portland Cement	65997-15-1	20 - 30
Calcium Sulfate Hemihydrate	26499-65-0	5 - 10
Quartz	14808-60-7	< 1

## Section 4 – First Aid Measures

**General** – If irritation or other symptoms occur or persist from any route of exposure, remove the affected individual from the area: see a physician/get medical attention.

**First Aid – Skin Contact:** Wash with soap and water. Remove contaminated clothing. If persistent irritation occurs, seek medical attention.

**First Aid – Eye Contact:** Flush eyes water for at least 5 minutes. Seek medical attention if irritation persists.

**First Aid – Inhalation:** Remove to fresh air. Seek medical attention if irritation persists.

**First Aid – Ingestion:** If swallowed do not induce vomiting. Rinse mouth out with water. Seek immediate medical attention.

**Protection of first aid responders:** Wear proper personal protective clothing and equipment

## Section 5 – Fire Fighting Measures

**Extinguishing Media:** Use a water spray, ABC dry chemical, foam or carbon dioxide. Water or foam may cause frothing. Use water to keep fire-exposed containers cool.

**Unusual Fire & Explosion Hazards:** Product is not considered a fire hazard but will burn if ignited. Closed container may rupture (due to build up of pressure) when exposed to extreme heat. Irritating or toxic substances may be emitted upon burning, combustion or decomposition.

**Special Firefighting Procedures:** Wear positive pressure self-contained NIOSH approved breathing equipment and approved protective equipment.

See section 9 for more details

## Section 6 – Accidental Release Measures

### Personal precautions, Protective Equipment, and Emergency Response:

Use personal protective equipment as recommended in section 8. If spilled in an enclosed area, ventilate.

**Environmental precautions:** This product contains component that are hazardous to aquatic life. Keep out of drains, sewers, ditches and waterways. Avoid runoff to waterways and sewers.

### Methods and materials for containment and cleaning up:

Sweep up material and place in disposal containers. Wet material should be treated with an inert absorbent material and placed in disposal containers. Dispose of material in accordance with all federal, state, and local regulations. Use personal protective equipment as necessary.

## Section 7 – Handling And Storage

**Precautions for safe handling:** When working with any chemical product, use good workplace procedures. Do not cut, puncture, or weld on or near the container. Wash thoroughly after handling this product. Always wash up before eating, smoking or using the facilities. Use under well ventilated conditions. Avoid skin and eye contact. Avoid inhalation of dust, mist, spray, fume or vapor. Avoid drinking, tasting, swallowing or ingesting this product. Wash contaminated clothing before reuse.

**Conditions for safe storage:** Keep away from heat, sparks, and open flames. Store in cool, dry place with adequate ventilation. Store this material away from incompatible substances (see section 10). Do not store in open, unlabeled or mislabeled containers. Keep container closed when not in use. Empty container contains residual product which may exhibit hazards of product. Do not reuse empty container.

## Section 8 – Exposure Controls / Personal Protection

### Permissible Exposure Limits

Chemical Name	CAS Number	OSHA PEL	ACGIH TLV	NIOSH	Mexico
Slag Wool	65997-17-3	15 mg/m3 TWA (Total Dust) 5 mg/m3 (Respirable Fraction)	1 f/cc TWA	5 mg/m3 TWA (Total Dust)	N/A
Portland Cement	65997-15-1	15 mg/m3 TWA (Total Dust)	10 mg/m3 TWA (Chemical is a particulate matter containing no asbestos and <1% crystalline silica.	10 mg/m3 TWA (Total Dust)	N/A
Calcium Sulfate, Hemihydrate	26499-65-0	15 mg/m3 TWA (Total Dust) 5 mg/m3 (Respirable Fraction)	15 mg/m3 TWA (Chemical is a particulate matter containing no asbestos and <1% crystalline silica.	10 mg/m3 TWA (Total Dust) 5 mg/m3 (Respirable Fraction)	10 (Respirable Fraction)
Quartz	14808-60-7	30 mg/m3 %SiO <sub>2</sub> +2 (Total Dust) 250 mppcf %SiO <sub>2</sub> +5 (Respirable) 10 mg/m3 %SiO <sub>2</sub> +2 (Respirable Fraction)	0.025 mg/m3 TWA (Respirable Fraction)	0.05 mg/m3 TWA (Total Dust) 0.05 mg/m3 TWA (Respirable Fraction)	.010mg/m3 TWA (Total Dust)

**Engineering Controls:** Mechanically exhaust vapors at appropriate times in application of product.

**Respiratory Protection:** Wear a proper disposable dust mask to prevent exposure above the limits specified.

**Skin Protection:** Wear gloves and use hand creams to prevent dry skin.

**Eye Protection:** Wear proper eye protection; at minimum, safety glasses with side shields.

**Work / Hygienic Practices:** Use bag opening procedures which minimize dust release. Use anti-slip surfaces on working platforms – material is slippery when wet.

## Section 9 – Physical And Chemical Properties

<b>Appearance:</b>	White to Charcoal
<b>Odor:</b>	Low Odor
<b>PH:</b>	N/A
<b>Melting Point (°F):</b>	>1800°F (981° C)
<b>Boiling Point (°F):</b>	N/A
<b>Flash Point:</b>	N/A
<b>Evaporation Rate:</b>	N/A
<b>Flammability:</b>	N/A
<b>Lower Explosive Limit:</b>	N/A
<b>Upper Explosive Limit:</b>	N/A
<b>Vapor Pressure (mm Hg):</b>	N/A
<b>Relative Density (kg/mm3)</b>	N/A
<b>Solubility in Water:</b>	Negligible
<b>Specific Gravity (H<sub>2</sub>O=1):</b>	N/A
<b>Physical State:</b>	Solid
<b>% Volatiles:</b>	0l
<b>Viscosity</b>	N/A
<b>Auto ignition temperature</b>	N/A

## Section 10 – Stability And Reactivity

<b>Chemical Stability (under normal conditions):</b>	Stable
<b>Possibility of hazardous reactions:</b>	None
<b>Conditions to Avoid:</b>	Excessive heat. Strong oxidizer.
<b>Incompatibility:</b>	Strong Acids, bases, and oxidizing agents. Avoid contact with amines.
<b>Hazardous Decomposition Products:</b>	Thermal decomposition may produce smoke, carbon monoxide (CO), carbon dioxide (CO <sub>2</sub> ), aldehydes, and other products of incomplete combustion.
<b>Hazardous Polymerization:</b>	No hazardous polymerization will occur under normal conditions.

## Section 11 – Toxicological Information

Information on likely routes of exposure:

**General:** Caution must be exercised through the prudent use of personal protective equipment and handling procedures to minimize exposure.

**Eyes:** May cause eye irritation.

**Skin:** May cause allergic skin reaction. Causes skin irritation.

**Inhalation:** High airborne concentrations of vapors resulting from heating, misting or spraying may cause irritation of the respiratory tract and mucous membranes.

**Ingestion:** Not likely route of exposure but ingestion may cause irritation

Carcinogenicity	IARC			NTP		OSHA
	Group 1	Group 2A	Group 2B	Known	Suspect	
Slag Wool	No	Possible	No	No	No	No
Portland Cement	No	No	No	No	No	No
Calcium Sulfate, Hemihydrate	No	No	No	No	No	No
Quartz	Yes	No	No	Yes	No	Yes

**Chronic effects** – For this category no toxicological test data is available for the whole product.

**Carcinogenicity** - For this category no toxicological test data is available for the whole product.

**Mutagenicity** - For this category no toxicological test data is available for the whole product.

**Teratogenicity** - For this category no toxicological test data is available for the whole product.

**Developmental effects** - For this category no toxicological test data is available for the whole product.

**Fertility effects** - For this category no toxicological test data is available for the whole product.

**Target organs** – For this category no toxicological test data is available for the whole product.



## Section 12 – Ecological Information

**Ecological Information:** No ecological testing has been conducted on this product.

**Persistence and degradability:** N/E

**Bioaccumulative potential:** N/E

**Mobility in soil:** N/E

## Section 13 – Disposal Considerations

**Disposal Information:** For waste disposal purposes, this product is not known to be designated as hazardous by current provisions of RCRA. Incinerate waste products in a properly permitted incineration facility in accordance with federal, state, and local regulations. Liquids cannot be disposed of in a landfill. Federal, state and local regulations where the waste material is generated, treated, and/or disposed of must be examined to verify the appropriate waste classification.

## Section 14 – Transportation Information

**Proper Shipping Name:** Not regulated – See Bill of Lading for details

**Technical Name:** Not regulated

**Hazard Class:** Non-Hazardous

**UN/NA Number:** Not regulated

**Additional Notes:** None

## Section 15 – Regulatory Information

### US Regulations

HCS Classification                      Irritating material, Sensitizing material

SARA 313 - Supplier Notification      None known

U.S. Federal Regulations SARA 311/312					
	Immediate Health (Acute)	Delayed Health (Chronic)	FIRE	PRESSURE	REACTIVE
	No	Yes	No	No	No

U.S. State Regulations	State Hazardous Substance List						
	CAS Number	CA	MA	MN	NJ	PA	RI
	65997-17-3	No	No	No	No	No	No
	65997-15-1	No	No	No	No	No	No
	26499-65-0	No	No	No	No	No	No
	14808-60-7	Yes	Yes	Yes	Yes	No	Yes

### U.S. State Regulations

#### California Proposition 65

Warning: This product contains substances known to the State of California to cause cancer, birth defects or other reproductive harm.

### INTERNATIONAL REGULATIONS AS FOLLOWS:

#### Chemical Inventory Status

All chemicals in this product are listed or exempt from listing in the following:

U.S	Canada		Europe	Australia	Korea
TSCA	DSL	NDSL	EINECS   ELINCS	AICS	ECL
Yes	Yes	No	Yes	Yes	Yes

## Section 15 – Regulatory Information

### CANADIAN WHMIS

This SDS has been prepared in compliance with Controlled Product Regulations and contains all information required.

CANADIAN WHMIS CLASS: D2A

### HMIS Rating



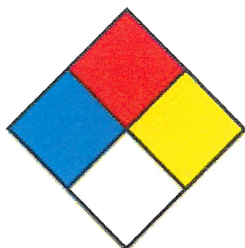
VOLATILE ORGANIC COMPOUNDS, GR/LTR MIXED (UNTHINNED): 0

## Section 16 – Other Information

N/E – Non Established

N/A – Not Applicable

### NFPA Rating



Prepared By: Research Department, U.S.A.

Telephone: (973) 347-1200

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. **VENDOR SPECIFICALLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** In no event shall the vendor be liable for special, indirect or consequential damages.

Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in this data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Furthermore, vendee assumes all risks in his use of the material.

## Section 1 – Chemical Product / Company Information

**Product Name:** CAFCO® 300, CAFCO® 300 SB, CAFCO® 300 ES, CAFCO® 300 AC, CAFCO® 300 HS **Effective Date:** March 26, 2015

**Product Use/Class:** Spray-Applied Fire Resistive Materials (SFRM)

**Manufacturer:** United States Mineral Products Company  
dba Isolatek International  
41 Furnace Street  
Stanhope, NJ 07874 USA  
(973)-347-1200 **Preparer:** R&D Department

**In Case of Emergency Call:** CHEMTREC **Supersedes:** October 28, 2014

800.424.9300 (USA) +1 703.527.3887 (Int'l)

## Section 2 – Hazards Identification

GHS Classification:	Hazard Category	Route of Exposure
<b>Hazard Class</b>	2	Skin
Skin Irritation	1	Skin
Skin Sensitizer	2B	Eye
Eye Irritation	4	Nose/Mouth
Inhalation Toxicity		

### Global Harmonization Labeling and Classification:

**Signal word:** Warning

**Hazard Symbol(s):** GHS07



**Overview:** A granular powder that poses little immediate hazard. However, components may contain trace amounts of crystalline silica (quartz). Prolonged exposure to respirable crystalline silica (quartz) may cause cancer.

**Primary Route(s) of Entry:** Skin Contact, Skin Absorption, Inhalation, Ingestion, Eye Contact

**Medical Conditions Prone to Aggravation by Exposure:** Sensitive skin; respiratory conditions

Hazard Statements:	
<b>H303</b>	May be harmful if swallowed.
<b>H313</b>	May be harmful in contact with skin.
<b>H320</b>	Causes eye irritation.
<b>H335</b>	May cause respiratory irritation.
<b>H373</b>	May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements:	
<b>P202</b>	Do not handle until safety precautions have been read and understood.
<b>P261</b>	Avoid breathing dust/ fumes/ gas/ mist/ vapours/ spray.
<b>P271</b>	Use only outdoors or in a well ventilated area.
<b>P280</b>	Wear protective gloves/ protective clothing/ eye protection/ face protection.
<b>P284</b>	Wear respiratory protection.
<b>P402+P403</b>	Store in a dry place. Store in a well ventilated place.
<b>EUH401</b>	To avoid risks to human health and the environment, comply with the instructions for use.

Response:	
<b>P301+P330 P331+P312</b>	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/ physician if you feel unwell.
<b>P302+P352+ P332+P313+ P363</b>	IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/ attention. Wash contaminated clothing before reuse.
<b>P304+P340+ P342+P313</b>	IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Get medical advice/ attention.
<b>P305+P351+ P338+P337+ P313</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention.

Storage:	
<b>P402+P403+ P232</b>	Store in a dry place. Store in a well ventilated place. Protect from moisture.

Disposal:	
<b>P501</b>	Dispose of contents/container in accordance with local/regional/national/international regulations (see section 13).

### Section 3 – Composition / Information On Ingredients

Chemical Name	CAS Number	Wt. % (Max.)
Calcium Sulfate, Hemihydrate	26499-65-0	50 - 75
Vermiculite	1318-00-9	15 - 35
Cellulose	065996-61-4	1 - 10
Calcium Carbonate	1317-65-3	1 - 10
Quartz	014808-60-7	0 - 5

### Section 4 – First Aid Measures

**General** – If irritation or other symptoms occur or persist from any route of exposure, remove the affected individual from the area: see a physician/get medical attention.

**First Aid – Skin Contact:** Wash with soap and water. Remove contaminated clothing. If persistent irritation occurs, seek medical attention.

**First Aid – Eye Contact:** Flush eyes thoroughly with copious amounts of water. Seek medical attention if irritation persists.

**First Aid – Inhalation:** Remove to fresh air. Seek medical attention if irritation persists.

**First Aid – Ingestion:** Do not induce vomiting. Rinse mouth out with water. Seek medical attention if irritation persists.

**Protection of first aid responders:** Wear proper personal protective clothing and equipment.



## Section 5 – Fire Fighting Measures

**Extinguishing Media:** Not Applicable. Product will not burn.

**Unusual Fire & Explosion Hazards:** None.

**Special Firefighting Procedures:** None.

## Section 6 – Accidental Release Measures

**Steps To Be Taken If Material Is Released Or Spilled:** Sweep up material and place in disposal containers. Avoid inhalation of dust. Dispose of material in accordance with all federal, state, and local regulations. Use personal protective equipment as necessary.

## Section 7 – Handling And Storage

**Precautions for safe handling:** Avoid inhalation of dust. Avoid skin & eye contact. Wear skin and eye protection during use. Use normal personal hygiene to remove materials, contaminants; wash clothing separately before re-use.

**Conditions for safe storage:** Keep dry. Keep containers closed when not in use. Store in a cool, dry place with adequate ventilation.

## Section 8 – Exposure Controls / Personal Protection

Permissible Exposure Limits

Chemical Name	CAS Number	OSHA PEL	ACGIH TLV	NIOSH	Mexico
Calcium Sulfate Hemihydrate	26499-65-0	15 mg/m <sup>3</sup> TWA (Total Dust) 5 mg/m <sup>3</sup> (Respirable Fraction)	15 mg/m <sup>3</sup> TWA (Chemical is a particulate matter containing no asbestos and <1% crystalline silica)	10 mg/m <sup>3</sup> TWA (Total Dust) 5 mg/m <sup>3</sup> (Respirable Fraction)	10 (Respirable Fraction)
Vermiculite	1318-00-9	N/A	10mg/m <sup>3</sup> (Total Dust) 3 mg/m <sup>3</sup> (Respirable Fraction)	0.05 mg/m <sup>3</sup>	-
Cellulose	065996-61-4	N/A	N/A	N/A	N/A
Calcium Carbonate	1317-65-3	15 mg/m <sup>3</sup> TWA (Total Dust) 5 mg/m <sup>3</sup> (Respirable Fraction)	-	10 mg/m <sup>3</sup> TWA (Total Dust) 5 mg/m <sup>3</sup> (Respirable Fraction)	10 (Respirable Fraction)
Quartz	14808-60-7	30 mg/m <sup>3</sup> %SiO <sub>2</sub> +2 (Total Dust) 250 mppcf %SiO <sub>2</sub> +5 (Respirable) 10 mg/m <sup>3</sup> %SiO <sub>2</sub> +2 (Respirable Fraction)	0.025 mg/m <sup>3</sup> TWA (Respirable Fraction)	0.05 mg/m <sup>3</sup> TWA (Total Dust) 0.05 mg/m <sup>3</sup> TWA (Respirable Fraction)	0.010mg/m <sup>3</sup> TWA (Total Dust)

**Engineering Controls:** Exhaust fans may be necessary when mixing in enclosed areas.

**Respiratory Protection:** Wear a proper disposable dust mask to prevent exposure above the limits specified.

**Skin Protection:** Wear gloves and use hand creams to prevent dry skin.

**Eye Protection:** Wear proper eye protection; at minimum, safety glasses with side shields.

**Work / Hygienic Practices:** Use bag opening procedures which minimize dust release. Use anti-slip surfaces on working platforms – material is slippery when wet.

## Section 9 – Physical And Chemical Properties

Appearance:	Light grey or tan, light green or light red, granular powder
Odor:	Low odor
pH:	8-10
Melting Point (°F):	>1800°F (981°C)
Boiling Point (°F):	Not Applicable
Flash Point:	Not Applicable
Evaporation Rate:	Not Applicable
Flammability:	Not Applicable
Lower Explosive Limit:	Not Applicable
Upper Explosive Limit:	Not Applicable
Vapor Pressure (mm Hg):	Not Applicable
Bulk Density (kg/mm3)	Not Applicable
Solubility in Water:	Low
Specific Gravity (H <sub>2</sub> O=1):	Not Applicable
Physical State:	Solid
% Volatiles:	Not Applicable
Viscosity	Not Applicable
Auto ignition temperature	Not Applicable

## Section 10 – Stability And Reactivity

Chemical Stability (under normal conditions):	Stable
Possibility of Hazardous Reactions:	No
Conditions to Avoid:	Contact with strong acids
Incompatibility:	Strong Acids
Hazardous Decomposition Products:	Stable under normal conditions. Trace amounts of carbon and nitrogen oxide compounds may release under fire.
Hazardous Polymerization:	No polymerization will occur.

## Section 11 – Toxicological Information

Carcinogenicity	IARC			NTP		OSHA	LD50/LC50
	Group 1	Group 2A	Group 2B	Known	Suspect		
Calcium Sulfate Hemihydrate	No	No	No	No	No	No	No Data Available
Vermiculite	No	No	No	No	No	No	No Data Available
Cellulose	No	No	No	No	No	No	No Data Available
Calcium Carbonate	No	No	No	No	No	No	No Data Available
Quartz	Yes	No	No	Yes	No	Yes	No Data Available

## Section 12 – Ecological Information

Ecological Information: No data available.

## Section 13 – Disposal Considerations

**Disposal Information:** For waste disposal purposes, this product is not known to be designated as hazardous by current provisions under RCRA. Dispose of in accordance with federal, state and local regulations.

## Section 14 – Transportation Information

Proper Shipping Name: Not Applicable  
Technical Name: Not Applicable  
Hazard Class: Non-Hazardous  
UN/NA Number: Not Applicable  
Additional Notes: None

## Section 15 – Regulatory Information

U.S. Federal Regulations SARA 311/312	Immediate Health (Acute)	Delayed Health (Chronic)	FIRE	PRESSURE	REACTIVE
	No	Yes	No	No	No

U.S. State Regulations	State Hazardous Substance List						
	CAS Number	CA	MA	MN	NJ	PA	RI
	26499-65-0	No	No	No	No	No	No
	1318-00-9	No	No	No	No	No	No
	065996-61-4	No	No	No	No	No	No
	1317-65-3	No	No	No	No	No	No
	14808-60-7	Yes	Yes	Yes	Yes	No	Yes

International Regulations as Follows:

### Chemical Inventory Status

All chemicals in this product are listed or exempt from listing in the following countries:

U.S	Canada	Europe	Australia	Korea
TSCA	DSL   NDSL	EINECS   ELINCS	AICS	ECL
Yes	Yes   No	Yes	Yes	Yes

### Canadian WHMIS

This SDS has been prepared in compliance with Controlled Product Regulations and contains all information required.

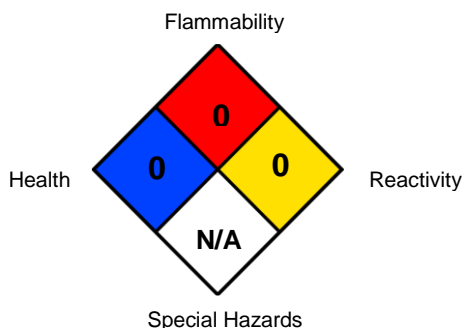
CANADIAN WHMIS CLASS: D2A

### HMIS Rating

HEALTH	1
FLAMMABILITY	0
REACTIVITY	0
PERSONAL PROTECTION	e

## Section 16 – Other Information

NFPA



Prepared By: Research Department, U.S.A.  
Telephone: (973) 347-1200

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. **VENDOR SPECIFICALLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** In no event shall the vendor be liable for special, indirect or consequential damages.

Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in this data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Furthermore, vendee assumes all risks in his use of the material.

## Section 1 – Chemical Product / Company Information

**Product Name:** ISOLATEK QWIK-SET® **Effective Date:** March 26, 2015

**Product Use/Class:** Spray-Applied Fire Resistive Materials (SFRM)

**Supplier:** United States Mineral Products Company  
dba Isolatek International  
41 Furnace Street  
Stanhope, NJ 07874 USA  
(973)-347-1200 **Preparer:** R&D Department

**In Case of Emergency Call:** CHEMTREC **Supersedes:** January 26, 2015

800.424.9300 (USA) +1 703.527.3887 (Int'l)

## Section 2 – Hazards Identification

### GHS Classification:

Hazard Class	Hazard Category	Route of Exposure
Skin Irritation	2	Skin
Skin Sensitizer	1	Skin
Eye Irritation	2B	Eye
Inhalation Toxicity	4	Nose/Mouth

### Global Harmonization Labeling and Classification:

**Signal word:** Warning

**Hazard Symbol(s):** GHS07



**Overview:** Harmful by ingestion. Irritating to eyes, respiratory system and skin. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**Primary Route(s) of Entry:** Skin Contact, Skin Absorption, Inhalation, Ingestion, Eye Contact

**Medical Conditions Prone to Aggravation by Exposure:** Sensitive skin; respiratory conditions

### Hazard Statements:

<b>H303</b>	May be harmful if swallowed.
<b>H313</b>	May be harmful in contact with skin.
<b>H320</b>	Causes eye irritation.
<b>H335</b>	May cause respiratory irritation.
<b>H373</b>	May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements:	
<b>P202</b>	Do not handle until safety precautions have been read and understood.
<b>P261</b>	Avoid breathing dust/ fumes/ gas/ mist/ vapours/ spray.
<b>P271</b>	Use only outdoors or in a well ventilated area.
<b>P280</b>	Wear protective gloves/ protective clothing/ eye protection/ face protection.
<b>P284</b>	Wear respiratory protection.
<b>P402+P403</b>	Store in a dry place. Store in a well ventilated place.
<b>EUH401</b>	To avoid risks to human health and the environment, comply with the instructions for use.

Response:	
<b>P301+P330 P331+P312</b>	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/ physician if you feel unwell.
<b>P302+P352+ P332+P313+ P363</b>	IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/ attention. Wash contaminated clothing before reuse.
<b>P304+P340+ P342+P313</b>	IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Get medical advice/ attention.
<b>P305+P351+ P338+P337+ P313</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention.

Storage:	
<b>P402+P403+ P232</b>	Store in a dry place. Store in a well ventilated place. Protect from moisture.

Disposal:	
<b>P501</b>	Dispose of contents/container in accordance with local/regional/national/international regulations (see section 13).

### Section 3 – Composition / Information On Ingredients

Chemical Name	CAS Number	Wt. % (Max.)
Aluminum Sulfate (hydrated)	10043-01-3	100

### Section 4 – First Aid Measures

**General** – If irritation or other symptoms occur or persist from any route of exposure, remove the affected individual from the area, see a physician/get medical attention.

**First Aid – Skin Contact:** Remove contaminated clothing and wash contaminated skin with water.

**First Aid – Eye Contact:** Immediately flush eyes with copious amounts of water for at least 15 minutes, occasionally lifting upper and lower lids. Seek medical attention.

**First Aid – Inhalation:** Remove to fresh air. Seek medical attention if irritation persists.

**First Aid – Ingestion:** Do not induce vomiting, drink milk or water and immediately seek medical attention. Ingestion may irritate gastrointestinal tract.

**Protection of first aid responders:** Wear proper personal protective clothing and equipment.

## Section 5 – Fire Fighting Measures

**Extinguishing Media:** Not Applicable. Product will not burn.

**Unusual Fire & Explosion Hazards:** If exposed to temperature greater than 1400 °F, Aluminum sulfate will decompose generating toxic and corrosive gas.

**Special Firefighting Procedures:** Do not release runoff from fire control methods to sewers or waterways.

## Section 6 – Accidental Release Measures

**Spill/Leak Procedures:** Spill procedures are dictated by site wastewater flow controls and will vary from site to site. General procedures are provided in this document, but authorization for any wastewater discharge must be obtained prior to the discharge.

**Large and Small Spills:** Sweep and shovel up dry chemical and place in a covered container. Wash down residue with large amounts of water and neutralize with soda ash or lime if necessary. Aluminum sulfate solutions can have a pH less than two. The neutralization of aluminum sulfate can generate carbon dioxide. Adequate ventilation must be provided. Do not discharge wastewaters to the environment or a wastewater treatment plant without authorization from the appropriate officials.

**Containments:** Aluminum sulfate may absorb moisture and powders or crystals can solidify into a single mass. Protect aluminum sulfate from moisture.

**Cleanup:** Wash impacted areas with water to remove residues.

**Regulatory Requirements:** Follow applicable OSHA regulations (29 CFR 1910.120)

## Section 7 – Handling And Storage

**Precautions for safe handling:** Minimize and/or control dust while handling.

**Conditions for safe storage:** Store in a cool, dry place. Wet aluminum sulfate will corrode steel.

## Section 8 – Exposure Controls / Personal Protection

### Permissible Exposure Limits

Chemical Name	CAS Number	OSHA PEL	ACGIH TLV	NIOSH	Mexico
Aluminum Sulfate	10043-01-3	15 mg/m <sup>3</sup> TWA (Total Dust) 5 mg/m <sup>3</sup> (Respirable Fraction)	1 f/cc TWA	2 mg/m <sup>3</sup> TWA (Total Dust)	N/A

**Engineering Controls:** Exhaust fans may be necessary.

**Respiratory Protection:** In case of brief exposure or low pollution use respiratory filter device.

**Skin Protection:** Wear gloves and use hand creams to prevent dry skin.

**Eye Protection:** Wear proper eye protection; at minimum, safety glasses with side shields.

**General protective and hygienic measures:** Avoid contact with the eyes and skin.

## Section 9 – Physical And Chemical Properties

**Appearance:** White granule or powder  
**Odor:** Negligible odor  
**pH of 1% solution:** 3.3 ± 0.5  
**Melting Point (°F):** Not Applicable  
**Boiling Point (°F):** 117 °C (242 °F)  
**Freezing/Melting Point:** 105 °C (221 °F)  
**Evaporation Rate:** Not Applicable  
**Flammability:** Not Applicable  
**Lower Explosive Limit:** Not Applicable  
**Upper Explosive Limit:** Not Applicable  
**Vapor Pressure (mm Hg):** Not Applicable  
**Bulk Density (kg/mm3)** Not Applicable  
**Solubility in Water:** Compete  
**Specific Gravity (H<sub>2</sub>O=1):** Not Applicable  
**Physical State:** Solid  
**% Volatiles:** 0  
**Density** Varies, < 98 lb/cu ft  
**Auto ignition temperature** Not Applicable

## Section 10 – Stability And Reactivity

**Stability: (under normal conditions):** Stable at room temperature in closed containers.  
**Incompatibility (Materials to Avoid):** Contact with alkalis and water-reactive materials causes exothermic reactions.  
**Hazardous Decomposition Products:** Thermal oxidative decomposition of Aluminum sulfate occurs at temperatures greater than 1400 °F and can produce sulfur oxides.  
**Hazardous Polymerization:** Will not occur.

## Section 11 – Toxicological Information

Carcinogenicity	ARC			NTP		OSHA	LD50/LC50
Chemical Name	Group 1	Group 2A	Group 2B	Known	Suspect		
Aluminum Sulfate	No	No	No	No	No	No	No Data Available

## Section 12 – Ecological Information

**Ecological Information:** No Data Available

## Section 13 – Disposal Considerations

**Disposal Information:** For waste disposal purposes, this product is not known to be designated as hazardous by current provisions under RCRA. Dispose of in accordance with federal, state and local regulations.

**Container Cleaning and Disposal:** Make sure bags are completely empty and dispose of in accordance with federal, state and local regulations.

## Section 14 – Transportation Information

**Proper Shipping Name:** Shipping name depends on the packaging. If a package exceeds the RQ, the shipment must meet the requirements of 49 CFR Parts 100-185, including the following shipping name. Otherwise, not hazmat regulated.  
UN3077, Environmentally Hazardous Substance, solid, n.o.s. (Aluminum sulfate), 9, III, RQ  
**Technical Name:** Not Applicable  
**Hazard Class:** 9  
**UN/NA Number:** Not Applicable  
**Additional Notes:** None



## Section 15 – Regulatory Information

U.S. Federal Regulations SARA 311/312	Immediate Health (Acute)	Delayed Health (Chronic)	FIRE	PRESSURE	REACTIVE
	No	Yes	No	No	No

U.S State Regulations		State Hazardous Substance List					
	CAS Number	CA	MA	MN	NJ	PA	RI
	10043-01-3	No	N/A	N/A	Yes	Yes	No

International Regulations as Follows:

### Chemical Inventory Status

All chemicals in this product are listed or exempt from listing in the following:

U.S	Canada	Europe	Australia	Korea
TSCA	DSL   NDSL	EINECS   ELINCS	AICS	ECL
Yes	Yes   No	Yes	Yes	Yes

### Canadian WHMIS

This SDS has been prepared in compliance with Controlled Product Regulations and contains all information required.

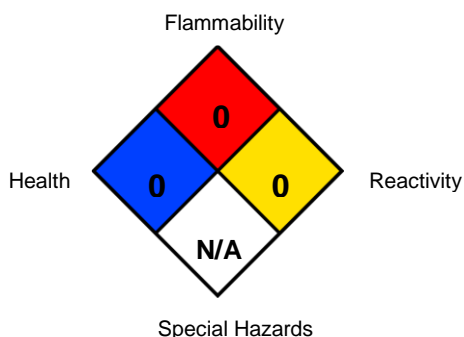
CANADIAN WHMIS CLASS: D2B

### HMIS Rating

HEALTH	1
FLAMMABILITY	0
REACTIVITY	0
PERSONAL PROTECTION	e

## Section 16 – Other Information

NFPA



Prepared By: Research Department, U.S.A.  
Telephone: (973) 347-1200

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Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in this data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Furthermore, vendee assumes all risks in his use of the material.

## Section 1 – Chemical Product / Company Information

**Product Name:** CAFCO® 400 **Effective Date:** March 26, 2015  
**Product Use/Class:** Spray-Applied Fire Resistive Materials (SFRM)  
**Manufacturer:** United States Mineral Products Company  
 dba Isolatek International  
 41 Furnace Street  
 Stanhope, NJ 07874 USA  
 (973)-347-1200 **Preparer:** R&D Department  
**In Case of Emergency Call:** CHEMTREC **Supersedes:** October 28, 2014  
 800.424.9300 (USA) +1 703.527.3887 (Int'l)

## Section 2 – Hazards Identification

### GHS Classification:

Hazard Class	Hazard Category	Route of Exposure
Skin Irritation	2	Skin
Skin Sensitizer	1	Skin
Eye Irritation	2B	Eye
Inhalation Toxicity	4	Nose/Mouth

### Global Harmonization Labeling and Classification:

**Signal word:** Warning

**Hazard Symbol(s):** GHS07



**Overview:** A granular powder that poses little immediate hazard. However, components may contain trace amounts of crystalline silica (quartz). Prolonged exposure to respirable crystalline silica (quartz) may cause cancer.

**Primary Route(s) of Entry:** Skin Contact, Skin Absorption, Inhalation, Ingestion, Eye Contact

**Medical Conditions Prone to Aggravation by Exposure:** Sensitive skin; respiratory conditions

### Hazard Statements:

<b>H303</b>	May be harmful if swallowed.
<b>H313</b>	May be harmful in contact with skin.
<b>H320</b>	Causes eye irritation.
<b>H335</b>	May cause respiratory irritation.
<b>H373</b>	May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements:	
<b>P202</b>	Do not handle until safety precautions have been read and understood.
<b>P261</b>	Avoid breathing dust/ fumes/ gas/ mist/ vapours/ spray.
<b>P271</b>	Use only outdoors or in a well ventilated area.
<b>P280</b>	Wear protective gloves/ protective clothing/ eye protection/ face protection.
<b>P284</b>	Wear respiratory protection.
<b>P402+P403</b>	Store in a dry place. Store in a well ventilated place.
<b>EUH401</b>	To avoid risks to human health and the environment, comply with the instructions for use.

Response:	
<b>P301+P330 P331+P312</b>	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/ physician if you feel unwell.
<b>P302+P352+ P332+P313+ P363</b>	IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/ attention. Wash contaminated clothing before reuse.
<b>P304+P340+ P342+P313</b>	IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Get medical advice/ attention.
<b>P305+P351+ P338+P337+ P313</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention.

Storage:	
<b>P402+P403+ P232</b>	Store in a dry place. Store in a well ventilated place. Protect from moisture.

Disposal:	
<b>P501</b>	Dispose of contents/container in accordance with local/regional/national/international regulations (see section 13).

### Section 3 – Composition / Information On Ingredients

Chemical Name	CAS Number	Wt. % (Max.)
Portland Cement	65997-15-1	40 - 70
Vermiculite	1318-00-9	15 - 35
Cellulose	065996-61-4	1 - 10
Calcium Carbonate	1317-65-3	5 - 10
Quartz	014808-60-7	<1

### Section 4 – First Aid Measures

**General** – If irritation or other symptoms occur or persist from any route of exposure, remove the affected individual from the area: see a physician/get medical attention.

**First Aid – Skin Contact:** Wash with soap and water. Remove contaminated clothing. If persistent irritation occurs, seek medical attention.

**First Aid – Eye Contact:** Flush eyes thoroughly with copious amounts of water. Seek medical attention if irritation persists.

**First Aid – Inhalation:** Remove to fresh air. Seek medical attention if irritation persists.

**First Aid – Ingestion:** Do not induce vomiting. Rinse mouth out with water. Seek medical attention if irritation persists.

**Protection of first aid responders:** Wear proper personal protective clothing and equipment.

## Section 5 – Fire Fighting Measures

**Extinguishing Media:** Not Applicable. Product will not burn.

**Unusual Fire & Explosion Hazards:** None unless noted below in Section 6.

**Special Firefighting Procedures:** None.

## Section 6 – Accidental Release Measures

**Steps To Be Taken If Material Is Released Or Spilled:** Sweep up material and place in disposal containers. Avoid inhalation of dust. Dispose of material in accordance with all federal, state, and local regulations. Use personal protective equipment as necessary.

## Section 7 – Handling And Storage

**Precautions for safe handling:** Avoid inhalation of dust. Avoid skin & eye contact. Wear skin and eye protection during use. Use normal personal hygiene to remove materials, contaminants; wash clothing separately before re-use.

**Conditions for safe storage:** Keep dry. Keep containers closed when not in use. Store in a cool, dry place with adequate ventilation.

## Section 8 – Exposure Controls / Personal Protection

Permissible Exposure Limits

Chemical Name	CAS Number	OSHA PEL	ACGIH TLV	NIOSH	Mexico
Portland Cement	65997-15-1	15 mg/m <sup>3</sup> TWA (Total Dust)	10 mg/m <sup>3</sup> TWA (Chemical is a particulate matter containing no asbestos and <1% crystalline silica.	10 mg/m <sup>3</sup> TWA (Total Dust)	N/A
Vermiculite	1318-00-9	N/A	10mg/m <sup>3</sup> (Total Dust) 3 mg/m <sup>3</sup> (Respirable Fraction)	0.05 mg/m <sup>3</sup>	-
Cellulose	065996-61-4	N/A	N/A	N/A	N/A
Calcium Carbonate	1317-65-3	15 mg/m <sup>3</sup> TWA (Total Dust) 5 mg/m <sup>3</sup> (Respirable Fraction)	N/A	10 mg/m <sup>3</sup> TWA (Total Dust) 5 mg/m <sup>3</sup> (Respirable Fraction)	10 (Respirable Fraction)
Quartz	14808-60-7	30 mg/m <sup>3</sup> %SiO <sub>2</sub> +2 (Total Dust) 250 mppcf %SiO <sub>2</sub> +5 (Respirable) 10 mg/m <sup>3</sup> %SiO <sub>2</sub> +2 (Respirable Fraction)	0.025 mg/m <sup>3</sup> TWA (Respirable Fraction)	0.05 mg/m <sup>3</sup> TWA (Total Dust) 0.05 mg/m <sup>3</sup> TWA (Respirable Fraction)	0.010mg/m <sup>3</sup> TWA (Total Dust)

**Engineering Controls:** Exhaust fans may be necessary when mixing in enclosed areas.

**Respiratory Protection:** Wear a proper disposable dust mask to prevent exposure above the limits specified.

**Skin Protection:** Wear gloves and use hand creams to prevent dry skin.

**Eye Protection:** Wear proper eye protection; at minimum, safety glasses with side shields.

**Work / Hygienic Practices:** Use bag opening procedures which minimize dust release. Use anti-slip surfaces on working platforms – material is slippery when wet.

## Section 9 – Physical And Chemical Properties

Appearance:	Grey powder with golden pellets and flakes
Odor:	Low odor
pH:	10-13
Melting Point (°F):	>1800°F (981°C)
Boiling Point (°F):	Not Applicable
Flash Point:	Not Applicable
Evaporation Rate:	Not Applicable
Flammability:	Not Applicable
Lower Explosive Limit:	Not Applicable
Upper Explosive Limit:	Not Applicable
Vapor Pressure (mm Hg):	Not Applicable
Bulk Density (kg/mm3)	Not Applicable
Solubility in Water:	Low
Specific Gravity (H <sub>2</sub> O=1):	Not Applicable
Physical State:	Solid
% Volatiles:	Not Applicable
Viscosity	Not Applicable
Auto ignition temperature	Not Applicable

## Section 10 – Stability And Reactivity

Chemical Stability (under normal conditions):	Stable
Possibility of Hazardous Reactions:	No
Conditions to Avoid:	Contact with strong acids
Incompatibility:	Strong Acids
Hazardous Decomposition Products:	Stable under normal conditions. Trace amounts of carbon and nitrogen oxide compounds may release under fire.
Hazardous Polymerization:	No polymerization will occur

## Section 11 – Toxicological Information

Carcinogenicity	IARC			NTP		OSHA	LD50/LC50
	Group 1	Group 2A	Group 2B	Known	Suspect		
Portland Cement	No	No	No	No	No	No	No Data Available
Vermiculite	No	No	No	No	No	No	No Data Available
Cellulose	No	No	No	No	No	No	No Data Available
Calcium Carbonate	No	No	No	No	No	No	No Data Available
Quartz	Yes	No	No	Yes	No	Yes	No Data Available

## Section 12 – Ecological Information

Ecological Information: No data available.

## Section 13 – Disposal Considerations

**Disposal Information:** For waste disposal purposes, this product is not known to be designated as hazardous by current provisions under RCRA. Dispose of in accordance with federal, state and local regulations.

## Section 14 – Transportation Information

Proper Shipping Name:	Not Applicable
Technical Name:	Not Applicable
Hazard Class:	Non-Hazardous
UN/NA Number:	Not Applicable
Additional Notes:	None

## Section 15 – Regulatory Information

U.S. Federal Regulations SARA 311/312	Immediate Health (Acute)	Delayed Health (Chronic)	FIRE	PRESSURE	REACTIVE
	No	Yes	No	No	No

U.S. State Regulations	State Hazardous Substance List						
	CAS Number	CA	MA	MN	NJ	PA	RI
	65997-15-1	No	No	No	No	No	No
	1318-00-9	No	No	No	No	No	No
	065996-61-4	No	No	No	No	No	No
	1317-65-3	No	No	No	No	No	No
	14808-60-7	Yes	Yes	Yes	Yes	No	Yes

### INTERNATIONAL REGULATIONS AS FOLLOWS:

#### Chemical Inventory Status

All chemicals in this product are listed or exempt from listing in the following countries:

U.S	Canada		Europe		Australia	Korea
TSCA	DSL	NDSL	EINECS	ELINCS	AICS	ECL
Yes	Yes	No	Yes		Yes	Yes

#### CANADIAN WHMIS

This SDS has been prepared in compliance with Controlled Product Regulations and contains all information required.

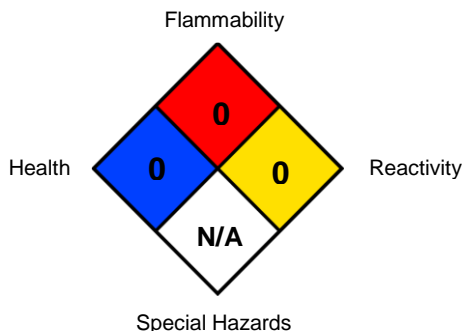
CANADIAN WHMIS CLASS: D2A

#### HMIS Rating

HEALTH	1
FLAMMABILITY	0
REACTIVITY	0
PERSONAL PROTECTION	e

## Section 16 – Other Information

NFPA



Prepared By: Research Department, U.S.A.  
Telephone: (973) 347-1200

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. **VENDOR SPECIFICALLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** In no event shall the vendor be liable for special, indirect or consequential damages.

Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in this data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Furthermore, vendee assumes all risks in his use of the material.



## Section 1 – Chemical Product / Company Information

**Product Name:** CAFCO® FENDOLITE® M-II **Effective Date:** November 9, 2015

**Product Use/Class:** Spray-Applied Fire Resistive Materials (SFRM)

**Manufacturer:** United States Mineral Products Company  
dba Isolatek International  
41 Furnace Street  
Stanhope, NJ 07874 USA  
(973)-347-1200 **Preparer:** R&D Department

**In Case of Emergency Call:** CHEMTREC **Supersedes:** April 6, 2015

800.424.9300 (USA) +1 703.527.3887 (Int'l)

## Section 2 – Hazards Identification

### GHS Classification:

Hazard Class	Hazard Category	Route of Exposure
Skin Irritation	2	Skin
Skin Sensitizer	1	Skin
Eye Irritation	2B	Eye
Inhalation Toxicity	4	Nose/Mouth

### Global Harmonization Labeling and Classification:

**Signal word:** Warning

**Hazard Symbol(s):** GHS07



**Overview:** A granular powder that poses little immediate hazard. However, components may contain trace amounts of crystalline silica. Prolonged exposure to respirable crystalline silica may cause cancer.

**Primary Route(s) of Entry:** Skin Contact, Skin Absorption, Inhalation, Ingestion, Eye Contact

**Medical Conditions Prone to Aggravation by Exposure:** Sensitive skin; respiratory conditions

### Hazard Statements:

<b>H303</b>	May be harmful if swallowed.
<b>H313</b>	May be harmful in contact with skin.
<b>H320</b>	Causes eye irritation.
<b>H335</b>	May cause respiratory irritation.
<b>H373</b>	May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements:	
<b>P202</b>	Do not handle until safety precautions have been read and understood.
<b>P261</b>	Avoid breathing dust/ fumes/ gas/ mist/ vapours/ spray.
<b>P271</b>	Use only outdoors or in a well ventilated area.
<b>P280</b>	Wear protective gloves/ protective clothing/ eye protection/ face protection.
<b>P284</b>	Wear respiratory protection.
<b>P402+P403</b>	Store in a dry place. Store in a well ventilated place.
<b>EUH401</b>	To avoid risks to human health and the environment, comply with the instructions for use.

Response:	
<b>P301+P330 P331+P312</b>	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/ physician if you feel unwell.
<b>P302+P352+ P332+P313+ P363</b>	IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/ attention. Wash contaminated clothing before reuse.
<b>P304+P340+ P342+P313</b>	IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Get medical advice/ attention.
<b>P305+P351+ P338+P337+ P313</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention.

Storage:	
<b>P402+P403+ P232</b>	Store in a dry place. Store in a well ventilated place. Protect from moisture.

Disposal:	
<b>P501</b>	Dispose of contents/container in accordance with local/regional/national/international regulations (see section 13).

### Section 3 – Composition / Information On Ingredients

Chemical Name	CAS Number	Wt. % (Max.)
Portland Cement	65997-15-1	45 - 65
Vermiculite	1318-00-9	15 - 25
Calcium Carbonate	1317-65-3	10-25
Crystalline Silica	14808-60-7	<1

### Section 4 – First Aid Measures

**General** – If irritation or other symptoms occur or persist from any route of exposure, remove the affected individual from the area: see a physician/get medical attention.

**First Aid – Skin Contact:** Wash with soap and water. Remove contaminated clothing. If persistent irritation occurs, seek medical attention.

**First Aid – Eye Contact:** Flush eyes thoroughly with copious amounts of water. Seek medical attention if irritation persists.

**First Aid – Inhalation:** Remove to fresh air. Seek medical attention if irritation persists.

**First Aid – Ingestion:** Do not induce vomiting. Rinse mouth out with water. Seek medical attention if irritation persists.

**Protection of first aid responders:** Wear proper personal protective clothing and equipment.

## Section 5 – Fire Fighting Measures

**Extinguishing Media:** Not Applicable. Product will not burn.

**Unusual Fire & Explosion Hazards:** None unless noted below in Section 6.

**Special Firefighting Procedures:** None.

## Section 6 – Accidental Release Measures

**Steps To Be Taken If Material Is Released Or Spilled:** Sweep up material and place in disposal containers. Avoid inhalation of dust. Dispose of material in accordance with all federal, state, and local regulations. Use personal protective equipment as necessary.

## Section 7 – Handling And Storage

**Precautions for safe handling:** Avoid inhalation of dust. Avoid skin & eye contact. Wear skin and eye protection during use. Use normal personal hygiene to remove materials, contaminants; wash clothing separately before re-use.

**Conditions for safe storage:** Keep dry. Keep containers closed when not in use. Store in a cool, dry place with adequate ventilation.

## Section 8 – Exposure Controls / Personal Protection

Permissible Exposure Limits

Chemical Name	CAS Number	OSHA PEL	ACGIH TLV	NIOSH	Mexico
Portland Cement	65997-15-1	15 mg/m <sup>3</sup> TWA (Total Dust)	10 mg/m <sup>3</sup> TWA (Chemical is a particulate matter containing no asbestos and <1% crystalline silica).	10 mg/m <sup>3</sup> TWA (Total Dust)	N/E
Vermiculite	1318-00-9	N/E	10mg/m <sup>3</sup> (Total Dust) 3 mg/m <sup>3</sup> (Respirable Fraction)	0.05 mg/m <sup>3</sup>	N/E
Calcium Carbonate	1317-65-3	15 mg/m <sup>3</sup> TWA (Total Dust) 5 mg/m <sup>3</sup> (Respirable Fraction)	N/E	10 mg/m <sup>3</sup> TWA (Total Dust) 5 mg/m <sup>3</sup> (Respirable Fraction)	10 (Respirable Fraction)
Crystalline Silica	14808-60-7	30 mg/m <sup>3</sup> %SiO <sub>2</sub> +2 (Total Dust) 250 mppcf %SiO <sub>2</sub> +5 (Respirable) 10 mg/m <sup>3</sup> %SiO <sub>2</sub> +2 (Respirable Fraction)	0.025 mg/m <sup>3</sup> TWA (Respirable Fraction)	0.05 mg/m <sup>3</sup> TWA (Total Dust) 0.05 mg/m <sup>3</sup> TWA (Respirable Fraction)	0.010mg/m <sup>3</sup> TWA (Total Dust)

**Engineering Controls:** Exhaust fans may be necessary when mixing in enclosed areas.

**Respiratory Protection:** Wear a proper disposable dust mask to prevent exposure above the limits specified.

**Skin Protection:** Wear gloves and use hand creams to prevent dry skin.

**Eye Protection:** Wear proper eye protection; at minimum, safety glasses with side shields.

**Work / Hygienic Practices:** Use bag opening procedures which minimize dust release. Use anti-slip surfaces on working platforms – material is slippery when wet.

## Section 9 – Physical And Chemical Properties

Appearance:	Grey powder with golden pellets and flakes
Odor:	Low odor
pH:	10-13
Melting Point (°F):	>1800°F (981°C)
Boiling Point (°F):	Not Applicable
Flash Point:	Not Applicable
Evaporation Rate:	Not Applicable
Flammability:	Not Applicable
Lower Explosive Limit:	Not Applicable
Upper Explosive Limit:	Not Applicable
Vapor Pressure (mm Hg):	Not Applicable
Bulk Density (kg/mm3)	Not Applicable
Solubility in Water:	Low
Specific Gravity (H <sub>2</sub> O=1):	Not Applicable
Physical State:	Solid
% Volatiles:	Not Applicable
Viscosity	Not Applicable
Auto ignition temperature	Not Applicable

## Section 10 – Stability And Reactivity

Chemical Stability (under normal conditions):	Stable
Possibility of Hazardous Reactions:	No
Conditions to Avoid:	Contact with strong acids
Incompatibility:	Strong Acids
Hazardous Decomposition Products:	Stable under normal conditions. Trace amounts of carbon and nitrogen oxide compounds may release under fire.
Hazardous Polymerization:	No polymerization will occur

## Section 11 – Toxicological Information

Carcinogenicity	IARC			NTP		OSHA	LD50/LC50
Chemical Name	Group 1	Group 2A	Group 2B	Known	Suspect		
Portland Cement	No	No	No	No	No	No	No Data Available
Vermiculite	No	No	No	No	No	No	No Data Available
Calcium Carbonate	No	No	No	No	No	No	No Data Available
Crystalline Silica	Yes	No	No	Yes	No	Yes	No Data Available

## Section 12 – Ecological Information

Ecological Information: No data available.

## Section 13 – Disposal Considerations

**Disposal Information:** For waste disposal purposes, this product is not known to be designated as hazardous by current provisions under RCRA. Dispose of in accordance with federal, state and local regulations.

## Section 14 – Transportation Information

Proper Shipping Name:	Not Applicable
Technical Name:	Not Applicable
Hazard Class:	Non-Hazardous
UN/NA Number:	Not Applicable
Additional Notes:	None

## Section 15 – Regulatory Information

U.S. Federal Regulations SARA 311/312	Immediate Health (Acute)	Delayed Health (Chronic)	FIRE	PRESSURE	REACTIVE
	No	Yes	No	No	No

U.S. State Regulations	State Hazardous Substance List						
	CAS Number	CA	MA	MN	NJ	PA	RI
	65997-15-1	No	No	No	No	No	No
	1318-00-9	No	No	No	No	No	No
	1317-65-3	No	No	No	No	No	No
	14808-60-7	Yes	Yes	Yes	Yes	No	Yes

### INTERNATIONAL REGULATIONS AS FOLLOWS:

#### Chemical Inventory Status

All chemicals in this product are listed or exempt from listing in the following countries:

U.S	Canada		Europe	Australia	Korea
TSCA	DSL	NDSL	EINECS   ELINCS	AICS	ECL
Yes	Yes	No	Yes	Yes	Yes

#### CANADIAN WHMIS

This SDS has been prepared in compliance with Controlled Product Regulations and contains all information required.

CANADIAN WHMIS CLASS: D2A

#### HMIS Rating

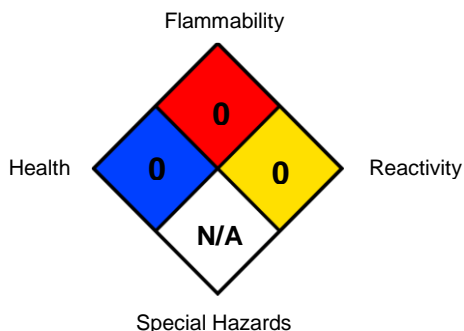
HEALTH	1
FLAMMABILITY	0
REACTIVITY	0
PERSONAL PROTECTION	e

## Section 16 – Other Information

N/E – Non Established

N/A – Not Applicable

### NFPA :



Prepared By: Research Department, U.S.A.

Telephone: (973) 347-1200

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Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in this data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Furthermore, vendee assumes all risks in his use of the material.

## Section 1 – Chemical Product / Company Information

**Product Name:** ISOLATEK® HEAT-SHIELD® **Effective Date:** October 6, 2015

**Product Use/Class:** Spray-Applied Fire Resistive Materials (SFRM)

**Manufacturer:** United States Mineral Products Company  
dba Isolatek International  
41 Furnace Street  
Stanhope, NJ 07874 USA  
(973)-347-1200 **Preparer:** R&D Department

**In Case of Emergency Call:** CHEMTREC **Supersedes:** December 15, 2014

800.424.9300 (USA) +1 703.527.3887 (Int'l)

## Section 2 – Hazards Identification

### GHS Classification:

Hazard Class	Hazard Category	Route of Exposure
Skin Irritation	2	Skin
Skin Sensitizer	1	Skin
Eye Irritation	2B	Eye
Inhalation Toxicity	4	Nose/Mouth

### Global Harmonization Labeling and Classification:

**Signal word:** Warning

**Hazard Symbol(s):** GHS07



**Overview** This product is not expected to produce any unusual hazards during normal use. Exposure to high dust levels may irritate the skin, eyes, nose, throat, or upper respiratory tract. As product may contain trace amount of crystalline silica, prolonged exposure to respirable crystalline silica may cause cancer.

**Primary Route(s) of Entry:** Skin Contact, Skin Absorption, Inhalation, Ingestion, Eye Contact

**Medical Conditions Prone to Aggravation by Exposure:** Sensitive skin; respiratory conditions

### Hazard Statements:

<b>H303</b>	May be harmful if swallowed.
<b>H313</b>	May be harmful in contact with skin.
<b>H320</b>	Causes eye irritation.
<b>H335</b>	May cause respiratory irritation.
<b>H373</b>	May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements:	
<b>P202</b>	Do not handle until safety precautions have been read and understood.
<b>P261</b>	Avoid breathing dust/ fumes/ gas/ mist/ vapours/ spray.
<b>P271</b>	Use only outdoors or in a well ventilated area.
<b>P280</b>	Wear protective gloves/ protective clothing/ eye protection/ face protection.
<b>P284</b>	Wear respiratory protection.
<b>P402+P403</b>	Store in a dry place. Store in a well ventilated place.
<b>EUH401</b>	To avoid risks to human health and the environment, comply with the instructions for use.

Response:	
<b>P301+P330 P331+P312</b>	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/ physician if you feel unwell.
<b>P302+P352+ P332+P313+ P363</b>	IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/ attention. Wash contaminated clothing before reuse.
<b>P304+P340+ P342+P313</b>	IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Get medical advice/ attention.
<b>P305+P351+ P338+P337+ P313</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention.

Storage:	
<b>P402+P403+ P232</b>	Store in a dry place. Store in a well ventilated place. Protect from moisture.

Disposal:	
<b>P501</b>	Dispose of contents/container in accordance with local/regional/national/international regulations (see section 13).

### Section 3 – Composition / Information On Ingredients

Chemical Name	CAS Number	Wt. % (Max.)
Slag Wool	65997-17-3	60 - 95
Portland Cement	65997-15-1	1 – 10
Crystalline Silica	14808-60-7	<1

### Section 4 – First Aid Measures

**General** – If irritation or other symptoms occur or persist from any route of exposure, remove the affected individual from the area: see a physician/get medical attention.

**First Aid – Skin Contact:** Wash with soap and water. Remove contaminated clothing. If persistent irritation occurs, seek medical attention.

**First Aid – Eye Contact:** Flush eyes thoroughly with copious amounts of water. Seek medical attention if irritation persists.

**First Aid – Inhalation:** Remove to fresh air. Seek medical attention if irritation persists.

**First Aid – Ingestion:** Do not induce vomiting. Rinse mouth out with water. Seek medical attention if irritation persists.

**Protection of first aid responders:** Wear proper personal protective clothing and equipment.



## Section 5 – Fire Fighting Measures

**Extinguishing Media:** Not Applicable. Product will not burn.

**Unusual Fire & Explosion Hazards:** None.

**Special Firefighting Procedures:** None.

## Section 6 – Accidental Release Measures

**Steps To Be Taken If Material Is Released Or Spilled:** Sweep up material and place in disposal containers. Avoid inhalation of dust. Dispose of material in accordance with all federal, state, and local regulations. Use personal protective equipment as necessary.

## Section 7 – Handling And Storage

**Precautions for safe handling:** Avoid inhalation of dust. Avoid skin & eye contact. Wear skin and eye protection during use. Use normal personal hygiene to remove materials, contaminants; wash clothing separately before re-use.

**Conditions for safe storage:** Keep dry. Keep containers closed when not in use. Store in a cool, dry place with adequate ventilation.

## Section 8 – Exposure Controls / Personal Protection

### Permissible Exposure Limits

Chemical Name	CAS Number	OSHA PEL	ACGIH TLV	NIOSH	Mexico
Slag Wool	65997-17-3	15 mg/m <sup>3</sup> TWA (Total Dust) 5 mg/m <sup>3</sup> (Respirable Fraction)	1 f/cc TWA	5 mg/m <sup>3</sup> TWA (Total Dust)	N/E
Portland Cement	65997-15-1	15 mg/m <sup>3</sup> TWA (Total Dust)	10 mg/m <sup>3</sup> TWA (Chemical is a particulate matter containing no asbestos and <1% crystalline silica.	10 mg/m <sup>3</sup> TWA (Total Dust)	N/E
Crystalline Silica	14808-60-7	30 mg/m <sup>3</sup> %SiO <sub>2</sub> +2 (Total Dust) 250 mppcf %SiO <sub>2</sub> +5 (Respirable) 10 mg/m <sup>3</sup> %SiO <sub>2</sub> +2 (Respirable Fraction)	0.025 mg/m <sup>3</sup> TWA (Respirable Fraction)	0.05 mg/m <sup>3</sup> TWA (Total Dust) 0.05 mg/m <sup>3</sup> TWA Respirable Fraction)	0.010mg/m <sup>3</sup> TWA (Total Dust)

**Engineering Controls:** Exhaust fans may be necessary when mixing in enclosed areas.

**Respiratory Protection:** Wear a proper disposable dust mask to prevent exposure above the limits specified.

**Skin Protection:** Wear gloves and use hand creams to prevent dry skin.

**Eye Protection:** Wear proper eye protection; at minimum, safety glasses with side shields.

**Work / Hygienic Practices:** Use bag opening procedures which minimize dust release. Use anti-slip surfaces on working platforms – material is slippery when wet.

## Section 9 – Physical And Chemical Properties

Appearance:	White to grey
Odor:	Low odor
pH:	10-13
Melting Point (°F):	>1800°F (981°C)
Boiling Point (°F):	Not Applicable
Flash Point:	Not Applicable
Evaporation Rate:	Not Applicable
Flammability:	Not Applicable
Lower Explosive Limit:	Not Applicable
Upper Explosive Limit:	Not Applicable
Vapor Pressure (mm Hg):	Not Applicable
Bulk Density (kg/mm3)	Not Applicable
Solubility in Water:	Low
Specific Gravity (H <sub>2</sub> O=1):	Not Applicable
Physical State:	Solid
% Volatiles:	Not Applicable
Viscosity	Not Applicable
Auto ignition temperature	Not Applicable

## Section 10 – Stability And Reactivity

Chemical Stability (under normal conditions):	Stable
Possibility of Hazardous Reactions:	No
Conditions to Avoid:	Contact with strong acids
Incompatibility:	Strong Acids
Hazardous Decomposition Products:	Stable under normal conditions. Trace amounts of carbon and nitrogen oxide compounds may release under fire.
Hazardous Polymerization:	No polymerization will occur.

## Section 11 – Toxicological Information

Carcinogenicity	IARC			NTP		OSHA	LD50/LC50
Chemical Name	Group 1	Group 2	Group 3	Known	Suspect		
Slag Wool	No	No	Yes (not classifiable as to human carcinogenicity)	No	No	No	No Data Available
Portland Cement	No	No	No	No	No	No	No Data Available
Crystalline Silica	Yes	No	No	Yes	No	Yes	No Data Available

## Section 12 – Ecological Information

Ecological Information: No data available.

## Section 13 – Disposal Considerations

**Disposal Information:** For waste disposal purposes, this product is not known to be designated as hazardous by current provisions under RCRA. Dispose of in accordance with federal, state and local regulations.

## Section 14 – Transportation Information

Proper Shipping Name: Not Applicable  
Technical Name: Not Applicable  
Hazard Class: Non-Hazardous  
UN/NA Number: Not Applicable  
Additional Notes: None

## Section 15 – Regulatory Information

U.S. Federal Regulations SARA 311/312	Immediate Health (Acute)	Delayed Health (Chronic)	FIRE	PRESSURE	REACTIVE
	No	Yes	No	No	No

U.S. State Regulations	State Hazardous Substance List						
	CAS Number	CA	MA	MN	NJ	PA	RI
	65997-17-3	No	No	No	No	No	No
	65997-15-1	No	No	No	No	No	No
	14808-60-7	Yes	Yes	Yes	Yes	No	Yes

International Regulations as Follows:

### Chemical Inventory Status

All chemicals in this product are listed or exempt from listing in the following countries:

U.S	Canada	Europe	Australia	Korea
TSCA	DSL   NDSL	EINECS   ELINCS	AICS	ECL
Yes	Yes   No	Yes	Yes	Yes

### CANADIAN WHMIS

This SDS has been prepared in compliance with Controlled Product Regulations and contains all information required.

CANADIAN WHMIS CLASS: D2A

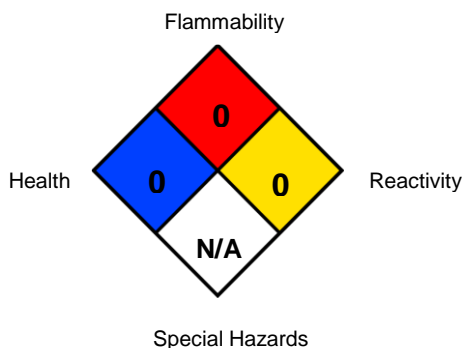
### HMIS Rating

HEALTH	1
FLAMMABILITY	0
REACTIVITY	0
PERSONAL PROTECTION	e

## Section 16 – Other Information

N/E – Non Established  
N/A – Not Applicable

### NFPA:



Prepared By: Research Department, U.S.A.  
Telephone: (973) 347-1200

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. **VENDOR SPECIFICALLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** In no event shall the vendor be liable for special, indirect or consequential damages.

Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in this data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Furthermore, vendee assumes all risks in his use of the material.

## Section 1 – Chemical Product / Company Information

**Product Name:** CAFCO® BOND-SEAL Type X **Effective Date:** July 27, 2015  
**Product Use/Class:** Adhesive/Sealer for fireproofing  
**Supplier:** United States Mineral Products Company **Preparer:** R&D Department  
 dba Isolatek International  
 41 Furnace Street  
 Stanhope, NJ 07874 USA  
 (973)-347-1200  
**In Case of Emergency Call: CHEMTREC** **Supersedes:** August 6, 2012  
 800.424.9300 (USA) +1 703.527.3887 (Int'l)

## Section 2 – Hazards Identification

### GHS Classification:

Hazard Class	Hazard Category	Route of Exposure
Skin Irritation	2	Skin
Skin Sensitizer	1	Skin
Eye Irritation	2B	Eye
Inhalation Toxicity	4	Nose/Mouth

### Global Harmonization Labeling and Classification:

**Signal word:** Warning

**Hazard Symbol(s):** GHS07



**Overview:** A thick liquid that poses little immediate hazard.

**Primary Route(s) of Entry:** Skin Contact, Skin Absorption, Inhalation, Ingestion, Eye Contact

**Medical Conditions Prone to Aggravation by Exposure:** Sensitive skin; respiratory conditions

### Hazard Statements:

<b>H303</b>	May be harmful if swallowed.
<b>H313</b>	May be harmful in contact with skin.
<b>H320</b>	Causes eye irritation.
<b>H335</b>	May cause respiratory irritation.
<b>H373</b>	May cause damage to organs through prolonged or repeated exposure.
<b>H402</b>	Harmful to aquatic life.

**Precautionary Statements:**

<b>P202</b>	Do not handle until safety precautions have been read and understood.
<b>P261</b>	Avoid breathing dust/ fumes/ gas/ mist/ vapours/ spray.
<b>P264</b>	Wash thoroughly after handling.
<b>P271</b>	Use only outdoors or in a well ventilated area.
<b>P280</b>	Wear protective gloves/ protective clothing/ eye protection/ face protection.
<b>P284</b>	In case of inadequate ventilation, wear respiratory protection.
<b>P403</b>	Store in a well ventilated place.
<b>EUH401</b>	To avoid risks to human health and the environment, comply with the instructions for use.

**Response:**

<b>P301+P330 P331+P312</b>	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/ physician if you feel unwell.
<b>P302+P352+ P332+P313+ P363</b>	IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/ attention. Wash contaminated clothing before reuse.
<b>P304+P340+ P342+P313</b>	IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Get medical advice/ attention.
<b>P305+P351+ P338+P337+ P313</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention.

**Storage:**

<b>P402+P403+ P404+P410+ P411</b>	Store in a dry place. Store in a well ventilated place. Store in a closed container. Protect from sunlight. Store at temperatures not exceeding 38°C/ 100°F.
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**Disposal:**

<b>P501</b>	Dispose of contents/container in accordance with local/regional/national/international regulations (see section 13).
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**Section 3 – Composition / Information On Ingredients**

Chemical Name	CAS Number	Wt. %
Poly(vinyl alcohol)	25213-24-5	<5
Poly(vinyl acetate)	90003-20-7	<50

## Section 4 – First Aid Measures

**General** – If irritation or other symptoms occur or persist from any route of exposure, remove the affected individual from the area: see a physician/get medical attention.

**First Aid – Skin Contact:** Wash with soap and water. Remove contaminated clothing. If persistent irritation occurs, seek medical attention.

**First Aid – Eye Contact:** Flush eyes thoroughly with copious amounts of water. Seek medical attention if irritation persists.

**First Aid – Inhalation:** Remove to fresh air. Seek medical attention if irritation persists.

**First Aid – Ingestion:** If swallowed do not induce vomiting. Rinse mouth out with water. If Irritation persists seek medical attention.

**Protection of first aid responders:** Wear proper personal protective clothing and equipment.

Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

Repeated or prolonged exposure may cause irritation of eyes and skin.

## Section 5 – Fire Fighting Measures

**Extinguishing Media:** ABC dry chemical, foam or carbon dioxide.

**Unusual Fire & Explosion Hazards:** The pressure in sealed containers can increase under the influence of heat and rupture.

**Special Firefighting Procedures:** Wear positive pressure self-contained NIOSH approved breathing equipment and approved protective equipment if necessary. Prevent fire extinguishing water from contaminating surface water or the ground water system.

## Section 6 – Accidental Release Measures

**Personal precautions, Protective Equipment, and Emergency Response:** Use personal protective equipment as recommended in section 8.

**Environmental precautions:** The product should not be allowed to enter drains or soil.

**Methods and materials for containment and cleaning up:** Large spills can be controlled mechanically by pumping for disposal. Soak up with inert absorbent material (e.g. sand, silica gel, sawdust). Clean contaminated floors thoroughly while observing environmental regulations.

## Section 7 – Handling And Storage

**Precautions for safe handling:** When working with any chemical product, use good workplace procedures. Do not cut, puncture, or weld on or near the container. Wash thoroughly after handling this product. Always wash up before eating, smoking or using the facilities. Use under well ventilated conditions. Avoid skin and eye contact. Avoid inhalation of mist, spray, fume or vapor. Avoid drinking, tasting, swallowing or ingesting this product. Wash contaminated clothing before reuse.

**Conditions for safe storage:** Store between 4 and 38°C (40 and 100°F). Keep away from heat, sparks, and open flames. Avoid extreme heat or cold. Do not store in open, unlabeled or mislabeled containers. Keep container closed when not in use. Empty container contains residual product which may exhibit hazards of product. Do not reuse empty container.

## Section 8 – Exposure Controls / Personal Protection

### Permissible Exposure Limits

Chemical Name	CAS Number	OSHA PEL	ACGIH TLV	NIOSH	Mexico
Poly(vinyl alcohol)	68412-54-4	15 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>	N/E	N/E
Poly(vinyl acetate)	68412-54-4	N/E	N/E	N/E	N/E

**Engineering Controls:** Provide ventilation to ensure compliance with applicable exposure limits.

**Respiratory Protection:** In case of vapor formation use a respirator with an approved filter.

**Skin Protection:** Wear rubber, nitrile, or latex gloves. Use typical long sleeve work clothing or a "Tyvek" type suit .

**Eye Protection:** Wear proper eye protection; at minimum, safety glasses with side shields.

**Work / Hygienic Practices:** Use proper personal protective equipment. Eye wash stations are recommended in the work area. Do not flush product into drains. Follow standard industry hygienic rules, such as but not limited to, not smoking or drinking while using product and washing hands at the end of the day.

## Section 9 – Physical And Chemical Properties

<b>Appearance:</b>	White Liquid, Aqueous dispersion
<b>Odor:</b>	Slight
<b>pH:</b>	4-8
<b>Melting Point (°F):</b>	N/E
<b>Boiling Point (°F):</b>	>212F
<b>Flash Point:</b>	Not Applicable
<b>Evaporation Rate:</b>	Not Applicable
<b>Flammability:</b>	Not flammable
<b>Lower Explosive Limit:</b>	N/E
<b>Upper Explosive Limit:</b>	N/E
<b>Vapor Pressure (mm Hg):</b>	ca. 23 hPa, at 20°C
<b>Relative Density (kg/mm<sup>3</sup>):</b>	0.9-1.1
<b>Solubility in Water:</b>	Insoluble but dispersible
<b>Specific Gravity (H<sub>2</sub>O=1):</b>	N/E
<b>Physical State:</b>	Liquid
<b>% Volatiles:</b>	50
<b>Auto ignition temperature</b>	N/E

## Section 10 – Stability And Reactivity

<b>Chemical Stability (under normal conditions):</b>	Stable
<b>Possibility of Hazardous Reactions:</b>	None
<b>Conditions to Avoid:</b>	Avoid extreme temperatures and direct sunlight.
<b>Incompatibility:</b>	None known.
<b>Hazardous Decomposition Products:</b>	No hazardous decomposition products are known.
<b>Hazardous Polymerization:</b>	No hazardous polymerization will occur under normal conditions.



## Section 11 – Toxicological Information

Information on likely routes of exposure:

**General:** Caution must be exercised through the prudent use of personal protective equipment and handling procedures to minimize exposure.

**Eyes:** May cause eye irritation.

**Skin:** Causes skin irritation.

**Inhalation:** High airborne concentrations of vapor resulting may cause irritation of the respiratory tract and mucous membranes.

**Ingestion:** Not likely route of exposure but ingestion may cause irritation.

Carcinogenicity	IARC			NTP		OSHA
Chemical Name	Group 1	Group 2A	Group 2B	Known	Suspect	
Poly(vinyl alcohol)	N/E	N/E	N/E	N/E	N/E	N/E
Poly(vinyl acetate)	No	No	No	No	No	No

### Acute toxicity

No toxicity studies have been conducted on this product.

Components:

Poly(vinyl alcohol)

Oral rat: LD50: >5000 gm/kg

Inhalation LC50: >20 mg/l (rats, dust with 3-5 micron particle size; 1 hr. exposure)

**Chronic effects** – For this category no toxicological test data is available for the whole product.

**Carcinogenicity** - For this category no toxicological test data is available for the whole product.

**Mutagenicity** - For this category no toxicological test data is available for the whole product.

**Teratogenicity** - For this category no toxicological test data is available for the whole product.

**Developmental effects** - For this category no toxicological test data is available for the whole product.

**Fertility effects** - For this category no toxicological test data is available for the whole product.

**Target organs** – For this category no toxicological test data is available for the whole product.

Review Section 2 for any additional assessments

## Section 12 – Ecological Information

**Ecological Information:** No ecological testing has been conducted on this product.

### Ecotoxicity

Poly(vinyl alcohol)

Fish (Pimephales promelas) 96-hr. LC50: >40,000 ppm

Fish (Lepomis macrochirus) 96-hr. LC50: >10,000 ppm

**Persistence and degradability:** The product is estimated to be readily biodegradable according to OECD classification

**Bioaccumulative potential:** Not likely

**Mobility in soil:** N/E

## Section 13 – Disposal Considerations

**Disposal Information:** Do not allow the product to enter drains, water courses or the soil. Liquids cannot be disposed of in a landfill. Allow liquid material to dry. Dispose of in accordance with federal, state and local regulations.

## Section 14 – Transportation Information

Proper Shipping Name: Not regulated – See Bill of Lading for details  
Technical Name: Not regulated  
Hazard Class: Not regulated  
UN/NA Number: Not regulated  
Additional Notes: None

## Section 15 – Regulatory Information

### US Regulations

HCS Classification Irritating material

SARA 313 - Supplier Notification None

U.S. Federal Regulations SARA 311/312	Immediate Health (Acute)	Delayed Health (Chronic)	FIRE	PRESSURE	REACTIVE
	No	No	No	No	No

### INTERNATIONAL REGULATIONS AS FOLLOWS:

#### Chemical Inventory Status

All chemicals in this product are listed or exempt from listing in the following:

U.S	Canada	Europe	Australia	Korea
TSCA	DSL   NDSL	EINECS   ELINCS	AICS	ECL
Yes	Yes   No	No	Yes	Yes

#### CANADIAN WHMIS

This SDS has been prepared in compliance with Controlled Product Regulations and contains all information required.

CANADIAN WHMIS CLASS: D2B

#### HMIS Ratings

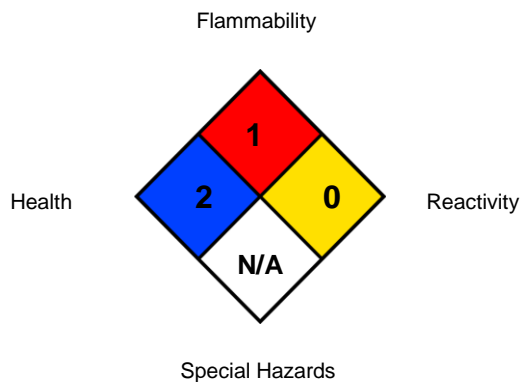
HEALTH	2
FLAMMABILITY	1
REACTIVITY	0
PERSONAL PROTECTION	B

## Section 16 – Other Information

N/E – Non Established

N/A – Not Applicable

### NFPA:



Prepared By: Research Department, U.S.A.

Telephone: (973) 347-1200

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. **VENDOR SPECIFICALLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** In no event shall the vendor be liable for special, indirect or consequential damages.

Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in this data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Furthermore, vendee assumes all risks in his use of the material.

## Section 1 – Chemical Product / Company Information

**Product Name:** CAFCO® SprayFilm® Topseal, Part A **Effective Date:** July 27, 2015

**Product Use/Class:** One part of a two part coating for application over fireproofing

**Manufacturer:** United States Mineral Products Company  
dba Isolatek International  
41 Furnace Street  
Stanhope, NJ 07874 USA  
(973)-347-1200 **Preparer:** R&D Department

**In Case of Emergency Call:** CHEMTREC **Supersedes:** October 28, 2014

800.424.9300 (USA) +1 703.527.3887 (Int'l)

## Section 2 – Hazards Identification

### GHS Classification:

Hazard Class	Hazard Category	Route of Exposure
Skin Irritation	2	Skin
Skin Sensitizer	1	Skin
Eye Irritation	2B	Eye
Inhalation Toxicity	4	Nose/Mouth

### Global Harmonization Labeling and Classification:

**Signal word:** Warning

**Hazard Symbol(s):** GHS07



**Overview:** A thick liquid that poses little immediate hazard. However, prolonged skin contact may cause irritation and/ or sensitization.

**Primary Route(s) of Entry:** Skin Contact, Skin Absorption, Inhalation, Ingestion, Eye Contact

**Medical Conditions Prone to Aggravation by Exposure:** Sensitive skin; respiratory conditions

### Hazard Statements:

<b>H303</b>	May be harmful if swallowed.
<b>H313</b>	May be harmful in contact with skin.
<b>H320</b>	Causes eye irritation.
<b>H335</b>	May cause respiratory irritation.
<b>H373</b>	May cause damage to organs through prolonged or repeated exposure.
<b>H401</b>	Toxic to aquatic life.

Precautionary Statements:	
<b>P202</b>	Do not handle until safety precautions have been read and understood.
<b>P261</b>	Avoid breathing dust/ fumes/ gas/ mist/ vapours/ spray.
<b>P264</b>	Wash thoroughly after handling.
<b>P271</b>	Use only outdoors or in a well ventilated area.
<b>P280</b>	Wear protective gloves/ protective clothing/ eye protection/ face protection.
<b>P284</b>	In case of inadequate ventilation, wear respiratory protection.
<b>P403</b>	Store in a well ventilated place.
<b>EUH205</b>	Contains epoxy constituents. May produce an allergic reaction.
<b>EUH401</b>	To avoid risks to human health and the environment, comply with the instructions for use.

Response:	
<b>P301+P330 P331+P312</b>	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/ physician if you feel unwell.
<b>P302+P352+ P332+P313+ P363</b>	IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/ attention. Wash contaminated clothing before reuse.
<b>P304+P340+ P342+P313</b>	IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Get medical advice/ attention.
<b>P305+P351+ P338+P337+ P313</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention.

Storage:	
<b>P402+P403+ P404+P410+ P411</b>	Store in a dry place. Store in a well ventilated place. Store in a closed container. Protect from sunlight. Store at temperatures not exceeding 38°C/ 100°F.

Disposal:	
<b>P501</b>	Dispose of contents/container in accordance with local/regional/national/international regulations (see section 13).

### Section 3 – Composition / Information On Ingredients

Chemical Name	CAS Number	Wt. % (Max.)
4,4'-Isopropylidenediphenol-Epichlorohydrin	25068-38-6	80-95
Alkyl Glycidyl Ether	68609-97-2	5-20

### Section 4 – First Aid Measures

**General** – If irritation or other symptoms occur or persist from any route of exposure, remove the affected individual from the area: see a physician/get medical attention.

**First Aid – Skin Contact:** Wash with soap and water. Remove contaminated clothing. If persistent irritation occurs, seek medical attention.

**First Aid – Eye Contact:** Flush eyes thoroughly with copious amounts of water. Seek medical attention if irritation persists.

**First Aid – Inhalation:** Remove to fresh air. Seek medical attention if irritation persists.

**First Aid – Ingestion:** If swallowed do not induce vomiting. Rinse mouth out with water. Seek immediate medical attention.

**Protection of first aid responders:** Wear proper personal protective clothing and equipment

## Section 5 – Fire Fighting Measures

- Extinguishing Media:** NFPA Class IIIB (combustible liquid): Use water spray, ABC dry chemical, foam or carbon dioxide. Water or foam may cause frothing. Use water to keep fire-exposed containers cool.
- Unusual Fire & Explosion Hazards:** Product is not considered a fire hazard but will burn if ignited. Closed container may rupture (due to build up of pressure) when exposed to extreme heat.  
Irritating or toxic substances may be emitted upon burning, combustion or decomposition.
- Special Firefighting Procedures:** Wear positive pressure self-contained NIOSH approved breathing equipment and approved protective equipment.

## Section 6 – Accidental Release Measures

**Personal precautions, Protective Equipment, and Emergency Response:** Use personal protective equipment as recommended in section 8. If spilled in an enclosed area, ventilate.

**Environmental precautions:** This product contains a component that is toxic to aquatic life. Keep out of drains, sewers, ditches and waterways. Avoid runoff to waterways and sewers.

**Methods and materials for containment and cleaning up:** If spilled, absorb spill with vermiculite or other inert material (such as sand). Collect up and place in a chemical waste container for disposal. Clean surface thoroughly to remove residual contamination.

## Section 7 – Handling And Storage

**Precautions for safe handling:** When working with any chemical product, use good workplace procedures. Do not cut, puncture, or weld on or near the container. Wash thoroughly after handling this product. Always wash up before eating, smoking or using the facilities. Use under well ventilated conditions. Avoid skin and eye contact. Avoid inhalation of mist, spray, fume or vapor. Avoid drinking, tasting, swallowing or ingesting this product. Wash contaminated clothing before reuse.

**Conditions for safe storage:** Store between 4 and 38°C (40 and 100°F). Keep away from heat, sparks, and open flames. Store this material away from incompatible substances (see section 10). Do not store in open, unlabeled or mislabeled containers. Keep container closed when not in use. Empty container containing residual product which may exhibit hazards of product. Do not reuse empty container.

## Section 8 – Exposure Controls / Personal Protection

### Permissible Exposure Limits

Chemical Name	CAS Number	OSHA PEL	ACGIH TLV	NIOSH	Mexico
4,4'-Isopropylidenediphenol-Epichlorohydrin	25068-38-6	N/E	N/E	N/E	N/E
Alkyl Glycidyl Ether	68609-97-2	N/E	N/E	N/E	N/E

**Engineering Controls:** Mechanically exhaust vapors at appropriate times in application of product.

**Respiratory Protection:** Usually not required. However, in confined areas or areas with poor ventilation, use an organic vapors cartridge type respirator.

**Skin Protection:** Wear chemical resistant (impervious) gloves. Use chemical resistant protective clothing.

**Eye Protection:** Wear proper eye protection; at minimum, safety glasses with side shields.

**Work / Hygienic Practices:** Use proper personal protective equipment. Eye wash stations are recommended in the work area.

**Other Precautions:** This product must be mixed with another component before use. Before use READ AND FOLLOW WARNING LABELS ON BOTH COMPONENTS.

## Section 9 – Physical And Chemical Properties

<b>Appearance:</b>	Clear liquid
<b>Odor:</b>	Mild, solvent
<b>pH:</b>	Not Applicable
<b>Melting Point (°F):</b>	Not Applicable
<b>Boiling Point (°F):</b>	Not Applicable
<b>Flash Point:</b>	Not Applicable
<b>Evaporation Rate:</b>	Slower than N-Butyl acetate
<b>Flammability:</b>	Not Applicable
<b>Lower Explosive Limit:</b>	Not Applicable
<b>Upper Explosive Limit:</b>	Not Applicable
<b>Vapor Pressure (mm Hg):</b>	Not Applicable
<b>Relative Density (kg/mm3)</b>	Not Applicable
<b>Solubility in Water:</b>	Negligible
<b>Specific Gravity (H<sub>2</sub>O=1):</b>	1.10-1.15
<b>Physical State:</b>	Liquid
<b>% Volatiles:</b>	<2%
<b>Viscosity</b>	Not Applicable
<b>Auto ignition temperature</b>	Not Applicable

## Section 10 – Stability And Reactivity

<b>Chemical Stability (under normal conditions):</b>	Stable
<b>Possibility of Hazardous Reactions:</b>	None
<b>Conditions to Avoid:</b>	Excessive heat. Strong oxidizer.
<b>Incompatibility:</b>	Strong Acids, bases, and oxidizing agents. Avoid contact with amines.
<b>Hazardous Decomposition Products:</b>	Thermal decomposition may produce smoke, carbon monoxide (CO), carbon dioxide (CO <sub>2</sub> ), aldehydes, and other products of incomplete combustion.
<b>Hazardous Polymerization:</b>	No hazardous polymerization will occur under normal conditions.

## Section 11 – Toxicological Information

Information on likely routes of exposure:

**General:** Caution must be exercised through the prudent use of personal protective equipment and handling procedures to minimize exposure.

**Eyes:** May cause eye irritation.

**Skin:** May cause allergic skin reaction. Causes skin irritation.

**Inhalation:** High airborne concentrations of vapors resulting from heating, misting or spraying may cause irritation of the respiratory tract and mucous membranes.

**Ingestion:** Not likely route of exposure but ingestion may cause irritation

Carcinogenicity	IARC			NTP		OSHA
	Group 1	Group 2A	Group 2B	Known	Suspect	
4,4'-Isopropylidenediphenol-Epichlorohydrin	No	No	No	No	No	No
Alkyl Glycidyl Ether	No	No	No	No	No	No

### Acute toxicity

Not classified. No toxicity studies have been conducted on this product.

#### 4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer

LD50 Oral	Rat	30,000 mg/kg
LD50 Dermal	Rat	> 1,200 mg/kg

#### Alkyl Glycidyl Ether

LD50 Oral	Rat	17100 mg/kg
LD50 Dermal	Rabbit	> 4.5 mL/kg

**Chronic effects** – For this category no toxicological test data is available for the whole product.  
**Carcinogenicity** - For this category no toxicological test data is available for the whole product.  
**Mutagenicity** - For this category no toxicological test data is available for the whole product.  
**Teratogenicity** - For this category no toxicological test data is available for the whole product.  
**Developmental effects** - For this category no toxicological test data is available for the whole product.  
**Fertility effects** - For this category no toxicological test data is available for the whole product.  
**Target organs** – For this category no toxicological test data is available for the whole product.

Review Section 2 for any additional assessments.

## Section 12 – Ecological Information

**Ecological Information:** No ecological testing has been conducted on this product.

### Ecotoxicity

Alkyl Glycidyl Ether	
Fish 96 hour LC50	>1800mg/L
Invertebrate 48 hour EC50	6.07-7.2mg/L (EL50)
Algae 72 hour EC50	844 mg/L

**Persistence and degradability:** N/E

**Bioaccumulative potential:** N/E

**Mobility in soil:** N/E

## Section 13 – Disposal Considerations

**Disposal Information:** Do not allow the product to enter drains, water courses or the soil. Liquids can not be disposed of in a landfill. Allow liquid material to dry. Dispose of in accordance with federal, state and local regulations.

## Section 14 – Transportation Information

<b>Proper Shipping Name:</b>	Not regulated – See Bill of Lading for details
<b>Technical Name:</b>	Not regulated
<b>Hazard Class:</b>	Not regulated
<b>UN/NA Number:</b>	Not regulated
<b>Additional Notes:</b>	None



## Section 15 – Regulatory Information

### US Regulations

HCS Classification

Irritating material, Sensitizing material

### SARA 313 - Supplier Notification

None known

U.S. Federal Regulations SARA 311/312	Immediate Health (Acute)	Delayed Health (Chronic)	FIRE	PRESSURE	REACTIVE
	Yes	No	No	No	Yes

U.S. State Regulations	State Hazardous Substance List						
	CAS Number	CA	MA	MN	NJ	PA	RI
	25068-38-6	No	No	No	No	No	No
	68609-97-2	No	No	No	No	No	No

### INTERNATIONAL REGULATIONS AS FOLLOWS:

#### Chemical Inventory Status

All chemicals in this product are listed or exempt from listing in the following:

U.S	Canada		Europe	Australia	Korea
TSCA	DSL	NDSL	EINECS   ELINCS	AICS	ECL
Yes	Yes	No	Yes	Yes	Yes

#### CANADIAN WHMIS

This SDS has been prepared in compliance with Controlled Product Regulations and contains all information required.

CANADIAN WHMIS CLASS: D2B

#### HMIS Ratings

HEALTH	2
FLAMMABILITY	0
REACTIVITY	1
PERSONAL PROTECTION	B

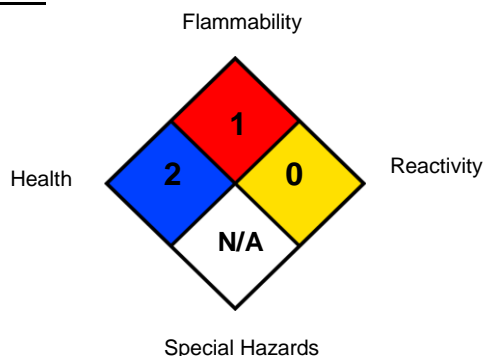
VOLATILE ORGANIC COMPOUNDS, GR/LTR MIXED (UNTHINNED): 23 g/L

## Section 16 – Other Information

N/E – Non Established

N/A – Not Applicable

### NFPA:



Prepared By: Research Department, U.S.A.  
Telephone: (973) 347-1200

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. **VENDOR SPECIFICALLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** In no event shall the vendor be liable for special, indirect or consequential damages.

Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in this data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Furthermore, vendee assumes all risks in his use of the material.

## Section 1 – Chemical Product / Company Information

**Product Name:** CAFCO® Fiber-Patch **Effective Date:** October 7, 2015

**Product Use/Class:** Spray-Applied Fire Resistive Materials (SFRM)

**Manufacturer:** United States Mineral Products Company  
dba Isolatek International  
41 Furnace Street  
Stanhope, NJ 07874 USA  
(973)-347-1200 **Preparer:** R&D Department

**In Case of Emergency Call:** CHEMTREC **Supersedes:** February 28, 2013

800.424.9300 (USA) +1 703.527.3887 (Int'l)

## Section 2 – Hazards Identification

### GHS Classification:

Hazard Class	Hazard Category	Route of Exposure
Skin Irritation	2	Skin
Skin Sensitizer	1	Skin
Eye Irritation	2B	Eye
Inhalation Toxicity	4	Nose/Mouth

### Global Harmonization Labeling and Classification:

**Signal word:** Warning

**Hazard Symbol(s):** GHS07



**Overview:** A granular powder that poses little immediate hazard. However, components may contain trace amounts of crystalline silica. Prolonged exposure to respirable crystalline silica may cause cancer.

**Primary Route(s) of Entry:** Skin Contact, Skin Absorption, Inhalation, Ingestion, Eye Contact

**Medical Conditions Prone to Aggravation by Exposure:** Sensitive skin; respiratory conditions

### Hazard Statements:

<b>H303</b>	May be harmful if swallowed.
<b>H313</b>	May be harmful in contact with skin.
<b>H320</b>	Causes eye irritation.
<b>H335</b>	May cause respiratory irritation.
<b>H373</b>	May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements:	
<b>P202</b>	Do not handle until safety precautions have been read and understood.
<b>P261</b>	Avoid breathing dust/ fumes/ gas/ mist/ vapours/ spray.
<b>P271</b>	Use only outdoors or in a well ventilated area.
<b>P280</b>	Wear protective gloves/ protective clothing/ eye protection/ face protection.
<b>P284</b>	Wear respiratory protection.
<b>P402+P403</b>	Store in a dry place. Store in a well ventilated place.
<b>EUH401</b>	To avoid risks to human health and the environment, comply with the instructions for use.

Response:	
<b>P301+P330 P331+P312</b>	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/ physician if you feel unwell.
<b>P302+P352+ P332+P313+ P363</b>	IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/ attention. Wash contaminated clothing before reuse.
<b>P304+P340+ P342+P313</b>	IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Get medical advice/ attention.
<b>P305+P351+ P338+P337+ P313</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention.

Storage:	
<b>P402+P403+ P232</b>	Store in a dry place. Store in a well ventilated place. Protect from moisture.

Disposal:	
<b>P501</b>	Dispose of contents/container in accordance with local/regional/national/international regulations (see section 13).

### Section 3 – Composition / Information On Ingredients

Chemical Name	CAS Number	Wt. % (Max.)
Slag Wool	65997-17-3	40 - 70
Calcium Sulfate, Hemihydrate	26499-65-0	20 - 40
Portland Cement	65997-15-1	5 - 30
Crystalline Silica	14808-60-7	<1

### Section 4 – First Aid Measures

**General** – If irritation or other symptoms occur or persist from any route of exposure, remove the affected individual from the area: see a physician/get medical attention.

**First Aid – Skin Contact:** Wash with soap and water. Remove contaminated clothing. If persistent irritation occurs, seek medical attention.

**First Aid – Eye Contact:** Flush eyes thoroughly with copious amounts of water. Seek medical attention if irritation persists.

**First Aid – Inhalation:** Remove to fresh air. Seek medical attention if irritation persists.

**First Aid – Ingestion:** Do not induce vomiting. Rinse mouth out with water. Seek medical attention if irritation persists.

**Protection of first aid responders:** Wear proper personal protective clothing and equipment.

## Section 5 – Fire Fighting Measures

**Extinguishing Media:** Not Applicable. Product will not burn.

**Unusual Fire & Explosion Hazards:** None.

**Special Firefighting Procedures:** None.

## Section 6 – Accidental Release Measures

**Steps To Be Taken If Material Is Released Or Spilled:** Sweep up material and place in disposal containers. Avoid inhalation of dust. Dispose of material in accordance with all federal, state, and local regulations. Use personal protective equipment as necessary.

## Section 7 – Handling And Storage

**Precautions for safe handling:** Avoid inhalation of dust. Avoid skin & eye contact. Wear skin and eye protection during use. Use normal personal hygiene to remove materials, contaminants; wash clothing separately before re-use.

**Conditions for safe storage:** Keep dry. Keep containers closed when not in use. Store in a cool, dry place with adequate ventilation.

## Section 8 – Exposure Controls / Personal Protection

Permissible Exposure Limits

Chemical Name	CAS Number	OSHA PEL	ACGIH TLV	NIOSH	Mexico
Slag Wool	65997-17-3	15 mg/m <sup>3</sup> TWA (Total Dust) 5 mg/m <sup>3</sup> (Respirable Fraction)	15 fiber/cm <sup>3</sup> TWA	5 mg/m <sup>3</sup> TWA (Total Dust) 3 fiber/cm <sup>3</sup> TWA (Respirable Fraction)	N/E
Calcium Sulfate, Hemihydrate	26499-65-0	15 mg/m <sup>3</sup> TWA (Total Dust) 5 mg/m <sup>3</sup> (Respirable Fraction)	15 mg/m <sup>3</sup> TWA (Chemical is a particulate matter containing no asbestos and <1% crystalline silica)	10 mg/m <sup>3</sup> TWA (Total Dust) 5 mg/m <sup>3</sup> (Respirable Fraction)	10 (Respirable Fraction)
Portland Cement	65997-15-1	15 mg/m <sup>3</sup> TWA (Total Dust)	10 mg/m <sup>3</sup> TWA (Chemical is a particulate matter containing no asbestos and <1% crystalline silica)	10 mg/m <sup>3</sup> TWA (Total Dust)	N/E
Crystalline Silica	14808-60-7	30 mg/m <sup>3</sup> %SiO <sub>2</sub> +2 (Total Dust) 250 mppcf %SiO <sub>2</sub> +5 (Respirable) 10 mg/m <sup>3</sup> %SiO <sub>2</sub> +2 (Respirable Fraction)	0.025 mg/m <sup>3</sup> TWA (Respirable Fraction)	0.05 mg/m <sup>3</sup> TWA (Total Dust) 0.05 mg/m <sup>3</sup> TWA (Respirable Fraction)	0.010mg/m <sup>3</sup> TWA (Total Dust)

**Engineering Controls:** Exhaust fans may be necessary when mixing in enclosed areas.

**Respiratory Protection:** Wear a proper disposable dust mask to prevent exposure above the limits specified.

**Skin Protection:** Wear gloves and use hand creams to prevent dry skin.

**Eye Protection:** Wear proper eye protection; at minimum, safety glasses with side shields.

**Work / Hygienic Practices:** Use bag opening procedures which minimize dust release. Use anti-slip surfaces on working platforms – material is slippery when wet.

## Section 9 – Physical And Chemical Properties

Appearance:	White or gray fibrous nodules
Odor:	Low odor
pH:	9-12
Melting Point (°F):	>1800°F (981°C)
Boiling Point (°F):	Not Applicable
Flash Point:	Not Applicable
Evaporation Rate:	Not Applicable
Flammability:	Not Applicable
Lower Explosive Limit:	Not Applicable
Upper Explosive Limit:	Not Applicable
Vapor Pressure (mm Hg):	Not Applicable
Bulk Density (kg/mm3)	Not Applicable
Solubility in Water:	Low
Specific Gravity (H <sub>2</sub> O=1):	> 1.0
Physical State:	Solid
% Volatiles:	Not Applicable
Viscosity	Not Applicable
Auto ignition temperature	Not Applicable

## Section 10 – Stability And Reactivity

Chemical Stability (under normal conditions):	Stable
Possibility of Hazardous Reactions:	No
Conditions to Avoid:	Contact with strong acids
Incompatibility:	Strong Acids
Hazardous Decomposition Products:	Stable under normal conditions. Trace amounts of carbon and nitrogen oxide compounds may release under fire.
Hazardous Polymerization:	No polymerization will occur.

## Section 11 – Toxicological Information

Carcinogenicity	IARC			NTP		OSHA	LD50/LC50
	Group 1	Group 2A	Group 3	Known	Suspect		
Slag Wool	No	No	Yes (not classifiable as to human carcinogenicity)	No	No	No	No Data Available
Calcium Sulfate, Hemihydrate	No	No	No	No	No	No	No Data Available
Portland Cement	No	No	No	No	No	No	No Data Available
Crystalline Silica	Yes	No	No	Yes	No	Yes	No Data Available

## Section 12 – Ecological Information

Ecological Information: No data available.

## Section 13 – Disposal Considerations

**Disposal Information:** For waste disposal purposes, this product is not known to be designated as hazardous by current provisions under RCRA. Dispose of in accordance with federal, state and local regulations.

## Section 14 – Transportation Information

**Proper Shipping Name:** Not Applicable  
**Technical Name:** Not Applicable  
**Hazard Class:** Non-Hazardous  
**UN/NA Number:** Not Applicable  
**Additional Notes:** None

## Section 15 – Regulatory Information

U.S. Federal Regulations SARA 311/312	Immediate Health (Acute)	Delayed Health (Chronic)	FIRE	PRESSURE	REACTIVE
	No	Yes	No	No	No

U.S. State Regulations	State Hazardous Substance List						
	CAS Number	CA	MA	MN	NJ	PA	RI
	65997-17-3	No	No	No	No	No	No
	26499-65-0	No	No	No	No	No	No
	65997-15-1	No	No	No	No	No	No
	14808-60-7	Yes	Yes	Yes	Yes	No	Yes

International Regulations as Follows:

### Chemical Inventory Status

All chemicals in this product are listed or exempt from listing in the following countries:

U.S	Canada	Europe	Australia	Korea
TSCA	DSL   NDSL	EINECS   ELINCS	AICS	ECL
Yes	Yes   No	Yes	Yes	Yes

### CANADIAN WHMIS

This SDS has been prepared in compliance with Controlled Product Regulations and contains all information required.

CANADIAN WHMIS CLASS: D2A

### HMIS Rating

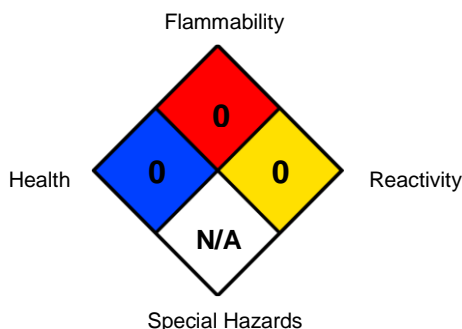
HEALTH	1
FLAMMABILITY	0
REACTIVITY	0
PERSONAL PROTECTION	e

## Section 16 – Other Information

N/E – Non Established

N/A – Not Applicable

### NFPA:



Prepared By: Research Department, U.S.A.

Telephone: (973) 347-1200

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. **VENDOR SPECIFICALLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** In no event shall the vendor be liable for special, indirect or consequential damages.

Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in this data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Furthermore, vendee assumes all risks in his use of the material.



## PRODUCT DESCRIPTION

CAFCO-BOARD is a rigid mineral wool board which combines fire protection, thermal insulation and acoustical control all in one product. With the ability to be installed during any phase of construction, regardless of roof traffic, temperature or substrate condition, CAFCO-BOARD is the ideal solution for fast paced projects.

## PRODUCT ADVANTAGES

- Lasting in-place performance – mechanically fastened
- Greater than 75% recycled content (pre-consumer)
- Inorganic composition
- Available in pre-manufactured thicknesses according to UL design criteria
- Choice of unfaced, silver or white foil faced finish
- NRC of up to 1.1 for noise reduction coefficient
- Thermal resistance (R-value) up to 4.2

## Technical Information

Nominal Density	9 pcf (144 kg/m <sup>3</sup> )
Standard Dimension	2' x 4' (610 x 1219 mm)
Thickness Range	1" to 4½" (25 to 114 mm)
Finish	Unfaced, silver foil faced, white foil faced
Recycled Content	90% (pre-consumer)
Method of Attachment	Patented friction fit Cafclips, welded pins and clinch shields

## Hourly Rating

Columns	1	1½	2	3	4	
W6x16 to W8x28 (W150x24 to W200x42)	•	•	•			X314
W10x49 (W250x73)	•	•	•	•		X314
W12x106 to W14x228 (W310x158 to W360x342)	•	•	•	•	•	X314
Protected Floor/Ceiling Assemblies Minimum Concrete Thickness						
Electrified floor decks 2" – 3" deck 2-½" concrete	•	•	•	•		D301
Floor Assembly 2" – 3" deck 2-½" concrete	•	•	•	•		D301
Unprotected Floor/Ceiling Assembly						
Floor Beam 3 ¼" LW Concrete	•	•	•			D915
Beam Only Floors Minimum Concrete Thickness						
Floor Beam Only Rating 2-½" concrete	•	•	•			N308
Floor Beam Only Rating 2-½" concrete	•	•	•	•		N308
Roof / Ceiling Assemblies (Includes Beams And Joists)						
Polyisocyanurate or Mineral and Fiber Boards	•	•	•			P301
Lightweight Insulating Concrete	•	•	•			P301

## FIRE TEST PERFORMANCE

CAFCO-BOARD has been extensively tested for fire resistance and is rated for up to 4 hours for floor assemblies, beams, joists, columns, and roof assemblies.

- Classified by UL in accordance with ANSI/UL 263 (ASTM E119)
- Classified by UL in accordance with CAN/ULC-S101 (ASTM E119)

CAFCO-BOARD has also been tested for surface burning characteristics in accordance with ASTM E84 and is rated Class A.

Plain	Flame Spread .....	0	Smoke Developed .....	0
Foil Faced	Flame Spread .....	15	Smoke Developed .....	5

## Thermal Performance

Product	Conductivity(k)*	Resistance (R/inch)
CAFCO-BOARD	0.24 BTU in/hr ft <sup>2</sup> °F @ 75°F (0.034 W/m•K@24° C)	4.2

\*When tested in accordance with ASTM C518

## Noise Reduction Coefficients\*

1/3 Octave Band Center Frequency HZ

	125	250	500	1000	2000	4000	NRC
2 in (51 mm)	0.18	0.75	1.17	1.06	1.00	0.81	1.00
4 in (102 mm)	0.49	1.11	1.11	1.14	0.97	0.64	1.10

\* Data on Unfaced CAFCO-BOARD, when tested in accordance with ASTM C423

## Sound Transmission Class (STC) Data

1 in (25 mm)	10
2 in (51 mm)	15
3 in (76 mm)	18

# CAFCO-BOARD Guide Specification

**SECTION 078200 – BOARD FIREPROOFING**  
The following is an outline/short language application.  
Complete specifications for the Rigid Board Fire  
Protection is available on various media upon request.

## PART 1 – GENERAL

### 1.1 Work Included

- 1.1.1 Specify to meet project requirements. Provide all labor, materials, equipment and services necessary for, and incidental to, the complete and proper installation of all sprayed fire protection and related work as shown on the drawings or where specified herein, and in accordance with all applicable requirements of the Contract Documents.
- 1.1.2 The material and installation shall conform to the applicable building code requirements of all authorities having jurisdiction.
- 1.1.3 Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specifications Sections, apply to this Section.

### 1.2 Quality Assurance

- 1.2.1 Work shall be performed by a firm with expertise in the installation of fire protection or similar materials. This firm shall be recognized or otherwise approved by the Rigid Board fire resistive material manufacturer.
- 1.2.2 Fire Test Response Characteristics: Provide rigid board fire protection with identical fire performance characteristics to those which have been determined per test methods indicated below and have been tested by UL or other testing organizations acceptable to authorities having jurisdiction.
- 1.2.2.1 Surface Burning Characteristics: ASTM E84
- 1.2.2.2 Fire Resistance Ratings and Fire Resistance Assemblies: Provide rigid board fire protection with ratings indicated by the appropriate UL or equivalent design based on ASTM E-119 (UL263, CAN/ULC-S101) testing requirements.
- 1.2.2.3 Combustion Characteristics: ASTM E136
- 1.2.2.4 Fire resistance rated assemblies/designs are listed in the UL Fire Resistance Directory or equivalent publication.

### Related Sections

- 1.3.1 SECTION 072100 - THERMAL INSULATION
- 1.3.2 SECTION 078100 - APPLIED FIREPROOFING
- 1.3.3 SECTION 078123 – INTUMESCENT FIREPROOFING
- 1.3.4 SECTION 078413 - PENETRATION FIRESTOPPING
- 1.3.5 SECTION 092900 – GYPSUM BOARD
- 1.3.6 SECTION 099123 – INTERIOR PAINTING

### 1.4 Submittals

- 1.4.1 Product Data to be submitted with manufacturers specification, including certification as may be required to show material compliance with Contract Documents
- 1.4.2 Product Certificates or test reports from, and based on tests performed by, qualified independent testing and inspection agency acceptable to authorities having jurisdiction. Include test results and their interpretations which evidence compliance of current mineral wool board fire protection with from Independent laboratory test results for all specified performance criteria.
- 1.4.3 Research/ Evaluation Reports of the model code organization acceptable to authorities having jurisdiction which evidence mineral wool board's fire protection compliance with the building code applicable to the project.

### 1.5 Coordination/Sequencing

- 1.5.1 Sequence and coordinate installation of board fire protection with related construction operations specified in other sections to comply with the following requirements:
- 1.5.2 Avoid unnecessary exposure of rigid board fire protection to abrasion and other damage likely to occur during construction operations subsequent to its application.
- 1.5.3 Do not install rigid board fire protection on structural members until piping and other construction behind the fire protection has been completed.
- 1.5.4 Expedite installation of rigid board fire protection to minimize exposure of structural members without fire protection.

- 1.5.5 Do not enclose rigid board fire protection until application is completed and inspected by authorities having jurisdiction.

## PART 2 - PRODUCTS

### 2.1 Manufacturers

- 2.1.1 The rigid board fire protection shall be manufactured under the CAFCO® brand name, by authorized producers.
- 2.1.2 CAFCO-BOARD Rigid Board Fire Protection (UL Designation: Type CB) and related accessories shall be provided by ISOLATEK International and shall be installed in accordance with current printed instructions.

### 2.2 Materials

- 2.2.1 Materials shall be CAFCO-BOARD, (UL/ULC designation, Type CB) produced from materials by combining refractory mineral wool manufactured from slag with thermosetting resin binders, to comply with ASTM C-612 for Class 4, nominal density of 9pcf (144kg/m³), applied to conform to the drawings, specifications and following test criteria:
- 2.2.2 Thermal Conductivity (R value/inch): 4.2 at 75° F (24° C) per ASTM
- 2.2.3 Surface Burning Characteristics: Maximum Flame Spread and Smoke Developed ratings of 0 and 15, respectively.
- 2.2.4 Fastening Accessories: For each fire resistive assembly in which rigid board fire protection serves as rigid fire protection, provide a board fastening system complying to the related UL design or other acceptable testing and inspection organization's report.

## PART 3 – EXECUTION

### 3.1 Preparation

- 3.1.1 Examine substrates and conditions under which rigid board fire protection construction is to be installed. Do not proceed with installation of the rigid board fire protection until unsatisfactory conditions have been corrected.

### Installation/Application

- 3.2.1 Comply with manufacturer's written instructions for particular conditions of installation in each case.
- 3.2.2 Install rigid board fire protection to comply with requirements for thicknesses, number of courses (layers), construction of joints and corners, and anchorage methods applicable to fire resistance rated assemblies indicated.

### 3.3 Protection

- 3.3.1 Coordinate installation of rigid board fire protection with other construction trades to minimize cutting into, or removal of, already installed board material. As construction by other trades is successively completed, replace or repair rigid board fire protection installations which have been removed or cut away, in accordance with 3.3.2. Maintain complete thickness on steel members and assemblies protected by fire protection.
- 3.3.2 All patching and repair to rigid board fire protection due to damage by other trades shall be performed under this section and paid for by the trade responsible for the damage.
- 3.3.3 Provide final protection and maintain conditions in a manner acceptable to Installer. Manufacturer, and authorities having jurisdiction that ensures rigid board fire protection is without damage or deterioration at time of Substantial Completion.

### 3.4 Field Quality Control

- 3.4.1 Inspection Agency: Engage a qualified independent inspecting agency to inspect rigid board fire protection and prepare inspection reports.
- 3.4.2 Testing Services: Inspecting of completed installations of rigid board fire protection shall take place in successive stages as installation of rigid board fire protection proceeds. Do not proceed with installation of rigid board fire protection for the next area until inspecting agency determines completed work shows compliance with requirements.

### Product Availability

ISOLATEK International Rigid Board Fire Protection is available to trained, recognized applicators around the world from strategically located production and distribution points in the U.S., Canada, Mexico, Europe and the Pacific Basin.



ISOLATEK INTERNATIONAL is registered with the  
AIA Continuing Education System (AIA/CES)



We support our customers with unsurpassed technical expertise and customer service, complemented by an extensive global network of experienced sales representatives and recognized applicators. For detailed product information or for the name of the sales representative in your area please contact us.

The performance data herein reflect our expectations based on tests conducted in accordance with recognized standard methods under controlled conditions. The applicator, general contractor, property owner and/or user MUST read, understand and follow the directions, specifications and/or recommendations set forth in Isolatek International's publications concerning use and application of these products, and should not rely merely on the information contained in this product data sheet. Isolatek International is not responsible for property damage, bodily injuries, consequential damages, or losses of any kind that arise from or are related to the applicator's, general contractor's, or property owners' failure to follow the recommendations set forth in Isolatek International's publications. The sale of these products shall be subject to the Terms and Conditions set forth in the Company's invoices.



Isolatek International provides passive fireproofing materials under the CAFCO® trademark throughout the Americas and other markets and under the ISOLATEK® trademark throughout the world.

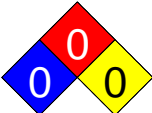
800.631.9600 or 973.347.1200  
www.isolatek.com | technical@isolatek.com



## 1 Identification

- **Product identifier**
- **Trade name:**  
**Hilti Firestop Acrylic Sealant CFS-S ACR**  
**CP 606**
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use** SU19 Building and construction work
- **Application of the substance / the mixture** Construction chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Hilti, Inc.  
5400 South 122nd East Ave.  
US-Tulsa, OK 74146  
Phone: (800) 879-8000  
Fax: (800) 879-7000  
Español: (800) 879-5000
- **Information department:**  
chemicals.hse@hilti.com  
see section 16
- **Emergency telephone number:**  
Tox Info Suisse - 24 h Service  
Tel.: 0041 / 44 251 51 51 (international)
- Chem-Trec  
Tel.: 1 800 424 9300

## 2 Hazard(s) identification

- **Classification of the substance or mixture** The product is not classified according to the Globally Harmonized System (GHS).
  - **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** not applicable
  - **Classification system:**  
The classification was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.
  - **Label elements**
  - **GHS label elements** Void
  - **Hazard pictograms** Void
  - **Signal word** Void
  - **Hazard statements** Void
  - **Classification system**
  - **NFPA ratings (scale 0-4)**
- 

Health = 0

Fire = 0

Reactivity = 0
- **Other hazards**
  - **Results of PBT and vPvB assessment**
  - **PBT:** Not applicable.
  - **vPvB:** Not applicable.

## 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Acrylat-dispersion

### Dangerous components:

57-55-6 propane-1,2-diol	<2.5%
--------------------------	-------

- **Additional information** For the wording of the listed risk phrases refer to section 16.

## 4 First-aid measures

- **Description of first aid measures**
- **General information** No special measures required.
- **After inhalation** Take affected persons into fresh air and keep quiet.
- **After skin contact** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing** Seek immediate medical advice.
- **Information for doctor**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

## 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents** CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture**  
In case of fire, the following can be released:  
Carbon monoxide (CO)  
Carbondioxide (CO<sub>2</sub>)
- **Advice for firefighters**
- **Protective equipment:** Ensure adequate ventilation

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective clothing.  
Ensure adequate ventilation  
Particular danger of slipping on leaked/spilled product.
- **Environmental precautions:** No special measures required.
- **Methods and material for containment and cleaning up:**  
Pick up mechanically.  
Dispose contaminated material as waste according to item 13.
- **Reference to other sections**  
See Section 7 for information on safe handling  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

## 7 Handling and storage

- **Handling**
- **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** keep containers securely closed and dry, store at 5 - 25 °C / 41 - 77 °F
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Storage class** 11
- **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**

**57-55-6 propane-1,2-diol**

WEEL Long-term value: 10 mg/m<sup>3</sup>

- **Additional information:** The lists that were valid during the creation were used as basis.

- **Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**  
The usual precautionary measures for handling chemicals should be followed.  
Avoid contact with the eyes and skin.  
Keep away from foodstuffs, beverages and feed.  
Wash hands before breaks and at the end of work.
- **Breathing equipment:** Not necessary if room is well-ventilated.
- **Protection of hands:**



Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation  
EN 374

- **Material of gloves**  
Nitrile rubber, NBR  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. of page 2)

· Eye protection:



Tightly sealed goggles.

EN 166 + EN 170

· Body protection:



Protective work clothing.

## 9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Pasty
Color:	According to product specification
Odor:	Characteristic
Odour threshold:	Not determined.

· pH-value: Not applicable.

· Change in condition

Melting point/Melting range:	Not determined.
Boiling point/Boiling range:	undetermined

· Flash point: Not applicable

· Flammability (solid, gaseous) Not determined.

· Ignition temperature:

Decomposition temperature: Not determined.

· Auto igniting: Product is not selfigniting.

· Danger of explosion: Product does not present an explosion hazard.

· Explosion limits:

Lower:	Not determined.
Upper:	Not determined.

· Vapor pressure: Not determined.

· Density at 20 °C (68 °F): 1.55 g/cm<sup>3</sup> (12.935 lbs/gal) (DIN 51757)

· Relative density Not determined.

· Vapour density Not applicable.

· Evaporation rate Not applicable.

· Solubility in / Miscibility with

Water: Not miscible or difficult to mix

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

dynamic: Not applicable.

kinematic: Not applicable.

· Other information VOC Content: 71 g/l (EPA Method 24)

## 10 Stability and reactivity

· Reactivity

· Chemical stability

· Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

· Possibility of hazardous reactions No dangerous reactions known

· Conditions to avoid No further relevant information available.

· Incompatible materials: No further relevant information available.

· Hazardous decomposition products: No dangerous decomposition products known

## 11 Toxicological information

· Information on toxicological effects

· Acute toxicity:

· Primary irritant effect:

· on the skin: No irritant effect.

· on the eye: No irritating effect.

(Contd. on page 4)

(Contd. of page 3)

· **Sensitization:** No sensitizing effects known.

· **Additional toxicological information:**

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

## 12 Ecological information

· **Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **Persistence and degradability** No further relevant information available.

· **Behavior in environmental systems:**

· **Bioaccumulative potential** No further relevant information available.

· **Mobility in soil** No further relevant information available.

· **Additional ecological information:**

· **General notes:** Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

· **Waste treatment methods**

· **Recommendation**

For disposal, local regulations issued by the authorities must be observed.

Smaller quantities can be disposed of with household waste.

· **European waste catalogue:**

08 04 10 waste adhesives and sealants other than those mentioned in 08 04 09

· **Uncleaned packagings:**

· **Recommendation:**

Disposal must be made according to official regulations.

Dispose of packaging according to regulations on the disposal of packagings.

## 14 Transport information

· **UN-Number**

· **DOT, ADR, ADN, IMDG, IATA**

Void

· **UN proper shipping name**

· **DOT, ADR, ADN, IMDG, IATA**

Void

· **Transport hazard class(es)**

· **DOT, ADR, ADN, IMDG, IATA**

· **Class**

Void

· **Packing group**

· **DOT, ADR, IMDG, IATA**

Void

· **Environmental hazards:**

· **Marine pollutant:**

No

· **Special precautions for user**

Not applicable.

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

· **UN "Model Regulation":**

-

## 15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **Sara**

· **Section 355 (Extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients are listed.

(Contd. on page 5)

(Contd. of page 4)

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Proposition 65:**

· **Chemicals known to cause cancer:**

None of the ingredients are listed.

· **Cancerogenity categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

· **MAK (German Maximum Workplace Concentration)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **Chemical safety assessment:** not required.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:**

Hilti Corporation  
Business Unit Chemicals  
Quality/Safety/Environment  
FL-9494 Schaan / Liechtenstein

chemicals.hse@hilti.com

Tel.: +423 234 3004

FAX.: +423 234 3462

· **Date of preparation / last revision** 05/18/2015 / 2

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
DOT: US Department of Transportation  
IATA: International Air Transport Association  
ACGIH: American Conference of Governmental Industrial Hygienists  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
NFPA: National Fire Protection Association (USA)

· **\* Data compared to the previous version altered.**





# Safety Data Sheet

acc. to ISO 11014

Printing date 05/18/2015



Version number 4

Reviewed on 03/06/2015

## 1 Identification

- **Product identifier**
- **Trade name:**  
**CP 672**  
**Hilti Firestop Joint Spray CFS-SP WB**
- **Relevant identified uses of the substance or mixture and uses advised against** No further relevant information available.
- **Application of the substance / the mixture** Construction chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Hilti, Inc.  
5400 South 122nd East Ave.  
US-Tulsa, OK 74146  
Phone: (800) 879-8000  
Fax: (800) 879-7000  
Español: (800) 879-5000
- **Information department:**  
chemicals.hse@hilti.com  
see section 16
- **Emergency telephone number:**  
Tox Info Suisse - 24 h Service  
Tel.: 0041 / 44 251 51 51 (international)
- Chem-Trec  
Tel.: 1 800 424 9300

## 2 Hazard(s) identification

- **Classification of the substance or mixture**  
Repr. 2 H361 Suspected of damaging fertility or the unborn child.
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** not applicable
- **Classification system:**  
The classification was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.
- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**  
  
GHS08
- **Signal word** Warning
- **Hazard-determining components of labeling:**  
Zinc borate  
[Zn4B12O22\*7H2O]
- **Hazard statements**  
H361 Suspected of damaging fertility or the unborn child.
- **Precautionary statements**  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P308+P313 IF exposed or concerned: Get medical advice/attention.
- **Classification system**
- **NFPA ratings (scale 0-4)**  
  
Health = 1  
Fire = 0  
Reactivity = 0
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

## 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Watery, intumescent fire prevention coating

- **Dangerous components:**

138265-88-0	Zinc borate [Zn4B12O22*7H2O]	Xn R63; N R50/53-51 Repr. Cat. 3	<2.5%
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(Contd. on page 2)



(Contd. of page 1)

· **Additional information** For the wording of the listed risk phrases refer to section 16.

#### 4 First-aid measures

- **Description of first aid measures**
- **General information** No special measures required.
- **After inhalation** Take affected persons into fresh air and keep quiet.
- **After skin contact** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing** Seek immediate medical advice.
- **Information for doctor**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

#### 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents** CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture**  
In case of fire, the following can be released:  
Carbon monoxide (CO)  
Carbondioxide (CO<sub>2</sub>)
- **Advice for firefighters**
- **Protective equipment:** Ensure adequate ventilation

#### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Ensure adequate ventilation  
Wear protective clothing.  
Particular danger of slipping on leaked/spilled product.
- **Environmental precautions:** Do not allow product to reach sewage system or any water course.
- **Methods and material for containment and cleaning up:**  
Pick up mechanically.  
Dispose contaminated material as waste according to item 13.
- **Reference to other sections**  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

#### 7 Handling and storage

- **Handling**
- **Precautions for safe handling** No special measures required.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** keep containers securely closed and dry, store at 5 - 25 °C / 41 - 77 °F
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Protect from frost.
- **Storage class** 12
- **Specific end use(s)** No further relevant information available.

#### 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**  
The usual precautionary measures for handling chemicals should be followed.  
Avoid contact with the eyes and skin.  
Keep away from foodstuffs, beverages and feed.  
Wash hands before breaks and at the end of work.
- **Breathing equipment:** Not necessary if room is well-ventilated.

(Contd. on page 3)

(Contd. of page 2)

## Protection of hands:



Protective gloves.

EN 374

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves Nitrile rubber, NBR

## Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

## Eye protection:



Tightly sealed goggles.

EN 166 + EN 170

## Body protection:



Protective work clothing.

## 9 Physical and chemical properties

### Information on basic physical and chemical properties

#### General Information

#### Appearance:

Form:	Fluid
Color:	Various colors
Odor:	Characteristic

#### Change in condition

Melting point/Melting range:	Not determined.
Boiling point/Boiling range:	undetermined

Flash point: Not applicable

Auto igniting: Product is not selfigniting.

Danger of explosion: Product does not present an explosion hazard.

Density: Not determined

#### Solubility in / Miscibility with

Water: Not miscible or difficult to mix

Other information VOC Content: 34 g/l (EPA Method 24)

## 10 Stability and reactivity

### Reactivity

### Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Possibility of hazardous reactions No dangerous reactions known

Conditions to avoid No further relevant information available.

Incompatible materials: No further relevant information available.

Hazardous decomposition products: No dangerous decomposition products known

## 11 Toxicological information

### Information on toxicological effects

#### Acute toxicity:

#### Primary irritant effect:

on the skin: No irritant effect.

on the eye: No irritating effect.

Sensitization: No sensitizing effects known.

#### Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

#### IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

(Contd. on page 4)

(Contd. of page 3)

· **NTP (National Toxicology Program)**

None of the ingredients is listed

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

## 12 Ecological information

· **Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **Persistence and degradability** No further relevant information available.

· **Behavior in environmental systems:**

· **Bioaccumulative potential** No further relevant information available.

· **Mobility in soil** No further relevant information available.

· **Ecotoxic effects:** Not determined

· **Additional ecological information:**

· **General notes:**

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.

Do not allow product to reach ground water, water course or sewage system.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

· **Waste treatment methods**

· **Recommendation** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **European waste catalogue:**

08 04 10 | waste adhesives and sealants other than those mentioned in 08 04 09

· **Uncleaned packagings:**

· **Recommendation:**

Disposal must be made according to official regulations.

Dispose of packaging according to regulations on the disposal of packagings.

## 14 Transport information

· **UN-Number**

· **DOT, ADR, IMDG, IATA** Void

· **UN proper shipping name**

· **DOT, ADR, IMDG, IATA** Void

· **Transport hazard class(es)**

· **DOT, ADR, IMDG, IATA** Void

· **Class** Void

· **Packing group**

· **DOT, ADR, IMDG, IATA** Void

· **Environmental hazards:**

· **Marine pollutant:** No

· **Special precautions for user** Not applicable.

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

· **Transport/Additional information:** Not dangerous according to the above specifications.

## 15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **Sara**

· **Section 355 (Extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients are listed.

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

(Contd. on page 5)

(Contd. of page 4)

· **Proposition 65:**

· **Chemicals known to cause cancer:**

28553-12-0 | di-"isononyl" phthalate

· **Carcinogenicity categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

· **MAK (German Maximum Workplace Concentration)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **Chemical safety assessment:** not required.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

R51 Toxic to aquatic organisms.

R63 Possible risk of harm to the unborn child

· **Department issuing SDS:**

Hilti Corporation

Business Unit Chemicals

Quality/Safety/Environment

FL-9494 Schaan / Liechtenstein

chemicals.hse@hilti.com

Tel.: +423 234 3004

FAX.: +423 234 3462

· **Date of preparation / last revision** 05/18/2015 / 3

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

Repr. 2: Reproductive toxicity, Hazard Category 2

· **\* Data compared to the previous version altered.**

## 1 Identification

- **Product identifier**
- **Trade name:**  
**FS-ONE MAX**  
**Hilti Firestop Filler Mastix CFS-FIL**
- **Relevant identified uses of the substance or mixture and uses advised against** No further relevant information available.
- **Application of the substance / the mixture** Construction chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Hilti, Inc.  
5400 South 122nd East Ave.  
US-Tulsa, OK 74146  
Phone: (800) 879-8000  
Fax: (800) 879-7000  
Español: (800) 879-5000
- **Information department:**  
chemicals.hse@hilti.com  
see section 16
- **Emergency telephone number:**  
Chem-Trec  
Tel.: 1 800 424 9300  
Tox Info Suisse - 24 h Service  
Tel.: 0041 / 44 251 51 51 (international)

## 2 Hazard(s) identification

- **Classification of the substance or mixture** The product is not classified according to the Globally Harmonized System (GHS).
- **Label elements**
- **GHS label elements** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Classification system**
- **NFPA ratings (scale 0-4)**



- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

## 3 Composition/information on ingredients

- **Chemical characterization:** Mixtures
- **Description:**

Mixture of the substances listed below with nonhazardous additions.

### · **Dangerous components:**

57-55-6 | propane-1,2-diol

<2.5%

- **Additional information** For the wording of the listed risk phrases refer to section 16.

## 4 First-aid measures

- **Description of first aid measures**
- **General information** No special measures required.
- **After inhalation** Take affected persons into fresh air and keep quiet.
- **After skin contact** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing** Seek immediate medical advice.
- **Information for doctor**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

## 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents** CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

(Contd. on page 2)

(Contd. of page 1)

## · Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Carbon monoxide (CO)

Carbondioxide (CO<sub>2</sub>)

## · Advice for firefighters

· **Protective equipment:** Ensure adequate ventilation

## 6 Accidental release measures

### · Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Wear protective clothing.

Particular danger of slipping on leaked/spilled product.

· **Environmental precautions:** Do not allow product to reach sewage system or any water course.

### · Methods and material for containment and cleaning up:

Pick up mechanically.

Dispose contaminated material as waste according to item 13.

### · Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## 7 Handling and storage

### · Handling

· **Precautions for safe handling** No special measures required.

· **Information about protection against explosions and fires:** No special measures required.

### · Conditions for safe storage, including any incompatibilities

#### · Storage

· **Requirements to be met by storerooms and receptacles:** keep containers securely closed and dry, store at 5 - 25 °C / 41 - 77 °F

· **Information about storage in one common storage facility:** Not required.

· **Further information about storage conditions:** None.

· **Storage class** 10

· **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

### · Control parameters

· **Components with limit values that require monitoring at the workplace:**

57-55-6 propane-1,2-diol

WEEL Long-term value: 10 mg/m<sup>3</sup>

· **Additional information:** The lists that were valid during the creation were used as basis.

### · Exposure controls

#### · Personal protective equipment

#### · General protective and hygienic measures

The usual precautionary measures for handling chemicals should be followed.

Avoid contact with the eyes and skin.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

· **Breathing equipment:** Not necessary if room is well-ventilated.

#### · Protection of hands:



Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

EN 374

#### · Material of gloves

Synthetic gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

#### · Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **For the permanent contact gloves made of the following materials are suitable:** Nitrile rubber, NBR

(Contd. on page 3)

(Contd. of page 2)

· Eye protection:



Tightly sealed goggles.

EN 166 + EN 170

· Body protection:



Protective work clothing.

## 9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Pasty

Color: Red

· Odor: Characteristic

· Odour threshold: Not determined.

· pH-value: Not determined.

· Change in condition

Melting point/Melting range: Not determined.

Boiling point/Boiling range: 100 °C (212 °F)

· Flash point: Not applicable

· Flammability (solid, gaseous) Not applicable.

· Ignition temperature:

Decomposition temperature: Not determined.

· Auto igniting: Product is not selfigniting.

· Danger of explosion: Product does not present an explosion hazard.

· Explosion limits:

Lower: Not determined.

Upper: Not determined.

· Vapor pressure at 20 °C (68 °F): 23 hPa (17 mm Hg)

· Density: Not determined

· Relative density Not determined.

· Vapour density Not determined.

Not applicable.

· Evaporation rate Not determined.

· Solubility in / Miscibility with

Water: Not miscible or difficult to mix

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

dynamic: Not determined.

kinematic: Not determined.

· Solvent content:

Organic solvents: 1.0 %

Water: 18.5 %

· Other information VOC Content: 9 g/l (EPA Method 24)

## 10 Stability and reactivity

· Reactivity

· Chemical stability

· Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

· Possibility of hazardous reactions No dangerous reactions known

· Conditions to avoid No further relevant information available.

· Incompatible materials: No further relevant information available.

· Hazardous decomposition products: No dangerous decomposition products known

US

(Contd. on page 4)

## 11 Toxicological information

### · Information on toxicological effects

#### · Acute toxicity:

#### · Primary irritant effect:

· on the skin: No irritant effect.

· on the eye: No irritating effect.

· Sensitization: No sensitizing effects known.

#### · Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

#### · IARC (International Agency for Research on Cancer)

14808-60-7 | Quartz (SiO<sub>2</sub>)

1

#### · NTP (National Toxicology Program)

14808-60-7 | Quartz (SiO<sub>2</sub>)

K

#### · OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

## 12 Ecological information

### · Toxicity

· Aquatic toxicity: No further relevant information available.

· Persistence and degradability: No further relevant information available.

### · Behavior in environmental systems:

· Bioaccumulative potential: No further relevant information available.

· Mobility in soil: No further relevant information available.

### · Results of PBT and vPvB assessment

· PBT: Not applicable.

· vPvB: Not applicable.

· Other adverse effects: No further relevant information available.

## 13 Disposal considerations

### · Waste treatment methods

· Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

### · European waste catalogue:

08 00 00

08 04 00

08 04 10

### · Uncleaned packagings:

· Recommendation: Dispose of packaging according to regulations on the disposal of packagings.

## 14 Transport information

### · UN-Number

· DOT, ADR, ADN, IMDG, IATA

Void

### · UN proper shipping name

· DOT, ADR, ADN, IMDG, IATA

Void

### · Transport hazard class(es)

· DOT, ADR, ADN, IMDG, IATA

· Class

Void

### · Packing group

· DOT, ADR, IMDG, IATA

Void

### · Environmental hazards:

· Marine pollutant:

No

### · Special precautions for user

Not applicable.

· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

· UN "Model Regulation":

-

## 15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture

· Sara

### · Section 355 (Extremely hazardous substances):

None of the ingredients is listed.



(Contd. of page 4)

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients are listed.

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Proposition 65:**

· **Chemicals known to cause cancer:**

14808-60-7 | Quartz (SiO<sub>2</sub>)

· **Carcinogenicity categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

14808-60-7 | Quartz (SiO<sub>2</sub>)

A2

· **MAK (German Maximum Workplace Concentration)**

14808-60-7 | Quartz (SiO<sub>2</sub>)

1

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

14808-60-7 | Quartz (SiO<sub>2</sub>)

· **Chemical safety assessment:** not required.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:**

Hilti Corporation  
Business Unit Chemicals  
Quality/Safety/Environment  
FL-9494 Schaan / Liechtenstein

chemicals.hse@hilti.com

Tel.: +423 234 3004

FAX.: +423 234 3462

· **Date of preparation / last revision 05/18/2015 / -**

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)


· **\* Data compared to the previous version altered.**




## 1 Identification

- **Product identifier**
- **Trade name:**  
**CP 672**  
**Hilti Firestop Joint Spray CFS-SP WB**
- **Relevant identified uses of the substance or mixture and uses advised against** No further relevant information available.
- **Application of the substance / the mixture** Construction chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Hilti, Inc.  
5400 South 122nd East Ave.  
US-Tulsa, OK 74146  
Phone: (800) 879-8000  
Fax: (800) 879-7000  
Español: (800) 879-5000
- **Information department:**  
chemicals.hse@hilti.com  
see section 16
- **Emergency telephone number:**  
Tox Info Suisse - 24 h Service  
Tel.: 0041 / 44 251 51 51 (international)
- Chem-Trec  
Tel.: 1 800 424 9300

## 2 Hazard(s) identification

- **Classification of the substance or mixture**  
Repr. 2 H361 Suspected of damaging fertility or the unborn child.
  - **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** not applicable
  - **Classification system:**  
The classification was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.
  - **Label elements**
  - **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
  - **Hazard pictograms**
- 

GHS08
- **Signal word** Warning
  - **Hazard-determining components of labeling:**  
Zinc borate  
[Zn4B12O22\*7H2O]
  - **Hazard statements**  
H361 Suspected of damaging fertility or the unborn child.
  - **Precautionary statements**  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P308+P313 IF exposed or concerned: Get medical advice/attention.
  - **Classification system**
  - **NFPA ratings (scale 0-4)**
- 

Health = 1  
 Fire = 0  
 Reactivity = 0
- **Other hazards**
  - **Results of PBT and vPvB assessment**
  - **PBT:** Not applicable.
  - **vPvB:** Not applicable.

## 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Watery, intumescent fire prevention coating

- **Dangerous components:**

138265-88-0	Zinc borate [Zn4B12O22*7H2O]	Xn R63; N R50/53-51 Repr. Cat. 3	<2.5%
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(Contd. on page 2)

(Contd. of page 1)

· **Additional information** For the wording of the listed risk phrases refer to section 16.

#### 4 First-aid measures

- **Description of first aid measures**
- **General information** No special measures required.
- **After inhalation** Take affected persons into fresh air and keep quiet.
- **After skin contact** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing** Seek immediate medical advice.
- **Information for doctor**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

#### 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents** CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture**  
In case of fire, the following can be released:  
Carbon monoxide (CO)  
Carbondioxide (CO<sub>2</sub>)
- **Advice for firefighters**
- **Protective equipment:** Ensure adequate ventilation

#### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Ensure adequate ventilation  
Wear protective clothing.  
Particular danger of slipping on leaked/spilled product.
- **Environmental precautions:** Do not allow product to reach sewage system or any water course.
- **Methods and material for containment and cleaning up:**  
Pick up mechanically.  
Dispose contaminated material as waste according to item 13.
- **Reference to other sections**  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

#### 7 Handling and storage

- **Handling**
- **Precautions for safe handling** No special measures required.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** keep containers securely closed and dry, store at 5 - 25 °C / 41 - 77 °F
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Protect from frost.
- **Storage class** 12
- **Specific end use(s)** No further relevant information available.

#### 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**  
The usual precautionary measures for handling chemicals should be followed.  
Avoid contact with the eyes and skin.  
Keep away from foodstuffs, beverages and feed.  
Wash hands before breaks and at the end of work.
- **Breathing equipment:** Not necessary if room is well-ventilated.

(Contd. on page 3)

(Contd. of page 2)

## Protection of hands:



Protective gloves.

EN 374

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves Nitrile rubber, NBR

## Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

## Eye protection:



Tightly sealed goggles.

EN 166 + EN 170

## Body protection:



Protective work clothing.

## 9 Physical and chemical properties

### Information on basic physical and chemical properties

#### General Information

#### Appearance:

Form:	Fluid
Color:	Various colors
Odor:	Characteristic

#### Change in condition

Melting point/Melting range:	Not determined.
Boiling point/Boiling range:	undetermined

Flash point: Not applicable

Auto igniting: Product is not selfigniting.

Danger of explosion: Product does not present an explosion hazard.

Density: Not determined

#### Solubility in / Miscibility with

Water: Not miscible or difficult to mix

Other information VOC Content: 34 g/l (EPA Method 24)

## 10 Stability and reactivity

### Reactivity

### Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Possibility of hazardous reactions No dangerous reactions known

Conditions to avoid No further relevant information available.

Incompatible materials: No further relevant information available.

Hazardous decomposition products: No dangerous decomposition products known

## 11 Toxicological information

### Information on toxicological effects

#### Acute toxicity:

#### Primary irritant effect:

on the skin: No irritant effect.

on the eye: No irritating effect.

Sensitization: No sensitizing effects known.

#### Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

#### IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

(Contd. on page 4)

(Contd. of page 3)

· **NTP (National Toxicology Program)**

None of the ingredients is listed

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

## 12 Ecological information

· **Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **Persistence and degradability** No further relevant information available.

· **Behavior in environmental systems:**

· **Bioaccumulative potential** No further relevant information available.

· **Mobility in soil** No further relevant information available.

· **Ecotoxicological effects:** Not determined

· **Additional ecological information:**

· **General notes:**

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.

Do not allow product to reach ground water, water course or sewage system.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

· **Waste treatment methods**

· **Recommendation** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **European waste catalogue:**

08 04 10 waste adhesives and sealants other than those mentioned in 08 04 09

· **Uncleaned packagings:**

· **Recommendation:**

Disposal must be made according to official regulations.

Dispose of packaging according to regulations on the disposal of packagings.

## 14 Transport information

· **UN-Number**

· **DOT, ADR, IMDG, IATA**

Void

· **UN proper shipping name**

· **DOT, ADR, IMDG, IATA**

Void

· **Transport hazard class(es)**

· **DOT, ADR, IMDG, IATA**

· **Class**

Void

· **Packing group**

· **DOT, ADR, IMDG, IATA**

Void

· **Environmental hazards:**

· **Marine pollutant:**

No

· **Special precautions for user**

Not applicable.

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

· **Transport/Additional information:**

Not dangerous according to the above specifications.

## 15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **Sara**

· **Section 355 (Extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients are listed.

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

(Contd. on page 5)

(Contd. of page 4)

· **Proposition 65:**

· **Chemicals known to cause cancer:**

28553-12-0 | di-"isononyl" phthalate

· **Carcinogen categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

· **MAK (German Maximum Workplace Concentration)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **Chemical safety assessment:** not required.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

R51 Toxic to aquatic organisms.

R63 Possible risk of harm to the unborn child

· **Department issuing SDS:**

Hilti Corporation

Business Unit Chemicals

Quality/Safety/Environment

FL-9494 Schaan / Liechtenstein

chemicals.hse@hilti.com

Tel.: +423 234 3004

FAX.: +423 234 3462

· **Date of preparation / last revision** 05/18/2015 / 3

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

Repr. 2: Reproductive toxicity, Hazard Category 2

· **\* Data compared to the previous version altered.**

## 1 Identification

- **Product identifier**
- **Trade name:** Hilti Firestop Coated Board CFS-CT B  
Hilti Firestop Coated Board CP 670  
Hilti Firestop Coated Board CP 673  
Hilti Firestop Coated Board CP 676  
Hilti Firestop Cord CFS-CO  
Hilti Firestop Sleeve CP 645  
Hilti Speed Strip CP 767  
Hilti Speed Plug CP 777
- **Relevant identified uses of the substance or mixture and uses advised against** No further relevant information available.
- **Application of the substance / the mixture** Construction chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Hilti, Inc.  
5400 South 122nd East Ave.  
US-Tulsa, OK 74146  
Phone: (800) 879-8000  
Fax: (800) 879-7000  
Español: (800) 879-5000
- **Information department:**  
chemicals.hse@hilti.com  
see section 16
- **Emergency telephone number:**  
Tox Info Suisse - 24 h Service  
Tel.: 0041 / 44 251 51 51 (international)
- Chem-Trec  
Tel.: 1 800 424 9300

## 2 Hazard(s) identification

- **Classification of the substance or mixture** The product is not classified according to the Globally Harmonized System (GHS).
- **Label elements**
- **GHS label elements** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Classification system**
- **NFPA ratings (scale 0-4)**



- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

## 3 Composition/information on ingredients

- **Chemical characterization:** Mixtures
- **Description:**  
Mineral wool plate with coating  
Article made from mineral wool and fibre glass
- **Dangerous components:** Void

## 4 First-aid measures

- **Description of first aid measures**
- **General information** No special measures required.
- **After inhalation** Supply fresh air.
- **After skin contact** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing** Seek immediate medical advice.
- **Information for doctor**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

## 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents** CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents** Water with full jet.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Mount respiratory protective device.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Avoid formation of dust.  
Wear protective clothing.
- **Environmental precautions:** No special measures required.
- **Methods and material for containment and cleaning up:** Pick up mechanically.
- **Reference to other sections**  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

## 7 Handling and storage

- **Handling**
- **Precautions for safe handling** Prevent formation of dust.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Store in dry conditions.
- **Storage class** 11
- **Specific end use(s)** No further relevant information available.

## \* 8 Exposure controls/personal protection

- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

287922-11-6 HT stone wool (90%)

AGW(Germany) 3\*; 10\*\* mg/m<sup>3</sup>

\*inhalable (long term); \*\*respirable (short term)

- **Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**  
The usual precautionary measures for handling chemicals should be followed.  
Keep away from foodstuffs, beverages and feed.  
Do not inhale dust / smoke / mist.
- **Breathing equipment:** If dust is produced.
- **Protection of hands:**



Protective gloves.

- **Material of gloves** Strong gloves
- **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:**



Tightly sealed goggles.



## · Body protection:

(Contd. of page 2)



Protective work clothing.

## 9 Physical and chemical properties

### · Information on basic physical and chemical properties

#### · General Information

#### · Appearance:

Form:	Solid material.
Color:	Green
Odor:	Odorless

· pH-value: Not applicable

#### · Change in condition

Melting point/Melting range: &gt; 1000 °C (&gt; 1832 °F)

Boiling point/Boiling range: undetermined

· Flash point: Not applicable

· Ignition temperature: Not applicable

· Auto igniting: Product is not selfigniting.

· Danger of explosion: Product does not present an explosion hazard.

· Density at 20 °C (68 °F): 100-250 g/cm<sup>3</sup> (834.5-086.25 lbs/gal)

#### · Solubility in / Miscibility with

Water: Insoluble

#### · Solvent content:

Solids content: 100.0 %

· Other information: No further relevant information available.

## 10 Stability and reactivity

### · Reactivity

### · Chemical stability

· Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

· Possibility of hazardous reactions: No dangerous reactions known

· Conditions to avoid: No further relevant information available.

· Incompatible materials: No further relevant information available.

· Hazardous decomposition products: No dangerous decomposition products known

## 11 Toxicological information

### · Information on toxicological effects

#### · Acute toxicity:

#### · Primary irritant effect:

· on the skin: Irritant to skin and mucous membranes.

· on the eye: Irritating effect.

· Sensitization: No sensitizing effects known.

#### · Additional toxicological information:

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

#### · IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

#### · NTP (National Toxicology Program)

None of the ingredients is listed

#### · OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

## 12 Ecological information

### · Toxicity

· Aquatic toxicity: No further relevant information available.

· Persistence and degradability: No further relevant information available.

(Contd. on page 4)

(Contd. of page 3)

- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:** Not determined
- **Additional ecological information:**
- **General notes:** Generally not hazardous for water.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation** For disposal, local regulations issued by the authorities must be observed.

### · European waste catalogue:

17 06 04	insulation materials other than those mentioned in 17 06 01 and 17 06 03
08 04 10	waste adhesives and sealants other than those mentioned in 08 04 09

- **Uncleaned packagings:**
- **Recommendation:**  
Disposal must be made according to official regulations.  
Dispose of packaging according to regulations on the disposal of packagings.  
Empty packs: May be disposed via the local Green Dot collecting system or EAK waste material code 150102 (plastic packaging materials)

## 14 Transport information

- |  |  |
|--|--|
| · <b>UN-Number</b>   | Void   |
| · <b>DOT, ADR, ADN, IMDG, IATA</b>   | Void   |
| · <b>UN proper shipping name</b>   | Void   |
| · <b>DOT, ADN, IMDG, IATA</b>  | Void   |
| · <b>ADR</b>   | Void   |
| · <b>Transport hazard class(es)</b>  |  |
| · <b>DOT, ADR, ADN, IMDG, IATA</b>   |  |
| · <b>Class</b>   | Void   |
| · <b>Packing group</b>   |  |
| · <b>DOT, ADR, IMDG, IATA</b>  | Void   |
| · <b>Environmental hazards:</b>  |  |
| · <b>Marine pollutant:</b>   | No   |
| · <b>Special precautions for user</b>  | Not applicable.                                      |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable.                                      |
| · <b>Transport/Additional information:</b>                                       | Not dangerous according to the above specifications. |
| · <b>UN "Model Regulation":</b>  | -  |

## 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

### · Section 355 (Extremely hazardous substances):

None of the ingredients is listed.

### · Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

### · TSCA (Toxic Substances Control Act):

All ingredients are listed.

### · Proposition 65:

#### · Chemicals known to cause cancer:

None of the ingredients are listed.

#### · Cancerogenicity categories

#### · EPA (Environmental Protection Agency)

None of the ingredients is listed.

#### · TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

#### · MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

(Contd. on page 5)

(Contd. of page 4)

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **National regulations**· **Information about limitation of use:** None· **Chemical safety assessment:** not required.**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:**

Hilti Corporation

Business Unit Chemicals

Quality/Safety/Environment

FL-9494 Schaan / Liechtenstein

chemicals.hse@hilti.com

Tel.: +423 234 3004

FAX.: +423 234 3462

· **Date of preparation / last revision** 05/19/2015 / -· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

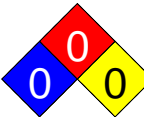
· **\* Data compared to the previous version altered.**

US

## 1 Identification

- **Product identifier**
- **Trade name:** CP 572
- **Relevant identified uses of the substance or mixture and uses advised against** No further relevant information available.
- **Application of the substance / the mixture** Acrylic sealant
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Hilti, Inc.  
5400 South 122nd East Ave.  
US-Tulsa, OK 74146  
Phone: (800) 879-8000  
Fax: (800) 879-7000  
Español: (800) 879-5000
- **Information department:**  
chemicals.hse@hilti.com  
see section 16
- **Emergency telephone number:**  
Chem-Trec  
Tel.: 1 800 424 9300  
Tox Info Suisse - 24 h Service  
Tel.: 0041 / 44 251 51 51 (international)

## 2 Hazard(s) identification

- **Classification of the substance or mixture** The product is not classified according to the Globally Harmonized System (GHS).
  - **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** not applicable
  - **Classification system:**  
The classification is in line with current EC lists. It has been expanded, however, by information from technical literature, by information furnished by suppliers and by national regulations which have to be observed in chapter 15.
  - **Label elements**
  - **GHS label elements** Void
  - **Hazard pictograms** Void
  - **Signal word** Void
  - **Hazard statements** Void
  - **Classification system**
  - **NEPA ratings (scale 0-4)**
- 

Health = 0

Fire = 0

Reactivity = 0
- **Other hazards**
  - **Results of PBT and vPvB assessment**
  - **PBT:** Not applicable.
  - **vPvB:** Not applicable.

## 3 Composition/information on ingredients

- **Chemical characterization:** Mixtures
- **Description:** Acrylat-dispersion
- **Dangerous components:** Void
- **Additional information** For the wording of the listed risk phrases refer to section 16.

## 4 First-aid measures

- **Description of first aid measures**
- **General information** No special measures required.
- **After inhalation** Take affected persons into fresh air and keep quiet.
- **After skin contact** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing**  
Rinse out mouth and then drink plenty of water.  
If symptoms persist consult doctor.
- **Information for doctor**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

Trade name: CP 572

(Contd. of page 1)

## 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents** CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture**  
In case of fire, the following can be released:  
Carbon monoxide (CO)  
Carbondioxide (CO<sub>2</sub>)
- **Advice for firefighters**
- **Protective equipment:**  
Wear self-contained respiratory protective device.  
Ensure adequate ventilation

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Wear protective clothing.
- **Environmental precautions:** No special measures required.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **Reference to other sections** No dangerous substances are released.

## 7 Handling and storage

- **Handling**
- **Precautions for safe handling** No special measures required.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** keep containers securely closed and dry, store at 5 - 25 °C / 41 - 77 °F
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Storage class** 12
- **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures** The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:** Not required.
- **Protection of hands:**



Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

EN 374

- **Material of gloves** Nitrile rubber, NBR

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Tightly sealed goggles.

EN 166 + EN 170

(Contd. on page 3)

Trade name: CP 572

(Contd. of page 2)

## · Body protection:



Protective work clothing.

## 9 Physical and chemical properties

### · Information on basic physical and chemical properties

#### · General Information

#### · Appearance:

Form:	Pasty
Color:	Various colors
Odor:	Nearly odorless

#### · Change in condition

Melting point/Melting range:	Not determined.
Boiling point/Boiling range:	>100 °C (>212 °F)

Flash point:	>100 °C (>212 °F) (DIN EN ISO 1523)
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Auto igniting:	Product is not selfigniting.
----------------	------------------------------

Danger of explosion:	Product does not present an explosion hazard.
----------------------	---

Density:	Not determined
----------	----------------

#### · Solubility in / Miscibility with

Water:	mixable
--------	---------

Other information	VOC Content: 91 g/l (EPA Method 24)
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## 10 Stability and reactivity

· **Reactivity** No further relevant information available.

### · Chemical stability

· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

· **Possibility of hazardous reactions** No dangerous reactions known

· **Conditions to avoid** No further relevant information available.

· **Incompatible materials:** No further relevant information available.

· **Hazardous decomposition products:** No dangerous decomposition products known

## 11 Toxicological information

### · Information on toxicological effects

#### · Acute toxicity:

#### · Primary irritant effect:

· **on the skin:** No irritant effect.

· **on the eye:** No irritating effect.

· **Sensitization:** No sensitizing effects known.

#### · Additional toxicological information:

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

#### · IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

#### · NTP (National Toxicology Program)

None of the ingredients is listed

#### · OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

## 12 Ecological information

### · Toxicity

· **Aquatic toxicity:** No further relevant information available.

· **Persistence and degradability** No further relevant information available.

### · Behavior in environmental systems:

· **Bioaccumulative potential** No further relevant information available.

· **Mobility in soil** No further relevant information available.

· **Ecotoxic effects:** Not determined

(Contd. on page 4)

Trade name: CP 572

(Contd. of page 3)

- **Additional ecological information:**
- **General notes:** Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation** Smaller quantities can be disposed of with household waste.
- **European waste catalogue:**  
08 04 00  
08 04 10  
08 04 99
- **Uncleaned packagings:**
- **Recommendation:**  
Dispose of packaging according to regulations on the disposal of packagings.  
Empty packs: May be disposed via the local Green Dot collecting system or EAK waste material code 150102 (plastic packaging materials)

## 14 Transport information

- |  |  |
|--|--|
| · <b>UN-Number</b>   | Void   |
| · <b>DOT, ADR, ADN, IMDG, IATA</b>   | Void   |
| · <b>UN proper shipping name</b>   | Void   |
| · <b>DOT, ADR, ADN, IMDG, IATA</b>   | Void   |
| · <b>Transport hazard class(es)</b>  | Void   |
| · <b>DOT, ADR, ADN, IMDG, IATA</b>   | Void   |
| · <b>Class</b>   | Void   |
| · <b>Packing group</b>   | Void   |
| · <b>DOT, ADR, IMDG, IATA</b>  | Void   |
| · <b>Environmental hazards:</b>  | No   |
| · <b>Marine pollutant:</b>   | No   |
| · <b>Special precautions for user</b>  | Not applicable.                                      |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable.                                      |
| · <b>Transport/Additional information:</b>                                       | Not dangerous according to the above specifications. |
| · <b>UN "Model Regulation":</b>  | Void   |

## 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

### · Section 355 (Extremely hazardous substances):

None of the ingredients is listed.

### · Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

### · TSCA (Toxic Substances Control Act):

All ingredients are listed.

### · Proposition 65:

#### · Chemicals known to cause cancer:

None of the ingredients are listed.

### · Cancerogenity categories

#### · EPA (Environmental Protection Agency)

None of the ingredients is listed.

#### · TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

#### · MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

#### · NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

(Contd. on page 5)



# Safety Data Sheet

acc. to ISO 11014

Printing date 08/03/2015

Version number 1

Reviewed on 08/03/2015

Trade name: CP 572

(Contd. of page 4)

- **National regulations**
- **Information about limitation of use:** Employment restrictions concerning young persons must be observed.
- **Chemical safety assessment:** not required.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing SDS:**

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- **Contact:** Gay Ybanez

- **Date of preparation / last revision** 08/03/2015 / -

- **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

- **\* Data compared to the previous version altered.**

US





## Safety Data Sheet

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### SECTION 1: Identification

#### 1.1. Product identifier

3M(TM) Fire Barrier Sealant FD 150+, Limestone

#### Product Identification Numbers

98-0400-5641-2, 98-0400-5642-0, 98-0400-5643-8, 98-0400-5644-6

#### 1.2. Recommended use and restrictions on use

##### Recommended use

Passive Fire Protection

#### 1.3. Supplier's details

<b>MANUFACTURER:</b>	3M
<b>DIVISION:</b>	Industrial Adhesives and Tapes Division
<b>ADDRESS:</b>	3M Center, St. Paul, MN 55144-1000, USA
<b>Telephone:</b>	1-888-3M HELPS (1-888-364-3577)

#### 1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

### SECTION 2: Hazard identification

#### 2.1. Hazard classification

Skin Corrosion/Irritation: Category 2.

Skin Sensitizer: Category 1A.

Carcinogenicity: Category 1A.

Specific Target Organ Toxicity (single exposure): Category 1.

#### 2.2. Label elements

##### Signal word

Danger

##### Symbols

Exclamation mark | Health Hazard |

##### Pictograms

**Hazard Statements**

Causes skin irritation.

May cause an allergic skin reaction.

May cause cancer.

Causes damage to organs:

cardiovascular system |

nervous system |

kidney/urinary tract |

respiratory system |

**Precautionary Statements****General:**

Keep out of reach of children.

If medical advice is needed, have product container or label at hand.

**Prevention:**

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wear protective gloves.

Do not eat, drink or smoke when using this product.

Wash thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace.

**Response:**

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

IF exposed: Call a POISON CENTER or doctor/physician.

IF exposed or concerned: Get medical advice/attention.

Specific treatment (see Notes to Physician on this label).

**Storage:**

Store locked up.

**Disposal:**

Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

**Notes to Physician:**

This product contains ethylene glycol. Effects of oral ethylene glycol poisoning can be divided into three stages which generally occur over a time-course of hours to days following ingestion: Stage 1 (neurological effects), stage 2 (cardiopulmonary effects) and stage 3 (renal effects). If ethylene glycol poisoning is confirmed, intravenous (IV) administration of ethanol should be considered. Additional pharmacologic and supportive care should be based on the treating physician's judgement.

**2.3. Hazards not otherwise classified**

None.

10% of the mixture consists of ingredients of unknown acute oral toxicity.

31% of the mixture consists of ingredients of unknown acute dermal toxicity.  
38% of the mixture consists of ingredients of unknown acute inhalation toxicity.

### SECTION 3: Composition/information on ingredients

<b>Ingredient</b>	<b>C.A.S. No.</b>	<b>% by Wt</b>
Calcium Carbonate	1317-65-3	30 - 60 Trade Secret *
Polymer NJTS Reg. No. 04499600-7186	Trade Secret*	10 - 30 Trade Secret *
Water	7732-18-5	7 - 13 Trade Secret *
Acrylic Emulsion	70677-00-8	5 - 10 Trade Secret *
Mineral Spirits	64742-88-7	5 - 10 Trade Secret *
Ethylene Glycol	107-21-1	1 - 5 Trade Secret *
Plasticizer	27138-31-4	1 - 5 Trade Secret *
Ethyl Hydroxyethyl Cellulose	9004-58-4	0.5 - 1.5 Trade Secret *
Quartz Silica	14808-60-7	0.1 - 1.0 Trade Secret *
Solvent Dewaxed Heavy Paraffinic Distillate (Petroleum)	64742-65-0	< 0.25 Trade Secret *
2-Octyl-3(2H)-Isothiazolone	26530-20-1	< 0.05 Trade Secret *
5-Chloro-2-Methyl-4-Isothiazoline-3-one	26172-55-4	< 0.05 Trade Secret *
2-Methyl-4-Isothiazoline-3-one	2682-20-4	< 0.05 Trade Secret *

NJTS or NJTSRN: New Jersey Trade Secret Registry Number.

\*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### **Inhalation:**

Remove person to fresh air. If you feel unwell, get medical attention.

##### **Skin Contact:**

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

##### **Eye Contact:**

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

##### **If Swallowed:**

Rinse mouth. If you feel unwell, get medical attention.

#### 4.2. Most important symptoms and effects, both acute and delayed

See Section 11.1. Information on toxicological effects.

#### 4.3. Indication of any immediate medical attention and special treatment required

This product contains ethylene glycol. Effects of oral ethylene glycol poisoning can be divided into three stages which generally occur over a time-course of hours to days following ingestion: Stage 1 (neurological effects), stage 2 (cardiopulmonary effects) and stage 3 (renal effects). If ethylene glycol poisoning is confirmed, intravenous (IV) administration of ethanol should be considered. Additional pharmacologic and supportive care should be based on the treating physician's judgement.

## SECTION 5: Fire-fighting measures

### 5.1. Suitable extinguishing media

Use a fire fighting agent suitable for the surrounding fire.

### 5.2. Special hazards arising from the substance or mixture

None inherent in this product.

### Hazardous Decomposition or By-Products

#### Substance

Carbon monoxide  
Carbon dioxide

#### Condition

During Combustion  
During Combustion

### 5.3. Special protective actions for fire-fighters

No special protective actions for fire-fighters are anticipated.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue. Seal the container. Dispose of collected material as soon as possible.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Keep out of reach of children. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Use personal protective equipment (gloves, respirators, etc.) as required.

### 7.2. Conditions for safe storage including any incompatibilities

Keep cool. Store away from oxidizing agents. Store away from areas where product may come into contact with food or pharmaceuticals. Store in a dry place.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
Ethylene Glycol	107-21-1	ACGIH	CEIL(as aerosol):100 mg/m3	A4: Not class. as human carcin

Ethylene Glycol	107-21-1	CMRG	CEIL(as vapor and aerosol):100 mg/m3	
Calcium Carbonate	1317-65-3	OSHA	TWA(as total dust):15 mg/m3;TWA(respirable fraction):5 mg/m3	
Quartz Silica	14808-60-7	ACGIH	TWA(respirable fraction):0.025 mg/m3	A2: Suspected human carcin.
Quartz Silica	14808-60-7	OSHA	TWA concentration(as total dust):0.3 mg/m3;TWA concentration(respirable):0.1 mg/m3(2.4 millions of particles/cu. ft.)	
5-Chloro-2-Methyl-4-Isothiazoline-3-one	26172-55-4	CMRG	TWA:0.076 mg/m3;STEL:0.23 mg/m3	Sensitizer
2-Methyl-4-Isothiazoline-3-one	2682-20-4	CMRG	TWA:1.5 mg/m3;STEL:4.5 mg/m3	Sensitizer
Paraffin oil	64742-65-0	OSHA	TWA(as mist):5 mg/m3	
PETROLEUM DISTILLATES	64742-65-0	OSHA	TWA:2000 mg/m3(500 ppm)	
Solvent Dewaxed Heavy Paraffinic Distillate (Petroleum)	64742-65-0	CMRG	TWA:5 mg/m3;STEL:10 mg/m3	
Mineral Spirits	64742-88-7	CMRG	TWA:100 ppm	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

## 8.2. Exposure controls

### 8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

### 8.2.2. Personal protective equipment (PPE)

#### Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Safety Glasses with side shields

#### Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.

Gloves made from the following material(s) are recommended: Polymer laminate

#### Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

General Physical Form:	Solid
Specific Physical Form:	Paste
Odor, Color, Grade:	Gray paste with low odor
Odor threshold	<i>No Data Available</i>
Melting point	<i>No Data Available</i>
Flash Point	Flash point > 93 °C (200 °F)
Flammability (solid, gas)	Not Classified
Flammable Limits(LEL)	<i>Not Applicable</i>
Flammable Limits(UEL)	<i>Not Applicable</i>
Density	1.45 g/cm <sup>3</sup>
Specific Gravity	1.45 [Ref Std: WATER=1]
Solubility- non-water	<i>No Data Available</i>
Autoignition temperature	<i>Not Applicable</i>
Decomposition temperature	<i>No Data Available</i>
Volatile Organic Compounds	< 15 % weight
VOC Less H <sub>2</sub> O & Exempt Solvents	< 250 g/l

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

This material is considered to be non reactive under normal use conditions.

### 10.2. Chemical stability

Stable.

### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

### 10.4. Conditions to avoid

None known.

### 10.5. Incompatible materials

Strong oxidizing agents

### 10.6. Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

## SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be

relevant to the material as a whole.

### 11.1. Information on Toxicological effects

#### Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

##### Inhalation:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May cause target organ effects after inhalation.

##### Skin Contact:

Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, dryness, cracking, blistering, and pain.  
Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

##### Eye Contact:

Contact with the eyes during product use is not expected to result in significant irritation.

##### Ingestion:

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

May cause target organ effects after ingestion.

#### Target Organ Effects:

##### Single exposure may cause:

Cardiac Effects: Signs/symptoms may include irregular heartbeat (arrhythmia), changes in heart rate, damage to heart muscle, heart attack, and may be fatal.

Neurological Effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and/or changes in blood pressure and heart rate.

Respiratory Effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish colored skin (cyanosis), sputum production, changes in lung function tests, and/or respiratory failure.

Kidney/Bladder Effects: Signs/symptoms may include changes in urine production, abdominal or lower back pain, increased protein in urine, increased blood urea nitrogen (BUN), blood in urine, and painful urination.

##### Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

<u><b>Ingredient</b></u>	<u><b>C.A.S. No.</b></u>	<u><b>Class Description</b></u>	<u><b>Regulation</b></u>
SILICA, CRYSTALLINE	14808-60-7	Known human carcinogen	National Toxicology Program Carcinogens
Quartz Silica	14808-60-7	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer

#### Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

#### Acute Toxicity

<u><b>Name</b></u>	<u><b>Route</b></u>	<u><b>Species</b></u>	<u><b>Value</b></u>
Overall product	Dermal		No data available; calculated ATE > 5,000 mg/kg
Overall product	Inhalation-		No data available; calculated ATE > 50 mg/l

	Vapor(4 hr)		
Overall product	Ingestion		No data available; calculated ATE > 5,000 mg/kg
Calcium Carbonate	Dermal	Rat	LD50 > 2,000 mg/kg
Calcium Carbonate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 3.0 mg/l
Calcium Carbonate	Ingestion	Rat	LD50 6,450 mg/kg
Polymer NJTS Reg. No. 04499600-7186	Ingestion	Rat	LD50 > 2,000 mg/kg
Mineral Spirits	Inhalation-Vapor		LC50 estimated to be 20 - 50 mg/l
Mineral Spirits	Dermal	Rabbit	LD50 > 3,000 mg/kg
Mineral Spirits	Ingestion	Rat	LD50 > 5,000 mg/kg
Plasticizer	Dermal	Rat	LD50 > 2,000 mg/kg
Plasticizer	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 200 mg/l
Plasticizer	Ingestion	Rat	LD50 3,295 mg/kg
Ethylene Glycol	Ingestion	Human	LD50 1,600 mg/kg
Ethylene Glycol	Inhalation-Dust/Mist (4 hours)	Other	LC50 estimated to be 5 - 12.5 mg/l
Ethylene Glycol	Dermal	Rabbit	9,530 mg/kg
Ethyl Hydroxyethyl Cellulose	Ingestion	Rat	LD50 > 10,000 mg/kg
Solvent Dewaxed Heavy Paraffinic Distillate (Petroleum)	Dermal	Rabbit	LD50 > 5,000 mg/kg
Solvent Dewaxed Heavy Paraffinic Distillate (Petroleum)	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 4 mg/l
Solvent Dewaxed Heavy Paraffinic Distillate (Petroleum)	Ingestion	Rat	LD50 > 5,000 mg/kg
Quartz Silica	Dermal		LD50 estimated to be > 5,000 mg/kg
Quartz Silica	Ingestion		LD50 estimated to be > 5,000 mg/kg
2-Methyl-4-Isothiazoline-3-one	Dermal	Rabbit	LD50 87 mg/kg
5-Chloro-2-Methyl-4-Isothiazoline-3-one	Dermal	Rabbit	LD50 87 mg/kg
2-Methyl-4-Isothiazoline-3-one	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.33 mg/l
2-Methyl-4-Isothiazoline-3-one	Ingestion	Rat	LD50 40 mg/kg
5-Chloro-2-Methyl-4-Isothiazoline-3-one	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.33 mg/l
5-Chloro-2-Methyl-4-Isothiazoline-3-one	Ingestion	Rat	LD50 40 mg/kg

ATE = acute toxicity estimate

### Skin Corrosion/Irritation

Name	Species	Value
Calcium Carbonate	Rabbit	No significant irritation
Polymer NJTS Reg. No. 04499600-7186	Rabbit	Minimal irritation
Mineral Spirits	Rabbit	Irritant
Plasticizer	Rabbit	No significant irritation
Ethylene Glycol	Rabbit	Minimal irritation
Ethyl Hydroxyethyl Cellulose		Minimal irritation
Quartz Silica		No significant irritation
2-Methyl-4-Isothiazoline-3-one	Rabbit	Corrosive
5-Chloro-2-Methyl-4-Isothiazoline-3-one	Rabbit	Corrosive

### Serious Eye Damage/Irritation

Name	Species	Value
Calcium Carbonate	Rabbit	No significant irritation
Polymer NJTS Reg. No. 04499600-7186		Mild irritant
Mineral Spirits	Rabbit	No significant irritation
Plasticizer	Rabbit	No significant irritation
Ethylene Glycol	Rabbit	Mild irritant
Ethyl Hydroxyethyl Cellulose		Mild irritant
2-Methyl-4-Isothiazoline-3-one	Rabbit	Corrosive
5-Chloro-2-Methyl-4-Isothiazoline-3-one	Rabbit	Corrosive



**Skin Sensitization**

Name	Species	Value
Mineral Spirits	Guinea pig	Not sensitizing
Plasticizer	Guinea pig	Not sensitizing
Ethylene Glycol	Human	Some positive data exist, but the data are not sufficient for classification
2-Methyl-4-Isothiazoline-3-one	Human and animal	Sensitizing
5-Chloro-2-Methyl-4-Isothiazoline-3-one	Human and animal	Sensitizing

**Photosensitization**

Name	Species	Value
2-Methyl-4-Isothiazoline-3-one	Human and animal	Not sensitizing
5-Chloro-2-Methyl-4-Isothiazoline-3-one	Human and animal	Not sensitizing

**Respiratory Sensitization**

Name	Species	Value
------	---------	-------

**Germ Cell Mutagenicity**

Name	Route	Value
Mineral Spirits	In vivo	Not mutagenic
Mineral Spirits	In Vitro	Some positive data exist, but the data are not sufficient for classification
Plasticizer	In Vitro	Not mutagenic
Ethylene Glycol	In Vitro	Not mutagenic
Ethylene Glycol	In vivo	Not mutagenic
Quartz Silica	In Vitro	Some positive data exist, but the data are not sufficient for classification
Quartz Silica	In vivo	Some positive data exist, but the data are not sufficient for classification
2-Methyl-4-Isothiazoline-3-one	In vivo	Not mutagenic
2-Methyl-4-Isothiazoline-3-one	In Vitro	Some positive data exist, but the data are not sufficient for classification
5-Chloro-2-Methyl-4-Isothiazoline-3-one	In vivo	Not mutagenic
5-Chloro-2-Methyl-4-Isothiazoline-3-one	In Vitro	Some positive data exist, but the data are not sufficient for classification

**Carcinogenicity**

Name	Route	Species	Value
Mineral Spirits	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Mineral Spirits	Inhalation	Human and animal	Some positive data exist, but the data are not sufficient for classification
Ethylene Glycol	Ingestion	Multiple animal species	Not carcinogenic
Quartz Silica	Inhalation	Human and animal	Carcinogenic
2-Methyl-4-Isothiazoline-3-one	Dermal	Mouse	Not carcinogenic
2-Methyl-4-Isothiazoline-3-one	Ingestion	Rat	Not carcinogenic
5-Chloro-2-Methyl-4-Isothiazoline-3-one	Dermal	Mouse	Not carcinogenic
5-Chloro-2-Methyl-4-Isothiazoline-3-one	Ingestion	Rat	Not carcinogenic

**Reproductive Toxicity****Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test Result	Exposure Duration
Calcium Carbonate	Ingestion	Not toxic to development	Rat	NOAEL 625 mg/kg/day	prematuring & during gestation
Mineral Spirits	Inhalation	Not toxic to development	Rat	NOAEL 2.4 mg/l	during organogenesis
Plasticizer	Ingestion	Not toxic to female reproduction	Rat	NOAEL 500 mg/kg/day	2 generation
Plasticizer	Ingestion	Not toxic to male reproduction	Rat	NOAEL 400 mg/kg/day	2 generation
Plasticizer	Ingestion	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 1,000 mg/kg/day	during gestation
Ethylene Glycol	Ingestion	Not toxic to female reproduction	Multiple animal species	NOAEL 1,000 mg/kg/day	2 years
Ethylene Glycol	Ingestion	Not toxic to male reproduction	Multiple animal species	NOAEL 1,000 mg/kg/day	2 years
Ethylene Glycol	Dermal	Some positive developmental data exist, but the data are not sufficient for classification	Mouse	NOAEL 3,549 mg/kg/day	during organogenesis
Ethylene Glycol	Ingestion	Some positive developmental data exist, but the data are not sufficient for classification	Mouse	LOAEL 750 mg/kg/day	during organogenesis
Ethylene Glycol	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Mouse	NOAEL 1,000 mg/kg/day	during organogenesis
2-Methyl-4-Isothiazoline-3-one	Ingestion	Not toxic to female reproduction	Rat	NOAEL 10 mg/kg/day	2 generation
2-Methyl-4-Isothiazoline-3-one	Ingestion	Not toxic to male reproduction	Rat	NOAEL 10 mg/kg/day	2 generation
2-Methyl-4-Isothiazoline-3-one	Ingestion	Not toxic to development	Rat	NOAEL 15 mg/kg/day	during organogenesis
5-Chloro-2-Methyl-4-Isothiazoline-3-one	Ingestion	Not toxic to female reproduction	Rat	NOAEL 10 mg/kg/day	2 generation
5-Chloro-2-Methyl-4-Isothiazoline-3-one	Ingestion	Not toxic to male reproduction	Rat	NOAEL 10 mg/kg/day	2 generation
5-Chloro-2-Methyl-4-Isothiazoline-3-one	Ingestion	Not toxic to development	Rat	NOAEL 15 mg/kg/day	during organogenesis

**Target Organ(s)****Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Calcium Carbonate	Inhalation	respiratory system	All data are negative	Rat	NOAEL 0.812 mg/l	90 minutes
Mineral Spirits	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Mineral Spirits	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
Mineral Spirits	Inhalation	nervous system	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL 6.5 mg/l	4 hours
Ethylene Glycol	Ingestion	heart   nervous system   kidney and/or bladder	Causes damage to organs	Human	NOAEL Not available	poisoning and/or abuse

		respiratory system				
Ethylene Glycol	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse
Ethylene Glycol	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	poisoning and/or abuse
2-Methyl-4-Isothiazoline-3-one	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
5-Chloro-2-Methyl-4-Isothiazoline-3-one	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Calcium Carbonate	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Mineral Spirits	Inhalation	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 4.6 mg/l	6 months
Mineral Spirits	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 1.9 mg/l	13 weeks
Mineral Spirits	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL 0.6 mg/l	90 days
Mineral Spirits	Inhalation	bone, teeth, nails, and/or hair   blood   liver   muscles	All data are negative	Rat	NOAEL 5.6 mg/l	12 weeks
Mineral Spirits	Inhalation	heart	All data are negative	Multiple animal species	NOAEL 1.3 mg/l	90 days
Plasticizer	Ingestion	hematopoietic system   liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 2,500 mg/kg/day	90 days
Ethylene Glycol	Ingestion	kidney and/or bladder   vascular system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 200 mg/kg/day	2 years
Ethylene Glycol	Ingestion	heart   hematopoietic system   liver   immune system   muscles	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,000 mg/kg/day	2 years
Ethylene Glycol	Ingestion	respiratory system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 12,000 mg/kg/day	2 years
Ethylene Glycol	Ingestion	skin   endocrine system   bone, teeth, nails, and/or hair   nervous system   eyes	All data are negative	Multiple animal species	NOAEL 1,000 mg/kg/day	2 years
Quartz Silica	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure

**Aspiration Hazard**

Name	Value
Mineral Spirits	Aspiration hazard

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

**SECTION 12: Ecological information**

## Ecotoxicological information

<u>Test Organism</u>	<u>Test Type</u>	<u>Result</u>
Water flea, Ceriodaphnia dubia	48 hours Effect Level 50%	96.5 mg/l

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

## Chemical fate information

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

**EPA Hazardous Waste Number (RCRA):** Not regulated

## SECTION 14: Transport Information

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

## SECTION 15: Regulatory information

### 15.1. US Federal Regulations

Contact 3M for more information.

#### 311/312 Hazard Categories:

Fire Hazard - No   Pressure Hazard - No   Reactivity Hazard - No   Immediate Hazard - Yes   Delayed Hazard - Yes

**Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):**

<u>Ingredient</u>	<u>C.A.S. No</u>	<u>% by Wt</u>
Ethylene Glycol	107-21-1	1 - 5

### 15.2. State Regulations

Contact 3M for more information.

#### California Proposition 65

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>Classification</u>
SILICA, CRYSTALLINE (AIRBORNE)	None	Carcinogen

PARTICLES OF RESPIRABLE SIZE)  
Carbon Black

1333-86-4

Carcinogen

WARNING: This product contains a chemical known to the State of California to cause cancer.

### 15.3. Chemical Inventories

The components of this product are in compliance with the new substance notification requirements of CEPA.

The components of this product are in compliance with the chemical notification requirements of TSCA.

Contact 3M for more information.

### 15.4. International Regulations

Contact 3M for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

## SECTION 16: Other information

### NFPA Hazard Classification

**Health:** 2 **Flammability:** 1 **Instability:** 0 **Special Hazards:** None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

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## Safety Data Sheet

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### SECTION 1: Identification

#### 1.1. Product identifier

3M(TM) FireDam (TM) Spray 200- Red

#### Product Identification Numbers

98-0400-5588-5

#### 1.2. Recommended use and restrictions on use

##### Recommended use

Fire retardant spray

#### 1.3. Supplier's details

**MANUFACTURER:** 3M  
**DIVISION:** Industrial Adhesives and Tapes Division  
**ADDRESS:** 3M Center, St. Paul, MN 55144-1000, USA  
**Telephone:** 1-888-3M HELPS (1-888-364-3577)

#### 1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

### SECTION 2: Hazard identification

#### 2.1. Hazard classification

Carcinogenicity: Category 1A.

#### 2.2. Label elements

##### Signal word

Danger

##### Symbols

Health Hazard |

##### Pictograms

**Hazard Statements**

May cause cancer.

**Precautionary Statements****Prevention:**

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Wear protective gloves.

**Response:**

IF exposed or concerned: Get medical advice/attention.

**Storage:**

Store locked up.

**Disposal:**

Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

**2.3. Hazards not otherwise classified**

None.

## SECTION 3: Composition/information on ingredients

<b>Ingredient</b>	<b>C.A.S. No.</b>	<b>% by Wt</b>
Water	7732-18-5	30 - 60 Trade Secret *
Limestone	1317-65-3	10 - 30 Trade Secret *
Polymer NJTS Reg. No. 04499600-7181	Trade Secret*	10 - 30 Trade Secret *
Alumina Trihydrate	21645-51-2	5 - 10 Trade Secret *
Styrene-butadiene polymer	9003-55-8	5 - 10 Trade Secret *
Iron Oxide	1309-37-1	1 - 5 Trade Secret *
Quartz Silica	14808-60-7	< 0.2 Trade Secret *

NJTS or NJTSRN: New Jersey Trade Secret Registry Number.

\*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

## SECTION 4: First aid measures

**4.1. Description of first aid measures****Inhalation:**

Remove person to fresh air. If you feel unwell, get medical attention.

**Skin Contact:**

Wash with soap and water. If you are concerned, get medical advice.

**Eye Contact:**

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

**If Swallowed:**

Rinse mouth. If you feel unwell, get medical attention.

**4.2. Most important symptoms and effects, both acute and delayed**

See Section 11.1. Information on toxicological effects.

**4.3. Indication of any immediate medical attention and special treatment required**

Not applicable

## SECTION 5: Fire-fighting measures

**5.1. Suitable extinguishing media**

Material will not burn. Use a fire fighting agent suitable for the surrounding fire.

**5.2. Special hazards arising from the substance or mixture**

None inherent in this product.

**Hazardous Decomposition or By-Products****Substance**

Carbon monoxide  
Carbon dioxide

**Condition**

During Combustion  
During Combustion

**5.3. Special protective actions for fire-fighters**

No special protective actions for fire-fighters are anticipated.

## SECTION 6: Accidental release measures

**6.1. Personal precautions, protective equipment and emergency procedures**

Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Observe precautions from other sections.

**6.2. Environmental precautions**

Avoid release to the environment.

**6.3. Methods and material for containment and cleaning up**

Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue with water. Seal the container. Dispose of collected material as soon as possible.

## SECTION 7: Handling and storage

**7.1. Precautions for safe handling**

Keep out of reach of children. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Use personal protective equipment (gloves, respirators, etc.) as required.

**7.2. Conditions for safe storage including any incompatibilities**

No special storage requirements.



## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
ROUGE	1309-37-1	OSHA	TWA(as total dust):15 mg/m3;TWA(respirable fraction):5 mg/m3	
Iron Oxide	1309-37-1	ACGIH	TWA(respirable fraction):5 mg/m3	A4: Not class. as human carcin
Iron Oxide	1309-37-1	OSHA	TWA(as fume):10 mg/m3	
Limestone	1317-65-3	OSHA	TWA(as total dust):15 mg/m3;TWA(respirable fraction):5 mg/m3	
Quartz Silica	14808-60-7	ACGIH	TWA(respirable fraction):0.025 mg/m3	A2: Suspected human carcin.
Quartz Silica	14808-60-7	OSHA	TWA concentration(respirable):0.1 mg/m3(2.4 millions of particles/cu. ft.);TWA:0.05 mg/m3	
Aluminum, insoluble compounds	21645-51-2	ACGIH	TWA(respirable fraction):1 mg/m3	A4: Not class. as human carcin

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

### 8.2. Exposure controls

#### 8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

#### 8.2.2. Personal protective equipment (PPE)

##### Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Safety Glasses with side shields

##### Skin/hand protection

No chemical protective gloves are required.

##### Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of

a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

<b>General Physical Form:</b>	Liquid
<b>Odor, Color, Grade:</b>	Viscous red liquid with the consistency of paint.
<b>Odor threshold</b>	<i>No Data Available</i>
<b>pH</b>	7
<b>Melting point</b>	<i>No Data Available</i>
<b>Boiling Point</b>	$\geq 212$ °F
<b>Flash Point</b>	No flash point
<b>Flammability (solid, gas)</b>	Not Applicable
<b>Flammable Limits(LEL)</b>	<i>No Data Available</i>
<b>Flammable Limits(UEL)</b>	<i>No Data Available</i>
<b>Vapor Density</b>	<i>No Data Available</i>
<b>Specific Gravity</b>	1.29 [ <i>Ref Std: WATER=1</i> ]
<b>Solubility in Water</b>	Complete
<b>Solubility- non-water</b>	<i>No Data Available</i>
<b>Partition coefficient: n-octanol/ water</b>	<i>No Data Available</i>
<b>Autoignition temperature</b>	<i>Not Applicable</i>
<b>Decomposition temperature</b>	<i>No Data Available</i>
<b>Viscosity</b>	80,000 centipoise
<b>Volatile Organic Compounds</b>	<i>No Data Available</i>
<b>VOC Less H2O &amp; Exempt Solvents</b>	$\leq 3$ g/l [ <i>Test Method: tested per EPA method 24</i> ]

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

This material is considered to be non reactive under normal use conditions.

### 10.2. Chemical stability

Stable.

### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

### 10.4. Conditions to avoid

None known.

### 10.5. Incompatible materials

None known.

### 10.6. Hazardous decomposition products

#### Substance

None known.

#### Condition

Refer to section 5.2 for hazardous decomposition products during combustion.

## SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

### 11.1. Information on Toxicological effects

#### Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

##### Inhalation:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May cause additional health effects (see below).

##### Skin Contact:

Contact with the skin during product use is not expected to result in significant irritation.

##### Eye Contact:

Contact with the eyes during product use is not expected to result in significant irritation.

##### Ingestion:

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

#### Additional Health Effects:

##### Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

<u>Ingredient</u>	<u>CAS No.</u>	<u>Class Description</u>	<u>Regulation</u>
SILICA, CRYSTAL AIRRESP	14808-60-7	Known human carcinogen	National Toxicology Program Carcinogens
Quartz Silica	14808-60-7	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer

#### Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

#### Acute Toxicity

<u>Name</u>	<u>Route</u>	<u>Species</u>	<u>Value</u>
Overall product	Ingestion		No data available; calculated ATE > 5,000 mg/kg
Polymer NJTS Reg. No. 04499600-7181	Dermal		LD50 estimated to be > 5,000 mg/kg
Polymer NJTS Reg. No. 04499600-7181	Ingestion	Rat	LD50 > 2,000 mg/kg
Limestone	Dermal	Rat	LD50 > 2,000 mg/kg
Limestone	Inhalation-Dust/Mist (4 hours)	Rat	LC50 3 mg/l
Limestone	Ingestion	Rat	LD50 6,450 mg/kg
Alumina Trihydrate	Dermal		LD50 estimated to be > 5,000 mg/kg
Alumina Trihydrate	Ingestion	Rat	LD50 > 5,000 mg/kg
Styrene-butadiene polymer	Dermal	Rabbit	LD50 > 2,000 mg/kg
Styrene-butadiene polymer	Ingestion	Rat	LD50 > 5,000 mg/kg
Iron Oxide	Dermal	Not	LD50 3,100 mg/kg

Iron Oxide	Ingestion	available Not available	LD50 3,700 mg/kg
Quartz Silica	Dermal		LD50 estimated to be > 5,000 mg/kg
Quartz Silica	Ingestion		LD50 estimated to be > 5,000 mg/kg

ATE = acute toxicity estimate

### Skin Corrosion/Irritation

Name	Species	Value
Polymer NJTS Reg. No. 04499600-7181	Rabbit	Minimal irritation
Limestone	Rabbit	No significant irritation
Alumina Trihydrate	Rabbit	No significant irritation
Styrene-butadiene polymer	Professional judgement	No significant irritation
Iron Oxide	Rabbit	No significant irritation
Quartz Silica	Professional judgement	No significant irritation

### Serious Eye Damage/Irritation

Name	Species	Value
Polymer NJTS Reg. No. 04499600-7181	Professional judgement	Mild irritant
Limestone	Rabbit	No significant irritation
Alumina Trihydrate	Rabbit	No significant irritation
Iron Oxide	Rabbit	No significant irritation

### Skin Sensitization

Name	Species	Value
Alumina Trihydrate	Guinea pig	Not sensitizing
Iron Oxide	Human	Some positive data exist, but the data are not sufficient for classification

### Respiratory Sensitization

For the component/components, either no data are currently available or the data are not sufficient for classification.

### Germ Cell Mutagenicity

Name	Route	Value
Iron Oxide	In Vitro	Not mutagenic
Quartz Silica	In Vitro	Some positive data exist, but the data are not sufficient for classification
Quartz Silica	In vivo	Some positive data exist, but the data are not sufficient for classification

### Carcinogenicity

Name	Route	Species	Value
Alumina Trihydrate	Not Specified	Multiple animal species	Not carcinogenic
Iron Oxide	Inhalation	Human	Some positive data exist, but the data are not sufficient for classification
Quartz Silica	Inhalation	Human and animal	Carcinogenic

**Reproductive Toxicity****Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test Result	Exposure Duration
Limestone	Ingestion	Not toxic to development	Rat	NOAEL 625 mg/kg/day	premating & during gestation
Alumina Trihydrate	Ingestion	Not toxic to development	Rat	NOAEL 768 mg/kg/day	during organogenesis

**Target Organ(s)****Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Limestone	Inhalation	respiratory system	All data are negative	Rat	NOAEL 0.812 mg/l	90 minutes

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Limestone	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Iron Oxide	Inhalation	pulmonary fibrosis   pneumoconiosis	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Quartz Silica	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure

**Aspiration Hazard**

For the component/components, either no data are currently available or the data are not sufficient for classification.

**Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.**

**SECTION 12: Ecological information****Ecotoxicological information**

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

**Chemical fate information**

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

**SECTION 13: Disposal considerations****13.1. Disposal methods**

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. If no other disposal options are available, waste product that has been completely cured or polymerized may be placed in a landfill properly designed for industrial waste. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated &

disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

**EPA Hazardous Waste Number (RCRA):** Not regulated

## SECTION 14: Transport Information

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

## SECTION 15: Regulatory information

### 15.1. US Federal Regulations

Contact 3M for more information.

#### 311/312 Hazard Categories:

Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - No Delayed Hazard - Yes

### 15.2. State Regulations

Contact 3M for more information.

#### California Proposition 65

<u><b>Ingredient</b></u>	<u><b>C.A.S. No.</b></u>	<u><b>Classification</b></u>
SILICA, CRYSTALLINE (AIRBORNE PARTICLES OF RESPIRABLE SIZE)	None	Carcinogen

**WARNING:** This product contains a chemical known to the State of California to cause cancer.

### 15.3. Chemical Inventories

The components of this material are in compliance with the provisions of Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply. Contact the selling division for additional information.

The components of this product are in compliance with the new substance notification requirements of CEPA.

The components of this material are in compliance with the provisions of the Korean Toxic Chemical Control Law. Certain restrictions may apply. Contact the selling division for additional information.

The components of this product are in compliance with the chemical notification requirements of TSCA.

Contact 3M for more information.

### 15.4. International Regulations

Contact 3M for more information.

**This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.**

## SECTION 16: Other information

### NFPA Hazard Classification

**Health:** 1 **Flammability:** 0 **Instability:** 0 **Special Hazards:** None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

**HMIS Hazard Classification**

**Health:** \*0   **Flammability:** 1   **Physical Hazard:** 0   **Personal Protection:** X - See PPE section.

Hazardous Material Identification System (HMIS® IV) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® IV ratings are to be used with a fully implemented HMIS® IV program. HMIS® is a registered mark of the American Coatings Association (ACA).

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**Reason for Reissue**

Conversion to GHS format SDS.

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# Safety Data Sheet

## ELASTOSPRAY® 8000A ISOCYANATE

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(30232235/SDS\_GEN\_US/EN)

### 1. Product and Company Identification

Company

BASF CORPORATION  
100 Campus Drive  
Florham Park, NJ 07932, USA

24 Hour Emergency Response Information

CHEMTREC: 1-800-424-9300  
BASF HOTLINE: 1-800-832-HELP

Chemical family:

aromatic isocyanates

Synonyms:

POLYMETHYLENE POLYPHENYLISOCYANATE

### 2. Hazards Identification

Emergency overview**WARNING:**

CONTAINS DIPHENYLMETHANE DIISOCYANATE (CAS No. 101-68-8). INHALATION OF MDI MISTS OR VAPORS MAY CAUSE RESPIRATORY IRRITATION, BREATHLESSNESS, CHEST DISCOMFORT AND REDUCED PULMONARY FUNCTION. OVEREXPOSURE WELL ABOVE THE PEL MAY RESULT IN BRONCHITIS, BRONCHIAL SPASMS AND PULMONARY EDEMA. LONG-TERM EXPOSURE TO ISOCYANATES HAS BEEN REPORTED TO CAUSE LUNG DAMAGE, INCLUDING REDUCED LUNG FUNCTION WHICH MAY BE PERMANENT. ACUTE OR CHRONIC OVEREXPOSURE TO ISOCYANATES MAY CAUSE SENSITIZATION IN SOME INDIVIDUALS, RESULTING IN ALLERGIC RESPIRATORY REACTIONS INCLUDING WHEEZING, SHORTNESS OF BREATH AND DIFFICULTY BREATHING.  
AVOID CONTACT WITH SKIN AND EYES.  
SKIN OR EYE CONTACT MAY CAUSE IRRITATION.  
ANIMAL TESTS AND OTHER RESEARCH INDICATE THAT SKIN CONTACT WITH MDI MAY PLAY A ROLE IN CAUSING RESPIRATORY SENSITIZATION.

State of matter: liquid

Colour: dark amber

Odour: faint odour, aromatic

Potential health effects**Primary routes of exposure:**

Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases.

**Acute toxicity:**

Of moderate toxicity after short-term inhalation. Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact.

Inhalation of vapours may cause irritation of the mucous membranes of the nose, throat or trachea, breathlessness, chest discomfort, difficult breathing and reduced pulmonary function. Inhalation exposure well above the PEL may result additionally in eye irritation, headache, chemical bronchitis, asthma-like findings or

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pulmonary edema. Isocyanates have also been reported to cause hypersensitivity pneumonitis, which is characterized by flu-like symptoms, the onset of which may be delayed. Gastrointestinal symptoms include nausea, vomiting and abdominal pain.

### **Irritation / corrosion:**

Irritating to eyes, respiratory system and skin.

### **Assessment other acute effects:**

Causes temporary irritation of the respiratory tract.

### **Sensitization:**

The substance may cause sensitization of the respiratory tract. Sensitization after skin contact possible. Studies in animals suggest that dermal exposure may lead to pulmonary sensitization. However, the relevance of this result for humans is unclear.

As a result of previous repeated overexposures or a single large dose, certain individuals will develop isocyanate sensitization (chemical asthma) which will cause them to react to a later exposure to isocyanate at levels well below the PEL/TLV. These symptoms, which include chest tightness, wheezing, cough, shortness of breath, or asthmatic attack, could be immediate or delayed up to several hours after exposure. Similar to many non-specific asthmatic responses, there are reports that once sensitized an individual can experience these symptoms upon exposure to dust, cold air, or other irritants. This increased lung sensitivity can persist for weeks and in severe cases for several years. Chronic overexposure to isocyanates has also been reported to cause lung damage, including a decrease in lung function, which may be permanent. Prolonged contact can cause reddening, swelling, rash, scaling, or blistering. In those who have developed a skin sensitization, these symptoms can develop as a result of contact with very small amounts of liquid material, or even as a result of vapour-only exposure.

### **Chronic toxicity:**

**Carcinogenicity:** A carcinogenic potential cannot be excluded after prolonged exposure to severely irritating concentrations. These effects are not relevant to humans at occupational levels of exposure.

**Repeated dose toxicity:** After repeated exposure the prominent effect is local irritation. The substance may cause damage to the olfactory epithelium after repeated inhalation. These effects are not relevant to humans at occupational levels of exposure.

The substance may cause damage to the olfactory epithelium after repeated inhalation. These effects are not relevant to humans at occupational levels of exposure.

**Reproductive toxicity:** Repeated inhalative uptake of the substance did not cause damage to the reproductive organs.

**Teratogenicity:** The substance did not cause malformations in animal studies; however, toxicity to development was observed at high doses that were toxic to the parental animals.

**Genotoxicity:** The substance was mutagenic in various bacterial test systems; however, these results could not be confirmed in tests with mammals.

### **Medical conditions aggravated by overexposure:**

The isocyanate component is a respiratory sensitizer. It may cause allergic reaction leading to asthma-like spasms of the bronchial tubes and difficulty in breathing. Medical supervision of all employees who handle or come into contact with isocyanates is recommended. Contact may aggravate pulmonary disorders. Persons with history of respiratory disease or hypersensitivity should not be exposed to this product. Preemployment and periodic medical examinations with respiratory function tests (FEV<sub>1</sub>, FVC as a minimum) are suggested. Persons with asthmatic conditions, chronic bronchitis, other chronic respiratory diseases, recurrent eczema or pulmonary sensitization should be excluded from working with isocyanates. Once a person is diagnosed as having pulmonary sensitization (allergic asthma) to isocyanates, further exposure is not recommended.

### **Signs and symptoms of overexposure:**

Eye irritation, skin irritation, allergic symptoms

Symptoms can appear later.

*Information on: Diphenylmethane-4,4'-diisocyanate (MDI)*

*Respiratory sensitization may result in allergic (asthma-like) signs in the lower respiratory tract including wheezing, shortness of breath and difficulty breathing, the onset of which may be delayed. Repeated inhalation of high concentrations may cause lung damage, including reduced lung function, which may be permanent.*

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*Substances eliciting lower respiratory tract irritation may worsen the asthma-like reactions that may be produced by product exposures.*

### **Potential environmental effects**

#### **Aquatic toxicity:**

The product may hydrolyse. The test result maybe partially due to degradation products. The product has not been tested. The statement has been derived from products of a similar structure or composition.

## 3. Composition / Information on Ingredients

<b><u>CAS Number</u></b>	<b><u>Content (W/W)</u></b>	<b><u>Chemical name</u></b>
101-68-8	38.0 %	Diphenylmethane-4,4'-diisocyanate (MDI)
26447-40-5	< 10.0 %	MDI Mixed Isomers
9016-87-9	< 55.0 %	P-MDI

## 4. First-Aid Measures

#### **General advice:**

Remove contaminated clothing.

#### **If inhaled:**

Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary. Immediate medical attention required.

#### **If on skin:**

Wash affected areas thoroughly with soap and water. If irritation develops, seek medical attention.

#### **If in eyes:**

In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Immediate medical attention required.

#### **If swallowed:**

Rinse mouth and then drink plenty of water. Do not induce vomiting. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Immediate medical attention required.

#### **Note to physician**

Antidote:	Specific antidotes or neutralizers to isocyanates do not exist.
Treatment:	Treatment should be supportive and based on the judgement of the physician in response to the reaction of the patient.

## 5. Fire-Fighting Measures

Flash point:	220 °C	(open cup)
Autoignition:	> 250 °C	
Self-ignition temperature:		not self-igniting

#### **Suitable extinguishing media:**

water spray, dry powder, carbon dioxide, foam

#### **Hazards during fire-fighting:**

nitrous gases, fumes/smoke, isocyanate, vapour

#### **Protective equipment for fire-fighting:**

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

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### 6. Accidental release measures

#### Personal precautions:

Clear area. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.

#### Environmental precautions:

Do not discharge into drains/surface waters/groundwater.

#### Cleanup:

Dike spillage.

For small amounts: Absorb isocyanate with suitable absorbent material (see § 40 CFR, sections 260, 264 and 265 for further information). Shovel into open container. Do not make container pressure tight. Move container to a well-ventilated area (outside). Spill area can be decontaminated with the following recommended decontamination solution: Mixture of 90 % water, 8 % concentrated ammonia, 2 % detergent. Add at a 10 to 1 ratio. Allow to stand for at least 48 hours to allow escape of evolved carbon dioxide.

For large amounts: If temporary control of isocyanate vapor is required, a blanket of protein foam or other suitable foam (available from most fire departments) may be placed over the spill. Transfer as much liquid as possible via pump or vacuum device into closed but not sealed containers for disposal.

For residues: The following measures should be taken for final cleanup: Wash down spill area with decontamination solution. Allow solution to stand for at least 10 minutes.

### 7. Handling and Storage

#### Handling

##### General advice:

If bulging of drum occurs, transfer to well ventilated area, puncture to relieve pressure, open vent and let stand for 48 hours before resealing.

##### Protection against fire and explosion:

No explosion proofing necessary.

#### Storage

##### Storage stability:

Storage temperature: 32 - 110 °F  
Protect against moisture.

### 8. Exposure Controls and Personal Protection

#### Components with workplace control parameters

P-MDI	OSHA	CLV	0.02 ppm	0.2 mg/m3	;
	ACGIH	TWA value	0.005 ppm		;
Diphenylmethane-4,4'-diisocyanate (MDI)	OSHA	CLV	0.02 ppm	0.2 mg/m3	;
	ACGIH	TWA value	0.005 ppm		;

##### Advice on system design:

Provide local exhaust ventilation to maintain recommended P.E.L.

#### Personal protective equipment

##### Respiratory protection:

When workers are facing concentrations above the occupational exposure limits they must use appropriate certified respirators. When atmospheric levels may exceed the occupational exposure limit (PEL or TLV) NIOSH-certified air-purifying respirators equipped with an organic vapor sorbent and particulate filter can be used as long as appropriate precautions and change out schedules are in place. For emergency or non-routine, high exposure situations, including confined space entry, use a NIOSH-certified full facepiece pressure demand

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self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions.

### Hand protection:

Chemical resistant protective gloves should be worn to prevent all skin contact., Suitable materials may include, chloroprene rubber (Neoprene), nitrile rubber (Buna N), chlorinated polyethylene, polyvinylchloride (Pylox), butyl rubber, depending upon conditions of use.

### Eye protection:

Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

### Body protection:

Cover as much of the exposed skin as possible to prevent all skin contact., Suitable materials may include, saran-coated material, depending upon conditions of use.

### General safety and hygiene measures:

Wear protective clothing as necessary to prevent contact. Eye wash fountains and safety showers must be easily accessible. Observe the appropriate PEL or TLV value. Wash soiled clothing immediately. Contaminated equipment or clothing should be cleaned after each use or disposed of.

## 9. Physical and Chemical Properties

Form:	liquid	
Odour:	faint odour, aromatic	
Colour:	dark amber	
pH value:		not applicable
Freezing point:	3 °C	( 1 ATM)
Boiling point:	200 °C	( 5 mmHg)
Vapour pressure:	0.00016 mmHg	( 20 °C)
Density:	1.22 g/cm3	( 20 °C)
Relative density:	1.22	( 25 °C)
Bulk density:	10.17 lb/USg	( 25 °C)
Viscosity, dynamic:	200 mPa.s	( 20 °C)
Solubility in water:		Reacts with water.
Molar mass:	360 g/mol	
Other Information:	If necessary, information on other physical and chemical parameters is indicated in this section.	

## 10. Stability and Reactivity

### Conditions to avoid:

Avoid moisture.

### Substances to avoid:

water, alcohols, strong bases, Substances/products that react with isocyanates.

### Hazardous reactions:

The product is chemically stable.

Reacts with water, with formation of carbon dioxide. Risk of bursting. Reacts with alcohols. Reacts with acids. Reacts with alkalis. Reacts with amines. Risk of exothermic reaction. Risk of violent reaction. Risk of polymerization. Contact with certain rubbers and plastics can cause brittleness of the substance/product with subsequent loss in strength.

### Decomposition products:

Hazardous decomposition products: carbon monoxide, hydrogen cyanide, nitrogen oxides, aromatic isocyanates, gases/vapours

### Thermal decomposition:

> 260 °C

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No data available.

### Corrosion to metals:

No corrosive effect on metal.

### Oxidizing properties:

not fire-propagating

## 11. Toxicological information

### Acute toxicity

#### Oral:

Information on: Diphenylmethane-4,4'-diisocyanate (MDI)

Type of value: LD50

Species: rat (male/female)

Value: > 2,000 mg/kg (Directive 84/449/EEC, B.1)

-----

#### Inhalation:

Information on: Diphenylmethane-4,4'-diisocyanate (MDI)

Type of value: LC10

Species: rat

Value: 2.24 mg/l (OECD Guideline 403)

Exposure time: 1 h

An aerosol was tested.

-----

#### Dermal:

Information on: Diphenylmethane-4,4'-diisocyanate (MDI)

Type of value: LD50

Species: rabbit (male/female)

Value: > 9,400 mg/kg

-----

### Irritation / corrosion:

#### Skin:

Information on: Diphenylmethane-4,4'-diisocyanate (MDI)

Species: rabbit

Result: Irritating.

Method: Draize test

-----

#### Eye:

Information on: Diphenylmethane-4,4'-diisocyanate (MDI)

Species: rabbit

Result: Irritating.

Method: Draize test

-----

### Sensitization:

Information on: Diphenylmethane-4,4'-diisocyanate (MDI)

Buehler test

Species: guinea pig

Result: sensitizing

Mouse Local Lymph Node Assay (LLNA)

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*Species: mouse*  
*Result: sensitizing*  
*Can cause skin sensitization*  
*other*  
*Species: guinea pig*  
*Result: sensitizing*  
*Studies in animals suggest that dermal exposure may lead to pulmonary sensitization. However, the relevance of this result for humans is unclear.*  
-----

### Repeated dose toxicity

*Information on: Diphenylmethane-4,4'-diisocyanate (MDI)*  
*Experimental/calculated data:*  
*rat (Wistar) (male/female) Inhalation 2 yrs, 6 hr/day 0, 0.2, 1, 6 mg/m3, olfactory epithelium*  
*NOAEL: 0.2 mg/m3*  
*LOAEL: 1 mg/m3*  
*The substance may cause damage to the olfactory epithelium after repeated inhalation. These effects are not relevant to humans at occupational levels of exposure. Repeated inhalative uptake of the substance did not cause damage to the reproductive organs.*  
*, Lung*  
-----

### Genetic toxicity

*Experimental/calculated data:*  
*OECD Guideline 471 Ames-test Salmonella typhimurium:with and without metabolic activation ambiguous*

*Information on: Diphenylmethane-4,4'-diisocyanate (MDI)*  
*Experimental/calculated data:*  
*OECD Guideline 471 Ames-test Salmonella typhimurium:with and without metabolic activation ambiguous*  
-----

*Experimental/calculated data:*  
*OECD Guideline 474 Micronucleus assay rat (male) Inhalation negative*  
*No clastogenic effect reported.*

### Carcinogenicity

*Experimental/calculated data:*  
*OECD Guideline 453 rat Inhalation 0, 0.2, 1, 6 mg/m3*  
*Result: Lung tumors*  
*A carcinogenic potential cannot be excluded after prolonged exposure to severely irritating concentrations. These effects are not relevant to humans at occupational levels of exposure.*

### Development

*OECD Guideline 414 rat Inhalation 0, 1, 4, 12 mg/m3*  
*NOAEL Mat.: 4 mg/m3*  
*NOAEL Teratog.: 4 mg/m3*  
*The substance did not cause malformations in animal studies; however, toxicity to development was observed at high doses that were toxic to the parental animals.*

### Aspiration Hazard:

No aspiration hazard expected.

---

## 12. Ecological Information

### Aquatic toxicity

*Information on: Diphenylmethane-4,4'-diisocyanate (MDI)*  
*Assessment of aquatic toxicity:*



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*The product may hydrolyse. The test result maybe partially due to degradation products. The product has not been tested. The statement has been derived from products of a similar structure or composition.*

-----

### Fish

Acute:  
OECD Guideline 203 static  
Brachydanio rerio/LC0 (96 h): > 1,000 mg/l

### Aquatic invertebrates

Acute:  
OECD Guideline 202, part 1 static  
Daphnia magna/EC50 (24 h): > 1,000 mg/l

### Aquatic plants

Toxicity to aquatic plants:  
OECD Guideline 201 static  
green algae/EC0 (72 h): 1,640 mg/l

### Microorganisms

Toxicity to microorganisms:  
OECD Guideline 209 aquatic  
aerobic bacteria from a domestic water treatment plant/EC50 (3 h): > 100 mg/l

### Degradability / Persistence

#### Biological / Abiological Degradation

Test method: OECD Guideline 302 C (aerobic), activated sludge  
Method of analysis: BOD of the ThOD  
Degree of elimination: 0 % (28 d)  
Evaluation: Poorly biodegradable.  
Poorly biodegradable.  
The product is unstable in water. The elimination data also refer to products of hydrolysis.

### Hydrolysis

Test method: (abiotic)  
Half-life: 20 h (25 °C)

### Bioaccumulation

OECD Guideline 305 E  
carp (28 d) Bioconcentration factor 200

---

## 13. Disposal considerations

### Waste disposal of substance:

Incinerate or dispose of in a licensed facility. Do not discharge substance/product into sewer system.

### Container disposal:

#### DRUMS:

Steel drums must be emptied and can be sent to a licensed drum reconditioner for reuse, a scrap metal dealer or an approved landfill. Do not attempt to refill or clean containers since residue is difficult to remove. Under no circumstances should empty drums be burned or cut open with gas or electric torch as toxic decomposition products may be liberated. Do not reuse empty containers.

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### 14. Transport Information

#### Land transport USDOT

Not classified as a dangerous good under transport regulations

#### Sea transport IMDG

Not classified as a dangerous good under transport regulations

#### Air transport IATA/ICAO

Not classified as a dangerous good under transport regulations

### 15. Regulatory Information

#### Federal Regulations

##### Registration status:

Chemical TSCA, US released / listed

OSHA hazard category: Chronic target organ effects reported; ACGIH TLV established

EPCRA 311/312 (Hazard categories): Acute; Chronic

##### EPCRA 313:

##### CAS Number

##### Chemical name

Diisocyanates Compound Category

##### CERCLA RQ

5000 LBS

##### CAS Number

101-68-8

##### Chemical name

Diphenylmethane-4,4'-diisocyanate (MDI)

Reportable Quantity for release: 13,157.9 lb

#### State regulations

##### State RTK

MA, NJ, PA  
MA, NJ, PA

##### CAS Number

101-68-8  
9016-87-9

##### Chemical name

Diphenylmethane-4,4'-diisocyanate (MDI)  
P-MDI

### 16. Other Information

#### NFPA Hazard codes:

Health: 2

Fire: 1

Reactivity: 1

Special:

#### HMIS III rating

Health: 2

Flammability: 1

Physical hazard: 1

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NFPA and HMIS use a numbering scale ranging from 0 to 4 to indicate the degree of hazard. A value of zero means that the substance possesses essentially no hazard; a rating of four indicates extreme danger. Although similar, the two rating systems are intended for different purposes, and use different criteria. The NFPA system was developed to provide an on-the-spot alert to the hazards of a material, and their severity, to emergency responders. The HMIS system was designed to communicate workplace hazard information to employees who handle hazardous chemicals.

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

---

### MSDS Prepared by:

BASF NA Product Regulations

msds@basf.com

MSDS Prepared on: 2011/11/18

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END OF DATA SHEET

# Safety Data Sheet

## SPRAYTITE® 178-XF B-RESIN

Revision date : 2011/02/25

Version: 3.0

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(30288742/SDS\_GEN\_US/EN)

### 1. Product and Company Identification

Use: Chemical

Company

BASF CORPORATION  
100 Park Avenue  
Florham Park, NJ 07932, USA

24 Hour Emergency Response Information

CHEMTREC: 1-800-424-9300  
BASF HOTLINE: 1-800-832-HELP (4357)

Chemical family:

resin

Synonyms:

Urethane System Resin Component

### 2. Hazards Identification

Emergency overview

## CAUTION:

MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.  
SENSITIZER.

MAY CAUSE LIVER DAMAGE BASED ON ANIMAL DATA.  
MAY CAUSE KIDNEY DAMAGE BASED ON ANIMAL DATA.  
INGESTION MAY CAUSE GASTRIC DISTURBANCES.  
CAN CAUSE CENTRAL NERVOUS SYSTEM DAMAGE.

State of matter: liquid

Colour: various, depending on the colourant

Odour: amine-like

Potential health effects**Primary routes of exposure:**

Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases.

**Acute toxicity:**

Ingestion may cause gastrointestinal disturbances.

**Irritation / corrosion:**

Irritating to respiratory system.

**Assessment other acute effects:**

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

# Safety Data Sheet

## SPRAYTITE® 178-XF B-RESIN

Revision date : 2011/02/25  
Version: 3.0

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### Chronic toxicity:

**Carcinogenicity:** The chemical structure does not suggest a specific alert for such an effect.

**Repeated dose toxicity:** Repeated exposure to the substance by dermal administration leads to effects similar to those found after single exposure. Repeated exposure to the substance by inhalative administration leads to effects similar to those found after single exposure. Repeated exposure to the substance by oral administration leads to effects similar to those found after single exposure.

**Reproductive toxicity:** The chemical structure does not suggest such an effect.

**Teratogenicity:** The chemical structure does not suggest such an effect.

**Genotoxicity:** The chemical structure does not suggest such an effect.

### Signs and symptoms of overexposure:

*Information on: Dimethylaminoethanol*

*Overexposure may cause: shortness of breath, restlessness, coughing, headache*  
-----

### Potential environmental effects

#### Aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms.

#### Degradation / environmental fate:

The product has not been tested.

#### Bioaccumulation / bioconcentration:

The product has not been tested.

## 3. Composition / Information on Ingredients

<u>CAS Number</u>	<u>Content (W/W)</u>	<u>Chemical name</u>
	< 80.0 %	Polyol
	< 15.0 %	Flame Retardant
	< 3.0 %	Surfactant
25265-71-8	< 3.0 %	Dipropylene Glycol
	< 2.0 %	Catalyst
108-01-0	< 5.0 %	2-dimethylaminoethanol
460-73-1	< 10.0 %	1,1,1,3,3-pentafluoropropane

## 4. First-Aid Measures

### General advice:

Remove contaminated clothing.

### If inhaled:

Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary. Immediate medical attention required.

### If on skin:

Wash affected areas thoroughly with soap and water. If irritation develops, seek medical attention.

### If in eyes:

In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Immediate medical attention required.

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**If swallowed:**

Rinse mouth and then drink plenty of water. Do not induce vomiting. Immediate medical attention required.

---

### 5. Fire-Fighting Measures

Flash point:	> 200 °F	(closed cup)
	> 93.3 °C	(closed cup)
Autoignition:		Unspecified
Self-ignition temperature:		not self-igniting

**Suitable extinguishing media:**

water spray, dry powder, carbon dioxide, foam

**Hazards during fire-fighting:**

No particular hazards known.

**Protective equipment for fire-fighting:**

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

---

### 6. Accidental release measures

**Cleanup:**

Spills should be contained, solidified, and placed in suitable containers for disposal.

---

### 7. Handling and Storage

**Handling**

**General advice:**

Product should not be mixed with air above atmospheric pressure for leak testing or any other purpose. Use dry nitrogen to transfer or leak test equipment pressurized with product.

**Protection against fire and explosion:**

No explosion proofing necessary.

**Storage**

**General advice:**

Product that is frozen and/or tending to sedimentation can be liquified or homogenized by careful application of indirect heat (do not use flames or direct contact with a heat source). Protect from direct sunlight. Keep in a cool, well-ventilated place. Avoid extreme heat. Store protected against freezing. Stored and transported in a cylinder under pressure. Must not be repacked by the customer.

**Storage stability:**

Storage temperature: 70 - 80 °F

Protect against moisture. Store in unopened original containers in a cool and dry place.

---

### 8. Exposure Controls and Personal Protection

**Advice on system design:**

Provide local exhaust ventilation to control vapours/mists.

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### Personal protective equipment

#### **Respiratory protection:**

Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator as needed.

#### **Hand protection:**

Chemical resistant protective gloves

#### **Eye protection:**

Wear face shield or tightly fitting safety goggles (chemical goggles) if splashing hazard exists.

#### **General safety and hygiene measures:**

Avoid contact with skin. Handle in accordance with good industrial hygiene and safety practice. Wear protective clothing as necessary to prevent contact. Avoid inhalation of vapours/mists. Wash soiled clothing immediately.

## 9. Physical and Chemical Properties

Form:	liquid	
Odour:	amine-like	
Colour:	various, depending on the colourant	
pH value:	>= 7	
Freezing point:		Unspecified
Boiling point:		Unspecified
Vapour pressure:		Unspecified
Density:	9.60 - 9.83 lb/USg	( 25 °C)
Partitioning coefficient n-octanol/water (log Pow):		Unspecified
Viscosity, dynamic:	350 - 650 mPa.s	( 21 °C)
Solubility in water:		slightly soluble

## 10. Stability and Reactivity

#### **Conditions to avoid:**

> 80 degrees Fahrenheit

Avoid moisture. Avoid direct sunlight. Avoid excessive temperatures.

#### **Hazardous reactions:**

The product is chemically stable.

#### **Decomposition products:**

Hazardous decomposition products: carbon monoxide, carbon dioxide

#### **Thermal decomposition:**

No data available.

#### **Oxidizing properties:**

not fire-propagating

## 11. Toxicological information

### **Acute toxicity**

*Information on: Fluorocarbons*

*Assessment of acute toxicity:*

*Has a narcotic effect. May cause drowsiness and dizziness.*

*Information on: 2-dimethylaminoethanol*

*Assessment of acute toxicity:*

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*Of moderate toxicity after short-term skin contact. Of moderate toxicity after single ingestion. Of pronounced toxicity after short-term inhalation.*

*Information on: Dipropylene glycol*

*Assessment of acute toxicity:*

*Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact.*

*Information on: Triethyl Phosphate*

*Assessment of acute toxicity:*

*Inhalation causes headache/nausea. Inhalation of vapours leads to irritation of respiratory tract and mucous membranes, headache, nausea, dizziness, vomiting. Ingestion may cause moderate to severe gastric irritation including nausea, vomiting and pain.*  
-----

### **Irritation / corrosion**

*Information on: Polyol*

*Assessment of irritating effects:*

*Contact may result in skin irritation. Contact may result in eye irritation.*

*Information on: 2-dimethylaminoethanol*

*Assessment of irritating effects:*

*Corrosive! Damages skin and eyes. May cause severe damage to the eyes.*  
-----

### **Sensitization**

*Information on: 2-dimethylaminoethanol*

*Assessment of sensitization:*

*Skin sensitizing effects were not observed in animal studies.*  
-----

### **Repeated dose toxicity**

*Information on: Dipropylene glycol*

*Assessment of repeated dose toxicity:*

*The substance may cause damage to the liver after repeated ingestion of high doses, as shown in animal studies. The substance may cause damage to the kidney after repeated ingestion of high doses, as shown in animal studies.*

*Information on: Triethyl Phosphate*

*Assessment of repeated dose toxicity:*

*May cause central nervous system effects.*  
-----

### **Aspiration Hazard:**

No aspiration hazard expected.

---

## **12. Ecological Information**

### **Bioaccumulation**

The product has not been tested.

---

## **13. Disposal considerations**

### **Waste disposal of substance:**

Incinerate in a licensed facility. Dispose of in a licensed facility. Do not discharge substance/product into sewer system.



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### Container disposal:

Steel drums must be emptied and can be sent to a licensed drum reconditioner for reuse, a scrap metal dealer or an approved landfill. Do not attempt to refill or clean containers since residue is difficult to remove. Under no circumstances should empty drums be burned or cut open with gas or electric torch as toxic decomposition products may be liberated. Do not reuse empty containers.

## 14. Transport Information

### Land transport USDOT

Not classified as a dangerous good under transport regulations

### Sea transport IMDG

Not classified as a dangerous good under transport regulations

### Air transport IATA/ICAO

Not classified as a dangerous good under transport regulations

## 15. Regulatory Information

### Federal Regulations

#### Registration status:

Chemical TSCA, US released / listed

OSHA hazard category: Chronic target organ effects reported;

EPCRA 311/312 (Hazard categories): Chronic;

### State regulations

#### State RTK

MA, NJ, PA

#### CAS Number

108-01-0

#### Chemical name

2-dimethylaminoethanol

#### CA Prop. 65:

THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

## 16. Other Information

### HMIS III rating

Health: 1 Flammability: 1 Physical hazard: 1

NFPA and HMIS use a numbering scale ranging from 0 to 4 to indicate the degree of hazard. A value of zero means that the substance possesses essentially no hazard; a rating of four indicates extreme danger. Although similar, the two rating systems are intended for different purposes, and use different criteria. The NFPA system was developed to provide an

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on-the-spot alert to the hazards of a material, and their severity, to emergency responders. The HMIS system was designed to communicate workplace hazard information to employees who handle hazardous chemicals.

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

---

### MSDS Prepared by:

BASF NA Product Regulations

msds@basf.com

MSDS Prepared on: 2011/02/25

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END OF DATA SHEET

# MATERIAL SAFETY DATA SHEET



BaySystems NorthAmerica

**Baysystems North America**  
**Product Safety & Regulatory Affairs**  
**100 Bayer Road**  
**Pittsburgh, PA 15205-9741**  
**USA**

## TRANSPORTATION EMERGENCY

CALL CHEMTREC: (800) 424-9300  
INTERNATIONAL: (703) 527-3887

## NON-TRANSPORTATION

Bayer Emergency Phone: (412) 923-1800  
Bayer Information Phone: (800) 662-2927

### 1. Product and Company Identification

**Product Name:** BAYSEAL CC  
**Material Number:** 81208019  
**Chemical Family:** Polyol System

### 2. Hazards Identification

#### Emergency Overview

**WARNING! Color:** Dark, Amber **Form:** liquid **Odor:** Amine.  
May cause eye, skin, and respiratory tract irritation. Use cold water spray to cool fire-exposed containers to minimize the risk of rupture. Toxic by inhalation, in contact with skin and if swallowed. Vapor reduces oxygen available for breathing. May cause allergic respiratory reaction. May cause allergic skin reaction. May cause a temporary fogging of the eyes. May affect nervous system. May cause irregular heartbeat. May cause liver damage. May cause kidney damage.

#### Potential Health Effects

**Primary Routes of Entry:** Skin Contact, Eye Contact, Inhalation

**Medical Conditions Aggravated by Exposure:** Eye disorders, Respiratory disorders, Skin disorders

#### HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE

##### Inhalation

##### Acute Inhalation

##### For Component: Polymer

Inhalation is unlikely due to the low vapor pressure. If misted or handled at elevated temperatures, high concentrations may cause respiratory tract irritation.

##### For Component: Hydrofluorocarbon

May cause respiratory tract irritation with symptoms of coughing, sore throat and runny nose. May induce cardiac arrhythmia (irregular heartbeat) in some individuals. Vapor can reduce oxygen available for breathing.

Material Name: BAYSEAL CC

Article Number: 81208019

**For Component: Glycol**

Inhalation is unlikely due to the low vapor pressure. If misted or handled at elevated temperatures, high concentrations may cause respiratory tract irritation.

**For Component: Tris-(2-chloroisopropyl)-phosphate**

May cause respiratory tract irritation with symptoms of coughing, sore throat and runny nose.

**For Component: Aliphatic Ether**

Expected to be toxic by inhalation. May cause nervous system effects which can include symptoms of dizziness, incoordination, headache, numbness, and/or confusion.

**For Component: Glycerin**

Inhalation is unlikely due to the low vapor pressure. If misted or handled at elevated temperatures, high concentrations may cause respiratory tract irritation.

**For Component: Tertiary Amine**

Causes respiratory tract irritation with symptoms of coughing, sore throat and runny nose. May cause allergic respiratory reaction with symptoms of coughing, wheezing, shortness of breath, bronchospasm, and reduced lung function.

**Chronic Inhalation**

**For Component: Tertiary Amine**

May cause pulmonary edema with symptoms of breathing difficulty and tightness of chest.

**Skin**

**Acute Skin**

**For Component: Polymer**

Causes irritation with symptoms of reddening, itching, and swelling.

**For Component: Hydrofluorocarbon**

Slightly toxic by skin absorption. May cause slight irritation.

**For Component: Glycol**

Not expected to be irritating.

**For Component: Tris-(2-chloroisopropyl)-phosphate**

May cause slight irritation.

**For Component: Aliphatic Ether**

Toxic by skin absorption. May cause irritation with symptoms of reddening and itching.

**For Component:**

Corrosive with symptoms of reddening, itching, swelling, burning and possible permanent damage.

**For Component: Glycerin**

May cause slight irritation.

**For Component: Tertiary Amine**

May cause allergic skin reaction with symptoms of reddening, itching, swelling, and rash. Corrosive with symptoms of reddening, itching, swelling, burning and possible permanent damage. Moderately toxic by skin absorption.

**Chronic Skin**

**For Component: Aliphatic Ether**

May cause defatting of the skin with symptoms of dryness and cracking. Chronic exposure may cause symptoms similar to those described in chronic inhalation.

**For Component: Glycerin**

Prolonged or repeated skin contact may cause dermatitis with symptoms of red, itchy, dry skin.

**Eye**

**Acute Eye**

**For Component: Polymer**

Causes irritation with symptoms of reddening, tearing, stinging, and swelling. May cause corneal injury.

**For Component: Hydrofluorocarbon**

May cause slight irritation.

**For Component: Glycol**

May cause slight irritation.

**For Component: Tris-(2-chloroisopropyl)-phosphate**

Not expected to be irritating.

**For Component: Aliphatic Ether**

Causes irritation with symptoms of reddening, tearing, stinging, and swelling.

**For Component:**

Corrosive with symptoms of reddening, tearing, swelling, burning and possible permanent damage.

**For Component: Glycerin**

May cause slight irritation.

**For Component: Tertiary Amine**

Corrosive with symptoms of reddening, tearing, swelling, burning and possible permanent damage. Vapors can cause temporary corneal edema with symptoms of blurred vision or the appearance of halos around bright objects.

**Ingestion**

**Acute Ingestion**

**For Component: Polymer**

Symptoms of ingestion may include abdominal pain, nausea, vomiting, and diarrhea. May be harmful if swallowed.

**For Component: Glycol**

May cause nervous system effects which can include symptoms of dizziness, incoordination, headache, numbness, and/or confusion. The oral toxicity is greater in humans than in laboratory animals.

**For Component: Tris-(2-chloroisopropyl)-phosphate**

May be harmful if swallowed. Symptoms of ingestion may include abdominal pain, nausea, vomiting, and diarrhea. Moderately toxic by ingestion.

**For Component: Aliphatic Ether**

Toxic by ingestion. Symptoms of ingestion may include abdominal pain, nausea, vomiting, and diarrhea. May cause nervous system effects which can include symptoms of dizziness, incoordination, headache, numbness, and/or confusion.

**For Component:**

Harmful if swallowed.

**For Component: Glycerin**

Not expected to be harmful if swallowed.



**For Component: Tertiary Amine**

May be harmful if swallowed. May cause digestive tract burns.

**Chronic Ingestion****For Component: Glycol**

May cause kidney damage. Repeated excessive exposures may cause liver or kidney effects Chronic overexposure to this product may cause effects as noted under acute overexposure. If ingested the individual should be observed for signs of numbness, incoordination, headache, and confusion.

**For Component: Tris-(2-chloroisopropyl)-phosphate**

May cause liver damage. May cause kidney damage.

**For Component: Aliphatic Ether**

May cause blood disorders. May cause kidney damage. May cause liver damage.

**General Effects of Exposure****Acute Effects of Exposure****For Component: Polymer**

Gases and fumes evolved during the thermal processing or decomposition of this material may irritate the eyes, skin or respiratory tract.

**Carcinogenicity:**

No Carcinogenic substances as defined by IARC, NTP and/or OSHA

**3. Composition/Information on Ingredients****Hazardous Components**

<u>Weight %</u>	<u>Components</u>	<u>CAS-No.</u>
15 - 25%	Polymer	CAS# is a trade secret
7 - 13%	Hydrofluorocarbon	460-73-1
5 - 10%	Glycol	CAS# is a trade secret
5 - 10%	Tris-(2-chloroisopropyl)-phosphate	13674-84-5
1 - 5%	Aliphatic Ether	CAS# is a trade secret
1 - 5%		CAS# is a trade secret
1 - 5%	Glycerin	56-81-5
1 - 5%	Tertiary Amine	CAS# is a trade secret

**4. First Aid Measures****Eye Contact**

In case of contact, flush eyes with plenty of lukewarm water. Get medical attention if irritation develops.

**Skin Contact**

In case of skin contact, wash affected areas with soap and water. Immediately remove contaminated clothing and shoes. Get medical attention if irritation develops.

**Inhalation**

If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration using a pocket mask type resuscitator. Get medical attention.

**Ingestion**

If ingested, do not induce vomiting unless directed to do so by medical personnel. Get medical attention.

## 5. Fire-Fighting Measures

**Suitable Extinguishing Media:** carbon dioxide (CO<sub>2</sub>), dry chemical, foam, water spray for large fires.

### Special Fire Fighting Procedures

Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes. Use cold water spray to cool fire-exposed containers to minimize the risk of rupture.

## 6. Accidental release measures

### Spill and Leak Procedures

Cover spill with inert material (e. g., dry sand or earth) and collect for proper disposal. Use appropriate personal protective equipment during clean up. Evacuate and keep unnecessary people out of spill area.

## 7. Handling and Storage

### Storage Temperature:

**minimum:** 10 °C (50 °F)  
**maximum:** 30 °C (86 °F)

### Storage Period

6 Months

### Handling/Storage Precautions

Handle in accordance with good industrial hygiene and safety practices. Wash thoroughly after handling. Keep container closed when not in use. Material is hygroscopic and may absorb small amounts of atmospheric moisture. If contamination with isocyanates is suspected, do not reseal containers. Avoid contact with eyes. Avoid contact with skin or clothing. Do not breathe vapours/dust.

## 8. Exposure Controls / Personal Protection

### Aliphatic Ether (CAS# is a trade secret)

US. ACGIH Threshold Limit Values

Time Weighted Average (TWA): 20 ppm

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

PEL: 50 ppm, 240 mg/m<sup>3</sup>

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Skin designation: Can be absorbed through the skin.

US. ACGIH Threshold Limit Values

Hazard Designation: Group A3 Confirmed animal carcinogen with unknown relevance to humans.

### Glycerin (56-81-5)

US. ACGIH Threshold Limit Values

Time Weighted Average (TWA): 10 mg/m<sup>3</sup> (Mist.)  
US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)  
PEL: 5 mg/m<sup>3</sup> (Respirable fraction.)  
US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)  
PEL: 15 mg/m<sup>3</sup> (Total dust.)

#### **Industrial Hygiene/Ventilation Measures**

Use local and general exhaust ventilation to control levels of exposure.

#### **Respiratory Protection**

In case of insufficient ventilation wear suitable respiratory equipment.

#### **Hand Protection**

Permeation resistant gloves.

#### **Eye Protection**

Chemical safety goggles or safety glasses with side-shields.

#### **Skin and body protection**

Wear cloth work clothing including long pants and long-sleeved shirts.

#### **Additional Protective Measures**

Employees should wash their hands and face before eating, drinking, or using tobacco products. Educate and train employees in the safe use and handling of this product.

### **9. Physical and chemical properties**

<b>Form:</b>	liquid
<b>Color:</b>	Dark, Amber
<b>Odor:</b>	Amine
<b>pH:</b>	8.5 - 10.5
<b>Freezing Point:</b>	Not Established
<b>Boiling Point/Range:</b>	Not Established
<b>Flash Point:</b>	> 93.33 °C (> 200 °F)
<b>Specific Gravity:</b>	1.14 - 1.16
<b>Solubility in Water:</b>	Partially soluble
<b>Viscosity, Dynamic:</b>	450 - 500 cP @ 25 °C (77 °F)

### **10. Stability and Reactivity**

#### **Hazardous Reactions**

Hazardous polymerization does not occur.

#### **Stability**

Stable

#### **Materials to avoid**

oxidizing agents, Isocyanates, Acids

#### **Hazardous decomposition products**

By Fire: Carbon Dioxide; Carbon Monoxide; Tin oxide fumes., nitrogen oxides (NO<sub>x</sub>), other aliphatic fragments which have not been determined



## 11. Toxicological Information

### Toxicity Data for Polymer

#### **Acute Oral Toxicity**

LD50: approximately 1,000 - 3,000 mg/kg (rat)

#### **Acute Inhalation Toxicity**

LC50: approximately > 200 mg/l, 1 hrs (rat)

#### **Acute dermal toxicity**

LD50: approximately > 2,000 mg/kg (rabbit)

#### **Skin Irritation**

Severely irritating

#### **Eye Irritation**

Risk of serious damage to eyes.

### Toxicity Data for Hydrofluorocarbon

#### **Acute Inhalation Toxicity**

LC50: >200,000 ppm, 4 h (Rat)

#### **Acute dermal toxicity**

LD50: > 2,000 mg/kg (Rat)

#### **Skin Irritation**

rabbit, Non-irritating

#### **Eye Irritation**

rabbit, Mild eye irritation

#### **Sensitization**

non-sensitizer (Dog)

#### **Repeated Dose Toxicity**

28 d, inhalation: NOAEL: 50,000 ppm, (Rat)

90 d, Inhalation: NOAEL: 2000 ppm, (Rat)

#### **Mutagenicity**

Genetic Toxicity in Vitro:

Cytogenetic assay: ambiguous (human lymphocytes, Metabolic Activation: with/without)

Ames: negative (Metabolic Activation: with/without)

Genetic Toxicity in Vivo:

Micronucleus Assay: negative (mouse)

#### **Developmental Toxicity/Teratogenicity**

No Teratogenic effects observed at doses tested.

### Toxicity Data for Glycol

#### **Acute Oral Toxicity**

LD50: > 5,000 mg/kg (Rat)

Lowest lethal dose: 1 ml/kg (Human)

#### **Acute dermal toxicity**

LD50: 11.2 l/kg (rabbit)

**Skin Irritation**

rabbit, Exposure Time: 4 hrs, Non-irritating  
rabbit, Draize, Slightly irritating

**Eye Irritation**

rabbit, Draize, Slightly irritating

**Repeated Dose Toxicity**

90 Days, Oral: NOAEL: 200 mg/kg, (Rat, )  
6 months, Inhalation: NOAEL: < 0.02 mg/l, (rat, )

**Mutagenicity**

Genetic Toxicity in Vitro:

Ames: Negative results were reported in various in vitro studies. (Salmonella typhimurium, Metabolic Activation: with/without)

Genetic Toxicity in Vivo:

Cytogenetic assay: positive (hamster, )

Cytogenetic assay: negative (hamster, )

**Toxicity to Reproduction/Fertility**

One generation study, oral, (mouse) NOAEL (parental): 3.5%,  
Fertility and mating indices were decreased. The survival and growth rates were reduced.

**Developmental Toxicity/Teratogenicity**

mouse, oral, NOAEL (maternal): 1,250 mg/kg,  
Fetotoxicity seen only with maternal toxicity.

**Toxicity Data for Tris-(2-chloroisopropyl)-phosphate****Acute Oral Toxicity**

LD50: 632 mg/kg (Rat)

**Acute Inhalation Toxicity**

LC50: > 17,800 mg/l, aerosol, 1 hrs (rat, Male/Female)

**Acute dermal toxicity**

LD50: > 5,000 mg/kg (rabbit, Male/Female)

**Skin Irritation**

Human, Patch Test, No skin irritation  
rabbit, No skin irritation

**Eye Irritation**

rabbit, Draize, Exposure Time: 24 hrs, Mild eye irritation  
rabbit, No eye irritation

**Sensitization**

dermal: non-sensitizer (guinea pig, Maximisation Test (GPMT))  
dermal: non-sensitizer (Human, Patch Test)

**Repeated Dose Toxicity**

90 Days, oral: NOAEL: 36 mg/kg, (Rat, male)

**Mutagenicity**

Genetic Toxicity in Vitro:

Ames: negative (Salmonella typhimurium, Metabolic Activation: with/without)

Positive and negative results were reported.

Mammalian cell - gene mutation assay: positive (Mouse lymphoma cells (L5178Y/TK), Metabolic

Activation: with)  
Positive and negative results were reported.

**Toxicity to Reproduction/Fertility**

Other method, inhalation, daily, (rat, male)  
Reproductive effects have been observed in animal studies.

**Developmental Toxicity/Teratogenicity**

rat, female, oral, gestation, daily, NOAEL (teratogenicity): > 1%, NOAEL (maternal): > 1%  
No Teratogenic effects observed at doses tested. No fetotoxicity observed at doses tested.

**Toxicity Data for Aliphatic Ether**

**Acute Oral Toxicity**

LD50: 470 mg/kg (rat)  
LD50: 300 mg/kg (rabbit)

**Acute Inhalation Toxicity**

LC50: 2.21 - 2.39 mg/l, 4 hrs (Rat)

**Acute dermal toxicity**

LD50: 220 mg/kg (rabbit)

**Skin Irritation**

rabbit, Draize, Mild skin irritation

**Eye Irritation**

rabbit, Draize, Moderate eye irritation

**Sensitization**

dermal: non-sensitizer (Guinea pig, Maximisation Test (GPMT))  
dermal: non-sensitizer (Human, Patch Test)

**Repeated Dose Toxicity**

90 Days, inhalation: NOAEL: 0.121 mg/kg, (Rat, Male/Female, daily)  
30 Days, inhalation: NOAEL: < 0.27 mg/kg, (Rat, Male/Female, daily)  
90 days, dermal: NOAEL: 150 mg/kg, (rabbit, Male/Female, daily)

**Mutagenicity**

Genetic Toxicity in Vitro:  
Ames: Negative results were reported in various in vitro studies. (Salmonella typhimurium, Metabolic  
Activation: with/without)  
Genetic Toxicity in Vivo:  
Micronucleus Assay: negative (mouse, )

**Carcinogenicity**

mouse, Male/Female, inhalation, 2 years, daily  
Animal experiments showed a statistically significant number of tumours.

**Toxicity to Reproduction/Fertility**

Other method, oral, daily, (Rat, Male/Female) NOAEL (parental): 304 mg/kg,  
Reproductive effects have been observed in animal studies.  
Two generation study, oral, (mouse, Male/Female) NOAEL (parental): 720 mg/kg, NOAEL (F1): < 720  
mg/kg,

**Developmental Toxicity/Teratogenicity**

Rat, female, inhalation, gestation, daily, NOAEL (teratogenicity): 0.97 mg/kg, NOAEL (maternal): 0.24

mg/kg,

Teratogenic effects seen only with maternal toxicity.

rabbit, female, gestation, daily, NOAEL (teratogenicity): 0.97 mg/kg, NOAEL (maternal): 0.48 mg/kg,

Rat, Female, dermal, gestation, daily, NOAEL (teratogenicity): 5,400 mg/kg, NOAEL (maternal): < 1,800 mg/kg,

#### **Toxicity Data for**

##### **Acute Oral Toxicity**

LD50: 1,440 mg/kg (rat)

##### **Acute dermal toxicity**

LD50: > 2,000 mg/kg (rabbit)

##### **Skin Irritation**

rabbit, Draize, Corrosive

##### **Eye Irritation**

rabbit, Draize, Corrosive

#### **Toxicity Data for Dimethyl Glutarate**

##### **Acute Oral Toxicity**

LD50: > 5,000 mg/kg (Rat)

##### **Acute Inhalation Toxicity**

LC50: 4.53 - 6.1 mg/l, 4 h (Rat)

##### **Acute dermal toxicity**

LD50: > 3,400 mg/kg (rabbit)

##### **Skin Irritation**

rabbit, Slightly irritating

##### **Eye Irritation**

rabbit, Slightly irritating

##### **Sensitization**

non-sensitizer (Guinea pig)

##### **Repeated Dose Toxicity**

Inhalation: NOAEL: < 0.16 mg/l, (Rat, Male/Female)

##### **Mutagenicity**

Genetic Toxicity in Vitro:

Ames: negative (Salmonella typhimurium, Metabolic Activation: with/without)

Genetic Toxicity in Vivo:

Micronucleus Assay: negative (mouse, Male/Female, inhalation)

##### **Toxicity to Reproduction/Fertility**

One generation study, inhalation, (rat, Male/Female) NOAEL (parental): 1 mg/l, NOAEL (F1): 0.4 mg/l,

##### **Developmental Toxicity/Teratogenicity**

rat, female, inhalation, NOAEL (teratogenicity): 1 mg/l, NOAEL (maternal): 0.16 mg/l,

No fetotoxicity observed at doses tested.



### **Toxicity Data for Glycerin**

#### **Toxicity Note**

No data available for this component.

#### **Acute Oral Toxicity**

LD50: > 5,000 mg/kg (Rat)

#### **Skin Irritation**

rabbit, Non-irritating

#### **Eye Irritation**

rabbit, Slightly irritating

#### **Sensitization**

dermal: non-sensitizer (Human, Patch Test)

#### **Repeated Dose Toxicity**

90 Days, inhalation: NOAEL: 0.167 mg/l, (Rat)

#### **Mutagenicity**

Genetic Toxicity in Vitro:

Ames: negative (Salmonella typhimurium, Metabolic Activation: with/without)

### **Toxicity Data for Tertiary Amine**

#### **Acute Oral Toxicity**

LD50: 2,000 mg/kg (Rat)

#### **Acute Inhalation Toxicity**

LC50: 6.1 mg/l, (Rat)

#### **Acute dermal toxicity**

LD50: 1,220 - 3,135 mg/kg (rabbit)

#### **Skin Irritation**

rabbit, Draize, Mild skin irritation

rabbit, OECD Guideline for Testing of Chemicals, No. 404, Exposure Time: 1 hrs, Corrosive

#### **Eye Irritation**

rabbit, Draize, Corrosive

#### **Sensitization**

dermal: sensitizer (mouse, Mouse local lymphoma assay)

#### **Repeated Dose Toxicity**

90 Days, inhalation: NOAEL: 24 ppm, (Rat, Male/Female, 6 hrs/day 5 days/week)

Irritation to lungs and nasal cavity. Reduced body weight gain.

#### **Mutagenicity**

Genetic Toxicity in Vitro:

(Salmonella typhimurium, Metabolic Activation: with/without)

Genetic Toxicity in Vivo:

Micronucleus Assay: (mouse, Male/Female, intraperitoneal)

#### **Carcinogenicity**

mouse, females, oral, 123 weeks,

negative

**Toxicity to Reproduction/Fertility**

inhalation, daily, (Rat, Female) NOAEL (parental): 10 ppm, NOAEL (F2): 100 ppm  
No effects on Reproductive parameters observed at doses tested.

**Developmental Toxicity/Teratogenicity**

rat, female, inhalation, gestation, NOAEL (teratogenicity): 100 ppm, NOAEL (maternal): 10 ppm  
No Teratogenic effects observed at doses tested. No fetotoxicity observed at doses tested.

**12. Ecological Information****Ecological Data for Hydrofluorocarbon****Acute and Prolonged Toxicity to Fish**

LC50: > 97.9 mg/l (Rainbow trout (*Salmo gairdneri*), 48 h)

**Acute Toxicity to Aquatic Invertebrates**

EC50: 81.8 mg/l (Water flea (*Daphnia magna*), 96 h)

**Ecological Data for Glycol****Biological Oxygen Demand (BOD)**

5 Days, 4 %

20 Days, 53 %

**Acute and Prolonged Toxicity to Fish**

LC50: > 10,000 mg/l (Fathead minnow (*Pimephales promelas*), 48 hrs)

LC0: > 1,000 mg/l (Bluegill (*Lepomis macrochirus*), 96 h)

**Acute Toxicity to Aquatic Invertebrates**

EC50: > 10,000 mg/l (Water flea (*Daphnia magna*), 24 hrs)

**Toxicity to Aquatic Plants**

NOEC: 100 mg/l, End Point: growth (*selenastrum capricornutum*, 7 d)

**Toxicity to Microorganisms**

> 10,000 mg/l, (Other bacteria)

**Ecological Data for Tris-(2-chloroisopropyl)-phosphate****Biodegradation**

Aerobic, 0 %, Exposure time: 28 Days, Not readily biodegradable.

**Bioaccumulation**

Carp, Exposure time: 42 Days, approximately 0.8 - 2.8 BCF

**Acute and Prolonged Toxicity to Fish**

LC50: approximately 84 mg/l (Bluegill (*Lepomis macrochirus*), 96 hrs)

LC50: 51 mg/l (Fathead minnow (*Pimephales promelas*), 96 hrs)

LC50: 30 mg/l (Guppy (*Poecilia reticulata*), 96 hrs)

**Acute Toxicity to Aquatic Invertebrates**

EC50: approximately 131 mg/l (Water flea (*Daphnia magna*), 48 hrs)

**Toxicity to Aquatic Plants**

EC50: 45 mg/l, End Point: biomass (Green algae (*Scenedesmus subspicatus*), 72 hrs)

EC50: 41 - 55 mg/l, End Point: biomass (Green algae (*Selenastrum capricornutum*), 96 h)

**Toxicity to Microorganisms**

EC50: 295 mg/l, (Photobacterium phosphoreum, 30 min)

EC50: 784 mg/l, (Activated sludge microorganisms, 3 hrs)

**Ecological Data for Aliphatic Ether****Biodegradation**

aerobic, 100 %, Exposure time: 28 Days

**Biological Oxygen Demand (BOD)**

5 Days, 1,300 mg/g

20 Days, 1,800 mg/g

**Chemical Oxygen Demand (COD)**

2,180 mg/g

**Theoretical Biological Oxygen Demand (ThBOD)**

2,300 mg/g

**Bioaccumulation**

approximately 2.5 BCF

**Acute and Prolonged Toxicity to Fish**

LC50: 1,490 mg/l (Bluegill (Lepomis macrochirus), 96 hrs)

1,250 mg/l (Silverside Minnow (Menidia peninsulae), 96 hrs)

LC50: 2,137 mg/l (Fathead minnow (Pimephales promelas), 96 hrs)

**Acute Toxicity to Aquatic Invertebrates**

EC50: 1,720 - 1,850 mg/l (Water flea (Daphnia magna), 24 hrs)

LC50: 800 mg/l (Common shrimp (Crangon crangon), 48 hrs)

**Toxicity to Aquatic Plants**

EC50: > 1,000 mg/l, (Green algae (Selenastrum capricornutum), 7 Days)

**Toxicity to Microorganisms**

IC50: > 1,000 mg/l, (Activated sludge microorganisms, 16 hrs)

**Ecological Data for Dimethyl Glutarate****Biodegradation**

aerobic, 75 %, Exposure time: 28 d, Readily biodegradable.

**Acute and Prolonged Toxicity to Fish**

LC50: 33.6 mg/l (Fathead minnow (Pimephales promelas), 96 h)

**Acute Toxicity to Aquatic Invertebrates**

EC50: 122.1 - 163.5 mg/l (Water flea (Daphnia magna), 48 h)

**Toxicity to Microorganisms**

EC10: 62.5 mg/l, (Pseudomonas putida, 18 h)

**Ecological Data for Glycerin****Biodegradation**

Aerobic, 63 %, Exposure time: 14 Days

Readily biodegradable.

**Biological Oxygen Demand (BOD)**

5 Days, 700 mg/l

**Chemical Oxygen Demand (COD)**

1,150 mg/g

**Acute and Prolonged Toxicity to Fish**

LC0: > 10,000 mg/l (Golden orfe (*Leuciscus idus*), 48 hrs)

**Acute Toxicity to Aquatic Invertebrates**

EC50: > 10,000 mg/l (Water flea (*Daphnia magna*), 24 hrs)

**Ecological Data for Tertiary Amine****Biodegradation**

aerobic, > 90 %, Exposure time: 13 Days, Readily biodegradable.

**Biological Oxygen Demand (BOD)**

285 O<sub>2</sub>/g

**Chemical Oxygen Demand (COD)**

485 O<sub>2</sub>/g

**Acute and Prolonged Toxicity to Fish**

LC50: 81 mg/l (Fathead minnow (*Pimephales promelas*), 96 h)

LC50: 100 - 220 mg/l (Golden orfe (*Leuciscus idus*), 96 h)

**Acute Toxicity to Aquatic Invertebrates**

EC50: 98 mg/l (Water flea (*Daphnia magna*), 48 h)

**Toxicity to Aquatic Plants**

EC50: 35 mg/l, (Green algae (*Scenedesmus subspicatus*), 72 h)

**Toxicity to Microorganisms**

EC50: > 8,000 mg/l, (*Pseudomonas putida*, 71 hrs)

**13. Disposal considerations****Waste Disposal Method**

Waste disposal should be in accordance with existing federal, state and local environmental control laws.

**Empty Container Precautions**

Recondition or dispose of empty container in accordance with governmental regulations.

**14. Transportation information****Land transport (DOT)**

Non-Regulated

**Sea transport (IMDG)**

Non-Regulated

**Air transport (ICAO/IATA)**

**Proper Shipping Name:**

Aviation regulated liquid, n.o.s. (contains Hydrofluorocarbon)

**Hazard Class or Division:**

9

**UN-No:**

UN3334



**Packaging Group:**

**Hazard Label(s):**

Miscellaneous

## 15. Regulatory Information

### United States Federal Regulations

**OSHA Hazcom Standard Rating:** Hazardous

**US. Toxic Substances Control Act:** Listed on the TSCA Inventory.

**US. EPA CERCLA Hazardous Substances (40 CFR 302):**

#### Components

Aliphatic Ether Included in the regulation but with no data values. See regulation for further details

**SARA Section 311/312 Hazard Categories:**

Acute Health Hazard, Chronic Health Hazard

**US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):**

#### Components

None

**US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required:**

#### Components

Aliphatic Ether

**US. EPA Resource Conservation and Recovery Act (RCRA) Composite List of Hazardous Wastes and Appendix VIII Hazardous Constituents (40 CFR 261):**

If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24)

### State Right-To-Know Information

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

**Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists:**

<u>Weight %</u>	<u>Components</u>	<u>CAS-No.</u>
>=1%	Polyester Polyol	CAS# is a trade secret
15 - 25%	Polymer	CAS# is a trade secret
7 - 13%	Hydrofluorocarbon	460-73-1
5 - 10%	Glycol	CAS# is a trade secret
5 - 10%	Tris-(2-chloroisopropyl)-phosphate	13674-84-5
1 - 5%	Aliphatic Ether	CAS# is a trade secret
1 - 5%		CAS# is a trade secret
1 - 5%	Glycerin	56-81-5
1 - 5%	Tertiary Amine	CAS# is a trade secret

**New Jersey Environmental Hazardous Substances List and/or New Jersey RTK Special Hazardous Substances Lists:**

<u>Weight %</u>	<u>Components</u>	<u>CAS-No.</u>
1 - 5%	Aliphatic Ether	CAS# is a trade secret
1 - 5%		CAS# is a trade secret

**MA Right to Know Extraordinarily Hazardous Substance List:**

<u>Weight %</u>	<u>Components</u>	<u>CAS-No.</u>
<10 ppm	Propylene Oxide	75-56-9

<u>Weight %</u>	<u>Components</u>	<u>CAS-No.</u>
6.2 ppm	Propylene Oxide	75-56-9

**California Prop. 65:**

**Warning! This product contains chemical(s) known to the State of California to be Carcinogenic.**

<u>Weight %</u>	<u>Components</u>	<u>CAS-No.</u>
<10 ppb	Formaldehyde	50-00-0
<65 ppm	2,2'-Dichlorodiisopropyl ether	108-60-1
<10 ppm	Propylene Oxide	75-56-9
<0.0001 ppb		CAS# is a trade secret
62 ppm	2,2'-Dichlorodiisopropyl ether	108-60-1
6.2 ppm	Propylene Oxide	75-56-9

**16. Other Information**

**NFPA 704M Rating**

Health	2
Flammability	1
Reactivity	0
Other	

0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme

**HMIS Rating**

Health	2*
Flammability	1
Physical Hazard	0

0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

\* = Chronic Health Hazard

The method of hazard communication for Baysystems North America is comprised of Product Labels and Material Safety Data Sheets. HMIS and NFPA ratings are provided by Baysystems North America as a customer service.

Contact Person: Product Safety Department  
Telephone: (412) 777-2835  
MSDS Number: 000000009100  
Version Date: 06/11/2008  
Report Version: 1.3

This information is furnished without warranty, express or implied. This information is believed to be accurate to the best knowledge of Baysystems North America. The information in this MSDS relates only to the specific material designated herein. Baysystems North America assumes no legal responsibility for use of or reliance upon the information in this MSDS.

# MATERIAL SAFETY DATA SHEET



Bayer MaterialScience

**Bayer MaterialScience LLC**  
Product Safety & Regulatory Affairs  
100 Bayer Road  
Pittsburgh, PA 15205-9741  
USA

## TRANSPORTATION EMERGENCY

CALL CHEMTREC: (800) 424-9300  
INTERNATIONAL: (703) 527-3887

## NON-TRANSPORTATION

Emergency Phone: Call Chemtrec  
Information Phone: (800) 662-2927

### 1. Product and Company Identification

**Product Name:** BAYSEAL CC POLAR  
**Material Number:** 82638017  
**Chemical Family:** Polyol System

### 2. Hazards Identification

#### Emergency Overview

**Warning Color:** Amber **Form:** liquid **Odor:** Slight, Ether, Amine.  
Use cold water spray to cool fire-exposed containers to minimize the risk of rupture. May cause nausea or dizziness. Causes respiratory tract irritation. Vapor reduces oxygen available for breathing. Causes skin irritation. Causes eye irritation. May cause a temporary fogging of the eyes. When this product is sprayed, a full-face or hood-type supplied air respirator is required. May affect nervous system. May cause kidney damage. May cause liver damage. May cause lung damage. May cause irregular heartbeat.

#### Potential Health Effects

**Primary Routes of Entry:** Inhalation, Eye Contact, Skin Contact

**Medical Conditions Aggravated by Exposure:** Respiratory disorders, Eye disorders, Skin disorders

### HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE

#### Inhalation

##### Acute Inhalation

##### **For Component: Hydrofluorocarbon**

May cause respiratory tract irritation with symptoms of coughing, sore throat and runny nose. May induce cardiac arrhythmia (irregular heartbeat) in some individuals. Vapor can reduce oxygen available for breathing.

##### **For Component: Chlorinated Phosphate Ester**

May cause respiratory tract irritation with symptoms of coughing, sore throat and runny nose.

##### **For Component: 2-Butoxyethanol**

Expected to be toxic by inhalation. May cause nervous system effects which can include symptoms of dizziness, incoordination, headache, numbness, and/or confusion.

**For Component: Tertiary Amine**

Corrosive with symptoms of coughing, burning, ulceration, and pain.

**For Component: Ester derivative**

May be harmful by inhalation. May cause respiratory tract irritation with symptoms of coughing, sore throat and runny nose.

**For Component: Tertiary Amine**

Causes respiratory tract irritation with symptoms of coughing, sore throat and runny nose.

**Chronic Inhalation**

**For Component: Tertiary Amine**

May cause lung damage.

**Skin**

**Acute Skin**

**For Component: Polymer**

Causes irritation with symptoms of reddening, itching, and swelling.

**For Component: Hydrofluorocarbon**

Slightly toxic by skin absorption. May cause slight irritation.

**For Component: Chlorinated Phosphate Ester**

May cause slight irritation.

**For Component: 2-Butoxyethanol**

Toxic by skin absorption. May cause irritation with symptoms of reddening and itching.

**For Component: Tertiary Amine**

Toxic by skin absorption. Corrosive with symptoms of reddening, itching, swelling, burning and possible permanent damage.

**For Component: Ester derivative**

May cause irritation with symptoms of reddening and itching. Slightly toxic by skin absorption.

**For Component: Tertiary Amine**

Corrosive with symptoms of reddening, itching, swelling, burning and possible permanent damage. Toxic by skin absorption.

**Chronic Skin**

**For Component: 2-Butoxyethanol**

May cause defatting of the skin with symptoms of dryness and cracking. Chronic exposure may cause symptoms similar to those described in chronic inhalation.

**For Component: Tertiary Amine**

Prolonged or repeated skin contact may cause dermatitis with symptoms of red, itchy, dry skin.

**Eye**

**Acute Eye**

**For Component: Polymer**

Causes irritation with symptoms of reddening, tearing, stinging, and swelling.

**For Component: Hydrofluorocarbon**

May cause slight irritation.

**For Component: Chlorinated Phosphate Ester**

Not expected to be irritating.

**For Component: 2-Butoxyethanol**

Causes irritation with symptoms of reddening, tearing, stinging, and swelling.

**For Component: Tertiary Amine**

Corrosive with symptoms of reddening, tearing, swelling, burning and possible permanent damage. Vapors can cause temporary corneal edema with symptoms of blurred vision or the appearance of halos around bright objects.

**For Component: Ester derivative**

May cause irritation with symptoms of reddening, tearing and stinging.

**For Component: Tertiary Amine**

Vapors can cause temporary corneal edema with symptoms of blurred vision or the appearance of halos around bright objects. Corrosive with symptoms of reddening, tearing, swelling, burning and possible permanent damage.

**Chronic Eye**

**For Component: Tertiary Amine**

Prolonged vapor contact may cause conjunctivitis.

**Ingestion**

**Acute Ingestion**

**For Component: Chlorinated Phosphate Ester**

May be harmful if swallowed. Symptoms of ingestion may include abdominal pain, nausea, vomiting, and diarrhea. Moderately toxic by ingestion.

**For Component: 2-Butoxyethanol**

Toxic by ingestion. Symptoms of ingestion may include abdominal pain, nausea, vomiting, and diarrhea. May cause nervous system effects which can include symptoms of dizziness, incoordination, headache, numbness, and/or confusion.

**For Component: Tertiary Amine**

Moderately toxic by ingestion. Corrosive to the digestive tract with symptoms of burning and ulceration.

**For Component: Ester derivative**

Not expected to be harmful if swallowed.

**For Component: Tertiary Amine**

Ingestion and/or vomiting may cause aspiration into the lungs resulting in chemical pneumonitis (inflammation of the lungs). Corrosive to the digestive tract with symptoms of burning and ulceration.

**Chronic Ingestion**

**For Component: Chlorinated Phosphate Ester**

May cause liver damage. May cause kidney damage.

**For Component: 2-Butoxyethanol**

May cause blood disorders. May cause kidney damage. May cause liver damage.

**Carcinogenicity:**

No Carcinogenic substances as defined by IARC, NTP and/or OSHA

### 3. Composition/Information on Ingredients

#### Hazardous components

<u>Weight percent</u>	<u>Components</u>	<u>CAS-No.</u>
20 - 30%	Polymer	CAS# is a trade secret
7 - 13%	Hydrofluorocarbon	460-73-1
3 - 7%	Chlorinated Phosphate Ester	CAS# is a trade secret
1 - 5%	2-Butoxyethanol	111-76-2
1 - 5%	Tertiary Amine	CAS# is a trade secret
1 - 5%	Ester derivative	CAS# is a trade secret
0.1 - 1%	Tertiary Amine	CAS# is a trade secret

### 4. First aid measures

#### Eye contact

In case of contact, flush eyes with plenty of water for at least 15 minutes. Call a physician immediately.

#### Skin contact

In case of skin contact, wash affected areas with soap and water. Immediately remove contaminated clothing and shoes. Get medical attention.

#### Inhalation

If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

#### Ingestion

If ingested, do not induce vomiting unless directed to do so by medical personnel. Get medical attention.

### 5. Fire-fighting measures

**Suitable extinguishing media:** Carbon dioxide (CO<sub>2</sub>), Dry chemical, Foam, water spray for large fires.

#### Special Fire Fighting Procedures

Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes. Use cold water spray to cool fire-exposed containers to minimize the risk of rupture.

#### Unusual Fire/Explosion Hazards

The reaction of this product with polymeric MDI ("A" side) will release heat (e.g., it is an exothermic reaction). Thus, spraying foam too thickly in a single lift, or not allowing sufficient time between lifts, can result in excessive heat generation to the point where the foam may char, smolder or burn. Refer to the appropriate BaySystems technical datasheet for application instructions.

### 6. Accidental release measures

#### Spill and Leak Procedures

Evacuate and keep unnecessary people out of spill area. Remove ignition sources. Notify management. Put on protective equipment. Control source of the leak. Ventilate. Contain the spill. Cover spill with inert material (e.g., dry sand or earth) and collect for proper disposal.

## 7. Handling and storage

**Storage temperature:**  
**maximum:** 50 °C (122 °F)

**Storage period**  
6 Months

### Handling/Storage Precautions

Handle in accordance with good industrial hygiene and safety practices. Wash thoroughly after handling. Keep container closed when not in use. Material is hygroscopic and may absorb small amounts of atmospheric moisture. If contamination with isocyanates is suspected, do not reseal containers. Do not get on skin or clothing. Do not get in eyes. Do not breathe vapours or spray mist.

## 8. Exposure controls/personal protection

When this product is heated or spray applied, amine vapors can be released.

### 2-Butoxyethanol (111-76-2)

- US. ACGIH Threshold Limit Values  
Time Weighted Average (TWA): 20 ppm
- US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)  
PEL: 50 ppm, 240 mg/m<sup>3</sup>
- US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)  
Skin designation: Can be absorbed through the skin.
- US. ACGIH Threshold Limit Values  
Hazard Designation: Group A3 Confirmed animal carcinogen with unknown relevance to humans.

### Industrial Hygiene/Ventilation Measures

When handling this product, ventilation of the work area is recommended.

### Respiratory protection

When this product is sprayed in combination with polymeric MDI ("A" side), a full-face or hood-type supplied air respirator operated in the positive pressure or continuous flow mode is required. For exterior spray applications where the use of supplied air respiratory protection may create a safety hazard (e.g., roof applications), an air purifying respirator with combination organic vapor/particulate (P100) cartridges may be substituted for a supplied air respirator. When handling the liquid product, particularly if heated or in a confined area, an air purifying respirator with combination organic vapor/particulate (P100) cartridges is recommended. The respiratory protection selected must comply with the requirements set forth in OSHA's Respiratory Protection Standard (29 CFR 1910.134). When APRs are used, (a) the cartridges must be equipped with end-of-service life indicators (ESLI) certified by NIOSH, or (b) a change out schedule, based on objective information or data that will ensure that the cartridges are changed out before the end of their service life, must be developed and implemented. The basis for the change out schedule must be described in the written respirator program.

### Hand protection

When this product is sprayed in combination with polymeric MDI ("A" side), fabric gloves coated in nitrile, neoprene, butyl or PVC are recommended. When handling liquid product, nitrile, neoprene, butyl



or PVC gloves are recommended.

#### **Eye protection**

When this product is sprayed in combination with polymeric MDI ("A" side), eye protection will be provided by the full-face or hood-type air supplied respirator as mentioned above in the respiratory protection section. When handling liquid product, chemical safety goggles or safety glasses with side-shields are required.

#### **Skin and body protection**

When this product is sprayed in combination with polymeric MDI ("A" side), a disposable full body suit (e.g., Tyvek, Kleenguard, etc.) with attached hood and disposable over-boots are required. When handling liquid product, wear cloth work clothing including long pants and long-sleeved shirts. If the potential for splash to the body exists, impermeable protective clothing is recommended.

#### **Additional Protective Measures**

Employees should wash their hands and face before eating, drinking, or using tobacco products. Educate and train employees in the safe use and handling of this product.

### **9. Physical and chemical properties**

<b>Form:</b>	liquid
<b>Color:</b>	Amber
<b>Odor:</b>	Slight, Ether, Amine

### **10. Stability and reactivity**

#### **Hazardous Reactions**

Hazardous polymerisation does not occur. The reaction of this product with polymeric MDI ("A" side) will release heat (e.g., it is an exothermic reaction). Thus, spraying foam too thickly in a single lift, or not allowing sufficient time between lifts, can result in excessive heat generation to the point where the foam may char, smolder or burn. Refer to the appropriate BaySystems technical datasheet for application instructions.

#### **Stability**

Stable

#### **Materials to avoid**

Oxidizing agents, Isocyanates

#### **Hazardous decomposition products**

By Fire and Thermal Decomposition: Carbon dioxide (CO<sub>2</sub>), carbon monoxide (CO), oxides of nitrogen (NO<sub>x</sub>), dense black smoke., other potentially toxic fumes

### **11. Toxicological information**

#### **Toxicity Data for Polymer**

##### **Toxicity Note**

Toxicity data is based on a similar product.

##### **Acute oral toxicity**

LD50: 1,370 mg/kg (rat)

**Acute dermal toxicity**

LD50: 12800 (rabbit)

**Toxicity Data for Hydrofluorocarbon****Acute inhalation toxicity**

LC50: > 200000 ppm, 4 h (Rat)

**Acute dermal toxicity**

LD50: > 2,000 mg/kg (rat)

**Skin irritation**

rabbit, Non-irritating

**Eye irritation**

rabbit, Mild eye irritation

**Sensitisation**

non-sensitizer (Dog)

**Repeated dose toxicity**

28 d, inhalation: NOAEL: 50,000 ppm, (Rat)

90 d, Inhalation: NOAEL: 2000 ppm, (Rat)

**Mutagenicity**

Genetic Toxicity in Vitro:

Cytogenetic assay: ambiguous (human lymphocytes, Metabolic Activation: with/without)

Ames: negative (Metabolic Activation: with/without)

Genetic Toxicity in Vivo:

Micronucleus Assay: negative (mouse)

negative

**Developmental Toxicity/Teratogenicity**

No Teratogenic effects observed at doses tested.

**Toxicity Data for Chlorinated Phosphate Ester****Acute oral toxicity**

LD50: 632 mg/kg (rat)

**Acute inhalation toxicity**

LC50: > 17,800 mg/l, 1 h (rat, Male/Female)

aerosol

**Acute dermal toxicity**

LD50: > 5,000 mg/kg (rabbit, Male/Female)

**Skin irritation**

Human, Patch Test, No skin irritation

rabbit, No skin irritation

**Eye irritation**

rabbit, non-irritant

rabbit, Draize, Exposure Time: 24 h, slight irritant

**Sensitisation**

dermal: non-sensitizer (guinea pig, Maximisation Test)

dermal: non-sensitizer (Human, Patch Test)

**Repeated dose toxicity**

90 Days, oral: NOAEL: 36 mg/kg, (Rat, male)

**Mutagenicity**

Genetic Toxicity in Vitro:

Ames: negative (Salmonella typhimurium, Metabolic Activation: with/without)

Positive and negative results were reported.

Mammalian cell - gene mutation assay: positive (Mouse lymphoma cells (L5178Y/TK), Metabolic

Activation: with)

Positive and negative results were reported.

**Toxicity to Reproduction/Fertility**

Other method, inhalation, daily, (rat, male)

Reproductive effects have been observed in animal studies.

**Developmental Toxicity/Teratogenicity**

rat, female, oral, gestation, daily, NOAEL (teratogenicity): > 1%, NOAEL (maternal): > 1%

No Teratogenic effects observed at doses tested., No fetotoxicity observed at doses tested.

**Toxicity Data for 2-Butoxyethanol****Acute oral toxicity**

LD50: 470 mg/kg (rat)

LD50: 300 mg/kg (rabbit)

**Acute inhalation toxicity**

LC50: 2.21 - 2.39 mg/l, 4 h (Rat)

**Acute dermal toxicity**

LD50: 220 mg/kg (rabbit)

**Skin irritation**

rabbit, Draize, Mild skin irritation

**Eye irritation**

rabbit, Draize, Moderate eye irritation

**Sensitisation**

dermal: non-sensitizer (Guinea pig, Maximisation Test)

dermal: non-sensitizer (Human, Patch Test)

**Repeated dose toxicity**

90 Days, inhalation: NOAEL: 0.121 mg/kg, (Rat, Male/Female, daily)

30 Days, inhalation: NOAEL: < 0.27 mg/kg, (Rat, Male/Female, daily)

90 days, dermal: NOAEL: 150 mg/kg, (rabbit, Male/Female, daily)

**Mutagenicity**

Genetic Toxicity in Vitro:

Ames: Negative results were reported in various in vitro studies. (Salmonella typhimurium, Metabolic

Activation: with/without)

Genetic Toxicity in Vivo:

Micronucleus Assay: negative (mouse, )

negative

**Carcinogenicity**

mouse, Male/Female, inhalation, 2 years, daily,  
Animal experiments showed a statistically significant number of tumours.

#### **Toxicity to Reproduction/Fertility**

Other method, oral, daily, (Rat, Male/Female) NOAEL (parental): 304 mg/kg,  
Reproductive effects have been observed in animal studies.  
Two generation study, oral, (mouse, Male/Female) NOAEL (parental): 720 mg/kg, NOAEL (F1): < 720 mg/kg,

#### **Developmental Toxicity/Teratogenicity**

Rat, female, inhalation, gestation, daily, NOAEL (teratogenicity): 0.97 mg/kg, NOAEL (maternal): 0.24 mg/kg,  
Teratogenic effects seen only with maternal toxicity.  
rabbit, female, gestation, daily, NOAEL (teratogenicity): 0.97 mg/kg, NOAEL (maternal): 0.48 mg/kg,  
Rat, Female, dermal, gestation, daily, NOAEL (teratogenicity): 5,400 mg/kg, NOAEL (maternal): < 1,800 mg/kg,

#### **Toxicity Data for Tertiary Amine**

##### **Acute oral toxicity**

LD50: 1,045 mg/kg (Rat)

##### **Acute inhalation toxicity**

LC50: 2.09 mg/l, 6 h (Rat)

##### **Acute dermal toxicity**

LD50: 230 mg/kg (rabbit)

##### **Skin irritation**

Corrosive

##### **Eye irritation**

Corrosive

#### **Toxicity Data for Ester derivative**

##### **Acute oral toxicity**

LD50: > 5,000 mg/kg (Rat)

##### **Acute inhalation toxicity**

LC50: 4.53 - 6.1 mg/l, 4 h (Rat)

##### **Acute dermal toxicity**

LD50: > 3,400 mg/kg (rabbit)

##### **Skin irritation**

rabbit, Slightly irritating

##### **Eye irritation**

rabbit, Slightly irritating

##### **Sensitisation**

non-sensitizer (Guinea pig)

##### **Repeated dose toxicity**

Inhalation: NOAEL: < 0.16 mg/l, (Rat, Male/Female)

**Mutagenicity**

Genetic Toxicity in Vitro:

Ames: negative (Salmonella typhimurium, Metabolic Activation: with/without)

Genetic Toxicity in Vivo:

Micronucleus Assay: negative (mouse, Male/Female, inhalation)  
negative

**Toxicity to Reproduction/Fertility**

One generation study, inhalation, (rat, Male/Female) NOAEL (parental): 1 mg/l, NOAEL (F1): 0.4 mg/l,

**Developmental Toxicity/Teratogenicity**

rat, female, inhalation, NOAEL (teratogenicity): 1 mg/l, NOAEL (maternal): 0.16 mg/l,

No fetotoxicity observed at doses tested.

**Toxicity Data for Tertiary Amine****Acute oral toxicity**

1,900 mg/kg (Rat)

**Acute dermal toxicity**

569 mg/kg (rabbit)

**Skin irritation**

Severely irritating

**Eye irritation**

Severely irritating

**12. Ecological information****Ecological Data for Hydrofluorocarbon****Acute and Prolonged Toxicity to Fish**

LC50: > 97.9 mg/l (Rainbow trout (Salmo gairdneri), 48 h)

**Acute Toxicity to Aquatic Invertebrates**

EC50: 81.8 mg/l (Water flea (Daphnia magna), 96 h)

**Ecological Data for Chlorinated Phosphate Ester****Biodegradation**

Aerobic, 0 %, Exposure time: 28 Days, Not readily biodegradable.

**Bioaccumulation**

Cyprinus carpio (Carp), Exposure time: 42 Days, ca. 0.8 - 2.8 BCF

**Acute and Prolonged Toxicity to Fish**

LC50: ca. 84 mg/l (Bluegill (Lepomis macrochirus), 96 h)

LC50: 51 mg/l (Fathead minnow (Pimephales promelas), 96 h)

LC50: 30 mg/l (Guppy (Poecilia reticulata), 96 h)

**Acute Toxicity to Aquatic Invertebrates**

EC50: ca. 131 mg/l (Water flea (Daphnia magna), 48 h)

**Toxicity to Aquatic Plants**

EC50: 45 mg/l, End Point: biomass (Green algae (Scenedesmus subspicatus), 72 h)

EC50: 41 - 55 mg/l, End Point: biomass (Green algae (Selenastrum capricornutum), 96 h)

**Toxicity to Microorganisms**

EC50: 295 mg/l, (Photobacterium phosphoreum, 30 min)

EC50: 784 mg/l, (Activated sludge microorganisms, 3 h)

**Ecological Data for 2-Butoxyethanol****Biodegradation**

aerobic, 100 %, Exposure time: 28 Days

**Biochemical Oxygen Demand (BOD)**

5 Days, 1,300 mg/g

20 Days, 1,800 mg/g

**Chemical Oxygen Demand (COD)**

2,180 mg/g

**Theoretical Biological Oxygen Demand (ThBOD)**

2,300 mg/g

**Bioaccumulation**

ca. 2.5 BCF

**Acute and Prolonged Toxicity to Fish**

LC50: 1,490 mg/l (Bluegill (Lepomis macrochirus), 96 h)

1,250 mg/l (Silverside Minnow (Menidia peninsulae), 96 h)

LC50: 2,137 mg/l (Fathead minnow (Pimephales promelas), 96 h)

**Acute Toxicity to Aquatic Invertebrates**

EC50: 1,720 - 1,850 mg/l (Water flea (Daphnia magna), 24 h)

LC50: 800 mg/l (Common shrimp (Crangon crangon), 48 h)

**Toxicity to Aquatic Plants**

EC50: > 1,000 mg/l, (Green algae (Selenastrum capricornutum), 7 Days)

**Toxicity to Microorganisms**

IC50: > 1,000 mg/l, (Activated sludge microorganisms, 16 h)

**Ecological Data for Tertiary Amine****Biodegradation**

Not readily biodegradable.

**Acute and Prolonged Toxicity to Fish**

LC50: 220 mg/l (Golden orfe (Leuciscus idus), 96 h)

**Ecological Data for Ester derivative****Biodegradation**

aerobic, 75 %, Exposure time: 28 d, Readily biodegradable.

**Acute and Prolonged Toxicity to Fish**

LC50: 33.6 mg/l (Fathead minnow (Pimephales promelas), 96 h)

**Acute Toxicity to Aquatic Invertebrates**

EC50: 122.1 - 163.5 mg/l (Water flea (Daphnia magna), 48 h)

**Toxicity to Microorganisms**

EC10: 62.5 mg/l, (Pseudomonas putida, 18 h)

### 13. Disposal considerations

#### Waste Disposal Method

Waste disposal should be in accordance with existing federal, state and local environmental control laws.

#### Empty Container Precautions

Recondition or dispose of empty container in accordance with governmental regulations.

### 14. Transport information

#### Land transport (DOT)

Non-Regulated

#### Sea transport (IMDG)

Non-Regulated

#### Air transport (ICAO/IATA)

Proper shipping name: Aviation regulated liquid, n.o.s. (contains Hydrofluorocarbon)

Hazard Class or Division: 9

UN-Number: UN3334

Packaging group:

Hazard Label(s): MISCELLANEOUS

### 15. Regulatory information

#### United States Federal Regulations

OSHA Hazcom Standard Rating: Hazardous

US. Toxic Substances Control Act: Listed on the TSCA Inventory.

US. EPA CERCLA Hazardous Substances (40 CFR 302):

#### Components

2-Butoxyethanol

Included in the regulation but with no data values. See regulation for further details

SARA Section 311/312 Hazard Categories:

Acute Health Hazard, Chronic Health Hazard

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III  
Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):

#### Components

None

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III  
Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required:

#### Components

2-Butoxyethanol

US. EPA Resource Conservation and Recovery Act (RCRA) Composite List of Hazardous Wastes  
and Appendix VIII Hazardous Constituents (40 CFR 261):

Under RCRA, it is the responsibility of the person who generates a solid waste, as defined in 40 CFR

261.2, to determine if that waste is a hazardous waste.

### **State Right-To-Know Information**

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

#### **Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists:**

<b><u>Weight percent</u></b>	<b><u>Components</u></b>	<b><u>CAS-No.</u></b>
>=1%	Polyester Polyol	
20 - 30%	Polymer	CAS# is a trade secret
7 - 13%	Hydrofluorocarbon	460-73-1
>=1%	Polyether Polyol	CAS# is a trade secret
3 - 7%	Chlorinated Phosphate Ester	CAS# is a trade secret
1 - 5%	2-Butoxyethanol	111-76-2

#### **New Jersey Environmental Hazardous Substances List and/or New Jersey RTK Special Hazardous Substances Lists:**

<b><u>Weight percent</u></b>	<b><u>Components</u></b>	<b><u>CAS-No.</u></b>
1 - 5%	2-Butoxyethanol	111-76-2
0.1 - 1%	Ethylene Glycol	107-21-1

#### **Pennsylvania Right to Know Special Hazard Substance List:**

<b><u>Weight percent</u></b>	<b><u>Components</u></b>	<b><u>CAS-No.</u></b>
<0.1%	1,4-Dioxane	123-91-1

#### **MA Right to Know Extraordinarily Hazardous Substance List:**

<b><u>Weight percent</u></b>	<b><u>Components</u></b>	<b><u>CAS-No.</u></b>
<0.1%	1,4-Dioxane	123-91-1

#### **California Prop. 65:**

**Warning! This product contains chemical(s) known to the State of California to be Carcinogenic.**

<b><u>Weight percent</u></b>	<b><u>Components</u></b>	<b><u>CAS-No.</u></b>
<0.1%	1,4-Dioxane	123-91-1

### **16. Other information**

#### **NFPA 704M Rating**

<b>Health</b>	2
<b>Flammability</b>	1
<b>Reactivity</b>	0
<b>Other</b>	

0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme

#### **HMIS Rating**

<b>Health</b>	2*
<b>Flammability</b>	1
<b>Physical Hazard</b>	0

0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

\* = Chronic Health Hazard



The method of hazard communication for Bayer MaterialScience LLC is comprised of Product Labels and Material Safety Data Sheets. HMIS and NFPA ratings are provided by Bayer MaterialScience LLC as a customer service.

Contact person: Product Safety Department  
Telephone: (412) 777-2835  
MSDS Number: 112000039193  
Version Date: 01/20/2010  
Report version: 1.1

This information is furnished without warranty, express or implied. This information is believed to be accurate to the best knowledge of Bayer MaterialScience LLC. The information in this MSDS relates only to the specific material designated herein. Bayer MaterialScience LLC assumes no legal responsibility for use of or reliance upon the information in this MSDS.

# MATERIAL SAFETY DATA SHEET



Bayer MaterialScience

**Bayer MaterialScience LLC**  
**Product Safety & Regulatory Affairs**  
**100 Bayer Road**  
**Pittsburgh, PA 15205-9741**  
**USA**

## TRANSPORTATION EMERGENCY

CALL CHEMTREC: (800) 424-9300  
INTERNATIONAL: (703) 527-3887

## NON-TRANSPORTATION

Emergency Phone: Call Chemtrec  
Information Phone: (800) 662-2927

### 1. Product and Company Identification

**Product Name:** BAYSEAL C C X  
**Material Number:** 80831285  
**Chemical Family:** Polyol System

### 2. Hazards Identification

#### Emergency Overview

**Warning Color:** Amber **Form:** liquid **Odor:** Amine.

Use cold water spray to cool fire-exposed containers to minimize the risk of rupture. Causes respiratory tract irritation. Vapor reduces oxygen available for breathing. Causes skin irritation. May be harmful if absorbed through skin. Causes eye irritation. May cause a temporary fogging of the eyes. When this product is sprayed, a full-face or hood-type supplied air respirator is required. May be harmful if swallowed. May affect nervous system. May cause irregular heartbeat. May cause lung damage. May cause blood disorders. May cause kidney damage. May cause liver damage. May cause adverse reproductive effects.

#### Potential Health Effects

**Primary Routes of Entry:** Inhalation, Eye Contact, Skin Contact

**Medical Conditions Aggravated by Exposure:** Respiratory disorders, Eye disorders, Skin disorders

#### HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE

##### Inhalation

##### Acute Inhalation

##### For Component: Hydrofluorocarbon

May cause respiratory tract irritation with symptoms of coughing, sore throat and runny nose. May induce cardiac arrhythmia (irregular heartbeat) in some individuals. Vapor can reduce oxygen available for breathing.

##### For Component: Tris-(2-chloroisopropyl)-phosphate

May cause respiratory tract irritation with symptoms of coughing, sore throat and runny nose.

**For Component: Triethanolamine**

Inhalation is unlikely due to the low vapor pressure. If misted or handled at elevated temperatures, high concentrations may cause respiratory tract irritation.

**For Component: Trans-1,2-Dichloroethylene**

May cause respiratory tract irritation with symptoms of coughing, sore throat and runny nose. Overexposure to vapor may produce dizziness, drowsiness, or nausea.

**For Component: 2-Butoxyethanol**

Expected to be toxic by inhalation. May cause nervous system effects which can include symptoms of dizziness, incoordination, headache, numbness, and/or confusion.

**For Component: Tertiary Amine**

Corrosive with symptoms of coughing, burning, ulceration, and pain.

**For Component: Tertiary Amine**

Causes respiratory tract irritation with symptoms of coughing, sore throat and runny nose.

**Chronic Inhalation**

**For Component: Tertiary Amine**

May cause lung damage.

**Skin**

**Acute Skin**

**For Component: Hydrofluorocarbon**

Slightly toxic by skin absorption. May cause slight irritation.

**For Component: Tris-(2-chloroisopropyl)-phosphate**

May cause slight irritation.

**For Component: Triethanolamine**

May cause irritation with symptoms of reddening and itching.

**For Component: Trans-1,2-Dichloroethylene**

May cause irritation with symptoms of reddening and itching.

**For Component: 2-Butoxyethanol**

Toxic by skin absorption. May cause irritation with symptoms of reddening and itching.

**For Component: Tertiary Amine**

Toxic by skin absorption. Corrosive with symptoms of reddening, itching, swelling, burning and possible permanent damage.

**For Component: Tertiary Amine**

Corrosive with symptoms of reddening, itching, swelling, burning and possible permanent damage. Toxic by skin absorption.

**Chronic Skin**

**For Component: 2-Butoxyethanol**

May cause defatting of the skin with symptoms of dryness and cracking. Chronic exposure may cause symptoms similar to those described in chronic inhalation.

**For Component: Tertiary Amine**

Prolonged or repeated skin contact may cause dermatitis with symptoms of red, itchy, dry skin.

## **Eye**

### **Acute Eye**

**For Component: Hydrofluorocarbon**

May cause slight irritation.

**For Component: Tris-(2-chloroisopropyl)-phosphate**

Not expected to be irritating.

**For Component: Triethanolamine**

May cause irritation with symptoms of reddening, tearing and stinging.

**For Component: Trans-1,2-Dichloroethylene**

May cause irritation with symptoms of reddening, tearing and stinging.

**For Component: 2-Butoxyethanol**

Causes irritation with symptoms of reddening, tearing, stinging, and swelling.

**For Component: Tertiary Amine**

Corrosive with symptoms of reddening, tearing, swelling, burning and possible permanent damage. Vapors can cause temporary corneal edema with symptoms of blurred vision or the appearance of halos around bright objects.

**For Component: Tertiary Amine**

Vapors can cause temporary corneal edema with symptoms of blurred vision or the appearance of halos around bright objects. Corrosive with symptoms of reddening, tearing, swelling, burning and possible permanent damage.

### **Chronic Eye**

**For Component: Tertiary Amine**

Prolonged vapor contact may cause conjunctivitis.

## **Ingestion**

### **Acute Ingestion**

**For Component: Tris-(2-chloroisopropyl)-phosphate**

May be harmful if swallowed. Symptoms of ingestion may include abdominal pain, nausea, vomiting, and diarrhea. Moderately toxic by ingestion.

**For Component: Triethanolamine**

Symptoms of ingestion may include abdominal pain, nausea, vomiting, and diarrhea.

**For Component: Trans-1,2-Dichloroethylene**

May be harmful if swallowed.

**For Component: 2-Butoxyethanol**

Toxic by ingestion. Symptoms of ingestion may include abdominal pain, nausea, vomiting, and diarrhea. May cause nervous system effects which can include symptoms of dizziness, incoordination, headache, numbness, and/or confusion.

**For Component: Tertiary Amine**

Moderately toxic by ingestion. Corrosive to the digestive tract with symptoms of burning and ulceration.

**For Component: Tertiary Amine**

Ingestion and/or vomiting may cause aspiration into the lungs resulting in chemical pneumonitis (inflammation of the lungs). Corrosive to the digestive tract with symptoms of burning and ulceration.

### **Chronic Ingestion**

**For Component: Tris-(2-chloroisopropyl)-phosphate**

May cause liver damage. May cause kidney damage.

**For Component: Triethanolamine**

May cause liver damage. May cause kidney damage.

**For Component: 2-Butoxyethanol**

May cause blood disorders. May cause kidney damage. May cause liver damage.

**General Effects of Exposure**

**Acute Effects of Exposure**

**For Component: 2-Butoxyethanol**

Absorption may cause acute toxic effects, specifically damage to red blood cells.

**Carcinogenicity:**

No Carcinogenic substances as defined by IARC, NTP and/or OSHA

### 3. Composition/Information on Ingredients

**Hazardous components**

<u>Weight percent</u>	<u>Components</u>	<u>CAS-No.</u>
5 - 10%	Hydrofluorocarbon	CAS# is a trade secret
5 - 10%	Tris-(2-chloroisopropyl)-phosphate	13674-84-5
3 - 7%	Triethanolamine	102-71-6
1 - 5%	Trans-1,2-Dichloroethylene	156-60-5
1 - 5%	2-Butoxyethanol	111-76-2
1 - 5%	Tertiary Amine	CAS# is a trade secret
0.1 - 1%	Tertiary Amine	CAS# is a trade secret

### 4. First aid measures

**Eye contact**

In case of contact, flush eyes with plenty of water for at least 15 minutes. Call a physician immediately.

**Skin contact**

In case of skin contact, wash affected areas with soap and water. Immediately remove contaminated clothing and shoes. Get medical attention.

**Inhalation**

If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

**Ingestion**

If ingested, do not induce vomiting unless directed to do so by medical personnel. Get medical attention.

### 5. Firefighting measures

**Suitable extinguishing media:**

Carbon dioxide (CO<sub>2</sub>), Dry chemical, Foam, water spray for large fires.

### Special Fire Fighting Procedures

Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes. Use cold water spray to cool fire-exposed containers to minimize the risk of rupture.

### Unusual Fire/Explosion Hazards

The reaction of this product with polymeric MDI ("A" side) will release heat (e.g., it is an exothermic reaction). Thus, spraying foam too thickly in a single lift, or not allowing sufficient time between lifts, can result in excessive heat generation to the point where the foam may char, smolder or burn. Refer to the appropriate BaySystems technical datasheet for application instructions.

## 6. Accidental release measures

### Spill and Leak Procedures

Evacuate and keep unnecessary people out of spill area. Remove ignition sources. Notify management. Put on protective equipment. Control source of the leak. Ventilate. Contain the spill. Cover spill with inert material (e.g., dry sand or earth) and collect for proper disposal.

## 7. Handling and storage

### Storage temperature:

minimum:	21.11 °C (70 °F)
maximum:	26.67 °C (80 °F)

### Storage period

4 Months

### Handling/Storage Precautions

Handle in accordance with good industrial hygiene and safety practices. Wash thoroughly after handling. Keep container closed when not in use. Material is hygroscopic and may absorb small amounts of atmospheric moisture. If contamination with isocyanates is suspected, do not reseal containers. Do not get on skin or clothing. Do not get in eyes. Do not breathe vapours or spray mist.

### Further Info on Storage Conditions

Store materials between 70°F to 80°F (21°C to 27°C) in a dry and well ventilated area for a minimum of 48 hours prior to application of material. The transit temperature range is 32°F to 100°F (0°C to 38°C). The pressure in sealed containers can increase under the influence of heat. Protect against heat and direct sunlight.

## 8. Exposure controls/personal protection

When this product is heated or spray applied, amine vapors can be released.

### Triethanolamine (102-71-6)

US. ACGIH Threshold Limit Values  
Time Weighted Average (TWA): 5 mg/m<sup>3</sup>

### Trans-1,2-Dichloroethylene (156-60-5)

US. ACGIH Threshold Limit Values  
Time Weighted Average (TWA): 200 ppm

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

PEL: 200 ppm, 790 mg/m<sup>3</sup>

## **2-Butoxyethanol (111-76-2)**

US. ACGIH Threshold Limit Values

Time Weighted Average (TWA): 20 ppm

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

PEL: 50 ppm, 240 mg/m<sup>3</sup>

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Skin designation: Can be absorbed through the skin.

US. ACGIH Threshold Limit Values

Hazard Designation: Group A3 Confirmed animal carcinogen with unknown relevance to humans.

## **Industrial Hygiene/Ventilation Measures**

When handling this product, ventilation of the work area is recommended.

### **Respiratory protection**

When this product is sprayed in combination with polymeric MDI ("A" side), a full-face or hood-type supplied air respirator operated in the positive pressure or continuous flow mode is required. For exterior spray applications where the use of supplied air respiratory protection may create a safety hazard (e.g., roof applications), an air purifying respirator with combination organic vapor/particulate (P100) cartridges may be substituted for a supplied air respirator. When handling the liquid product, particularly if heated or in a confined area, an air purifying respirator with combination organic vapor/particulate (P100) cartridges is recommended. The respiratory protection selected must comply with the requirements set forth in OSHA's Respiratory Protection Standard (29 CFR 1910.134). When APRs are used, (a) the cartridges must be equipped with end-of-service life indicators (ESLI) certified by NIOSH, or (b) a change out schedule, based on objective information or data that will ensure that the cartridges are changed out before the end of their service life, must be developed and implemented. The basis for the change out schedule must be described in the written respirator program.

### **Hand protection**

When this product is sprayed in combination with polymeric MDI ("A" side), fabric gloves coated in nitrile, neoprene, butyl or PVC are recommended. When handling liquid product, nitrile, neoprene, butyl or PVC gloves are recommended.

### **Eye protection**

When this product is sprayed in combination with polymeric MDI ("A" side), eye protection will be provided by the full-face or hood-type air supplied respirator as mentioned above in the respiratory protection section. When handling liquid product, chemical safety goggles or safety glasses with side-shields are required.

### **Skin and body protection**

When this product is sprayed in combination with polymeric MDI ("A" side), a disposable full body suit (e.g., Tyvek, Kleenguard, etc.) with attached hood and disposable over-boots are required. When handling liquid product, wear cloth work clothing including long pants and long-sleeved shirts. If the potential for splash to the body exists, impermeable protective clothing is recommended.

### **Additional Protective Measures**

Employees should wash their hands and face before eating, drinking, or using tobacco products. Educate and train employees in the safe use and handling of this product.

## **9. Physical and chemical properties**

<b>Form:</b>	liquid
<b>Color:</b>	Amber
<b>Odor:</b>	Amine
<b>pH:</b>	ca. 10
<b>Flash point:</b>	> 100 °C (212 °F) (closed cup)
<b>Specific Gravity:</b>	> 1
<b>Solubility in Water:</b>	Partially soluble

## 10. Stability and reactivity

### Hazardous Reactions

Hazardous polymerisation does not occur. The reaction of this product with polymeric MDI ("A" side) will release heat (e.g., it is an exothermic reaction). Thus, spraying foam too thickly in a single lift, or not allowing sufficient time between lifts, can result in excessive heat generation to the point where the foam may char, smolder or burn. Refer to the appropriate BaySystems technical datasheet for application instructions.

### Stability

Stable

### Materials to avoid

Oxidizing agents, Isocyanates

### Hazardous decomposition products

By Fire and Thermal Decomposition: Carbon dioxide (CO<sub>2</sub>), carbon monoxide (CO), oxides of nitrogen (NO<sub>x</sub>), dense black smoke., Chlorine, Hydrogen chloride gas, Hydrogen fluoride, Carbonyl halides, Oxides of phosphorus, Other hazardous decomposition products may be formed.

## 11. Toxicological information

### Toxicity Data for Hydrofluorocarbon

#### Acute inhalation toxicity

LC50: > 200000 ppm, 4 h (Rat)

#### Acute dermal toxicity

LD50: > 2,000 mg/kg (rat)

#### Skin irritation

rabbit, Non-irritating

#### Eye irritation

rabbit, Mild eye irritation

#### Sensitisation

non-sensitizer (Dog)

#### Repeated dose toxicity

28 d, inhalation: NOAEL: 50,000 ppm, (Rat)

90 d, Inhalation: NOAEL: 2000 ppm, (Rat)

#### Mutagenicity

Genetic Toxicity in Vitro:

Cytogenetic assay: ambiguous (human lymphocytes, Metabolic Activation: with/without)

Ames: negative (Metabolic Activation: with/without)



Genetic Toxicity in Vivo:  
Micronucleus Assay: negative (mouse)  
negative

#### **Developmental Toxicity/Teratogenicity**

No Teratogenic effects observed at doses tested.

#### **Toxicity Data for Tris-(2-chloroisopropyl)-phosphate**

##### **Acute oral toxicity**

LD50: 632 mg/kg (rat)

##### **Acute inhalation toxicity**

LC50: > 17,800 mg/l, 1 h (rat, Male/Female)  
aerosol

##### **Acute dermal toxicity**

LD50: > 5,000 mg/kg (rabbit, Male/Female)

##### **Skin irritation**

Human, Patch Test, No skin irritation  
rabbit, No skin irritation

##### **Eye irritation**

rabbit, slight irritant  
rabbit, Draize, Exposure Time: 24 h, slight irritant

##### **Sensitisation**

dermal: non-sensitizer (guinea pig, Maximization Test)  
dermal: non-sensitizer (Human, Patch Test)

##### **Repeated dose toxicity**

90 Days, oral: NOAEL: 36 mg/kg, (Rat, male)

##### **Mutagenicity**

Genetic Toxicity in Vitro:  
Ames: negative (Salmonella typhimurium, Metabolic Activation: with/without)  
Positive and negative results were reported.  
Mammalian cell - gene mutation assay: positive (Mouse lymphoma cells (L5178Y/TK), Metabolic Activation: with)  
Positive and negative results were reported.

##### **Toxicity to Reproduction/Fertility**

Other method, inhalation, daily, (rat, male)  
Reproductive effects have been observed in animal studies.

#### **Developmental Toxicity/Teratogenicity**

rat, female, oral, gestation, daily, NOAEL (teratogenicity): > 1%, NOAEL (maternal): > 1%  
No Teratogenic effects observed at doses tested., No fetotoxicity observed at doses tested.

#### **Toxicity Data for Triethanolamine**

##### **Acute oral toxicity**

LD50: 4,190 mg/kg (Rat)

##### **Acute dermal toxicity**

LD50: > 2,000 mg/kg (rabbit)

**Skin irritation**

rabbit, Slightly irritating  
Human, Slightly irritating

**Eye irritation**

rabbit, Moderately irritating  
rabbit, Draize, Severely irritating

**Sensitisation**

dermal: non-sensitizer (Guinea pig, Maximization Test)

**Repeated dose toxicity**

28 days, inhalation: NOAEL: > 0.5 mg/l, (Rat, Male/Female, 6 hrs/day 5 days/week)  
13 weeks, dermal: NOAEL: 500 mg/kg, (rat, Male/Female, daily)

**Mutagenicity**

Genetic Toxicity in Vitro:  
Ames: negative (Salmonella typhimurium, Metabolic Activation: with/without)  
Genetic Toxicity in Vivo:  
Drosophila SLRL test: negative (Drosophila melanogaster)  
negative

**Carcinogenicity**

rat, female, dermal, 2 years, daily,  
negative  
mouse, Female, dermal, 2 years,  
positive  
Rat, male, dermal, 2 years,  
ambiguous  
mouse, male, dermal, 2 years,  
ambiguous

Nitrosamines may be formed with nitrates or nitrous acid under certain conditions . Nitrosamines have shown carcinogenic effects in animal tests.

**Toxicity Data for Trans-1,2-Dichloroethylene**

**Acute oral toxicity**

LD50: 1,235 mg/kg (rat)

**Acute inhalation toxicity**

LC50: 24100 ppm, 4 h (rat)

**Acute dermal toxicity**

LD50: > 5,000 mg/kg (rabbit)

**Skin irritation**

rabbit, Exposure Time: 24 h, Moderately irritating

**Eye irritation**

rabbit, Moderately irritating

**Toxicity Data for 2-Butoxyethanol**

**Acute oral toxicity**

LD50: 470 mg/kg (rat)

LD50: 300 mg/kg (rabbit)

**Acute inhalation toxicity**

LC50: 2.21 - 2.39 mg/l, 4 h (Rat)

**Acute dermal toxicity**

LD50: 220 mg/kg (rabbit)

**Skin irritation**

rabbit, Draize, Mild skin irritation

**Eye irritation**

rabbit, Draize, Moderate eye irritation

**Sensitisation**

dermal: non-sensitizer (Guinea pig, Maximization Test)

dermal: non-sensitizer (Human, Patch Test)

**Repeated dose toxicity**

90 Days, inhalation: NOAEL: 0.121 mg/kg, (Rat, Male/Female, daily)

30 Days, inhalation: NOAEL: < 0.27 mg/kg, (Rat, Male/Female, daily)

90 days, dermal: NOAEL: 150 mg/kg, (rabbit, Male/Female, daily)

**Mutagenicity**

Genetic Toxicity in Vitro:

Ames: Negative results were reported in various in vitro studies. (Salmonella typhimurium, Metabolic

Activation: with/without)

Genetic Toxicity in Vivo:

Micronucleus Assay: negative (mouse, )

negative

**Carcinogenicity**

mouse, Male/Female, inhalation, 2 years, daily,

Animal experiments showed a statistically significant number of tumours.

**Toxicity to Reproduction/Fertility**

Other method, oral, daily, (Rat, Male/Female) NOAEL (parental): 304 mg/kg,

Reproductive effects have been observed in animal studies.

Two generation study, oral, (mouse, Male/Female) NOAEL (parental): 720 mg/kg, NOAEL (F1): < 720 mg/kg,

**Developmental Toxicity/Teratogenicity**

Rat, female, inhalation, gestation, daily, NOAEL (teratogenicity): 0.97 mg/kg, NOAEL (maternal): 0.24 mg/kg,

Teratogenic effects seen only with maternal toxicity.

rabbit, female, gestation, daily, NOAEL (teratogenicity): 0.97 mg/kg, NOAEL (maternal): 0.48 mg/kg,

Rat, Female, dermal, gestation, daily, NOAEL (teratogenicity): 5,400 mg/kg, NOAEL (maternal): < 1,800 mg/kg,

**Toxicity Data for Tertiary Amine**

**Acute oral toxicity**

LD50: 1,045 mg/kg (Rat)

**Acute inhalation toxicity**

LC50: 2.09 mg/l, 6 h (Rat)

**Acute dermal toxicity**  
LD50: 230 mg/kg (rabbit)

**Skin irritation**  
Corrosive

**Eye irritation**  
Corrosive

**Toxicity Data for Tertiary Amine**

**Acute oral toxicity**  
1,900 mg/kg (Rat)

**Acute dermal toxicity**  
569 mg/kg (rabbit)

**Skin irritation**  
Severely irritating

**Eye irritation**  
Severely irritating

**12. Ecological information**

**Ecological Data for Hydrofluorocarbon**

**Acute and Prolonged Toxicity to Fish**  
LC50: > 81.8 mg/l (Rainbow trout (*Salmo gairdneri*), 48 h)

**Acute Toxicity to Aquatic Invertebrates**  
EC50: > 97.9 mg/l (Water flea (*Daphnia magna*), 96 h)

**Ecological Data for Tris-(2-chloroisopropyl)-phosphate**

**Biodegradation**  
Aerobic, 0 %, Exposure time: 28 Days, Not readily biodegradable.

**Bioaccumulation**  
Cyprinus carpio (Carp), Exposure time: 42 Days, ca. 0.8 - 2.8 BCF

**Acute and Prolonged Toxicity to Fish**  
LC50: ca. 84 mg/l (Bluegill (*Lepomis macrochirus*), 96 h)  
LC50: 51 mg/l (Fathead minnow (*Pimephales promelas*), 96 h)  
LC50: 30 mg/l (Guppy (*Poecilia reticulata*), 96 h)

**Acute Toxicity to Aquatic Invertebrates**  
EC50: ca. 131 mg/l (Water flea (*Daphnia magna*), 48 h)

**Toxicity to Aquatic Plants**  
EC50: 45 mg/l, End Point: biomass (Green algae (*Scenedesmus subspicatus*), 72 h)  
EC50: 41 - 55 mg/l, End Point: biomass (Green algae (*Selenastrum capricornutum*), 96 h)

**Toxicity to Microorganisms**  
EC50: 295 mg/l, (*Photobacterium phosphoreum*, 30 min)  
EC50: 784 mg/l, (Activated sludge microorganisms, 3 h)

### **Ecological Data for Triethanolamine**

#### **Biodegradation**

Aerobic, 82 %, Exposure time: 8 Days  
Inherently biodegradable.

#### **Biochemical Oxygen Demand (BOD)**

5 Days, 0.17 mg/l

#### **Chemical Oxygen Demand (COD)**

0.5 mg/g

#### **Theoretical Biological Oxygen Demand (ThBOD)**

1.61 - 2.04 mg/g

#### **Bioaccumulation**

Cyprinus carpio (Carp), Exposure time: 42 Days, < 0.4 BCF

#### **Acute and Prolonged Toxicity to Fish**

LC50: > 5,000 mg/l (Fathead minnow (Pimephales promelas), 96 h)

LC50: 450 mg/l (Bluegill (Lepomis macrochirus), 96 h)

#### **Acute Toxicity to Aquatic Invertebrates**

EC50: 1,386 mg/l (Water flea (Daphnia magna), 24 h)

#### **Toxicity to Aquatic Plants**

EC50: 216 - 750 mg/l, End Point: growth (Green algae (Scenedesmus subspicatus), 72 h)

#### **Toxicity to Microorganisms**

EC10: 7,650 mg/l, (Pseudomonas putida, 16 h)

EC50: 525 mg/l, (Photobacterium phosphoreum, 30 min)

### **Ecological Data for Trans-1,2-Dichloroethylene**

#### **Biodegradation**

0 %, Exposure time: 28 d, i.e. not readily degradable

### **Ecological Data for 2-Butoxyethanol**

#### **Biodegradation**

aerobic, 100 %, Exposure time: 28 Days

#### **Biochemical Oxygen Demand (BOD)**

5 Days, 1,300 mg/g

20 Days, 1,800 mg/g

#### **Chemical Oxygen Demand (COD)**

2,180 mg/g

#### **Theoretical Biological Oxygen Demand (ThBOD)**

2,300 mg/g

#### **Bioaccumulation**

ca. 2.5 BCF

#### **Acute and Prolonged Toxicity to Fish**

LC50: 1,490 mg/l (Bluegill (Lepomis macrochirus), 96 h)

1,250 mg/l (Silverside Minnow (Menidia peninsulae), 96 h)

LC50: 2,137 mg/l (Fathead minnow (Pimephales promelas), 96 h)

**Acute Toxicity to Aquatic Invertebrates**EC50: 1,720 - 1,850 mg/l (Water flea (*Daphnia magna*), 24 h)LC50: 800 mg/l (Common shrimp (*Crangon crangon*), 48 h)**Toxicity to Aquatic Plants**EC50: > 1,000 mg/l, (Green algae (*Selenastrum capricornutum*), 7 Days)**Toxicity to Microorganisms**

IC50: &gt; 1,000 mg/l, (Activated sludge microorganisms, 16 h)

**Ecological Data for Tertiary Amine****Biodegradation**

Not readily biodegradable.

**Acute and Prolonged Toxicity to Fish**LC50: 220 mg/l (Golden orfe (*Leuciscus idus*), 96 h)**13. Disposal considerations****Waste Disposal Method**

Waste disposal should be in accordance with existing federal, state and local environmental control laws.

**Empty Container Precautions**

Recondition or dispose of empty container in accordance with governmental regulations.

**14. Transport information****Land transport (DOT)****Proper shipping name:** Other regulated substances, liquid, n.o.s. (contains Hydrofluorocarbon, trans-Dichloroethylene)**Hazard Class or Division:** 9**UN/NA Number:** NA3082**Packaging group:** III**Hazard Label(s):** Class 9**RSPA/DOT Regulated Components:**

Trans-1,2-Dichloroethylene

**Reportable Quantity:** 18144 kg (40001 lb)**Sea transport (IMDG)****Non-Regulated****Air transport (ICAO/IATA)****Proper shipping name:** Aviation regulated liquid, n.o.s. (contains Hydrofluorocarbon, trans-Dichloroethylene)**Hazard Class or Division:** 9**UN number:** UN3334**Packaging group:** III**Hazard Label(s):** MISCELLANEOUS**Additional Transportation Information**

For ground, vessel, rail, when in quantities less than the RQ, this product ships non-regulated.

## 15. Regulatory information

### United States Federal Regulations

**OSHA Hazcom Standard Rating:** Hazardous

**US. Toxic Substances Control Act:** Listed on the TSCA Inventory.

### **US. EPA CERCLA Hazardous Substances (40 CFR 302):**

#### Components

Trans-1,2-Dichloroethylene	Reportable quantity: 1000 lbs
2-Butoxyethanol	Included in the regulation but with no data values. See regulation for further details

### **SARA Section 311/312 Hazard Categories:**

Acute Health Hazard, Chronic Health Hazard

### **US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):**

#### Components

None

### **US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required:**

#### Components

Trans-1,2-Dichloroethylene  
2-Butoxyethanol

### **US. EPA Resource Conservation and Recovery Act (RCRA) Composite List of Hazardous Wastes and Appendix VIII Hazardous Constituents (40 CFR 261)**

Under RCRA, it is the responsibility of the person who generates a solid waste, as defined in 40 CFR 261.2, to determine if that waste is a hazardous waste.

### **State Right-To-Know Information**

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

### **Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists:**

<u>Weight percent</u>	<u>Components</u>	<u>CAS-No.</u>
>=1%	Polyester Polyol	CAS# is a trade secret
5 - 10%	Hydrofluorocarbon	CAS# is a trade secret
>=1%	Non-halogenated flame retardant	CAS# is a trade secret
5 - 10%	Tris-(2-chloroisopropyl)-phosphate	13674-84-5
>=1%	Polyether Polyol	CAS# is a trade secret
3 - 7%	Triethanolamine	102-71-6
1 - 5%	Trans-1,2-Dichloroethylene	156-60-5
1 - 5%	2-Butoxyethanol	111-76-2

### **New Jersey Environmental Hazardous Substances List and/or New Jersey RTK Special Hazardous Substances Lists:**

<u>Weight percent</u>	<u>Components</u>	<u>CAS-No.</u>
1 - 5%	Trans-1,2-Dichloroethylene	156-60-5
1 - 5%	2-Butoxyethanol	111-76-2

0.1 - 1%

Ethylene Glycol

107-21-1

**Pennsylvania Right to Know Special Hazard Substance List:****Weight percent****Components****CAS-No.**

&lt;0.1%

1,4-Dioxane

123-91-1

**MA Right to Know Extraordinarily Hazardous Substance List:****Weight percent****Components****CAS-No.**

&lt;0.1%

1,4-Dioxane

123-91-1

**California Prop. 65:****Warning! This product contains chemical(s) known to the State of California to be Carcinogenic.****Weight percent****Components****CAS-No.**

&lt;0.1%

1,4-Dioxane

123-91-1

**16. Other information****NFPA 704M Rating**

<b>Health</b>	2
<b>Flammability</b>	1
<b>Reactivity</b>	0
<b>Other</b>	

0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme

**HMIS Rating**

<b>Health</b>	2*
<b>Flammability</b>	1
<b>Physical Hazard</b>	0

0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

\* = Chronic Health Hazard

The method of hazard communication for Bayer MaterialScience LLC is comprised of Product Labels and Material Safety Data Sheets. HMIS and NFPA ratings are provided by Bayer MaterialScience LLC as a customer service.

Contact person: Product Safety Department  
 Telephone: (412) 777-2835  
 MSDS Number: 112000047811  
 Version Date: 02/07/2012  
 Report version: 1.0

This information is furnished without warranty, express or implied. This information is believed to be accurate to the best knowledge of Bayer MaterialScience LLC. The information in this MSDS relates only to the specific material designated herein. Bayer MaterialScience LLC assumes no legal responsibility for use of or reliance upon the information in this MSDS.



# A-PMDI




## SAFETY DATA SHEET

### SECTION 1: PRODUCT & COMPANY INFORMATION

Distributed By Demilec 3315 E. Division Street, Arlington, TX 76011 Phone: 817-640-4900 / Fax: 817-633-2000 Email: Info@Demilec.com / Website: www.Demilec.com	Product Trade Name: A-PMDI Chemical Name: Diphenylmethane Diisocyanate (MDI) Chemical Family: Aromatic Isocyanate Product Use: Component of a Polyurethane System
Emergency Telephone: 1-877-DEMILEC (336-4532) or CHEMTREC 800-424-9300 or CANUTEC 613-996-6666	

### SECTION 2: HAZARDS IDENTIFICATION

Physical State / Color / Odor	Liquid / Brown / Slightly musty	
EMERGENCY OVERVIEW / WARNING		
OSHA / HCS Status	This material is classified hazardous under OSHA Hazard Communication Standard (29 CFR 1910.1200).	
Physical / Chemical Hazards	Toxic vapors may be released during burning or thermal decomposition. Closed container may forcibly rupture under extreme heat or when contents have been contaminated with water. Use cold water spray to cool fire exposed containers to minimize the risk of rupture.	
Human Health Hazard	Harmful by inhalation. Irritating to eyes, respiratory system and skin. May cause sensitization by inhalation and skin contact. This product is respiratory irritant and potential respiratory sensitizer: repeated inhalation of vapor or aerosol at levels above the occupational exposure limit could cause respiratory sensitization. A hyper reactive response to even minimal concentrations of MDI may develop in sensitized persons. The onset of the respiratory symptoms may be delayed for several hours after exposure. Lung damage and respiratory sensitization may be permanent.	

### SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENTS	CAS #	%
Polymeric Diphenylmethane Diisocyanate (pMDI)	9016-87-9	50 - 60
4,4' Diphenylmethane Diisocyanate (MDI)	101-68-8	35 - 45
2,4' Diphenylmethane Diisocyanate (MDI)	5873-54-1	1 - 5

### SECTION 4: FIRST AID MEASURES

Eye Contact	Immediately flush eyes with running water for a minimum of 15 minutes. Use lukewarm water if possible. Hold eyelids open during flushing. Obtain medical attention immediately.
Skin Contact	In case of contact, immediately remove contaminated clothing and shoes. Immediately flush skin with soap and water. Use lukewarm water if possible. Wash contaminated clothing and shoes thoroughly before reuse. For severe exposures, immediately get under safety shower and start rinsing. If the irritation develops, obtain medical attention.
Inhalation	Move to an area free from further exposure. Obtain medical attention immediately. If breathing is difficult, qualified personnel should administer artificial respiration or oxygen. Asthmatic symptoms may develop and may be immediate or delayed up to several hours. Extreme asthmatic reactions can be life threatening.
Ingestion	DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If patient is conscious, wash out mouth with water. Get immediate medical attention.
Protection of First-aiders	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
Notes to Physician	Eyes: Stain for evidence of corneal injury. If cornea is burned, instill antibiotic/steroid preparation as needed. Workplace vapors could produce reversible corneal epithelial edema impairing vision. Skin: this compound is a skin sensitizer. Treat symptomatically as for contact dermatitis or thermal burn. Ingestion: treat symptomatically. There is no specific antidote. Inducing vomiting is contraindicated because of the irritating nature of compound. Inhalation: treatment is essentially symptomatic. An individual having a dermal or pulmonary sensitization reaction to this material should be removed from further exposure to any diisocyanate. Following severe exposure the patient should be kept under medical review for at least 48 hours.

SECTION 5: FIRE FIGHTING MEASURES	
Suitable Extinguishing Media	Dry chemical, carbon dioxide (CO <sub>2</sub> ), foam, water spray for large fires.
Hazardous Products of Thermal Decomposition	Combustion products may include carbon monoxide, carbon dioxide, nitrogen oxides, hydrocarbons and HCN.
Special Fire Fighting Procedures	Firefighter should be equipped with self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode to protect against potentially toxic and irritating fumes generated by thermal decomposition or combustion during a fire. They should wear appropriate protective equipment such as PVC boots, gloves, safety helmet and protective clothing. Avoid contact with product. Exposure to heated diisocyanate can be extremely dangerous. Decontaminate equipment and clothing prior to reuse.
Unusual Fire / Explosion Hazards	A hazardous pressure buildup could result due to reaction with water producing CO <sub>2</sub> gas if contaminated containers are resealed. Containers may burst if overheated. Use cold water spray to cool fire exposed containers to minimize the risk of rupture. Large fires can be extinguished with large volumes of water applied from a safe distance, since reaction between water and hot diisocyanate can be vigorous.

SECTION 6: ACCIDENTAL RELEASE MEASURES	
Spill and Leak Procedures	Evacuate all non-emergency personnel. Isolate the area and prevent access. Eliminate all sources of ignition. Notify management. Use protective equipment. Control sources of the leak. Ventilate. Clean-up should be performed by trained personnel.
Methods for Cleaning-up	Environmental Precautions: Contain the spill to prevent spread into drains, sewers, water supplies, or soil. Major Spill or Leak: Released material may be pumped into closed, but not sealed metal containers for disposal. Process can generate heat. People dealing with major spillage should wear full protective clothing including respiratory protection. Use suitable protective equipment. Minor Spill or Leak: Cover spill area with sand, earth or any suitable absorbent material. Saturate absorbent material with neutralization solution and mix. Wait 15 minutes. Collect material in open-head metal containers. Repeat applications of decontamination solution, with scrubbing, followed by absorbent until the surface is decontaminated. Check for residual surface contamination. Swipe® test kits have been used for this purpose. Apply lid loosely and allow containers to vent for 72 hours to let carbon dioxide to escape. Wash the spillage area with water. Test atmosphere for MDI vapor.
Neutralization Solutions	<ul style="list-style-type: none"> <li>a mixture of 75% water, 20% non-ionic surfactant and 5% n-propanol</li> <li>a mixture of 80% water with 20% non-ionic surfactant</li> <li>a mixture of 90% water, 3-8% ammonium hydroxide or concentrated ammonia and 2% detergent</li> </ul>

SECTION 7: HANDLING & STORAGE	
Storage Temperature	50 - 100°F (10 - 38°C)
Storage Life	12 months
Handling	Do not breathe vapor, mists or dusts. Avoid contact with skin and eyes. Use adequate ventilation to keep airborne isocyanate levels below the exposure limits. The efficiency of the ventilation system must be monitored regularly because of the possibility of blockage. When the product is sprayed, heated, or used in confined space, suitable respiratory protection equipment with positive air supply is required. Keep equipment clean. This material can produce asthmatic sensitization upon either single inhalation exposure to a relatively high concentration or upon repeated inhalation exposures to lower concentrations. Individuals with lung or breathing problems or prior allergic reactions to isocyanates must not be exposed to vapors and mist. Do not breathe smoke and gases created by overheating or burning this material. Decomposition products can be highly toxic and irritating. Keep stocks of decontaminant readily available. Employee education and training in the safe use and handling of this product are required under the OSHA Hazard Communication Standard 29 CFR 1910.1200.
Storage	Store in tightly closed containers to prevent moisture contamination. Due to reaction with water producing CO <sub>2</sub> gas, a hazardous build up of pressure could result if contaminated containers are resealed. Do not reseal container if contamination is suspected. Uncontaminated containers, free of moisture, may be resealed only after placing under a nitrogen blanket.
Packaging Containers	Suitable: steel, stainless steel. Unsuitable: copper, copper alloys or galvanized surfaces.

SECTION 8: EXPOSURE CONTROL / PERSONAL PROTECTION	
Ingredient Name	4,4' Diphenylmethane Diisocyanate
OCCUPATIONAL EXPOSURE LIMITS	
US. ACGIH Threshold Limit Values: TWA: 0.005 ppm US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000): Ceiling Limit Value: 0.02 ppm, 0.2 mg/m <sup>3</sup> US. NIOSH: Pocket Guide to Chemical Hazards: Recommended Exposure Limit REL/TWA: 0.005 ppm, 0.05 mg/m <sup>3</sup> (10 hour, 40 hrs/week) Ceiling Limit Value and Time Period (if specified): 0.020 ppm, 0.2 mg/m <sup>3</sup> (10 min)	
ENVIRONMENTAL CONTROLS	
Occupational Exposure Controls	Provide exhaust ventilation or other engineering controls to keep the airborne vapors concentrations below their respective occupational exposure limits. Standard reference sources regarding industrial ventilation (e.g. ACGIH Industrial Ventilation Manual) should be used as a guide about adequate ventilation. To ensure that published exposure limits have not been exceeded, monitoring for airborne diisocyanate should become part of the overall employee exposure characterization program. NIOSH and OSHA have developed sampling and analytical methods and they are available upon request. MDI can only be smelled if the occupational exposure limit has been exceeded considerably.

Environmental Exposure Controls	Emissions from ventilation or work process equipment should be checked to ensure compliance with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
<b>PERSONAL PROTECTIVE EQUIPMENT</b>	
Eye Protection	Eye protection is required when directly handling liquid product. Safety eyewear such as chemical safety goggles or 8" face shield should be used when there is a greater risk of liquid splash. Contact lenses should not be worn when working with this chemical.
Skin Protection	Avoid all contact with skin. Cover exposed skin area with appropriate clothing to prevent skin contact. Use chemical resistant gloves such as nitrile/butadiene rubber ("nitrile" or "NBR"), butyl rubber, polyvinyl chloride ("PVC" or "vinyl"), polychloroprene (neoprene). Protective gloves should be worn when handling freshly made polyurethane products to avoid contact with trace residual materials that may be hazardous in contact with skin. Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Animal tests and other research indicate that skin contact with MDI can play a role in causing isocyanate sensitization and respiratory reaction.
Respiratory Protection	Airborne MDI concentrations greater than the ACGIH TLV-TWA (TWA) or OSHA PEL-C (PEL) can occur in inadequately ventilated environments when MDI is sprayed, aerosolized or heated. In such cases, respiratory protection must be worn. The type of protection selected must comply with the requirements set forth in OSHA's Respiratory Protection Standard (29 CFR 1910.134). The type of available protection include: 1) an atmosphere-supplying respirator such as a self-contained breathing apparatus (SCBA) or a supplied air respirator (SAR) in the positive pressure or continuous flow mode, or 2) an air purifying respirator (APR). If an APR is selected then: a) cartridge must be equipped with an end-of-service life indicator (ESLI) certified by NIOSH, or (b) a change out of schedule, based on objective information or data that will ensure that the cartridges are changed out before the end of their service life, must be developed and implemented. The basis for the change out of schedule must be described in the written respirator program. Further, if an APR is selected, the airborne diisocyanate concentration must be no greater than 10 times the TLV or PEL. The recommended APR cartridge is an organic vapor/particulate filter combination cartridge (OV/P100).
Medical Surveillance	All applicants assigned to an isocyanate work area should undergo a pre-placement medical evaluation. A history of asthma, bronchitis, eczema or respiratory allergies such as hay fever, are possible reasons for medical exclusion from isocyanate areas. Once a worker has been diagnosed as sensitized to any isocyanate, no further exposure can be permitted. The Occupational Exposure Limits do not apply to previously sensitized individuals. A comprehensive annual medical surveillance program should be instituted for all employees who are potentially exposed to diisocyanates.
Additional Protective Measures	Ensure that eyewash stations and safety showers are close to the workstation. Educate and train employees in the safe use and handling of this product. Follow all label instructions.

## SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

Physical State	Brown liquid
Odor	Slightly musty
Viscosity @ 77°F (25°C)	180 - 220 cps
Specific Gravity @ 77°F (25°C)	1.24
Flash Point	> 388°F (198°C) by ASTM D 93
Auto-Ignition Temperature	> 1112°F (600°C)
Boiling Point	~406°F (208°C)
Bulk Density	1.234 kg/m <sup>3</sup>
pH	N/A
Vapor Pressure	< 0.0001 mmHg @ 77°F (25°C) (MDI)
Vapor Density (Air=1)	8.5 for MDI
Solubility in Water	Insoluble. Reacts slowly with water to liberate CO <sub>2</sub>

## SECTION 10: STABILITY & REACTIVITY

Incompatibility	Stable at room temperature. This product will react and release heat with any materials containing active hydrogen. The reaction is accelerated and can be violent at higher temperatures if the miscibility of the reaction partners is good or is supported by stirring or by the presence of solvents. MDI is insoluble with and heavier than water and sinks to the bottom, but reacts slowly at the interface. A solid water-insoluble layer of polyurea is formed at the interface by liberating CO <sub>2</sub> .
Conditions / Materials to Avoid	Avoid high temperatures. Avoid water, alcohols, amines, bases, copper alloys
Hazardous Polymerization	May occur at elevated temperatures (350°F (177°C)), in the presence of alkalis, tertiary amines and metal compounds.
Hazardous Products of Decomposition	Isocyanate vapors and other irritating, highly toxic gases such as carbon dioxide, carbon monoxide, nitrogen oxides, hydrocarbons and HCN.

SECTION 11: TOXICOLOGICAL INFORMATION				
	Acute Oral Toxicity, LD50 (Rat)	Acute Inhalation Toxicity, LC50 (Rat)	Acute Dermal Toxicity, LD50 (Rabbit)	Repeated Dose Toxicity (Rat)
A-PMDI (data based on comparable products)	> 2000 mg/kg	490 mg/m³ (4 hr)	slightly irritating	90 days, inhalation: NOAEL: 1 mg/m³ (6 hrs/day 5 days/week) Irritation to lungs & nasal cavities
4,4' Diphenylmethane Diisocyanate	N/A	369 mg/m³ (4 hr) > 2240 mg/m³ (1 hr)	> 10,000 mg/kg	90 days, inhalation: NOAEL: 0.3 mg/m³ (18 hrs/day 5 days/week) Irritation to lungs & nasal cavities
POTENTIAL ACUTE HEALTH EFFECTS				
Eye Contact	Irritating to eyes			
Skin Contact	Irritating to skin. May cause sensitization by skin contact.			
Inhalation	Product is a respiratory irritant and potential respiratory sensitizer. Repeated inhalation of vapors or aerosols at levels above the occupational exposure limit could cause respiratory sensitization. Symptoms may include irritation to eyes, nose, throat and lungs, possibly combined with dryness of the throat, tightness of chest and difficulty in breathing. The onset of the respiratory symptoms may be delayed for several hours after exposure. A hyper-reactive response to even minimal concentrations of MDI may develop in sensitized persons.			
Ingestion	Low oral toxicity. Ingestion may cause irritation of gastrointestinal tract.			
POTENTIAL CHRONIC HEALTH EFFECTS				
Target Organs	Lungs, upper respiratory tract, skin			
Carcinogenic Effects	A study was conducted where groups of rats were exposed for 2 years to a respirable polymeric MDI aerosol at concentrations of 0, 0.2, 1 or 6 mg/m³. No adverse effects were observed at 0.2 mg/m³. At the 1 mg/m³, minimal nasal and lung irritant effects were seen. Only at the top concentration (6 mg/m³) there was an increased incidence of benign tumor of the lung. One malignant pulmonary tumor was seen in the 6 mg/m³ group. MDI administration to rats in this study did not change the distribution and incidence of tumors from those seen in control animals. The increased incidence of lung tumors is associated with prolonged respiratory irritation and the concurrent accumulation of yellow material in the lung. In the absence of prolonged exposure to high concentrations leading to chronic irritation and lung damage, it is highly unlikely that tumor formation will occur.			
Mutagenic Effects	There is no substantial evidence of mutagenic potential.			
Reproductive Effects	No adverse reproductive effects are anticipated. No birth defects were seen in two independent animal (rat) studies. Fetotoxicity was observed at doses that were extremely toxic (including lethal) to the mother. Fetotoxicity was not observed at doses that were not maternally toxic. The doses used in these studies were maximal respirable concentrations well in excess of the defined occupational exposure limits.			
SECTION 12: ECOLOGICAL INFORMATION				
AQUATIC TOXICITY DATA FOR COMPONENTS TOXICITY				
A-PMDI (data based on comparable products)	Biodegradation: 0%, not degradable (exposure time 28 days) Bioaccumulation: does not accumulate (112 days) (rainbow trout) Acute & Prolonged Toxicity to Fish: LC50: > 1,000 mg/l (96 hrs) (zebra fish) LC50: > 3,000 mg/l (96 hrs) (orange-red killifish) Acute & Prolonged Toxicity to Invertebrates: EC50: > 1,000 mg/l (24 hrs) (daphnia magna) Toxicity to Aquatic Plants: NOEC: 1,640 mg/l (72 hrs) (green algae) Toxicity to Microorganisms: EC50: > 100 mg/l (3 hrs) (activated sludge)			
4,4' Diphenylmethane Diisocyanate	Acute & Prolonged Toxicity to Fish: LC50: > 500 mg/l (24 hrs) (zebra fish) Acute & Prolonged Toxicity to Invertebrates: EC50: > 500 mg/l (24 hrs) (daphnia magna)			
Mobility	By considering the production and use of substance, it is unlikely that significant environmental exposure in the air or water will arise. Immiscible with water but will react and produce inert and non-biodegradable solids. Conversion to soluble products, including diamino-diphenylmethane (MDA) is very low under the optimal laboratory conditions of good dispersion and low concentration. In air, the predominant degradation process is predicted to be relatively rapid OH attack, by calculation and by analogy with related diisocyanates.			
Other Adverse Effects	By comparison with an analogous product, the following values are anticipated. The measured ecotoxicity is that of the hydrolyzed product, generally under conditions maximizing production of soluble species. Even so, the observed ecotoxicity is low/very low. A pond study showed gross contamination caused no significant toxic effects on a wide variety of flora in all trophic levels (including fish), no detectable diamino-diphenylmethane (MDA), and no evidence of bioaccumulation of MDI or MDA.			
SECTION 13: DISPOSAL CONSIDERATION				
Waste Disposal Method	The generation of waste should be avoided or minimized whenever possible. Waste must be disposed of in compliance with federal, state, provincial and local environmental control regulations. Dispose of surplus and non-recyclable products via licensed waste disposal contractor. Incineration is the preferred method. If incinerated, toxic and corrosive combustion gases must be properly handled.			

Empty Container Precautions	Empty containers retain product residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.
Demilec has no control over the management practices or manufacturing processes of parties handling or using this material. The information presented here pertains only to the product as shipped in its original condition as described in SDS Section 3 (Ingredients).	

#### SECTION 14: TRANSPORTATION INFORMATION

Technical Shipping Name	A-PMDI
Land Transport / DOT Classification	Non-regulated
RSPA / DOT Regulated Components	4,4' Diphenylmethane Diisocyanate Reportable Quantity (RQ) for 4,4 MDI: Single containers with $\geq$ 5,000 lbs Reportable Quantity (RQ) for A-PMDI: Single containers with $\geq$ 11,905 lbs
Additional Transport Information	In individual containers of less than the Reportable Quantity, material ships as non-regulated.
Sea Transport / IMDG Classification	Non-regulated
Air Transport / ICAO / IATA Classification	Non-regulated
TDG Classification	Non-regulated
Emergency Telephone Number	1-877-DEMILEC (336-4532) or CHEMTREC 800-424-9300 or CANUTEC 613-996-6666

#### SECTION 15: REGULATORY INFORMATION

##### U.S. FEDERAL REGULATIONS

OSHA Hazcom Standard Rating	This material is classified as hazardous under OSHA Hazard Communication Standard (29 CFR 1910.1200)		
HSC Classification	Toxic / Irritant / Sensitizer		
US. Toxic Substances Control Act / TSCA	All ingredients are listed on the TSCA Inventory		
US. EPA CERCLA Hazardous Substances (40 CFR 302)	4,4' Diphenylmethane Diisocyanate (CAS 101-68-8) has a 5,000 lbs RQ. Any spill or release above the RQ must be reported to the National Response Center (800-424-8802).		
SARA Section 311/312 Hazard Categories	Acute Health Hazard, Chronic Health Hazard		
US. EPA EPCRA SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A)	Non-regulated		
US. EPA EPCRA SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required	Components: Polymeric Diphenylmethane Diisocyanate (pMDI): 50 - 60% 4,4' Diphenylmethane Diisocyanate: 35 - 45%		
US. EPA RCRA Composite List of Hazardous Wastes and Appendix VIII Hazardous Constituents (40 CFR 261)	If discarded in its purchased form, this product will not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste (40 CFR 261.20-24).		
State Regulations	The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the SDS may also be applicable to state requirements. For details on your regulatory requirements you should contact appropriate agency in your state.		
California Prop. 65	No ingredients listed		
Massachusetts, New Jersey or Pennsylvania Right to Know Substances Lists	<b>COMPONENTS</b>	<b>CAS #</b>	<b>WEIGHT %</b>
	Polymeric Diphenylmethane Diisocyanate (pMDI)	9016-87-9	50 - 60
	4,4' Diphenylmethane Diisocyanate (MDI)	101-68-8	35 - 45
	2,4' Diphenylmethane Diisocyanate (MDI)	5873-54-1	1 - 5
New Jersey Environmental Hazardous Substances List and/or New Jersey RTK Special Hazardous Substances Lists	<b>COMPONENTS</b>	<b>CAS #</b>	<b>WEIGHT %</b>
	Polymeric Diphenylmethane Diisocyanate (pMDI)	9016-87-9	40 - 55
	4,4' Diphenylmethane Diisocyanate (MDI)	101-68-8	35 - 45

##### CANADA

WHMIS	Class D-1A / Material causing immediate and serious toxic effects (very toxic) Class D-2A / Material causing other toxic effects (very toxic) Class D-2B / Material causing other toxic effects (toxic)
CEPA (DSL)	Canada Inventory: All components are listed or exempted.

**SECTION 16: OTHER INFORMATION**

HMIS Rating 0 – Minimal; 1 – Slight; 2 – Moderate; 3 – Serious; 4 – Severe	Health	2
	Fire Hazard	1
	Reactivity	1
NFPA Rating 0 – Insignificant; 1 – Slight; 2 – Moderate; 3 – High; 4 – Extreme	Health Hazard: 2 Flammability Hazard: 1 Instability Hazard: 1	
This product does not contain nor is it manufactured with ozone depleting substances.		
Notice: The information herein is presented in good faith and believed to be accurate as of the effective date shown below. However, no warranty expressed or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the user’s responsibility to ensure that its activities comply with country, state, provincial and local laws. This product may present hazards and should be used with caution. While certain hazards are described in this publication, no guarantee is made that these are the only hazards that exist. Hazards, toxicity and behavior of the products may differ when used with other materials and are dependent upon manufacturing circumstances or other processes. Such hazards, toxicity and behavior should be determined by the user and made known to handlers, processors and end users.		
Prepared By	Demilec – EHS Group	
Current Issue Date	March, 2015	



## SAFETY DATA SHEET

### SECTION 1: PRODUCT & COMPANY INFORMATION

Manufactured For  
Demilec  
3315 E. Division Street, Arlington, TX 76011  
Phone: 817-640-4900 / Fax: 817-633-2000  
E-mail: Info@Demilec.com / Website: www.Demilec.com

Product  
Trade Name: Blazelok™ TBX  
Chemical Name: Intumescent Coating

Emergency Telephone: 1-877-DEMILEC (336-4532) or CHEMTREC 800-424-9300 or CANUTEC 613-996-6666

### SECTION 2: HAZARDS IDENTIFICATION

Physical State / Color      Liquid / White-Gray

#### EMERGENCY OVERVIEW / WARNING

Physical / Chemical Hazards	Acute Health Hazard
Routes of Entry	Eye contact, skin contact, inhalation, ingestion.
Eye Contact	Direct contact may cause irritation, redness and/or swelling.
Skin Contact	Direct contact may cause irritation.
Inhalation	May cause headaches.
Ingestion	May cause gastrointestinal irritation.
Carcinogenicity	The components of this product are not listed by NTP, IARC or regulated as a carcinogen by OSHA.

### SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

No reportable quantities of hazardous ingredients are present.

### SECTION 4: FIRST AID MEASURES

Eye Contact	Immediately flush eyes with running water for a minimum of 15 minutes.
Skin Contact	Thoroughly wash the affected area with soap and water. Remove contaminated clothing.
Inhalation	Move exposed person to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped, give artificial respiration and seek medical attention.
Ingestion	If material has been swallowed and the exposed person is conscious, give small quantities of water.
Notes to Physician	Severe exposure may cause dermatitis and/or a respiratory tract infection.

### SECTION 5: FIRE FIGHTING MEASURES

Flash Point	N/A
Upper Flammable Limit (% vol.)	N/A
Lower Flammable Limit (% vol.)	N/A
Suitable Extinguishing Media	N/A
Explosion Hazards	Closed containers may rupture when exposed to extreme heat.
Hazardous Products of Thermal Decomposition	Carbon monoxide and/or carbon dioxide may be released when exposed to high temperatures.
Special Fire Fighting Procedures	Firefighter should be equipped with self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode to protect against potentially toxic and irritating fumes generated by thermal decomposition or combustion during a fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES	
Personal Precautions	Avoid breathing vapors or mist. Provide adequate ventilation. Use suitable protective equipment.
Environmental Precautions	Avoid spreading of spilled material, runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution.
Methods for Cleaning Up	Contain the spill area, cover with an inert absorbent material, and remove to disposal container. Mop with mild detergent or cleaning solution. Observe all federal, state and local laws.

SECTION 7: HANDLING & STORAGE	
Storage Temperature	> 45°F (7°C)
Storage Life	12 months
Storage Precautions	Closed containers may rupture when exposed to extreme heat.

SECTION 8: EXPOSURE CONTROL / PERSONAL PROTECTION	
EXPOSURE LIMIT VALUES	
For Product	N/A
PERSONAL PROTECTIVE EQUIPMENT	
Eye Protection	Eye protection is required during application. Use appropriate chemical goggles with splash guards or side shields or use a full-faced respirator.
Skin Protection	Use long sleeve protective clothing and rubber/latex gloves. Wash hands, forearms and face thoroughly after handling chemical products, before eating, drinking, smoking, using the lavatory and at the end of the working period.
Respiratory Protection	Always use safety goggles and a mask with NIOSH approved organic vapor filter.
Environmental Exposure Controls / Ventilation Requirements	Local exhaust as required by job conditions to keep TLV below acceptable limits. Refer to OSHA regulations 29 CFR Part 1910.94.
Additional Protective Measures	Safety showers and eye wash stations should be easily accessible to the work area.

SECTION 9: PHYSICAL & CHEMICAL PROPERTIES	
Appearance	White/Gray liquid
Flash Point	N/A
Boiling Point	N/A
Vapor Density	Heavier than air
Evaporation Rate	Slower than butyl acetate
VOC / Volatility	< 50 g/l - Complies with AQMD and EPA requirements
Weight per Gallon	11.2 - 11.8 lbs.

SECTION 10: STABILITY & REACTIVITY	
Stability	This product is considered stable under normal and anticipated storage and handling conditions.
Conditions to Avoid	Avoid exposure to extreme heat. Closed containers may rupture when exposed to extreme heat.
Materials to Avoid	Avoid contact with oxidizing materials.
Hazardous Polymerization	Will not occur
Hazardous Products of Thermal Decomposition	Carbon monoxide and/or carbon dioxide may be released when exposed to high temperatures.
Decomposition Temperature	N/A

SECTION 11: TOXICOLOGICAL INFORMATION	
POTENTIAL ACUTE HEALTH EFFECTS	
Eye Contact	Direct contact may cause irritation, redness and/or swelling.
Skin Contact	Direct contact may cause irritation.
Inhalation	May cause headaches.
Ingestion	May cause gastrointestinal irritation.
POTENTIAL CHRONIC HEALTH EFFECTS	
Carcinogenicity	The components of this product are not listed by NTP, IARC or regulated as a carcinogen by OSHA.



**SECTION 12: ECOLOGICAL INFORMATION**

No information available.

**SECTION 13: DISPOSAL CONSIDERATION****Waste Disposal Method**

Waste must be disposed of in compliance with federal, state, provincial and local environmental control regulations. Dispose of surplus and non-recyclable products via licensed waste disposal contractor. Incineration is the preferred method. If incinerated, toxic and corrosive combustion gases must be properly handled. DO NOT incinerate closed containers.

Demilec has no control over the management practices or manufacturing processes of parties handling or using this material. The information presented here pertains only to the product as shipped in its original condition.

**SECTION 14: TRANSPORTATION INFORMATION**

Technical Shipping Name	Blazelok TBX
Land Transport / DOT Classification	Non-regulated
Sea Transport / IMDG Classification	Non-regulated
Air Transport / ICAO / IATA Classification	Non-regulated
TDG Classification	Non-regulated
WHMIS Classification	Non-regulated
Emergency Telephone Number	1-877-DEMILEC (336-4532) or CHEMTREC (800) 424-9300 or CANUTEC (613) 996-6666

**SECTION 15: REGULATORY INFORMATION**

U.S. EPA EPCRA SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65)	None
State Regulations	Check individual state requirements.

**SECTION 16: OTHER INFORMATION**

Notice: The information herein is presented in good faith and believed to be accurate as of the effective date shown below. However, no warranty expressed or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the user's responsibility to ensure that its activities comply with country, state, provincial and local laws. This product may present hazards and should be used with caution. While certain hazards are described in this publication, no guarantee is made that these are the only hazards that exist. Hazards, toxicity and behavior of the products may differ when used with other materials and are dependent upon manufacturing circumstances or other processes. Such hazards, toxicity and behavior should be determined by the user and made known to handlers, processors and end users.

Prepared By	Demilec - EHS Group
Current Issue Date	February, 2015

## SAFETY DATA SHEET – FINISHED FOAM

## SECTION 1: PRODUCT &amp; COMPANY INFORMATION

Manufacturer of Chemical Components Demilec 3315 E. Division Street, Arlington, TX 76011 Phone: 817-640-4900 / Fax: 817-633-2000 E-mail: Info@Demilec.com / Website: www.Demilec.com	Product Trade Name: Sealection® 500 Chemical Name: Semi-rigid Urethane Foam Plastic Chemical Family: Urethane
Emergency Telephone: 1-877-DEMILEC (336-4532) or CHEMTREC 800-424-9300 or CANUTEC 613-996-6666	

## SECTION 2: HAZARDS IDENTIFICATION

Physical State / Odor	Semi-rigid open cellular plastic / Neutral
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## EMERGENCY OVERVIEW / WARNING

Routes of Entry	Skin contact, inhalation (only if dust is created during cutting).
Eye Contact	May cause mechanical irritation to eyes.
Skin Contact	May cause mechanical irritation to skin.
Dust Inhalation	May cause mechanical irritation to respiratory system.
Dust Ingestion	May cause choking if swallowed.

## SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENTS	CAS #	%
Urethane Plastics	9009-54-5	100

## SECTION 4: FIRST AID MEASURES

Eye Contact	Flush with water for 15 minutes.
Skin Contact	Wash with soap and water thoroughly.
Inhalation	Remove to fresh air if effects occur. If not breathing, give artificial respiration. If breathing is difficult, assist with oxygen. Consult a physician.
Ingestion	No adverse effects anticipated by this route.

## SECTION 5: FIRE FIGHTING MEASURES

Auto-Ignition Temperature	1040°F (560°C) per ASTM D 1929
Flash Ignition Temperature	932°F (500°C) per ASTM D 1929
Suitable Extinguishing Media	Use water, dry chemical, carbon dioxide or chemical foam.
Hazardous Decomposition	Under fire conditions, carbon monoxide, carbon dioxide, hydrogen products halides and nitrogen oxides.
Special Fire Fighting Procedures	Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus with positive pressure.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

No information available. Refer to Section 13.

## SECTION 7: HANDLING PRECAUTIONS

Eye Protection	Safety glasses during cutting.
Skin Protection	Protective clothing to minimize skin exposure.
Respiratory Protection	Dust mask during cutting.
Ventilation	Use sufficient ventilation to keep exposure to dust at a minimum (below 5 mg/m³ breathable nuisance dust).

**SECTION 8: EXPOSURE CONTROL****EXPOSURE LIMIT VALUES**

For Product	OSHA PEL (TWA) – 8 hr	WEEL (AIHA) (TWA) – 8 hr
Urethane Plastics	N/A	N/A

**SECTION 9: PHYSICAL & CHEMICAL PROPERTIES**

Appearance	Semi-rigid open cellular plastic
Odor	Neutral
Density	0.45 – 0.5 lb/ft <sup>3</sup>
Auto-Ignition Temperature	1040°F (560°C) per ASTM D 1929
Melting Point	N/A, Thermoset
Decomposition Temperature	> 260°F (127°C)
Maximum Service Temperature	180°F (82°C)
Solubility in Water	None

**SECTION 10: STABILITY & REACTIVITY**

Stability	This product is considered stable under normal conditions.
Incompatibility	None known
Hazardous Decomposition	Under fire conditions, carbon monoxide, carbon dioxide, hydrogen products halides and nitrogen oxides.
Hazardous Polymerization	None
Corrosive Properties	None
Oxidizer Properties	None
Chemical Resistance	Stable in the presence of most solvents found in binders, bituminous materials, wood preservatives and sealers. Resistant to facers containing plasticizer, fuel, mineral oil, weak acids and weak bases. Resistant to fungi and microbes. UV rays cause a darkening of the foam surface and with time will degrade the surface.

**SECTION 11: TOXICOLOGICAL INFORMATION****POTENTIAL ACUTE HEALTH EFFECTS**

Eye Contact	May cause mechanical irritation to eyes.
Skin Contact	May cause mechanical irritation to skin.
Dust Inhalation	May cause mechanical irritation to respiratory system.
Dust Ingestion	May cause choking if swallowed.

**POTENTIAL CHRONIC HEALTH EFFECTS**

Sensitization	Not known or reported.
Carcinogenic Effects	The components of this product are not listed by NTP, IARC or regulated as a carcinogen by OSHA.
Mutagenic Effects	No known significant effects or critical hazards.
Reproductive Effects	No known significant effects or critical hazards.
Developmental Effects	No known significant effects or critical hazards.

**SECTION 12: ECOLOGICAL INFORMATION****AQUATIC TOXICITY DATA FOR COMPONENTS TOXICITY**

Urethane Plastics	No data on product itself.
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**SECTION 13: DISPOSAL CONSIDERATION**

Waste Disposal Method	The generation of waste should be avoided or minimized whenever possible. Waste must be disposed of in compliance with federal, state, provincial and local environmental control regulations.
Demilec has no control over the management practices or manufacturing processes of parties handling or using this material.	

**SECTION 14: TRANSPORTATION INFORMATION**

Technical Shipping Name	Sealection 500
Primary Hazard Class	N/A
Secondary Hazard Class	N/A
Label Required	None
Placard Required	None
Poison Constituent	N/A
UN Code	N/A
EPA Registration #	N/A
TDG Classification	Non-regulated
WHMIS Classification	Non-regulated

**SECTION 15: REGULATORY INFORMATION**

No information available.

**SECTION 16: OTHER INFORMATION**

This product does not contain nor is it manufactured with ozone depleting substances.

Notice: The information herein is presented in good faith and believed to be accurate as of the effective date shown below. However, no warranty expressed or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the user's responsibility to ensure that its activities comply with country, state, provincial and local laws. This product may present hazards and should be used with caution. While certain hazards are described in this publication, no guarantee is made that these are the only hazards that exist. Hazards, toxicity and behavior of the products may differ when used with other materials and are dependent upon manufacturing circumstances or other processes. Such hazards, toxicity and behavior should be determined by the user and made known to handlers, processors and end users.

Prepared By	Demilec - EHS Group
Current Issue Date	February, 2015

## SAFETY DATA SHEET – FINISHED FOAM

### SECTION 1: PRODUCT & COMPANY INFORMATION

<b>Manufacturer of Chemical Components</b> Demilec 3315 E. Division Street, Arlington, TX 76011 Phone: 817-640-4900 / Fax: 817-633-2000 E-mail: Info@Demilec.com / Website: www.Demilec.com	<b>Product</b> Trade Name: Heatlok Soy® 200 Plus Chemical Name: Rigid Urethane Foam Plastic Chemical Family: Urethane
Emergency Telephone: 1-877-DEMILEC (336-4532) or CHEMTREC 800-424-9300 or CANUTEC 613-996-6666	

### SECTION 2: HAZARDS IDENTIFICATION

Physical State / Color / Odor	Rigid cellular plastic / Green / Neutral
<b>EMERGENCY OVERVIEW / WARNING</b>	
Routes of Entry	Skin contact, inhalation (only if dust is created during cutting).
Eye Contact	May cause mechanical irritation to eyes.
Skin Contact	May cause mechanical irritation to skin.
Dust Inhalation	May cause mechanical irritation to respiratory system.
Dust Ingestion	May cause choking if swallowed.

### SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENTS	CAS #	%
Urethane Plastics	9009-54-5	90 - 100
1,1,1,3,3-Pentafluoropropane	460-73-1	1 - 5

### SECTION 4: FIRST AID MEASURES

Eye Contact	Flush with water for 15 minutes.
Skin Contact	Wash with soap and water thoroughly.
Inhalation	Remove to fresh air if effects occur. If not breathing, give artificial respiration. If breathing is difficult, assist with oxygen. Consult a physician.
Ingestion	No adverse effects anticipated by this route.

### SECTION 5: FIRE FIGHTING MEASURES

Auto-Ignition Temperature	932°F (500°C) per ASTM D 1929
Flash Ignition Temperature	847°F (453°C) per ASTM D 1929
Suitable Extinguishing Media	Use water, dry chemical, carbon dioxide or chemical foam.
Hazardous Decomposition	Under fire conditions, carbon monoxide, carbon dioxide, hydrogen products halides and nitrogen oxides.
Special Fire Fighting Procedures	Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus with positive pressure. Material supports combustion.
Precautions	Rigid polyurethane foam, like other organic materials such as paper, wood and cotton, can present fire risks in some applications when exposed to ignition sources. Once ignited, fires can burn rapidly and produce rapid flame spread, quick flashover, toxic or flammable gases, dense smoke and intense heat. In no event should the polyurethane foam remain exposed or unprotected. Make no application of foam to interior wall and ceilings or other space enclosures without prompt and subsequent application of approved thermal barriers. No welding or flame cutting until proper surface protection has been provided. Avoid the confined storage of large urethane foam buns.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

No information available. Refer to Section 13.
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SECTION 7: HANDLING PRECAUTIONS	
Eye Protection	Safety glasses during cutting.
Skin Protection	Protective clothing to minimize skin exposure.
Respiratory Protection	Dust mask during cutting.
Ventilation	Use sufficient ventilation to keep exposure to dust at a minimum (below 5 mg/m <sup>3</sup> breathable nuisance dust).

SECTION 8: EXPOSURE CONTROL		
EXPOSURE LIMIT VALUES		
For Product	OSHA PEL (TWA) - 8 hr	WEEL (AIHA) (TWA) - 8 hr
Urethane Plastics	N/A	N/A
1,1,1,3,3-Pentafluoropropane	N/A	300 ppm

SECTION 9: PHYSICAL & CHEMICAL PROPERTIES	
Appearance	Green rigid cellular plastic
Odor	Neutral
Density	2.1 lb/ft <sup>3</sup>
Auto-Ignition Temperature	932°F (500°C) per ASTM D 1929
Melting Point	N/A, Thermoset
Decomposition Temperature	> 260°F (127°C)
Maximum Service Temperature	180°F (82°C)
Solubility in Water	None

SECTION 10: STABILITY & REACTIVITY	
Stability	This product is considered stable under normal conditions.
Incompatibility	None known
Hazardous Decomposition	Under fire conditions, carbon monoxide, carbon dioxide, hydrogen products halides and nitrogen oxides.
Hazardous Polymerization	None
Corrosive Properties	None
Oxidizer Properties	None
Chemical Resistance	Stable in the presence of most solvents found in binders, bituminous materials, wood preservatives and sealers. Resistant to facers containing plasticizer, fuel, mineral oil, weak acids and weak bases. Resistant to fungi and microbes. UV rays cause a darkening of the foam surface and with time will degrade the surface.

SECTION 11: TOXICOLOGICAL INFORMATION	
POTENTIAL ACUTE HEALTH EFFECTS	
Eye Contact	May cause mechanical irritation to eyes.
Skin Contact	May cause mechanical irritation to skin.
Dust Inhalation	May cause mechanical irritation to respiratory system.
Dust Ingestion	May cause choking if swallowed.
POTENTIAL CHRONIC HEALTH EFFECTS	
Sensitization	Not known or reported.
Carcinogenic Effects	The components of this product are not listed by NTP, IARC or regulated as a carcinogen by OSHA.
Mutagenic Effects	No known significant effects or critical hazards.
Reproductive Effects	No known significant effects or critical hazards.
Developmental Effects	No known significant effects or critical hazards.

**SECTION 12: ECOLOGICAL INFORMATION****AQUATIC TOXICITY DATA FOR COMPONENTS TOXICITY**

Urethane Plastics	No data on product itself.
1,1,1,3,3-Pentafluoropropane	LC50: > 81.8 mg/l (96 hrs) (rainbow trout); EC50: > 97.9 mg/l (48 hrs) (daphnia magna)

**SECTION 13: DISPOSAL CONSIDERATION**

Waste Disposal Method	The generation of waste should be avoided or minimized whenever possible. Waste must be disposed of in compliance with federal, state, provincial and local environmental control regulations.
Demilec has no control over the management practices or manufacturing processes of parties handling or using this material.	

**SECTION 14: TRANSPORTATION INFORMATION**

Technical Shipping Name	Heatlok Soy 200 Plus
Primary Hazard Class	N/A
Secondary Hazard Class	N/A
Label Required	None
Placard Required	None
Poison Constituent	N/A
UN Code	N/A
EPA Registration #	N/A
TDG Classification	Non-regulated
WHMIS Classification	Non-regulated

**SECTION 15: REGULATORY INFORMATION**

No information available.

**SECTION 16: OTHER INFORMATION**

This product does not contain nor is it manufactured with ozone depleting substances.

Notice: The information herein is presented in good faith and believed to be accurate as of the effective date shown below. However, no warranty expressed or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the user's responsibility to ensure that its activities comply with country, state, provincial and local laws. This product may present hazards and should be used with caution. While certain hazards are described in this publication, no guarantee is made that these are the only hazards that exist. Hazards, toxicity and behavior of the products may differ when used with other materials and are dependent upon manufacturing circumstances or other processes. Such hazards, toxicity and behavior should be determined by the user and made known to handlers, processors and end users.

Prepared By	Demilec – EHS Group
Current Issue Date	May, 2015

## SAFETY DATA SHEET – B SIDE

### SECTION 1: PRODUCT & COMPANY INFORMATION

#### MANUFACTURER OF CHEMICAL COMPONENTS


Demilec  
3315 E. Division Street, Arlington, TX 76011  
Phone: 817-640-4900 / Fax: 817-633-2000  
E-mail: Info@Demilec.com / Website: www.DemilecUSA.com

#### PRODUCT

Trade Name: Heatlok Soy® 200 Plus B-side  
Chemical Name: Polyurethane Resin / B-side  
Chemical Family: Polyester Resin Blend  
Product Use: Component of a Polyurethane System

**EMERGENCY TELEPHONE:** 1-877-DEMILEC (336-4532) or CHEMTREC 800-424-9300 or CANUTEC 613-996-6666

### SECTION 2: HAZARDS IDENTIFICATION

Physical State / Color / Odor	Liquid / Blue / Ester	
EMERGENCY OVERVIEW / WARNING		
OSHA / HCS Status	This material is classified hazardous under OSHA Hazard Communication Standard (29 CFR 1910.1200).	
Physical / Chemical Hazards	Acute Health Hazard / Chronic Health Hazard / Fire Hazard Toxic vapors may be released during burning or thermal decomposition.	
Routes of Entry	Eye contact, skin contact, inhalation, ingestion.	
Eye Contact	Product liquids, aerosols or vapors are irritating. Vapors may cause a transient condition known as glaucopsia, resulting in blurred vision and appearance of halos around bright objects.	
Skin Contact	May cause irritation and dermatitis.	
Ingestion	May cause irritation to throat, esophagus and stomach (nausea, abdominal pains, vomiting and diarrhea).	
Inhalation	May cause headaches, dizziness, drowsiness and other central nervous system effects.	
Carcinogenicity	The components of this product are not listed by NTP, IARC or regulated as a carcinogen by OSHA.	

### SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENTS	CAS #	%
Polyester Polyol	Trade secret	30 – 50
Polyether Polyol	Trade secret	20 – 30
1,1,1,3,3-Pentafluoropropane	460-73-1	7 – 15
Tris-iso-chloropropyl Phosphate	13674-84-5	7 – 15
Triethyl Phosphate	78-40-0	5 – 10
Trans 1,2 Dichloroethylene	156-60-5	1 – 5
Tertiary Amine Catalyst	Trade secret	1 – 5
Surfactant	Trade secret	1 – 5

### SECTION 4: FIRST AID MEASURES

Eye Contact	Immediately flush eyes with running water for a minimum of 15 minutes. Hold eyelids open during flushing. Obtain medical attention immediately.
Skin Contact	In case of contact, immediately remove contaminated clothing and shoes. Immediately flush skin with plenty of soap and cold water. Do not use hot water. Wash contaminated clothing and shoes thoroughly before reuse. For severe exposures, immediately get under safety shower and start rinsing. If irritation develops, obtain medical attention.
Inhalation	Move exposed person to fresh air. Keep person warm and at rest. If not breathing, breathing irregularly, or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Obtain medical attention if adverse health effects persist. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as collar, tie, belt or waistband. If thermal decomposition



	products are inhaled during a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Ingestion	Wash out mouth with water. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water (250 ml). Stop if the exposed person feels sick, as vomiting may be dangerous. Obtain medical attention if symptoms occur. DO NOT induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter lungs. Get immediate medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as collar, tie, belt or waistband.
Protection of First-aiders	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
Notes to Physician	Following severe exposure the patient should be kept under medical review for at least 48 hours.

## SECTION 5: FIRE FIGHTING MEASURES

Flash Point	> 200°F (93°C)
Auto-Ignition Temperature	N/A
Upper Flammable Limit (% vol.)	N/A
Lower Flammable Limit (% vol.)	N/A
Suitable Extinguishing Media	Dry chemical, carbon dioxide (CO <sub>2</sub> ), foam, water spray for large fires.
Hazardous Products of Thermal Decomposition	Combustion products may include carbon monoxide, carbon dioxide, nitrogen oxides, halogenated compounds, traces of ammonia vapors, aldehydes and ketones, low molecular weight organic products.
Special Fire Fighting Procedures	Firefighter should be equipped with self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode to protect against potentially toxic and irritating fumes generated by thermal decomposition or combustion during a fire. They should wear appropriate protective equipment such as PVC boots, gloves, safety helmet and protective clothing. Material supports combustion.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions	Avoid breathing vapors or mist. Provide adequate ventilation. Use suitable protective equipment.
Environmental Precautions	Avoid spreading of spilled material, runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution.
Methods for Cleaning-up	Move containers from spill area. Approach release from upwind. Contain to prevent spread into drains, sewers, water supplies or soil by creating a dike or trench. For minor spills, spread sawdust or other absorbent material over the spill area and allow at least 30 minutes to absorb as much of the remaining product as possible. Shovel into suitable metal containers for waste disposal. Contaminated absorbent material may pose the same hazard as the spilled product. Dispose via a licensed waste disposal contractor. The spill area should then be washed down with soap and warm water to dilute and remove remaining traces of material. Ventilate area to remove the remaining vapors. For major spills, released material may be pumped into containers for disposal. Wear suitable personal protective equipment.

## SECTION 7: HANDLING & STORAGE

Storage Temperature	< 70°F (21°C)
Storage Life	6 months
Handling	Do not inhale vapor/spray. Avoid contact with skin and eyes. Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material; keep tightly closed and sealed until ready for use.
Storage	Store in tightly closed containers in a cool, dry and ventilated place away from incompatible materials and food and drink. Store away from ignition sources. Protect containers against physical damage. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.
Precautions	If contamination with isocyanates is suspected, do not reseal containers. Employee education and training in safe handling of this product are required under the OSHA Hazard Communication Standard.
Packaging Containers	Metal closed-head drums

**SECTION 8: EXPOSURE CONTROL / PERSONAL PROTECTION****EXPOSURE LIMIT VALUES**

For Product	N/A	
For Ingredients	WEEL (AIHA) (TWA) – 8 hr	OSHA PEL (TWA) – 8 hr
Polyol Blend	N/A	N/A
1,1,1,3,3-Pentafluoropropane	300 ppm / 1644 mg/m <sup>3</sup>	N/A
Tris-iso-chloropropyl Phosphate	N/A	N/A
Trans 1,2 Dichloroethylene	N/A	200 ppm / 790 mg/m <sup>3</sup>
Tertiary Amine Catalyst	N/A	N/A

**PERSONAL PROTECTIVE EQUIPMENT**

Preventive Measures	Conditions of use, adequacy of engineering or other control measures, and actual exposures will dictate the need for specific protective devices at your workplace. Establish a safety zone to keep out nonessential personnel. When spraying outdoors, protect people, cars, etc. against airborne overspray.
Eye Protection	Eye protection is required when directly handling liquid product. Use appropriate chemical goggles, face shields or full-faced respirator. Persons who work with this product should not wear contact lenses.
Skin Protection	Use long-sleeve protective clothing impervious to chemicals, boots and chemical-resistant gloves such as nitrile/butadiene rubber (“nitrile” or “NBR”), butyl rubber, polyvinyl chloride (“PVC” or “vinyl”), polychloroprene (neoprene). Protective gloves and clothing should be worn when handling freshly made polyurethane products to avoid contact with trace residual materials that may be hazardous in contact with skin. Wash hands, forearms and face thoroughly after handling chemical products, before eating, drinking, smoking, using the lavatory and at the end of the working period.
Respiratory Protection	Spraying in open-air well ventilated area: Use a properly fitted full-face air purifying respirator with organic cartridges complying with an approved standard if a risk assessment indicates this is necessary. Spraying in enclosed areas: Fresh air-line respirators or self-contained breathing apparatus should be used in areas with concentrations above the TLV. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Environmental Exposure Controls / Ventilation Requirements	Use local exhaust ventilation to maintain airborne concentrations below the TLV. Ventilation is not required when spraying outdoors. Suitable respiratory equipment should be used in cases of insufficient ventilation or where operational procedures demand it. For guidance on engineering control measures refer to publications such as the ACGIH current edition of “Industrial Ventilation, a Manual of Recommended Practice”.
Additional Protective Measures	Safety showers and eye wash stations should be easily accessible to the work area.

**SECTION 9: PHYSICAL & CHEMICAL PROPERTIES**

Appearance	Blue liquid
Odor	Ester
Viscosity @ 77°F (25°C)	550 – 750 cps
Specific Gravity @ 77°F (25°C)	1.18 – 1.20
Flash Point	> 200°F (93°C)
Auto-Ignition Temperature	N/A
Boiling Point	N/A
Freezing / Melting Point	N/A
Vapor Pressure	N/A
Vapor Density (Air = 1)	4.6 for 1,1,1,3,3-Pentafluoropropane
Solubility in Water	Moderate

**SECTION 10: STABILITY & REACTIVITY**

Stability	This product is considered stable under normal and anticipated storage and handling conditions.
Conditions to Avoid	Avoid exposure to moisture and high temperatures to protect product quality. Avoid open flame.
Materials to Avoid	Strong oxidizing and reducing agents: strong acids, strong alkalis, alkaline earth metals (aluminum, zinc, copper, etc.), phosphorus and phosphorus-containing compounds. Avoid unintended contact with isocyanates.
Hazardous Polymerization	Will not occur

Hazardous Products of Thermal Decomposition	Combustion products may include carbon monoxide, carbon dioxide, nitrogen oxides, halogenated compounds, traces of ammonia vapors, aldehydes and ketones, low molecular weight organic products.
Decomposition Temperature	N/A

## SECTION 11: TOXICOLOGICAL INFORMATION

	Acute Oral Toxicity, LD50 (Rat)	Acute Inhalation Toxicity, LC50 (Rat)	Acute Dermal Toxicity, LD50 (Rabbit)	Repeated Dose Toxicity (Rat)
Polyol Blend	N/A	N/A	N/A	N/A
1,1,1,3,3-Pentafluoropropane	N/A	> 200,000 ppm (4 hrs)	> 2,000 mg/kg	28 days, inhalation: NOAEL: 50,000 ppm 90 days, inhalation: NOAEL: 2,000 ppm
Tris-iso-chloropropyl Phosphate	< 2000 mg/kg	> 4.6 mg/l, aerosol (4 hrs)	> 2,000 mg/kg (24 hrs)	90 Days, oral: NOAEL: 36 mg/kg
Triethyl Phosphate	1311 mg/kg	6 hrs > 2.05 mg/l	N/A	N/A
Trans 1,2 Dichloroethylene	1235 mg/kg	8000 ppm	> 5000 mg/kg	N/A
Tertiary Amine Catalyst	1630 mg/kg	290 ppm (6 hrs)	280 mg/kg	14 days, inhalation: 12 ppm

Tertiary Amine Catalyst can cause severe eye and skin irritation; prolonged contact may result in chemical burns and permanent damage of liver, stomach and lungs.

### POTENTIAL ACUTE HEALTH EFFECTS

Eye Contact	Product liquids, aerosols or vapors are irritating. Vapors may cause a transient condition known as glaucopsia, resulting in blurred vision and appearance of halos around bright objects.
Skin Contact	May cause irritation and dermatitis.
Ingestion	May cause irritation to throat, esophagus and stomach (nausea, abdominal pains, vomiting and diarrhea).
Inhalation	May cause headaches, dizziness, drowsiness and other central nervous system effects.

### POTENTIAL CHRONIC HEALTH EFFECTS

Sensitization	Not known or reported.
Carcinogenic Effects	The components of this product are not listed by NTP, IARC or regulated as a carcinogen by OSHA.
Mutagenic Effects	No known significant effects or critical hazards.
Reproductive Effects	No known significant effects or critical hazards.
Developmental Effects	No known significant effects or critical hazards.

## SECTION 12: ECOLOGICAL INFORMATION

Ecological testing has not been conducted for this product. Available toxicological data for individual ingredients are summarized below.

### AQUATIC TOXICITY DATA FOR COMPONENTS TOXICITY

Polyol Blend	N/A
1,1,1,3,3-Pentafluoropropane	LC50: > 81.8 mg/l (96 hrs) (rainbow trout); EC50: > 97.9 mg/l (48 hrs) (daphnia magna)
Tris-iso-chloropropyl Phosphate	LC50: 51 mg/l (96 hrs) (fathead minnow); 180 mg/l (96 hrs) (bluegill sunfish); 131 mg/l (96 hrs) (daphnia magna)
Triethyl Phosphate	LC50: > 1070 mg/l (96 hrs) (fathead minnow); > 107 mg/l (96 hrs) (sideswimmer); > 107 mg/l (96 hrs) (segmented worm); > 107 mg/l (96 hrs) (pill bug); > 1070 mg/l (96 hrs) (flatworm); > 1070 mg/l (96 hrs) (ramshorn snail); EC50: 353.1 mg/l (96 hrs) (daphnid)
Trans 1,2 Dichloroethylene	LC50: 135 mg/l (96 hrs) (bluegill sunfish); 170 – 290 mg/l (48 hrs) (daphnia magna)
Tertiary Amine Catalyst	LC50: 220 mg/l (96 hrs) (golden orfe); EC50: 76 mg/l (48 hrs) (daphnia magna)

## SECTION 13: DISPOSAL CONSIDERATION

Waste Disposal Method	The generation of waste should be avoided or minimized whenever possible. Waste must be disposed of in compliance with federal, state, provincial and local environmental control regulations. Dispose of surplus and non-recyclable products via licensed waste disposal contractor. Incineration is the preferred method. If incinerated, toxic and corrosive combustion gases must be properly handled.
Empty Container Precautions	Empty containers retain product residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

Demilec has no control over the management practices or manufacturing processes of parties handling or using this material. The information presented here pertains only to the product as shipped in its original condition as described in SDS Section 3 (Ingredients).

SECTION 14: TRANSPORTATION INFORMATION	
Technical Shipping Name	Polyurethane Resin, Heatlok Soy 200 Plus B-side
Land Transport / DOT Classification	Non-regulated
Sea Transport / IMDG Classification	Non-regulated
Air Transport / ICAO / IATA Classification	Aviation regulated liquid, n.o.s (contains Hydrofluorocarbon) UN 3334 / Hazard Class or Division: 9 / Packaging Group III Hazardous Label: Miscellaneous
TDG Classification	Non-regulated
Emergency Telephone Number	1-877-DEMILEC (336-4532) or CHEMTREC 800-424-9300 or CANUTEC 613-996-6666

SECTION 15: REGULATORY INFORMATION	
U.S. FEDERAL REGULATIONS	
OSHA Hazcom Standard Rating	This material is classified hazardous under OSHA Hazard Communication Standard (29 CFR 1910.1200).
HSC Classification	Irritant
U.S. Toxic Substances Control Act / TSCA	All ingredients are listed on the TSCA Inventory.
U.S. EPA CERCLA Hazardous Substances (40 CFR 302)	Trans 1,2 Dichloroethylene RQ = 1000 lbs
SARA Section 311/312 Hazard Categories	Acute Health Hazard; Chronic Health Hazard; Fire Hazard
U.S. EPA EPCRA SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A)	Non-regulated
U.S. EPA EPCRA SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) – Supplier Notification Required	Non-regulated
U.S. EPA RCRA Composite List of Hazardous Wastes and Appendix VIII Hazardous Constituents (40 CFR 261)	If discarded in its purchased form, this product will not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste (40 CFR 261.20-24).
State Regulations	Check individual state requirements.
CANADA	
WHMIS	Class D-2B / Material causing other toxic effects (toxic)
CEPA (DSL)	All components are listed or exempted.

SECTION 16: OTHER INFORMATION		
HMIS Rating 0 – Minimal; 1 – Slight; 2 – Moderate; 3 – Serious; 4 – Severe	Health	2
	Fire Hazard	1
	Reactivity	0
NFPA Rating 0 – Insignificant; 1 – Slight; 2 – Moderate; 3 – High; 4 – Extreme	Health Hazard: 2 Flammability Hazard: 1 Instability Hazard: 0	
This product does not contain nor is it manufactured with ozone depleting substances.		
<b>Notice:</b> The information herein is presented in good faith and believed to be accurate as of the effective date shown below. However, no warranty expressed or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the user’s responsibility to ensure that its activities comply with country, state, provincial and local laws. This product may present hazards and should be used with caution. While certain hazards are described in this publication, no guarantee is made that these are the only hazards that exist. Hazards, toxicity and behavior of the products may differ when used with other materials and are dependent upon manufacturing circumstances or other processes. Such hazards, toxicity and behavior should be determined by the user and made known to handlers, processors and end users.		
Prepared By	Demilec – EHS Group	
Current Issue Date	May, 2014	



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### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Code:** CU-6  
**Product Name:** Dynasolve CU-6  
**Company Name:** SWD URETHANE  
539 S. Drew St.  
Mesa, AZ 85210,  
**Web site address:** www.swdurethane.com  
**Emergency Contact:** CHEMTREC  
(800) 424-9300

### 2. HAZARDS IDENTIFICATION

**Skin Corrosion/Irritation, Category 2**  
**Serious Eye Damage/Eye Irritation, Category 2A**  
**Specific Target Organ Toxicity (single exposure), Category 3**  
**Toxic To Reproduction, Category 1B**  
**Acute Toxicity: Oral, Category 4**



**GHS Signal Word:** Danger

**GHS Hazard Phrases:** H315 - Causes skin irritation.  
H319 - Causes serious eye irritation.  
H335 - May cause respiratory irritation.  
H360 - May damage fertility or the unborn child .  
H302 - Harmful if swallowed.

**GHS Precaution Phrases:** P264 - Wash hands thoroughly after handling.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.  
P271 - Use only outdoors or in a well-ventilated area.  
P201 - Obtain special instructions before use.  
P202 - Do not handle until all safety precautions have been read and understood.  
P281 - Use personal protective equipment as required.  
P270 - Do not eat, drink or smoke when using this product.  
P273 - Avoid release to the environment.  
P233 - Keep container tightly closed.  
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P240 - Ground/bond container and receiving equipment.  
P241 - Use explosion-proof electrical/ventilating/lighting/.../ equipment.  
P243 - Take precautionary measures against static discharge.  
P242 - Use only non-sparking tools.

**GHS Response Phrases:** P302+352 - IF ON SKIN: Wash with plenty of soap and water.  
P332+313 - If skin irritation occurs, get medical advice/attention.  
P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337+313 - If eye irritation persists, get medical advice/attention.  
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P312 - Call a POISON CENTER/doctor if you feel unwell.  
P308+313 - IF exposed or concerned: Get medical attention/advice.  
P301+312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel



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	unwell. P330 - Rinse mouth. P370+378 - In case of fire, use dry chemical, alcohol foam or water to extinguish. P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. P312 - Call a POISON CENTER or doctor/physician if you feel unwell. P362 - Take off contaminated clothing and wash before re-use. P403+233 - Store container tightly closed in well-ventilated place.
<b>GHS Storage and Disposal Phrases:</b>	
<b>Potential Health Effects (Acute and Chronic):</b>	Prolonged or repeated skin contact may cause dermatitis. Exposure to high concentrations may cause central nervous system depression.
<b>Inhalation:</b>	Causes respiratory tract irritation. May cause headache. Material has a very low vapor pressure at room temperature, so inhalation exposures are not expected unless material is heated or misted. May be harmful if inhaled. Inhalation of vapor may cause respiratory tract irritation. Vapors may cause dizziness or suffocation. Material may be irritating to mucous membranes and upper respiratory tract.
<b>Skin Contact:</b>	May be harmful by inhalation, ingestion, or skin absorption. Causes skin irritation. May be harmful if absorbed through the skin. Not expected to cause an allergic skin reaction. Because of the high permeability rate of N-methylpyrrolidone in human skin, prolonged exposures should be avoided.
<b>Eye Contact:</b>	Causes eye irritation. May cause temporary corneal clouding.
<b>Ingestion:</b>	May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Harmful if swallowed. May cause irritation of the digestive tract.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration
872-50-4	N-Methyl-2-pyrrolidone {2-Pyrrolidinone, 1-Methyl-; 1-Methylazacyclopentan-2-one}	40.0 -60.0 %
96-48-0	Butyrolactone {4-Hydroxybutyric acid gamma-lactone}	10.0 -30.0 %
122-99-6	Ethylene glycol monophenyl ether {2-Phenoxy ethanol, (a glycol ether)}	10.0 -20.0 %
763-69-9	Ethyl 3-ethoxypropionate {Popanoic acid, 3-ethoxy-,ethyl ester}	2.5 -10.0 %
25498-49-1	Propanol, [2-(2-Methoxymethylethoxy)methylethoxy]-	2.5 -10.0 %
68412-54-4	Poly(oxy-1,2-ethanediyl),.alpha.-(nonylphenyl)-.o mega.-hydroxy-, branched	2.5 -10.0 %







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### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
872-50-4	N-Methyl-2-pyrrolidone {2-Pyrrolidinone, 1-Methyl-; 1-Methylazacyclopentan-2-one}	No data.	No data.	No data.
96-48-0	Butyrolactone {4-Hydroxybutyric acid gamma-lactone}	No data.	No data.	No data.
122-99-6	Ethylene glycol monophenyl ether {2-Phenoxy ethanol, (a glycol ether)}	No data.	No data.	No data.
763-69-9	Ethyl 3-ethoxypropionate {Popanoic acid, 3-ethoxy-,ethyl ester}	No data.	No data.	No data.
25498-49-1	Propanol, [2-(2-Methoxymethylethoxy)methyletho xy]-	No data.	No data.	No data.
68412-54-4	Poly(oxy-1,2-ethanediyl),.alpha.-(nonylp henyl)-.omega.-hydroxy-, branched	No data.	No data.	No data.
<b>Respiratory Equipment (Specify Type):</b>		Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).		
<b>Eye Protection:</b>		Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.		
<b>Protective Gloves:</b>		Wear appropriate gloves to prevent skin exposure.		
<b>Other Protective Clothing:</b>		Wear appropriate protective clothing to prevent skin exposure.		
<b>Engineering Controls (Ventilation etc.):</b>		Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.		
<b>Work/Hygienic/Maintenance Practices:</b>		Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Wash contaminated clothing before reuse. Wash thoroughly after handling.		

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical States:</b>	[ ] Gas [ X ] Liquid [ ] Solid		
<b>Appearance and Odor:</b>	colorless. solvent odor.		
<b>Melting Point:</b>	No data.		
<b>Boiling Point:</b>	210.00 C		
<b>Flash Pt:</b>	89.00 C Method Used: Pensky-Marten Closed Cup		
<b>Evaporation Rate:</b>	No data.		
<b>Flammability (solid, gas):</b>	No data available.		
<b>Explosive Limits:</b>	LEL: No data.		UEL: No data.
<b>Vapor Pressure (vs. Air or mm Hg):</b>	No data.		
<b>Vapor Density (vs. Air = 1):</b>	No data.		
<b>Specific Gravity (Water = 1):</b>	1.0648		
<b>Solubility in Water:</b>	No data.		
<b>Solubility Notes:</b>	Completely miscible.		





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**Percent Volatile:** No data.**Autoignition Pt:** No data.

### 10. STABILITY AND REACTIVITY

**Stability:** Unstable [ ] Stable [ X ]**Conditions To Avoid -** Excessive heat, ignition sources.**Instability:****Incompatibility - Materials To** Strong oxidizing agents, Strong acids.**Avoid:****Hazardous Decomposition or** irritating and toxic fumes and gases.**Byproducts:****Possibility of Hazardous** Will occur [ ] Will not occur [ X ]**Reactions:****Conditions To Avoid -** No data available.**Hazardous Reactions:**

### 11. TOXICOLOGICAL INFORMATION

**Toxicological Information:** CAS# 872-50-4:  
Acute toxicity, LD50, Oral, Rat, 3914. MG/KG.  
Results:  
Behavioral: Food intake (animal).  
Nutritional and Gross Metabolic: Weight loss or decreased weight gain.  
- Arzneimittel-Forschung. Drug Research. (Editio Cantor Verlag,, Vol/p/yr: 26,1581, 1976

Acute toxicity, LD50, Skin, Species: Rabbit, 8.000 GM/KG.  
Results:  
Gastrointestinal: Nausea or vomiting.  
Behavioral: Muscle weakness.  
- Raw Material Data Handbook, Vol.1: Organic Solvents, 1974., National Assoc. of Printing Ink Research Institute, Francis McDonald Sinclair Memorial Labor, Lehigh Univ., Bethlehem, PA 18015, Vol/p/yr: 1,84, 1974

**Carcinogenicity/Other Information:** CAS# 872-50-4: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 96-48-0: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 122-99-6: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

CAS# 763-69-9: Not listed by ACGIH, IARC, NTP, or CA Prop 65.



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CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
872-50-4	N-Methyl-2-pyrrolidone {2-Pyrrolidinone, 1-Methyl-; 1-Methylazacyclopentan-2-one}	n.a.	n.a.	n.a.	n.a.
96-48-0	Butyrolactone {4-Hydroxybutyric acid gamma-lactone}	n.a.	3	n.a.	n.a.
122-99-6	Ethylene glycol monophenyl ether {2-Phenoxy ethanol, (a glycol ether)}	n.a.	n.a.	n.a.	n.a.
763-69-9	Ethyl 3-ethoxypropionate {Popanoic acid, 3-ethoxy-,ethyl ester}	n.a.	n.a.	n.a.	n.a.
25498-49-1	Propanol, [2-(2-Methoxymethylethoxy)methylethoxy]-	n.a.	n.a.	n.a.	n.a.
68412-54-4	Poly(oxy-1,2-ethanediyl),.alpha.-(nonylphenyl)-.omega.-hydr oxy-, branched	n.a.	n.a.	n.a.	n.a.

## 12. ECOLOGICAL INFORMATION

<b>General Ecological Information:</b>	Environmental: No information available.  CAS# 122-99-6: LC50, Fathead Minnow (Pimephales promelas), 344000. UG/L, 96 H, Mortality, Water temperature: 26.60 C C, pH: 7.60, Hardness: 45.00 MG/L; Acute Toxicities of Organic Chemicals to Fathead Minnows (Pimephales promelas), Vol. 1, Brooke, L.T., D.J. Call, D.L. Geiger, and C.E. Northcott, 1984
<b>Bioaccumulative Potential:</b>	Indication of bioaccumulation.
<b>Mobility in Soil:</b>	No data available.

## 13. DISPOSAL CONSIDERATIONS

<b>Waste Disposal Method:</b>	Dispose of in accordance with all applicable local, state and federal regulations.
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## 14. TRANSPORT INFORMATION

<b>GHS Classification:</b>	Skin Corrosion/Irritation, Category 2 - Warning! Causes skin irritation Serious Eye Damage/Eye Irritation, Category 2A - Warning! Causes serious eye irritation Specific Target Organ Toxicity (single exposure), Category 3 - Warning! May cause respiratory irritation,or may cause drowsiness and dizziness Toxic To Reproduction, Category 1B - Danger! May damage fertility or the unborn child Acute Toxicity: Oral, Category 4 - Warning! Harmful if swallowed
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### LAND TRANSPORT (US DOT):

**DOT Proper Shipping Name:** Not regulated as a hazardous material.  
**DOT Hazard Class:**  
**UN/NA Number:**

### LAND TRANSPORT (Canadian TDG):

**TDG Shipping Name:** Not regulated as a hazardous material.  
**UN Number:**  
**Hazard Class:** **TDG Classification:**

### AIR TRANSPORT (ICAO/IATA):

**ICAO/IATA Shipping Name:** Not regulated as a hazardous material.



# SAFETY DATA SHEET

## Dynasolve CU-6

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Revision: 05/05/2015

Supersedes Revision: 03/18/2015

### 15. REGULATORY INFORMATION

#### EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
872-50-4	N-Methyl-2-pyrrolidone {2-Pyrrolidinone, 1-Methyl-; 1-Methylazacyclopentan-2-one}	No	No	Yes
96-48-0	Butyrolactone {4-Hydroxybutyric acid gamma-lactone}	No	No	No
122-99-6	Ethylene glycol monophenyl ether {2-Phenoxy ethanol, (a glycol ether)}	No	No	Yes-Cat. N230
763-69-9	Ethyl 3-ethoxypropionate {Popanoic acid, 3-ethoxy-,ethyl ester}	No	No	No
25498-49-1	Propanol, [2-(2-Methoxymethylethoxy)methylethoxy]-	No	No	No
68412-54-4	Poly(oxy-1,2-ethanediyl),.alpha.-(nonylphenyl)-.o mega.-hydroxy-, branched	No	No	No

#### CAS # Hazardous Components (Chemical Name)

#### Other US EPA or State Lists

872-50-4	N-Methyl-2-pyrrolidone {2-Pyrrolidinone, 1-Methyl-; 1-Methylazacyclopentan-2-one}	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory, 4 Test, 12(b); CA PROP.65: Yes; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: Yes - 3716; NY Part 597: No; PA HSL: Yes - 1; SC TAP: No; WI Air: No
96-48-0	Butyrolactone {4-Hydroxybutyric acid gamma-lactone}	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: No; SC TAP: No; WI Air: No
122-99-6	Ethylene glycol monophenyl ether {2-Phenoxy ethanol, (a glycol ether)}	CAA HAP,ODC: HAP; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: TAC; MA Oil/HazMat: No; MI CMR, Part 5: Part 5; NC TAP: Yes - Cat.; NJ EHS: Yes - Cat.; NY Part 597: No; PA HSL: Yes - c; SC TAP: Yes - Cat.; WI Air: Yes - Cat.
763-69-9	Ethyl 3-ethoxypropionate {Popanoic acid, 3-ethoxy-,ethyl ester}	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: No; SC TAP: No; WI Air: No
25498-49-1	Propanol, [2-(2-Methoxymethylethoxy)methylethoxy]-	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory, 8D TERM; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: No; SC TAP: No; WI Air: No
68412-54-4	Poly(oxy-1,2-ethanediyl),.alpha.-(nonylphenyl)-.o mega.-hydroxy-, branched	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: No; SC TAP: No; WI Air: No

#### CAS # Hazardous Components (Chemical Name)

#### International Regulatory Lists

872-50-4	N-Methyl-2-pyrrolidone {2-Pyrrolidinone, 1-Methyl-; 1-Methylazacyclopentan-2-one}	Canadian DSL: Yes; Canadian NDSL: No
96-48-0	Butyrolactone {4-Hydroxybutyric acid gamma-lactone}	Canadian DSL: Yes; Canadian NDSL: No
122-99-6	Ethylene glycol monophenyl ether {2-Phenoxy ethanol, (a glycol ether)}	Canadian DSL: Yes; Canadian NDSL: No
763-69-9	Ethyl 3-ethoxypropionate {Popanoic acid,	Canadian DSL: Yes; Canadian NDSL: No



# SAFETY DATA SHEET

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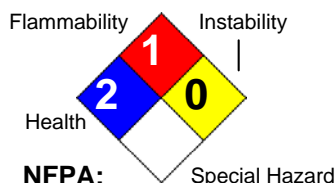
Supersedes Revision: 03/18/2015

25498-49-1	3-ethoxy-,ethyl ester} Propanol,	Canadian DSL: Yes; Canadian NDSL: No
68412-54-4	[2-(2-Methoxymethylethoxy)methylethoxy]- Poly(oxy-1,2-ethanediyl),.alpha.-(nonylphenyl)-.o mega.-hydroxy-, branched	Canadian DSL: Yes; Canadian NDSL: No

## 16. OTHER INFORMATION

**Revision Date:** 05/05/2015**Hazard Rating System:**

HEALTH		2
FLAMMABILITY		1
PHYSICAL		0
PPE		

**HMIS:****Additional Information About This Product:** No data available.**Company Policy or Disclaimer:**

While the information and recommendations in this publication are given to the best of our knowledge, and information at the date of publication, nothing herein is to be construed as a warranty, expressed or otherwise. In all cases, it is the responsibility of the user to determine the applicability of such information, and recommendations or the suitability of any product for its own particular purpose.

The product may present hazards and should be used with caution. While certain hazards are described in this Safety Data Sheet, no guarantee is made that these are the only hazards that exist. Hazards, toxicity and behavior of the products may differ when used with other materials and are dependent upon the manufacturing circumstances or other processes. Such hazards, toxicity and behavior should be determined by the user and made known to handlers, processors and end users.

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Bayer

BAYER INC.  
MATERIALSCIENCE  
77 BELFIELD ROAD  
TORONTO, ONTARIO; M9W 1G6  
(416) 248-0771

PRODUCT: ECOBAY CC CAN ISO



## Section 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER/SUPPLIER..... BAYER INC.  
77 BELFIELD ROAD  
TORONTO, ONTARIO  
M9W 1G6  
(416) 248-0771  
24 HOUR EMERGENCY NUMBER:..... (613) 996-6666 CANUTEC.  
PRODUCT NAME..... ECOBAY CC CAN ISO  
CHEMICAL FAMILY..... Aromatic isocyanate.  
MATERIAL USE..... Polyurethane applications.

## Section 02: HAZARDS IDENTIFICATION

ROUTE OF ENTRY ..... Eye contact. Skin contact. Inhalation. Ingestion.  
EYE CONTACT..... Product liquid, aerosols or vapours are irritating. Can cause tearing, reddening and swelling. May cause temporary corneal injury.  
SKIN CONTACT..... Causes skin irritation. Can cause reddening, itching and swelling. Persons previously sensitized can experience allergic skin reaction with symptoms of reddening, itching, swelling, and rash. Cured material is difficult to remove.  
SKIN ABSORPTION..... Not available.  
INHALATION (ACUTE)..... Vapour/mists at concentrations above the exposure limits can irritate (burning sensation) the mucous membranes in the respiratory tract. This can cause a runny nose, sore throat, coughing, chest discomfort, difficult breathing and reduced pulmonary functioning. Persons with pre-existing, nonspecific bronchial hyperreactivity can respond to concentrations below the TLV with similar symptoms as well as asthma attack. Exposure well above the TLV or PEL may lead to bronchitis, bronchial spasm and pulmonary edema. Chemical or hypersensitive pneumonitis, with flu-like symptoms has also been reported. These symptoms can be delayed up to several hours after exposure. Effects are usually reversible.  
INGESTION..... May cause irritation. Symptoms of ingestion may include abdominal pain, nausea, vomiting and diarrhea.  
EFFECTS OF CHRONIC EXPOSURE..... As a result of previous repeated overexposure or a single large dose, certain individuals develop sensitization which will cause them to react to a later exposure to product at levels well below the TLV. Symptoms including chest tightness, wheezing, cough, shortness of breath or asthma attack, could be immediate or delayed. There are reports that once sensitized, an individual can experience these symptoms upon exposure to dust, cold air or other irritants. This increased lung sensitivity can persist for weeks and in severe cases for several years. Prolonged or repeated exposure may cause lung damage, including a decrease in lung function. Possible risk of irreversible effects. Prolonged contact may cause reddening, swelling, rash, scaling, blistering, and in some cases, skin sensitization. Prolonged vapour contact with eyes may cause conjunctivitis.

## Section 03: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients	% w/w	Exposure Limit	C.A.S.#	LD/50, Route, Species	LC/50 Route, Species
POLYMERIC DIPHENYLMETHANE DIISOCYANATE (pMDI)	55-65	0.005 ppm (TWA)	9016-87-9	Oral: > 2,000 mg/kg (rat)	Inh: 490 mg/m <sup>3</sup> , vapour 4 hr (rat)
4,4'-DIPHENYLMETHANE DIISOCYANATE (MDI)	35-45	0.005 ppm (TWA)	101-68-8	>10000 mg/kg oral, rat	490 mg/m <sup>3</sup> (4hr) (rat)
2,4'-DIPHENYLMETHANE DIISOCYANATE (MDI)	1-5	0.005 ppm (TWA)	5873-54-1	Not available	370-490 mg/m <sup>3</sup> (4hr) rat

## Section 04: FIRST AID MEASURES

EYE CONTACT..... In case of contact, immediately flush eyes, keeping eyelids open, with plenty of water for at least 15 minutes. Consult a physician if irritation continues.  
SKIN CONTACT..... Immediately flush skin with plenty of soap and water. Remove contaminated clothing. Wash clothing before reuse. If irritation persists, seek medical attention.  
INHALATION..... If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen and obtain medical attention.

**PRODUCT: ECOBAY CC CAN ISO****Section 04: FIRST AID MEASURES**

INGESTION..... Do not induce vomiting. Rinse mouth with water. Give 1 to 2 glasses of water to drink. Never give anything by mouth to an unconscious person. Get medical attention.

ADDITIONAL INFORMATION..... In all cases, if irritation persists seek medical attention. Note to physician: Eye: Stain for evidence of corneal injury. If cornea is burned, instill antibiotic steroid preparation frequently. Workplace vapours have produced reversible corneal epithelial edema impairing vision. Skin: This compound is a known skin sensitizer. Treat symptomatically as for contact dermatitis or thermal burns. If burned, treat as thermal burn. Ingestion: Treat symptomatically. There is no specific antidote. Inducing vomiting is contraindicated because of the irritating nature of this compound. Respiratory: This compound is a known pulmonary sensitizer. Treatment is essentially symptomatic. An individual having a skin or pulmonary sensitization reaction to this material should be removed from exposure to any isocyanate.

**Section 05: FIRE FIGHTING MEASURES**

FLASH POINT (deg C), METHOD..... Approx. 199. Pensky-Martens Closed Cup. (ASTM D-93).

AUTO IGNITION TEMPERATURE (deg C)... Not available.

LOWER EXPLOSIVE LIMIT (% VOL)..... Not available.

UPPER EXPLOSIVE LIMIT (% VOL)..... Not available.

EXTINGUISHING MEDIA..... Dry chemical. Carbon dioxide. Foam. In cases of larger fires, water spray should be used.

HAZARDOUS COMBUSTION PRODUCTS.. By fire: Protect against potentially toxic and irritating fumes.

SENSITIVITY TO MECHANICAL IMPACT.... Not applicable.

SENSITIVITY TO STATIC DISCHARGE..... Not available.

SPECIAL FIRE FIGHTING PROCEDURES.. Firefighter should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes. During a fire, isocyanate vapours and other irritating, highly toxic gases may be generated by thermal decomposition or combustion. Cool fire-exposed containers with cold water spray. Heat will cause pressure buildup and may cause explosive rupture.

**Section 06: ACCIDENTAL RELEASE MEASURES**

LEAK/SPILL..... Isolate area and keep unauthorized people away. Do not walk through spilled material. Wear recommended protective equipment. Ventilate. Open windows and doors to allow air circulation. Dike area to prevent spreading. The use of absorbent socks or spill pillows may be required. Stop leak if safe to do so. Prevent runoff into drains, sewers, and other waterways.

MAJOR SPILLS..... If transportation spill occurs, call CANUTEC at (613) 996-6666. If temporary control of isocyanate vapour is required, a blanket of protein foam may be placed over spill. Large quantities may be pumped into closed, but not sealed, containers for disposal.

MINOR SPILLS..... Cover spill area with suitable absorbent material (e.g., sand, earth, sawdust, vermiculite, Oil-Dri, Kitty Litter, etc.). Saturate absorbent material with neutralizing solution. Recommended portion is ten parts neutralizing solution to one part spilled material. Suggested neutralization solution: 90% water + 5% concentrated ammonia + 5% detergent (dish soap). Add an additional layer of absorbent material. Use shovel to move absorbent material around to ensure that all spilled material comes in contact with the neutralizing solution. Shovel all absorbed material, including absorbent socks or spill pillows, into an appropriate salvage drum. Allow to stand (covered loosely) for 48 to 72 hours, to allow any gases to escape.

CLEAN UP..... Decontaminate spill area with neutralizing solution. Area can then be washed with soap and water.

**Section 07: HANDLING AND STORAGE**

HANDLING PROCEDURES..... Avoid skin and eye contact. Avoid breathing vapours or mist. Use adequate ventilation. Keep container closed when not in use. Decomposition products can be highly toxic and irritating. Individuals with lung or breathing problems or prior allergic reactions to isocyanates must not be exposed to vapour or spray mist. Warning properties (irritation of the eyes, nose and throat or odour) are not adequate to prevent chronic overexposure from inhalation. Handle in accordance with good industrial hygiene and safety practices. Wash hands and arms after handling. Wear respiratory protection if material is heated, sprayed, used in a confined space, or if the exposure limit is exceeded. Employee education and training are important.

SHELF LIFE..... 6 months.

STORAGE NEEDS..... Store in a cool, dry and well ventilated area. Keep container closed when not in use. Storage temperature: (Min/Max: 10/38).

**PRODUCT: ECOBAY CC CAN ISO****Section 08: EXPOSURE CONTROLS / PERSONAL PROTECTION****PROTECTIVE EQUIPMENT**

EYE / TYPE.....	Chemical safety goggles. Chemical safety goggles and full faceshield if a splash hazard exists.
RESPIRATORY / TYPE.....	In case of insufficient ventilation, wear suitable respiratory equipment. An air-purifying particulate/organic vapour cartridge respirator is required anytime inhalation of vapour above the exposure limit is possible. Respiratory equipment required during spraying. The use of a positive pressure air supplied respirator is mandatory when airborne concentrations are not known or airborne solvent levels are 10 times the appropriate TLV or spraying is performed in a confined space or area with limited ventilation. Be sure to use MSHA/NIOSH approved respirator or equipment. Do not exceed the use limits of the respirator.
GLOVES/TYPE.....	Chemical resistant gloves: butyl rubber, nitrile rubber, neoprene, PVC.
CLOTHING/TYPE.....	Wear adequate protective clothes. Wear long sleeves and trousers to prevent dermal exposure.
FOOTWEAR/TYPE.....	Safety boots per local regulations.
OTHER/TYPE.....	Emergency showers and eye wash stations should be available. Educate and train employees on the safe use and handling of the product. Employees should wash their hands and face before eating, drinking, or using tobacco products.
VENTILATION REQUIREMENTS.....	Ventilate adequately. Exhaust air may need to be cleaned by scrubbers or filters to reduce environmental contamination. Vent work area to ensure airborne concentrations are below the current occupational exposure limits. Avoid breathing mists; if general ventilation or local exhaust is inadequate, persons exposed to mists should wear approved breathing devices.
MONITORING.....	Exposure levels must be monitored by accepted monitoring techniques to ensure that the TLV is not exceeded.
MEDICAL SURVEILLANCE.....	Medical supervision of all employees who handle or come in contact with isocyanates is recommended. These should include preemployment and periodic medical examinations with pulmonary function test (FEV, FVC as a minimum). Persons with asthmatic-type conditions, chronic bronchitis, other chronic respiratory diseases or recurrent skin eczema or sensitization should be excluded from working with isocyanates. Once a person is diagnosed as sensitized to an isocyanate, no further exposure can be permitted.

**Section 09: PHYSICAL AND CHEMICAL PROPERTIES**

PHYSICAL STATE.....	Liquid.
COLOUR.....	Brown.
ODOUR.....	Musty.
SPECIFIC GRAVITY.....	1.24. @ 25 deg C.
ODOUR THRESHOLD (ppm).....	Not available.
VAPOUR PRESSURE (mm Hg).....	< 0.0001 mmHg @ 25 C.
VAPOUR DENSITY (AIR=1).....	Not available.
EVAPORATION RATE.....	Not available.
BOILING POINT (deg C).....	Approx. 208.
pH.....	Not applicable.
SOLUBILITY IN WATER (% W/W).....	Insoluble. Reacts slowly with water to liberate CO <sub>2</sub> gas.
COEFFICIENT OF WATER/OIL .....	Not available.
DISTRIBUTION	
FREEZING POINT (deg C).....	< 0. For the active ingredient.
BULK DENSITY.....	1,234 kg/m <sup>3</sup> .

**Section 10: STABILITY AND REACTIVITY**

INCOMPATIBILITY.....	Water, amines, strong bases, alcohols. Copper alloys.
REACTIVITY CONDITIONS.....	Contact with moisture, other materials that react with isocyanates, or temperatures above 177 C, may cause polymerization.
HAZARDOUS PRODUCTS OF DECOMPOSITION .....	By fire and high heat: Carbon dioxide. Carbon monoxide. Nitrogen oxides. Dense black smoke. Isocyanates. Isocyanic acid. Other undetermined compounds.

**Section 11: TOXICOLOGICAL INFORMATION**

NOTE:.....	Toxicity data based on polymeric MDI.
ACUTE ORAL TOXICITY (LD <sub>50</sub> ).....	>2000 mg/kg (rat).
IRRITANCY OF MATERIAL.....	Skin (rabbit): Slight irritation.
INHALATION (LC <sub>50</sub> ).....	490 mg/m <sup>3</sup> (rat/4 hr).
SENSITIZING CAPABILITY OF MATERIAL.....	Isocyanate is known to cause skin and respiratory sensitization in humans. Repeated contact may cause allergic respiratory reactions resulting in sensitization of the individual. Respiratory sensitivity results in asthma-like symptoms on subsequent exposure.
CARCINOGENICITY OF MATERIAL.....	This product is not listed by NTP, IARC or regulated as a carcinogen by OSHA.
TERATOGENICITY.....	No teratogenic effects observed at doses tested.
MUTAGENICITY.....	Negative.
REPRODUCTIVE EFFECTS.....	Not available.

**PRODUCT: ECOBAY CC CAN ISO****Section 12: ECOLOGICAL INFORMATION**

FISH TOXICITY (1)..... LC0: > 1000 mg/l.  
TEST SPECIES (1)..... Danio rerio.  
TESTING TIME (1)..... 96 hr.  
FISH TOXICITY (2)..... LC0: > 3000 mg/l.  
TEST SPECIES (2)..... Oryzias latipes.  
TESTING TIME (2)..... 96 hr.  
TOXICITY TO BACTERIA..... EC50: > 100 mg/l.  
BIODEGRADABILITY..... Not readily biodegradable.

**Section 13: DISPOSAL CONSIDERATIONS**

WASTE DISPOSAL..... Dispose of waste in accordance with all applicable federal, provincial and local regulations. Industrial incineration is the preferred method. Empty containers retain product residue; observe all precautions for product. Decontaminate containers prior to disposal. Empty decontaminated containers should be crushed to prevent reuse. Do not heat or cut empty containers with electric or gas torch as the vapours and gases may be toxic.

**Section 14: TRANSPORT INFORMATION**

TDG CLASSIFICATION..... Non regulated.

**Section 15: REGULATORY INFORMATION**

WHMIS CLASSIFICATION..... Controlled. D2A. D2B. This product has been classified in accordance with subsection 23(1) of the Controlled Product Regulations (CPR) under the Workplace Hazardous Materials Information System (WHMIS).  
CEPA STATUS

**Section 16: OTHER INFORMATION**

NOTE:..... This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Bayer Inc. The data on this sheet relates only to the specific material designated herein. Bayer Inc. assumes no legal responsibility for use or reliance upon these data.  
PREPARED BY: ..... Health, Safety and Environment.  
TELEPHONE NUMBER:..... 1-800-268-1331 ext. 2147.  
PREPARATION DATE: ..... Apr06/11





Flame Seal Products, Inc.  
15200 West Drive  
Houston, TX 77053 USA  
713-668-4291 (office)  
713-668-1724 (fax)  
[www.flameseal.com](http://www.flameseal.com)

# *Flame Seal-TB™* *Fire Retardant Coating* Material Safety Data Sheet

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**Emergency Telephone #:** **800-424-9300 (Chemtrec)**

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## **Section I – Product Information**

Product Name: *Flame Seal-TB™ Listed Fire Retardant Coating*  
Chemical Family: Aqueous based intumescent fire retardant  
Manufacturer's Name: Flame Seal Products, Inc.  
15200 West Drive  
Houston, TX 77053 USA  
Telephone # for Information: 713-668-4291

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## **Section II – Hazardous Components**

Component:		ACGIH	OSHA
<u>CAS Registry #</u>	<u>Wt. %</u>	<u>TLV</u>	<u>PEL</u>
Phosphoric Acid	< 0.1%	500 ppm TWA	400 ppm TWA
7664-38-2		500 ppm STEL	500 ppm STEL

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## **Section III – Physical Properties**

Appearance and Odor: White, odorless liquid  
Molecular Weight: N/A  
Boiling Point (°F): 212 – Not accurate: mixture of components  
Melting Point (°F): N/A  
Vapor Pressure (mm of Mercury): Not determined  
Specific Gravity (Water=1): 1.33– 1.45  
Vapor Density (Air=1): Not determined

Percent Volatile (by weight):	39.0% max. (water content only)
pH:	2.0 - 3.0
Solubility in Water:	Partial with heat. Has insoluble characteristic when cool.
Evaporation Rate (Butyl Acetate=1):	Not determined
Storage Temperature:	40-80 °F (4.44°C-26.67°C)
Shelf Life:	1 Year from Manufacturer Date

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**Section IV – Fire and Explosion Data**

Flash Point (°F, Pensky-Martens Closed Cup):	None to boiling
Fire Extinguishing Media:	Not combustible (use water spray, fog, foam, dry chemicals, CO2 or other agents as appropriate for material in surrounding fire)
Flammable Limits (% by Volume):	N/A
Special Fire Fighting Procedures And Equipment:	Not combustible (use safety equipment and clothing which is suitable for materials in surrounding fire)
Unusual Fire And Explosion Hazards:	May liberate flammable hydrogen gas after long term storage of liquid in metal containers. Store liquid only in stainless steel, plastic or glass vessels.
Hazardous Decomposition Products:	Combustion products can include carbon dioxide, carbon monoxide, oxides of phosphorus and traces of ammonia.

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**Section V – Reactivity Data**

Stability:	Stable <input checked="" type="checkbox"/> X_____	Unstable _____
Conditions to Avoid:	Storage of “liquid” in containers other than plastic, stainless steel or glass. Contamination with strong oxidizers, strong alkali or strong acids.	
Incompatibility (materials to avoid):	Strong oxidizers, alkalis or acids. When in liquid state the product slowly reacts with some common metals causing flammable hydrogen gas to be emitted.	
Hazardous Decomposition Products:	N/A	
Hazardous Polymerization:	Will occur _____	Will not occur <input checked="" type="checkbox"/> X_____

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**Section VI – Health Hazard Information**

Exposure from Routine Use:	No evidence of adverse effects from available information
Effects of Overexposure:	Eyes: Direct contact or prolonged exposure to mist may cause redness and pain.

	Nose: Breathing of heavy concentrations of mists may cause sinus irritation and dizziness.
	Mouth: Ingestion may cause nausea.
	Skin: Prolonged contact may cause reddening of effected area.
Probable Routes of Exposure:	Skin, eyes, inhalation and ingestion.
Emergency And First Aid Procedures:	Eye Contact: Immediately flush eyes with water for at least 15 minutes including underneath eyelids. Consult a physician if irritation persists.
	Skin Contact: Non-irritant; wash from skin.
	Inhalation: Remove to fresh air immediately. Use adequate ventilation.
	Ingestion: Substance exhibits very low toxicity. Consult a physician if upset stomach or nausea occurs.

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## Section VII – Toxicity Data

Oral:	Acute Oral Toxicity: Ld50 (rat) > 5000 mg/kg
Dermal:	Not established, not expected to be harmful. May be irritating with continual contact.
Inhalation:	Not established. Not expected to be harmful. If necessary, use respirator if adequate ventilation is not possible to keep exposure to particulate matter at a minimum in heavy mist areas when spraying.
Other Pertinent Data:	N/A

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## Section VIII – Special Protection Information

Personal Protection Equipment	Protective Gloves: Wear impervious gloves as necessary to avoid excessive skin contact (i.e. rubber or neoprene) Eye Protection: Protective glasses or goggles in heavy mist areas Respiratory Protection (Specify Type): For heavy mist exposure, use a NIOSH/MSHA approved respirator suitable for use with organic vapors if proper ventilation cannot be provided Other Protective Equipment: Adequate clothing to minimize direct contact with skin
Ventilation	Local Exhaust: Use exhaust fans if necessary to control mist or vapor

Mechanical (general): Normal room ventilation of fans

Special: N/A

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## Section IX – Spill, Leak, and Disposal Procedures

Steps to be taken in case material is Released or Spilled:	Confine spilled material and absorb on sand, sawdust, earth or other available solids. Sweep and place in a suitable container. Flush with water and rinse minor spills into sewer if permitted by Federal, State and local regulations.
Waste Disposal Methods:	Mix excess Flame Seal-TB resin with T50-TB Curing Agent, allow to solidify completely, then dispose in accordance with disposal methods of local regulations for non-hazardous solid waste.
Clean Water Act Requirements:	Section 311 of the Clean Water Act lists phosphorus as a hazardous substance which, if discharged into or upon water, will present an imminent and substantial danger to public health and welfare. Spills of 5000 pounds or more must be reported to the National Response Center @ 1-800-424-8802.
Resource Conservation and Recovery Act (RCRA) Requirements:	No applicable information found

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## Section X – Regulatory Information

FDA:	No applicable information found
USDA:	No applicable information found
CPSC:	No applicable information found
TSCA:	All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements
CEPA (DSL):	All components of this product are on the DSL inventory or are exempt from reporting under the New Substances Notification Regulations
DOT:	No applicable information found Proper Shipping Name: N/A Hazardous Class: N/A Label Required: N/A Identification Number: N/A Other Pertinent Information: N/A

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## Section XI – Special Precautions and Comments

Precautions to be taken in Handling and	Keep away from eyes. Avoid prolonged contact with skin.
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Storing:	Wash exposed skin with soap and water. Avoid breathing of mist.
Other Precautions	N/A
Registration/Certifications	N/A

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This information is furnished without warranty, representation, inducement or license of any kind, except that it is accurate to the best of Flame Seal Products, Inc.'s knowledge, or obtained from sources believed by Flame Seal Products, Inc. to be accurate. Flame Seal Products, Inc. does not assume any legal responsibility for use or reliance upon the information provided herein. It is ultimately the responsibility of the user to determine the products suitability for his/her purposes.

No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose or any other nature are made hereunder with respect to information contained herein, or the product to which this information refers.

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### **Made in the USA**

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Effective Date: April 1, 2012

Supersedes: March 1, 2012



## SAFETY DATA SHEET

### SECTION 1, PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** TPR<sup>2</sup> Fireshell Series - F10E, BMS TC, TB, JM TC  
**Effective Date:** April 28, 2015  
**Product Use/Class:** Fire Retardant Coating  
**Manufacturer:** TPR<sup>2</sup> Corporation  
36 Plains Road  
Essex, CT 06426 USA  
1-860-767-8772  
**In Case of Emergency:** CHEMTREC  
1-800-424-9300  
**Preparer:** Chemistry Department, TPR<sup>2</sup> Corporation  
**Supersedes:** New

### SECTION 2, HAZARDS IDENTIFICATION

#### GHS Classification:

Hazard Class	Hazard Category	Route of Exposure
Acute Toxicity – Inhalation	4	Inhalation
Eye Irritation	2B	Eye
Skin Irritation	2	Skin

**Signal word:** Warning

**Symbol(s):**



#### Hazard Statements:

Harmful if inhaled  
Causes eye irritation Causes skin irritation

#### Precautionary Statements:

Avoid breathing mist/spray  
Wear eye protection  
Avoid contact with exposed skin  
Wear protective gloves  
Wash thoroughly after handling

#### Response:

If inhaled: Remove person to fresh air  
If in eyes: Rinse with water for several minutes  
If eye irritation persists: Get medical attention  
If on skin: Wash with soap and water  
If skin irritation persists: Get medical attention

#### Storage:

Store material in cool dry place

#### Disposal:

Dispose of contents and container in accordance with local/regional/national regulations



## SAFETY DATA SHEET

### Section 3, Composition / Information on Ingredients

Chemical Name	CAS Number	Wt. %
Ammonium Polyphosphate	68333-79-9	15-35
Pentaerythritol	115-77-5	7-13
Melamine	108-78-1	7-13
Titanium Dioxide	13463-67-7	5-10
Aluminum Trihydrate	8064-00-4	0-5

### Section 4, First Aid Measures

**General** – If irritation or other symptoms occur or persist from any route of exposure, remove the affected individual from the area: get medical attention

**First Aid – Skin Contact:** Wash with soap and water. Remove contaminated clothing. If persistent irritation occurs, seek medical attention.

**First Aid – Eye Contact:** Flush eyes for at least 15 minutes. Seek medical attention if irritation persists.

**First Aid – Ingestion:** If swallowed: Do not induce vomiting. Rinse mouth out with water. If irritation persists: seek medical attention.

### Section 5, Fire Fighting Measures

**Extinguishing Media:** Use ABC dry chemical, foam or carbon dioxide.

**Unusual Fire & Explosion Hazards:** Closed container may rupture (due to a buildup of pressure) when exposed to extreme heat. Carbon monoxide and/or carbon dioxide may be released when exposed to very high temperatures.

**Special Protective Equipment and Precautions for Fire-Fighters:** Wear positive pressure self-contained NIOSH approved breathing equipment and approved protective equipment if necessary.

### Section 6, Accidental Release Measures

**Personal precautions, Protective Equipment, and Emergency Response:** Use personal protective equipment as recommended in section 8.

**Environmental Precautions:** Do not allow material to be released into waterways.

**Methods and materials for containment and cleaning up:** If spilled, absorb with vermiculate or other inert material (i.e. sand). Collect up and place in an appropriate container.

### Section 7, Handling and Storage

**Precautions for safe handling:** When working with any chemical product, use good workplace procedures. Do not cut, puncture, or weld on or near the container. Wash thoroughly after handling this product. Always wash up before eating, smoking or using the facilities. Use under well ventilated conditions. Avoid skin and eye contact. Avoid inhalation of mist, spray, fume or vapor. Avoid drinking, tasting, swallowing or ingesting this product. Wash contaminated clothing before reuse.



## SAFETY DATA SHEET

**Conditions for safe storage:** Keep away from heat, sparks and open flames. Avoid extreme heat or cold. Store above freezing. Do not store in open, unlabeled or mislabeled containers. Keep containers closed when not in use. Empty container contains residual product which may exhibit hazards of product. Do not reuse empty containers.

### Section 8, Exposure Controls / Personal Protection

Chemical Name	CAS Number	OSHA PEL	ACGIH TLV	NIOSH
Pentaerythritol	115-77-5	15 mg/m <sup>3</sup> TWA (total dust) 5 mg/m <sup>3</sup> TWA (respirable fraction)	10 mg/m <sup>3</sup> TWA (total dust)	10 mg/m <sup>3</sup> (total dust) 5 mg/m <sup>3</sup> TWA (respirable dust)
Melamine	108-78-1	N/A	N/A	N/A
Ammonium Polyphosphate	68333-79-9	N/A	N/A	N/A
Titanium Dioxide	13463-67-7	15 mg/m <sup>3</sup> TWA	10 mg/m <sup>3</sup> TWA	5000 mg/m <sup>3</sup> IDLH
Aluminum Trihydrate	21645-51-2	15 mg/m <sup>3</sup> TWA (total dust) 5 mg/m <sup>3</sup> (respirable dust)	10 mg/m <sup>3</sup> TWA (total dust) 3 mg/m <sup>3</sup> (respirable dust)	

**Engineering Controls:** Use mechanical ventilation (cross, dilution and local exhaust) to control exposure. Local exhaust as required by job conditions to keep TLV below acceptable limits. Refer to OSHA Regulations 29 CFR 1910.94

**Respiration Protection:** A dust mask should be used in cases where individual are exposed to airborne mists of the material.

**Skin Protection:** Wear cloth, rubber, or latex gloves. Use long sleeve work cloth or a polypropylene suit.

**Eye Protection:** Wear proper eye protection; at minimum, safety glasses with side shields.

### Section 9, Physical and Chemical Properties

<b>Appearance:</b>	white liquid
<b>Odor:</b>	mild odor
<b>pH:</b>	7-9
<b>Melting Point:</b>	N/A
<b>Boiling Point:</b>	>212°F
<b>Flash Point:</b>	>200°F
<b>Evaporation Rate:</b>	>1 (water=1)
<b>Flammability:</b>	N/A
<b>Lower Exposure Limit:</b>	N/A
<b>Upper Exposure Limit:</b>	N/A
<b>Vapor Pressure (mm Hg):</b>	N/A
<b>Relative Density (kg/mm<sup>3</sup>):</b>	N/A
<b>Solubility in Water:</b>	N/A
<b>Specific Gravity (H<sub>2</sub>O=1):</b>	1.3 +/- 0.1
<b>Physical State:</b>	White Liquid
<b>% Volatiles:</b>	20-30%
<b>Viscosity:</b>	2300-3500 CPS
<b>Auto Ignition Temperature:</b>	N/A

### Section 10, Stability and Reactivity

Chemical Stability: Stable (normal temperature and conditions)





## SAFETY DATA SHEET

Possibility of Hazardous Reactions: None  
Conditions to Avoid: Avoid high temperatures or freezing. Avoid strong acid, bases and oxidizing agents.  
Incompatibility: Strong acid, bases and oxidizing agents.  
Hazardous Decomposition Products: Thermal decomposition may produce smoke, carbon monoxide, carbon dioxide and oxides of titanium, oxides of phosphorous, and other products of incomplete combustion.  
Hazardous Polymerization: None

### Section 11, Toxicological Information

Information on likely exposure:

General: Use personal protective equipment to minimize exposure.

Eyes: May cause eye irritation.

Skin: Causes skin irritation.

Inhalation: Protect from high airborne concentrations of mist resulting from spray. May cause irritation of the respiratory tract and mucous membranes.

Ingestions: May cause irritation.

Carcinogenicity	IARC			NTP		OSHA
	Group 1	Group 2A	Group 2B	Known	Suspect	
Chemical Name						
Pentaerythritol	No	No	No	No	No	No
Melamine	No	No	No	No	No	No
Ammonium Polyphosphate	No	No	No	No	No	No
Titanium Dioxide	No	No	Yes	No	No	No
Aluminum Trihydrate	No	No	No	No	No	No

Acute Toxicity:

No toxicity studies have been conducted on this product.

Titanium Dioxide:

LD50 Oral	Rat	>10,000 mg/kg
LD50 Inhalation	Rat	>6.8 mg/L
LD50 Dermal	Rat	>10,000 mg/kg

Melamine:

LD50 Oral	Rat	3161 mg/kg
LD50 Dermal	Rabbit	>1,000 mg/kg

Ammonium Polyphosphate:

LD50	Rat	>2,000 mg/kg
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Aluminum Trihydrate:

LD50 Oral	Rat	>5,000 mg/kg
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Chronic effects: For this category no toxicological test data is available for the whole product.

Carcinogenicity: For this category no toxicological test data is available for the whole product.

Mutagenicity: For this category no toxicological test data is available for the whole product.

Teratogenicity: For this category no toxicological test data is available for the whole product.



## SAFETY DATA SHEET

Developmental effects: For this category no toxicological test data is available for the whole product.

Fertility effects: For this category no toxicological test data is available for the whole product.

Target Organs: For this category no toxicological test data is available for the whole product.

### Section 12, Ecological Information

Ecological Information: No ecological testing has been conducted on this product.

Ecotoxicity:

Ammonium Polyphosphate	
Fish(Brachydanio reno) 96 hour LC50	>500 mg/L
Melamine	
Fish (Poecilia reticulata) 96 hour LC50	>3,000 mg/L
Invertebrate (Daphnia) 48 hours LC50	>2,000 mg/L
Pentaerythritol	
Invertebrate (Daphnia) 24 hour EC50	50,000 mg/L
Invertebrate (Daphnia) 48 hour EC50	30477-37043 mg/L

Persistence and degradability: N/E

Bioaccumulative Potential: N/E

Mobility in Soil: N/E

### Section 13, Disposal Considerations

**Disposal Information:** For waste disposal purposes, this product is not known to be designated as hazardous. Incinerate waste products in accordance with federal, state and local regulations. Liquids cannot be disposed of in a landfill.

### Section 14, Transportation Information

Proper Shipping Name:	Not regulated
Technical Name:	Not regulated
Hazard Class:	Not regulated
UN/NA Number:	Not regulated
Freight Class:	
Skid(s):	55
Drum(s):	50
Additional Notes:	None

### Section 15, Regulatory Information

US Regulations

HCS Classification                      Irritating material, Sensitizing material

**SARA 313 – Supplier Notification**                      None per 40 CFR Part 372

#### **SARA 311/312 – U.S. Federal Regulations**

Immediate Health (Acute):	Yes (Irritant)
Delayed Health (Chronic):	No
Fire:	No
Pressure:	No
Reactive:	No

#### **Chemical Inventory List:**

**U.S. TSCA** - All chemicals in this product are listed or exempt from listing.



## SAFETY DATA SHEET

**HMIS Ratings:****Health:** 1**Flammability:** 0**Reactivity:** 0**Personal Protection:** G**Volatile Organic Compounds (VOC):** <50 g/L**NFPA:****Health:** 1**Flammability:** 0**Reactivity:** 0**Section 16, Other Information**Prepared by: Chemistry Department, TPR<sup>2</sup> Corporation, USA

Phone: (860)767-8772

To the best of our knowledge, the information contained herein is accurate, obtained from sources believed by TPR<sup>2</sup> Corporation to be accurate at the time of preparation. TPR<sup>2</sup> Corporation does not assume any legal responsibility for use or reliance upon same.



MSDS No.: 310  
Revision No.: 004  
Revision Date: 05/17/12  
Page: 1 of 2

## MATERIAL SAFETY DATA SHEET

**Product name:** CF 812 Insulating Foam – W&D  
**Description:** Polyurethane Foam  
**Supplier:** Hilti, Inc. P.O. Box 21148, Tulsa, OK 74121  
**Emergency # (Chem-Trec.):** 1 800 424 9300 (USA, PR, Virgin Islands, Canada); 001 703 527 3887 (other countries)

## INGREDIENTS AND EXPOSURE LIMITS

Ingredients:	CAS Number:	PEL:	TLV:	STEL:
Polymeric diphenylmethane diisocyanate	9016-87-9	NE	NE	NE
Isobutane	75-28-5	NE	1000 ppm	NE
Propane	074-98-6	1000 ppm	1000 ppm	NE

**Abbreviations:** PEL = OSHA Permissible Exposure Limit. TLV = ACGIH Threshold Limit Value.

STEL = Short Term Exposure Limit. C = Ceiling. NE = None Established. NA = Not Applicable

## PHYSICAL DATA

<b>Appearance:</b>	Yellow to tan liquid.	<b>Odor:</b>	Mild.
<b>Vapor Density: (air = 1)</b>	Not determined.	<b>Vapor Pressure:</b>	8.3 bar @ 68° F
<b>Boiling Point:</b>	Not determined.	<b>VOC Content:</b>	2.4 g/l
<b>Evaporation Rate:</b>	Not determined.	<b>Solubility in Water:</b>	Not soluble.
<b>Specific Gravity:</b>	0.9-1.1	<b>pH:</b>	Not determined.

## FIRE AND EXPLOSION HAZARD DATA

<b>Flash Point:</b>	Flammable Gas	<b>Flammable Limits:</b>	0.4 - 32%
<b>Extinguishing Media:</b>	CO <sub>2</sub> , Dry Chemical, Foam, Water		
<b>Special Fire Fighting Proc.</b>	None known for cured foam. Uncured isocyanates react with water to release CO <sub>2</sub> .		
<b>Unusual Fire and Explosion Hazards:</b>	Extremely flammable. Contains flammable propellants under pressure. Aerosol cans exposed to fire or direct heat can rupture from pressure build-up.		

## REACTIVITY DATA

<b>Stability:</b>	Reacts with alcohols, amines, aqueous acids, and alkalis. Reacts with water (moisture) producing CO <sub>2</sub> . I
<b>Hazardous Polymerization:</b>	Will not occur. Reacts with water (nonviolently).
<b>Decomposition Products:</b>	Thermal decomposition can yield CO, CO <sub>2</sub> , HCN, HCl, NO <sub>x</sub> .
<b>Conditions to Avoid:</b>	Temperature extremes will shorten product shelf life; i.e. below 41° F / above 77° F.

## HEALTH HAZARD DATA

<b>Known Hazards:</b>	<b>Acute:</b> Eye, skin, and respiratory irritation. <b>Chronic:</b> Respiratory and skin sensitization
<b>Signs and Symptoms of Exposure:</b>	<b>Eyes:</b> Can adhere to cornea. <b>Skin:</b> Can adhere to the skin. Can cause irritation and possibly sensitization; e.g. itching, swelling, rashes, etc. <b>Inhalation:</b> Vapor may cause irritation of the breathing tract and sensitization. Sensitization causes an allergic (asthmatic-like) response. Hypersensitive persons may react at very low isocyanate levels. <b>Ingestion:</b> Effects of ingestion have not been determined. Not a likely route of exposure.
<b>Routes of Exposure:</b>	Inhalation. Contact.
<b>Carcinogenicity:</b>	No ingredients are classified as a carcinogen by IARC, NTP or OSHA.
<b>Medical Conditions Aggravated by Exposure:</b>	Eye, skin, and respiratory conditions.

## EMERGENCY AND FIRST AID PROCEDURES

<b>Eyes:</b>	<b>Immediately</b> flush with large amounts of water. Contact a physician immediately.
<b>Skin:</b>	Wipe off skin immediately with soft cloth. Cured foam can only be removed mechanically. Contact a physician if symptoms occur.
<b>Inhalation:</b>	Should symptoms occur, immediately move to fresh air. Call a physician if symptoms persist. Those individuals who develop an allergic reaction should avoid future use of this product.
<b>Ingestion:</b>	Seek medical attention immediately. Do not induce vomiting unless directed by a physician.
<b>Other:</b>	Referral to a physician is recommended if there is any question about the seriousness of the injury/exposure. If sensitization occurs, future contact with the material should be avoided.

## CONTROL MEASURES AND PERSONAL PROTECTIVE EQUIPMENT

<b>Ventilation:</b>	Ensure adequate air movement (natural or mechanically induced fresh air movements).
<b>Eye Protection:</b>	Goggles recommended; safety glasses with side shields as a minimum.
<b>Skin Protection:</b>	Impermeable gloves are recommended. Wear other protective clothing as required to prevent contact with skin.
<b>Respiratory Protection:</b>	Not normally required.

## PRECAUTIONS FOR SAFE HANDLING AND USE

<b>Handling and Storing Precautions:</b>	Avoid contact with skin, eyes, and respiratory system. Material will adhere to eyes and skin. Contents under pressure. Extremely flammable. Do not apply direct heat to the cans. Before using, remove ignition sources such as flames or equipment / tools that generate sparks. Store in a cool dry place. Do not store in direct sunlight. Keep from freezing. Store between 41° and 77° F. Always wash thoroughly after handling chemical products. For industrial use only. Keep out of reach of children. Follow label / use instructions.
<b>Spill Procedures:</b>	Wear appropriate personal protective equipment. CF 812 foam will polymerize (cure) upon contact with air/moisture. Allow product to cure, then remove for disposal. See disposal guidelines below.

## REGULATORY INFORMATION

<b>TSCA Inventory Status:</b>	Chemical components listed on TSCA inventory.
<b>SARA Title III, Section 313:</b>	This product contains 5 - 25% Polymeric diphenylmethane diisocyanate (CAS # 9016-87-9) which is subject to reporting under Section 313 of SARA Title III (40 CFR Part 372). (Technical note: MDI is not available in cured foam due to reaction of parts A and B upon exposure to air; i.e. when released from the can)
<b>DOT Shipping Name:</b>	Limited Quantity - LQ
<b>IATA / ICAO Shipping Name:</b>	Aerosols, flammable, Class 2.1, UN 1950
<b>HMIS Codes:</b>	Health 2, Flammability 3, Reactivity 1, PPE B (Goggles, Gloves)
<b>EPA Waste Code(s):</b>	D001,D003 (for aerosol cans)
<b>Waste Disposal Methods:</b>	Consult with regulatory agencies or your corporate personnel for disposal methods that comply with local, state, and federal safety, health and environmental regulations.
<b>Hazard Communication</b>	This MSDS has been prepared in accordance with the Federal OSHA Hazard Communication Standard, 29 CFR1910.1200.

## CONTACTS

<b>Customer Service:</b>	1 800 879 8000	<b>Technical Service:</b>	1 800 879 8000
<b>Health / Safety:</b>	1 800 879 6000	Jerry Metcalf	(x1003704)
<b>Emergency # (Chem-Trec):</b>	1 800 424 9300 (USA, PR, Virgin Islands, Canada); 703 527 3887 (other countries)		

The information and recommendations contained herein are based upon data believed to be correct; however, no guarantee or warranty of any kind expressed or implied is made with respect to the information provided.

**SAFETY DATA SHEET**  
**LOW PRESSURE POLYURETHANE FOAM**  
**A-SIDE COMPONENT (134a)**



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## SECTION 1- IDENTIFICATION

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### 1.1 Product Identifier

**Product Name:** Handi-Foam® E84 Class 1, Handi-Foam® Quick Cure, Handi-Foam® SPF Roof Patch, Handi-Foam® Commercial Vehicle, Handi-Foam® Sound Barrier, Handi-Foam® Air Seal, Handi-Foam® Low Density, Hand-Flow® Slow Rise, Silent Seal® SA, and Handi-Flow® Cavity Fill

**ID SDS:** A16178A

**REACH Registration:**

### 1.2 Relevant identified uses of the substance or mixture and uses advised against:

**General Use** Low pressure polyurethane foam, Side-A Component, for PROFESSIONAL USE ONLY

**Uses advised against** No further information available

### 1.3 Details of the supplier and of the safety data sheet:

**Manufacturer** Fomo Products Inc.  
2775 Barber Road  
Norton, Ohio 44203  
In Ohio: 330-753-4585; 1-800-321-5585 (Monday-Friday, 8:00 am – 5:00pm EST)

### 1.4 Emergency telephone numbers:

**In the U.S.A** CHEMTREC (24 hours) 1-800-424-9300

**International** CHEMTREC (24 hours) 1-703-527-3887

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## SECTION 2- HAZARDS IDENTIFICATION

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### 2.1 Classification of substance or mixture

**Product definition:** Mixture

**Classification:** Gases Under Pressure- Compressed Gas

Skin Irritation- Category 2

Skin Sensitization- Category 1

Eye Irritation- Category 2A

Acute Toxicity Inhalation- Category 4

Respiratory Sensitizing- Category 1

Specific Target Organ Toxicity, Single Exposure -Category 3 (STOT SE 3)

Carcinogen- Category 2

Specific Target Organ Toxicity, Repeated Exposure- Category 2 (STOT RE 2)

### 2.2 Label elements

**Labeling (Regulation (EC) No 1272/2008)**

**Hazard Symbols:**



**Signal Word:** WARNING

**Hazard Statements:**

- H280 Contains gas under pressure; may explode if heated
- H315 Causes skin irritation
- H317 May cause an allergic skin reaction
- H319 Causes serious eye irritation
- H332 Harmful if inhaled
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
- H335 May cause respiratory irritation
- H351 Suspected of causing cancer
- H373 May cause damage to organs through prolonged or repeated exposure

**Prevention:**

- P102 Keep Out of Reach of Children
- P201 Obtain special instructions before use
- P202 Do not handle until all safety precautions have been read and understood
- P251 Pressurized container: Do not pierce or burn, even after use.
- P261 Avoid breathing vapor, mist or spray
- P262 Do not get in eyes, on skin, or on clothing
- P264 Wash hands and other skin areas exposed to material thoroughly after handling
- P271 Use outdoors or in a well-ventilated area
- P272 Contaminated work clothing should not be allowed out of the workplace

- P280 Wear protective gloves, protective clothing and eye protection  
P284 Wear respiratory protection

**Response:**

- P302+P352+P333+P313 IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical attention  
P304+P341 IF INHALED: if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P308+P313 IF exposed or concerned: Get medical advice.  
P314 Get medical attention if you feel unwell  
P337+P313 If eye irritation persists: Get medical attention  
P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor.  
P362 Take off contaminated clothing and wash before reuse.

**Storage:**

- P405 Store locked up  
P410+P403 Protect from sunlight. Store in a well-ventilated place.

**Disposal:**

- P501 Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

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**SECTION 3-COMPOSITION/ INFORMATION ON INGREDIENTS**

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**3.1 Substances**

Not applicable

**3.2 Mixtures**

Chemical characterization (preparation):

% by Weight	Ingredient	CAS No.	EC Number	EC Classification
30-60	4,4' Diphenylmethane diisocyanate	101-68-8	202-966-0	Carc.Cat. 3, R40; Xn, R20, R48/20; Xi, R36/37/38; R42/43
30-60	Polymethylene polyphenyl isocyanate	9016-87-9	500-079-6	
5-10	1,1,1,2- Tetrafluoroethane	811-97-2	217-377-0	

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to the health or the environment and hence require reporting in this section.

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**SECTION 4- FIRST AID MEASURES**

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**4.1 Description of first aid measures**

- Inhalation: If product vapors causes respiratory irritation or distress, move the exposed person to fresh air immediately. If breathing is difficult or irregular, administer oxygen. If respiratory arrest occurs, start artificial respiration by a trained individual. Loosen tight fitting clothing such as a jacket or tie. Seek medical attention immediately. Asthmatic symptoms may develop and may be immediate or delayed up to several hours. Extreme asthmatic reactions can be life threatening. Persons receiving significant exposure should be observed for 24-48 hours for signs of respiratory distress.
- Eye: Immediately flush eyes with large amounts of water for at least 15 minutes, holding the eyes open with fingers and occasionally lifting the upper and lower lids. Use lukewarm water if possible. If present and easy to do, remove contact lenses. If irritation persists, get medical attention.
- Skin: Flush skin with large amounts of water while removing contaminated clothing. Gently wipe product from skin with a damp cloth and continue rinsing for 15 minutes. Wash clothing before reuse. Call a physician if irritation persists.
- Ingestion: If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention.

**4.2 Most important symptoms and effects, both acute and delayed**

- Inhalation: Isocyanates vapors at concentrations above the concentration limits or guidelines can irritate the mucous membranes in the respiratory tract with symptoms of burning sensation, runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function (difficulty breathing). Persons with a pre-existing, nonspecific bronchial hyperactivity can respond to concentrations below the exposure limits or guidelines with similar symptoms as well as asthma attack or asthma-like symptoms. Exposure well above the exposure limits or guidelines may lead to bronchitis, bronchial spasm and pulmonary edema (fluid in the lungs). Chemical or hypersensitivity pneumonitis, with flu-like symptoms has also been reported. These symptoms can be delayed up to several hours after exposure. These effects are usually reversible; however, increased lung sensitivity may persist for a longer period of time. May be harmful if inhaled. Inhalation of the propellant may cause lightheadedness, headache and lethargy.
- Eye: May cause eye irritation. Symptoms may include redness, swelling, stinging, and tearing. May cause temporary corneal injury. Product vapor may cause eye irritation with symptoms of burning and tearing.
- Skin: May cause skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. May cause an

allergic reaction. Can cause sensitization. Persons previously sensitized can experience allergic skin reactions. May be harmful if absorbed through the skin.

Ingestion: May be harmful if swallowed. May cause gastrointestinal irritation: stomach distress, nausea, or vomiting.

Chronic: Pre-existing disorders of the skin and respiratory system may be aggravated by exposure to this product. Prolonged vapor contact may cause conjunctivitis. Prolonged or repeated skin contact can cause redness, swelling, rash and possible skin sensitization. Animal tests and other research indicate that skin contact with diisocyanates can play a role in causing isocyanate sensitization and respiratory reaction. This data reinforces the need to prevent direct skin contact with isocyanates. As a result of previous repeated exposures or a single large dose, certain individuals may develop sensitization to diisocyanates or polyisocyanates (asthma or asthma-like symptoms) that may cause them to react to a later exposure to these materials at levels well below the exposure limits or guidelines. These symptoms, which can include chest tightness, wheezing, cough, shortness of breath or asthmatic attack could be delayed up to several hours after exposure. Extreme asthmatic reactions can be life threatening. Sensitization can be permanent.

#### 4.3 Notes to the physician

If case of an accident or if you feel unwell, seek medical advice immediately (show label or SDS if possible).

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### SECTION 5- FIRE FIGHTING MEASURES

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#### 5.1 Extinguishable media

**Suitable methods of extinction:** Use dry chemical, carbon dioxide, alcohol resistant foams and water spray

**Unsuitable methods of extinction:** None

#### 5.2 Special hazards arising from the substance or mixture

Cans, cylinders, or refillable tanks may explode due to the buildup of pressure when exposed to extreme heat. During a fire, isocyanate vapors or other irritating, highly toxic gases may be generated by thermal decomposition or combustion. Overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent or may be delayed.

#### 5.3 Advice for firefighters

Keep upwind of fire. Wear full fire-fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Use water spray to keep fire-exposed containers cool.

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### SECTION 6- ACCIDENTAL RELEASE MEASURES

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#### 6.1 Personal precautions, protective equipment and emergency procedures

Wear personal protective equipment recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate sources of ignition. Ventilate the area.

#### 6.2 Environmental precautions

Avoid dispersal of spilled material or run-off and prevent contact with soil and entry into drains, sewers or waterways.

#### 6.3 Methods and materials for containment and cleaning up

Cover drains and contain spill. Cover spilled material with a large quantity of inert absorbent. Collect material and place into an approved, open-head metal container. Decontaminate the spill and waste area with a neutralization solution. Wait 15 minutes. Repeat applications of decontamination solution, with scrubbing, followed by absorbent until the surface is decontaminated. Allow container to vent for 72 hours to let carbon dioxide escape. Dispose of waste via a licensed waste disposal contractor in accordance with all applicable federal, state, provincial and local regulations. Ensure adequate ventilation.

Additional spill procedures- neutralization solutions (decontamination):

Use ten parts of solution for each part of the spill.

(1) An aqueous solution containing 3-8% ammonium hydroxide or concentrated ammonia and 0.2-0.5% liquid detergent

(2) An aqueous solution containing 5-10% sodium bicarbonate and 0.2-0.5% liquid detergent

#### 6.4 Reference to other sections

For indications about waste treatment, see Section 13

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### SECTION 7- HANDLING AND STORAGE

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#### 7.1 Precautions for safe handling

Do not breathe vapors or mist during application. Use adequate ventilation to keep airborne isocyanate levels below exposure limits. Wear respiratory protection when spraying this material. Warning symptoms (irritation of the eyes, nose, or throat, or odor) are not adequate to prevent overexposure from inhalation. Individuals with lung or breathing problems or prior allergic reactions to isocyanates must not be exposed. Avoid contact with skin or eyes. Wear appropriate personal protective equipment during use (see Section 8). Wash thoroughly after handling product. Do not puncture or incinerate cylinders. Containers are under pressure. Keep containers closed when not in use.

#### Advice on protection against fire and explosion

Contents under pressure. Exposure to high temperatures can cause containers to rupture or explode.

#### 7.2 Conditions for safe storage, including any incompatibilities

Store in a dry, well-ventilated area and away from incompatible materials (see Section 10.5). Storage temperature is 60-90°F (16-32°C). Products stored below 60°F (16°C) or above 90°F (32°C) must be given adequate time to warm up/cool down. Do not expose the tanks/kits to open flame or temperatures above 122°F (50°C); storage at elevated temperatures can cause the container to rupture. Excessive heat can cause premature aging of components resulting in a shorter shelf life. Protect unused product from freezing. Storage below 60°F



(16°C) may affect foam quality if chemicals are not warmed to room temperature before using. Protect containers from physical abuse. Always store the containers in the upright position. **KEEP OUT OF REACH OF CHILDREN.**

## SECTION 8- EXPOSURE CONTROLS/ PERSONAL PROTECTION

### 8.1 Control Parameters

Ingredient	CAS Number	OSHA-PEL	ACGIH-TLV	Other
4,4' Diphenylmethane diisocyanate	101-68-8	0.2 mg/m <sup>3</sup> ; 0.02 ppm CEIL	0.051 mg/m <sup>3</sup> ; 0.005 ppm (8 hours TWA)	<b>NIOSH</b> - 0.2 mg/m <sup>3</sup> ; 0.02 ppm CEIL 0.051 mg/m <sup>3</sup> ; 0.005 ppm TWA
1,1,1,2 Tetrafluoroethane	811-97-2			WEEL 1,000 ppm

### 8.2 Exposure controls:

**Engineering Controls:** Use local and general exhaust ventilation to control levels of exposure.

**Eye/face Protection:** Wear protective goggles or safety glasses with side shields.

**Hand Protection:** Use chemically resistant gloves (i.e. Nitrile gloves). Nitrile/butadiene rubber, butyl rubber, polyethylene, PVC (vinyl), or neoprene gloves are also effective. Glove selection should take into account potential body reactions to certain materials and manufacturer's instructions for use. Break through time of selected gloves must be greater than the intended use period.

**Other Protective Equipment:** Use clothing that protects against dermal exposure. Appropriate protective clothing varies depending on the potential for exposure. To ensure proper skin protection, wear PPE in such a manner that no skin is exposed.

**Respiratory Protection:** Atmospheric levels should be maintained below the exposure guidelines. Use products only in a well-ventilated area. Engineering and administrative (work practices) controls should be implemented to protect the workers. If atmospheric levels are expected to exceed the exposure levels, use a NIOSH approved air purifying respirator equipped with an organic vapor cartridge and a particulate filter. If atmospheric levels exceed 10 times the TLV or PEL level for which an air-purifying respirator is effective, use a powered air purifying respirator (PAPR). The type of respiratory protection selected must comply with the requirements set forth in OSHA's Respiratory Protection Standard (29 CFR 1910.134). The odor and irritancy of this material is inadequate to warn of excessive exposure.

**Hygiene Measures:** An eye wash station or portable eye wash station should be in the area. Wash hands thoroughly after use, before eating, drinking or using the lavatory. Employees/Users should be educated and trained in the safe use and handling of this product.

**Medical Surveillance:** All employees/end-users who work with isocyanates should undergo a medical evaluation. A history of eczema or respiratory allergies are possible reasons for medical exclusion from working with isocyanates. Users with a prior history of isocyanate sensitization should be excluded from further work with isocyanates. Once a user is diagnosed with being sensitized to isocyanates, no further exposure should be permitted.

## SECTION 9- PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

General Physical Form	Amber to dark brown liquid. Forms an off-white to yellowish froth when released from the container
Odor	Slightly musty
Odor Threshold	No data available
pH	No data available
Melting Point/Freezing Point	No data available
Initial Boiling Point and Boiling Range	MDI boils at 406°F (208°C)
Flash Point	MDI 390°F (199°C)
Evaporation Rate	No data available
Flammability	No applicable
Lower Flammability/Explosive Limit	Not available
Upper Flammability/Explosive Limit	Not available
Vapor Pressure in Container	Contents under pressure have a vapor pressure >50 psi (>345kPa)
Vapor Pressure of Liquid	Liquid phase vapor pressure: <1 mm Hg @ 40°C
Vapor Density	No data available
Relative Density/Specific Gravity	~ 1.2 @ 25°C (Water = 1)
Solubility	Insoluble; reacts slowly with water during cure, liberating traces of CO <sub>2</sub>
Partition coefficient: n-octanol/water	No data available
Auto-ignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available
Oxidizing Properties	Not available
VOC Content (calculated minus exempt compounds)	0 g/L

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## SECTION 10- STABILITY AND REACTIVITY

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### 10.1 Reactivity

No dangerous reaction known under conditions of normal use.

### 10.2 Chemical stability

Stable under normal conditions of use and recommended storage conditions. See Section 7 for storage recommendations.

### 10.3 Possibility of hazardous reactions

Exposure to elevated temperatures can cause containers to rupture or explode. Avoid moisture, material reacts slowly with water releasing carbon dioxide. Contents are under pressure.

### 10.4 Conditions to avoid

Temperatures below 60°F (16°C) or temperatures above 90°F (32°C). Avoid heat and flames.

### 10.5 Incompatible materials

Alcohols, strong bases, amines, metal compounds, ammonia, and strong oxidizers. Avoid contamination with water.

### 10.6 Hazardous decomposition products

May include, and are not limited to: oxides of carbon, oxides of nitrogen, hydrogen fluoride and traces of hydrogen cyanide.

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## SECTION 11- TOXICOLOGICAL INFORMATION

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### 11.1 Information on toxicological effects

#### Acute oral toxicity

Expected to have low acute oral toxicity. LD50, rat: >5000 mg/kg

#### Acute inhalation toxicity

LC50, rat: 490 mg/m<sup>3</sup>, 4h

#### Acute dermal toxicity

Expected to have a low acute dermal toxicity. LD50, rabbit: >5000 mg/kg

#### Skin irritation

Causes skin irritation

#### Eye irritation

Causes moderate to serious eye irritation

#### Sensitization

May cause skin and respiratory sensitization

#### Genotoxicity

Genetic toxicity data for MDI is inconclusive. Some in-vitro studies yield positive results, while other test data were negative

#### Mutagenicity

Test data using laboratory animals was predominately negative

#### Specific organ toxicity- single exposure

May cause respiratory irritation

#### Specific organ toxicity- repeated exposure

May cause damage to the lungs, central nervous system and skin

#### Aspiration hazard

No data available

### 11.2 Further information

MDI and PMDI: IARC Group 3 carcinogen- Not classifiable as to its carcinogenicity to humans. Not listed as a carcinogen by ACGIH, OSHA or NTP. MDI/PMDI did not cause birth defects in laboratory animals; fetal effects occurred only at high doses which were toxic to the mother. Lung tumors have been observed in laboratory animals exposed to respirable aerosol droplets of MDI/PMDI (6mg/m<sup>3</sup>) for their lifetime. Tumors occurred concurrently with respiratory irritation and lung injury. Current exposure guidelines are expected to protect against these effects.

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## SECTION 12- ECOLOGICAL INFORMATION

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### 12.1 Ecotoxicity

Ecotoxicological data reported are for a comparable product. The Ecotoxicity is that of the hydrolyzed product generally under conditions of maximizing production of soluble species. This material is not classified as dangerous to aquatic organisms (LD50/EC50 greater than 100 mg/l in the most sensitive species).

**Acute and prolonged toxicity to fish:** LC50- Brachydanio rerio (Zebra fish), 96h >1000 mg/l

**Toxicity to aquatic invertebrates:** EC50- Daphnia magna (Water flea) 48h >1000 mg/l

**Toxicity to aquatic plants:** NOEC- Desmodesmus subspicatus (Green algae) static, 72 h >1640 mg/l, growth rate inhibition

**Toxicity to aquatic microbes:** OECD 209 Test- Activated Sludge 3 h >100 mg/l, respiration inhibition

**Toxicity to soil dwelling organisms:** EC50- Eisenia fetida (earthworms) 14 d >1000 mg/kg

### 12.2 Persistence and degradability

Product is not readily biodegradable. In aquatic and terrestrial environments, this material reacts with water, forming predominantly insoluble and stable polyureas. In the atmospheric environment, this material is expected to have a short tropospheric half-life, based on data from similar diisocyanates.

**12.3 Bioaccumulation potential**

Bioaccumulation potential is low.

**12.4 Mobility**

Expected to have low mobility based on product's reactivity with water, which forms predominately insoluble polyureas.

**12.5 Results of PBT and vPvB assessment**

No data available

**12.6 Other adverse effects**

**Additional ecological information:** Do not allow material to run into surface waters, wastewater, or soil. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal

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**SECTION 13- DISPOSAL CONSIDERATIONS**

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**13.1 Waste Treatment Methods**

*Always wear proper protective equipment as you would while spraying the two-component foam in a well-ventilated area.*

**Procedure for handling empty or partially used disposable cylinders:**

1. DO NOT INCINERATE TANKS
2. Dispense the foam into a waste container like a cardboard box or plastic bag. Depressurize the used cylinders using the dispensing unit with a new nozzle attached. Spray the foam until one of the components/cylinders no longer sprays chemical.
3. Remove the nozzle and then continue to depressurize by dispensing the chemicals into a waste container (a box lined with a plastic bag) that has adequate industrial liquid absorbing medium in the bottom. Dispense the residual chemicals until the pressure is down to a minimum or there are just large bubbles in the hose.
4. Close the cylinder valves completely, and then operate the dispensing unit again to empty and depressurize the hoses. Use a 9/16" wrench and remove the hoses from the cylinders. Use caution in case there is some residual chemical and/or pressure in the hoses.
5. Invert the cylinder and point away from face. Slowly open the cylinder over the waste container to catch any residual spray.
6. Return the cylinder to an upright position. Shake the container; there should not be any sloshing of liquid. Make sure to leave valves OPEN-do not close.
7. DISPOSE OF EMPTY CYLINDERS ACCORDING TO APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS. CHECK WITH YOUR LOCAL WASTE DISPOSAL SERVICE FOR GUIDANCE.

NOTE: After dispensing if one cylinder has chemical left in it; treat as hazardous material.

**Procedure for handling empty refillable tanks:**

THESE TANKS ARE RETURNABLE. These tanks are shipped back to Fomo Products, Inc. to be cleaned, refilled, and redistributed. Return instructions are included in or on the A-tank collar.

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**SECTION 14- TRANSPORTATION**

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Note: Transportation information is for reference only. Customer is urged to consult 49 CFR 100-177, IMDG, IATA, EC, United Nations TDG and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

	Containers Less Than 1000 cu. cm. (1 liter)	Containers Greater Than 1000 cu. cm. (1 liter)
<b>Ground</b>	Consumer Commodity ORM-D	UN1956 Compressed Gas n.o.s. (Fluorinated hydrocarbon, nitrogen) 2.2 (Non-Flammable Gas Label)
<b>Air</b>	UN1950 Aerosols, Non-Flammable 2.2 (Non-flammable Gas Label) LIMITED QUANTITY Packing Instructions (Cargo & Passenger) 203	UN1956 Compressed Gas n.o.s. (Fluorinated hydrocarbon, nitrogen) 2.2 (Non-flammable Gas Label) Packing Instruction (Cargo & Passenger) 200
<b>Water</b>	UN1950 Aerosols, Non-Flammable 2.2 (Non-flammable Gas Label) LIMITED QUANTITY	UN1956 Compressed Gas n.o.s. (Fluorinated hydrocarbon, nitrogen 2.2 (Non-flammable Gas Label)

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**SECTION 15- REGULATORY**

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**15.1 Safety, health, and environmental regulations/legislations specific for the substance or mixture****U.S. Federal Regulations:**

**OSHA Hazard Communication Standard:** This material is classified as hazardous in accordance with OSHA 29 CFR 1910-1200

**TSCA Status:** All components of this product are listed on the Toxic Substance Control Act (TSCA) Inventory. This product is not subject to TSCA 12(b) Export Notification.

**Superfund Amendments and Reauthorization Act (SARA)**

**SARA Section 311/312 Hazard Categories:** Acute Health Hazard, Chronic Health Hazard, Sudden Release of Pressure Hazard

**SARA 313 Information:** MDI and PMDI are subject to reporting levels established by Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986.

**SARA 302/304 Extremely Hazardous Substance:** No components of the product exceed the threshold (de minimis) reporting levels established by these sections of the Title III of SARA.

**SARA 302/304 Emergency Planning & Notification:** No components of the product exceed the threshold (de minimis) report levels established by these sections of the Title III of SARA.

**Comprehensive Response Compensation and Liability Act (CERCLA):** This product contains the following CERCLA reportable substances: 4,4'- Diphenylmethane diisocyanate (CAS #101-68-8), RQ- 2,268 kg (5,000 lbs).

**Clean Air Act (CAA) - 4,4'- Diphenylmethane diisocyanate (CAS #101-68-8)** is listed as a Hazardous Air Pollutant (HAP) designated in CAA Section 112 (b). This product does not contain any Class 1 or Class 2 Ozone depleters.

**Clean Water Act (CWA) - 4,4'- Diphenylmethane diisocyanate (CAS #101-68-8)** is listed as a Hazardous Substance under the CWA. None of the chemicals in these products are listed as Priority Pollutants under the CWA. None of the chemicals listed in these products are listed as Toxic Pollutants under the CWA.

**U.S. State Regulations:**

**California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986:** This product contains trace amount of substances known to the State of California to cause cancer or other reproductive harm.

**Other U.S. State Inventories:**

4, 4'- Diphenylmethane diisocyanate (CAS #101-68-8) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/air Pollutants lists: CA, DE, ID, IL, ME, MA, MN, NJ, PA, WA, WI

Polymeric MDI (CAS #9016-87-9) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists: DE, NJ, MN

1,1,1,2- Tetrafluoroethane (CAS #811-97-2) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists: ME, WI

**Canada****WHMIS Hazard Symbol and Classification:**

A- Compressed Gas



D1A- Very toxic material causing immediate and serious toxic effects- Acute lethality

D2A- Very toxic material causing other toxic effects (Respiratory Sensitizer)

D2B- Toxic Material causing other toxic effects (Skin & Eye Sensitizer)

**Canada Controlled Product Regulations (CPR):** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulation, and the SDS contains all the information required by the Controlled Products Regulations.

**Canadian Ingredient Disclosure List (IDL):** 4,4'- Diphenylmethane diisocyanate (CAS #101-68-8) is listed on the IDL.

**Canadian National Pollutant Release Inventory (NPRI):** MDI and PMDI are listed on the NPRI

**European Economic Community****Labeling (67/548/EEC or 1999/45/EC)**

Xn- Harmful

**Risk Phrases:** R20- Harmful by inhalation  
R36/37/38- Irritating to eyes, respiratory system and skin  
R40- Limited evidence of carcinogenic effect  
R42/43- May cause sensitization by inhalation and skin contact  
R48/20- Harmful: danger or serious damage to health by prolonged exposure through inhalation.

**Safety Phrases:** S1/2- Keep locked up and out of reach of children  
S23- Do not breathe fumes, vapor, or mist  
S36/37- Wear suitable protective clothing and gloves  
S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label or this SDS where possible).

**WGK, Germany (Water danger/protection):** 1

**Global Chemical Inventory Lists:**

United States: Toxic Substance Control Act (TSCA)- Yes

Canada: Domestic Substances List (DSL)- Yes

Canada: Non-Domestic Substances List (NDSL)- No

Europe: Inventory of New and Existing Chemicals- (EINECS)- Yes

Australia: Australian Inventory of Chemical Substances (AICS)- Yes

New Zealand: New Zealand Inventory of Chemicals (NZLoC)- Yes

China: Inventory of Existing Chemical Substances in China (IECSC)- Yes

Japan: Inventory of Existing and New Chemical Substances (ENCS)- Yes

Korea: Existing Chemicals List (ECL)- Yes

Philippines: Philippines Inventory of Chemicals and Chemical Substances (PICCS)- Yes

**15.2 Chemical safety assessment:** For this product a chemical safety assessment was not carried out

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## SECTION 16- OTHER

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**NFPA: Health Hazard 2; Flammability 3; Reactivity 1**

**HMIS: Health Hazard 2; Flammability 3; Physical Hazard 1**

Hazard Rating: 0=minimal, 1= slight, 2=moderate, 3=severe, 4= extreme

The information and recommendations set forth herein are presented in good faith and believed to be correct as of the date hereof. The manufacturer makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving it will make their own determination as to its suitability for their purposes prior to use. In no event will the manufacturer be responsible for damages of any nature whatsoever resulting from the use of or reliance upon information. No representations or warranties, either expressed or implied, of merchantability or fitness for a particular use are made hereunder with respect to this information or the product to which information refers.

Information contained herein is deemed to be reliable, conservative and accurate. Fomo Products, Inc. reserves the right to change the design, specifications or any other features at any time and without notice, while otherwise maintaining regulatory compliance.

**Revision-Updated to GHS Format, March 24, 2015 (Date of Preparation) Version 2.1**

**Replaces Version 2.0 November 18, 2014**

**SAFETY DATA SHEET**  
**LOW PRESSURE POLYURETHANE FOAM**  
**B-SIDE COMPONENT (134a)**



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**SECTION 1- IDENTIFICATION**

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**1.1 Product Identifier**

**Product Name:** Handi-Foam® E84 Class 1, Handi-Foam® Quick Cure, Handi-Foam® SPF Roof Patch, Handi-Foam® Air Seal, Hand-Flow® Slow Rise, and Silent Seal® SA.

**ID SDS:** A16178B

**REACH Registration:**

**1.2 Relevant identified uses of the substance or mixture and uses advised against:**

**General Use** Low pressure polyurethane foam, Side-B Component, for PROFESSIONAL USE ONLY

**Uses advised against** No further information available

**1.3 Details of the supplier and of the safety data sheet:**

**Manufacturer** Fomo Products Inc.  
2775 Barber Road  
Norton, Ohio 44203  
In Ohio: 330-753-4585; 1-800-321-5585 (Monday-Friday, 8:00 am – 5:00pm EST)

**1.4 Emergency telephone numbers:**

**In the U.S.A** CHEMTREC (24 hours) 1-800-424-9300

**International** CHEMTREC (24 hours) 1-703-527-3887

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**SECTION 2- HAZARDS IDENTIFICATION**

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**2.1 Classification of substance or mixture**

**Product definition:** Mixture  
**Classification:** Gases Under Pressure- Compressed Gas  
Skin Irritation- Category 2  
Eye Irritation- Category 2A

**2.2 Label elements**

**Labeling (Regulation (EC) No 1272/2008)**

**Hazard Symbols:**



**Signal Word:** WARNING

**Hazard Statements:**

H280 Contains gas under pressure; may explode if heated  
H315 Causes skin irritation  
H319 Causes serious eye irritation

**Prevention:**

P102 Keep Out of Reach of Children  
P201 Obtain special instructions before use  
P202 Do not handle until all safety precautions have been read and understood  
P251 Pressurized container: Do not pierce or burn, even after use.  
P264 Wash hands and other skin areas exposed to material thoroughly after handling  
P271 Use outdoors or in a well-ventilated area  
P280 Wear protective gloves, protective clothing and eye protection

**Response:**

P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P321 Specific treatment: Seek immediate medical advice. Refer to product label and Section 4 of this SDS  
P333+P313 If skin irritation or rash occurs: Get medical attention  
P337+P313 If eye irritation persists: Get medical attention  
P362 Take off contaminated clothing and wash before reuse.

**Storage:**

P405 Store locked up  
P410+P403 Protect from sunlight. Store in a well-ventilated place.

**Disposal:**

P501 Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

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**SECTION 3-COMPOSITION/ INFORMATION ON INGREDIENTS**

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**3.1 Substances**

Not applicable

**3.2 Mixtures**

Chemical characterization (preparation):

% by Weight	Ingredient	CAS No.	EC Number	EC Classification
30-60	Proprietary Polyol Blend			
15-45	Tris (1-chloro-2-propyl) Phosphate	13674-84-5	237-158-7	
10-30	1,1,1,2- Tetrafluoroethane	811-97-2	217-377-0	
1-5	Pentamethyldiethylenetriamine	3030-47-5	221-201-1	T, R24; Xn,R22; C,R34
0.5 – 1.5	Diethylene Glycol	111-46-6	203-872-2	Xn, R22

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to the health or the environment and hence require reporting in this section.

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**SECTION 4- FIRST AID MEASURES**

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**4.1 Description of first aid measures**

- Inhalation:** If product vapors causes respiratory irritation or distress, move the exposed person to fresh air immediately. If breathing is difficult or irregular, administer oxygen. If respiratory arrest occurs, start artificial respiration by a trained individual. Loosen tight fitting clothing such as a jacket or tie. Seek medical attention immediately.
- Eye:** Immediately flush eyes with large amounts of water for at least 15 minutes, holding the eyes open with fingers and occasionally lifting the upper and lower lids. Use lukewarm water if possible. If present and easy to do, remove contact lenses. If irritation persists, get medical attention.
- Skin:** Flush skin with large amounts of water while removing contaminated clothing. Gently wipe product from skin with a damp cloth and continue rinsing for 15 minutes. Wash clothing before reuse. Call a physician if irritation persists.
- Ingestion:** If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention.

**4.2 Most important symptoms and effects, both acute and delayed**

- Inhalation:** Mist or vapor may cause irritation of the nose, throat and respiratory tract. Symptoms may include sore throat, coughing, headache, nausea and shortness of breath. Inhalation of propellant may cause lightheadedness, headache and lethargy.
- Eye:** May cause eye irritation. Symptoms may include redness, swelling, stinging, and tearing. May cause temporary corneal injury. Product vapor may cause eye irritation with symptoms of burning and tearing.
- Skin:** May cause mild skin irritation. Symptoms may include localized redness and discomfort.
- Ingestion:** May cause gastrointestinal irritation: stomach distress, nausea, or vomiting. Repeated ingestion may be harmful.
- Chronic:** Pre-existing disorders of the skin and respiratory system may be aggravated by exposure to this product. Diethylene glycol has caused reproductive and developmental effects in some laboratory animal's tests.

**4.3 Notes to the physician**

If case of an accident or if you feel unwell, seek medical advice immediately (show label or SDS if possible).

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**SECTION 5- FIRE FIGHTING MEASURES**

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**5.1 Extinguishable media**

**Suitable methods of extinction:** Use dry chemical, carbon dioxide, alcohol resistant foams and water spray

**Unsuitable methods of extinction:** None

**5.2 Special hazards arising from the substance or mixture**

Cans, cylinders, or refillable tanks may explode due to the buildup of pressure when exposed to extreme heat. Highly toxic gases may be generated by thermal decomposition or combustion. Overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent or may be delayed.

**5.3 Advice for firefighters**

Keep upwind of fire. Wear full fire-fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Use water spray to keep fire-exposed containers cool.

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**SECTION 6- ACCIDENTAL RELEASE MEASURES**

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**6.1 Personal precautions, protective equipment and emergency procedures**

Wear personal protective equipment recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate sources of ignition. Ventilate the area.

**6.2 Environmental precautions**

Avoid dispersal of spilled material or run-off and prevent contact with soil and entry into drains, sewers or waterways.

### 6.3 Methods and materials for containment and cleaning up

Cover drains and contain spill. Cover spilled material with a large quantity of inert absorbent. Collect material and place into an approved, open-head metal container. Clean contaminated area with soap and water.

### 6.4 Reference to other sections

For indications about waste treatment, see Section 13

## SECTION 7- HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Observe label precautions. Wear all appropriate protective equipment specified in Section 8. Keep containers closed when not in use.

#### Advice on protection against fire and explosion

Contents under pressure. Exposure to high temperatures can cause containers to rupture or explode.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in a dry, well-ventilated area and away from incompatible materials (see Section 10.5). Storage temperature is 60-90°F (16-32°C). Products stored below 60°F (16°C) or above 90°F (32°C) must be given adequate time to warm up/cool down. Do not expose the tanks/kits to open flame or temperatures above 122°F (50°C); storage at elevated temperatures can cause the container to rupture. Excessive heat can cause premature aging of components resulting in a shorter shelf life. Protect unused product from freezing. Storage below 60°F (16°C) may affect foam quality if chemicals are not warmed to room temperature before using. Protect containers from physical abuse. Always store the containers in the upright position. **KEEP OUT OF REACH OF CHILDREN.**

## SECTION 8- EXPOSURE CONTROLS/ PERSONAL PROTECTION

### 8.1 Control Parameters

Ingredient	CAS Number	OSHA-PEL	ACGIH-TLV	Other
Diethylene Glycol	111-46-6			WEEL 10 mg/kg
1,1,1,2 Tetrafluoroethane	811-97-2			WEEL 1,000 ppm

### 8.2 Exposure controls:

**Engineering Controls:** Use local and general exhaust ventilation to control levels of exposure.

**Eye/face Protection:** Wear protective goggles or safety glasses with side shields.

**Hand Protection:** Use chemically resistant gloves (i.e. Nitrile gloves). Nitrile/butadiene rubber, butyl rubber, polyethylene, PVC (vinyl), or neoprene gloves are also effective. Glove selection should take into account potential body reactions to certain materials and manufacturer's instructions for use. Break through time of selected gloves must be greater than the intended use period.

**Other Protective Equipment:** Use clothing that protects against dermal exposure. Appropriate protective clothing varies depending on the potential for exposure. To ensure proper skin protection, wear PPE in such a manner that no skin is exposed.

**Respiratory Protection:** Atmospheric levels should be maintained below the exposure guidelines. Use products only in a well-ventilated area. Engineering and administrative (work practices) controls should be implemented to protect the workers. If atmospheric levels are expected to exceed the exposure levels, use a NIOSH approved air purifying respirator equipped with an organic vapor cartridge and a particulate filter. If atmospheric levels exceed 10 times the TLV or PEL level for which an air-purifying respirator is effective, use a powered air purifying respirator (PAPR). The type of respiratory protection selected must comply with the requirements set forth in OSHA's Respiratory Protection Standard (29 CFR 1910.134). The odor and irritancy of this material is inadequate to warn of excessive exposure.

**Hygiene Measures:** An eye wash station or portable eye wash station should be in the area. Wash hands thoroughly after use, before eating, drinking or using the lavatory. Employees/Users should be educated and trained in the safe use and handling of this product.

## SECTION 9- PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

General Physical Form	Amber to dark brown liquid. Forms an off-white to yellowish froth when released from the container
Odor	Slight fluorocarbon and amine odor
Odor Threshold	No data available
pH	No data available
Melting Point/Freezing Point	No data available
Initial Boiling Point and Boiling Range	Propellant -26°C (-15°F); >93°C (200°F), liquid phase
Flash Point	Estimated >392°F (>200°C).
Evaporation Rate	No data available
Flammability	No applicable
Lower Flammability/Explosive Limit	Not available



Upper Flammability/Explosive Limit	Not available
Vapor Pressure in Container	Contents under pressure have a vapor pressure >50 psi (>345kPa)
Vapor Pressure of Liquid	Liquid phase vapor pressure: <1 mm Hg @ 40°C
Vapor Density	No data available
Relative Density/Specific Gravity	~ 1.2 @ 25°C (Water = 1)
Solubility	Water: partly soluble, does not react
Partition coefficient: n-octanol/water	No data available
Auto-ignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available
Oxidizing Properties	Not available
VOC Content (calculated minus exempt compounds)	Calculated at around 25 g/L

## SECTION 10- STABILITY AND REACTIVITY

### 10.1 Reactivity

No dangerous reaction known under conditions of normal use.

### 10.2 Chemical stability

Stable under normal conditions of use and recommended storage conditions. See Section 7 for storage recommendations.

### 10.3 Possibility of hazardous reactions

Exposure to elevated temperatures can cause containers to rupture or explode. Contents are under pressure.

### 10.4 Conditions to avoid

Temperatures below 60°F (16°C) or temperatures above 90°F (32°C). Avoid heat and flames.

### 10.5 Incompatible materials

Alcohols, strong bases, amines, metal compounds, ammonia, and strong oxidizers.

### 10.6 Hazardous decomposition products

May include, and are not limited to: oxides of carbon, oxides of nitrogen, hydrogen fluoride and traces of hydrogen cyanide.

## SECTION 11- TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute oral toxicity

Expected to have low acute oral toxicity

#### Acute inhalation toxicity

Expected to have low acute inhalation toxicity

#### Acute dermal toxicity

Expected to have a low acute dermal toxicity

#### Skin irritation

May cause mild skin irritation

#### Eye irritation

Causes eye irritation

#### Sensitization

No data available

#### Genotoxicity

No data available

#### Mutagenicity

No data available

#### Specific organ toxicity- single exposure

No data available

#### Specific organ toxicity- repeated exposure

No data available

#### Aspiration hazard

No data available

### 11.2 Further information

None of the components of this product are listed as carcinogens by IARC, ACGIH, NTP or OSHA. No data is available regarding the mutagenicity or teratogenicity of this product, nor is there any available data that indicates that it causes adverse or fertility effects. Chronic toxicity from prolonged and repeated exposure to Diethylene glycol (DEG) is associated with kidney, and to a lesser degree liver effects. Available data indicates that DEG is negative in in-vitro genotoxicity tests. Some positive results were obtained in in-vivo genotoxicity studies, however, only at high toxic doses of DEG. Overall, DEG is considered non-genotoxic. Several animal reproductive toxicity studies indicate that human data or case reports on reproductive and developmental effects of DEG are available.

Handle in accordance with good industrial hygiene and safe practices.

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**SECTION 12- ECOLOGICAL INFORMATION**

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**12.1 Ecotoxicity**

The ecotoxicity of this product has not been experimentally determined. However, it is expected to have low acute aquatic toxicity based on the acute aquatic toxicity of the individual components and their concentrations in this composition.

**12.2 Persistence and degradability**

Product is readily biodegradable.

**12.3 Bioaccumulation potential**

Product is not expected to bioaccumulate

**12.4 Mobility**

No data available

**12.5 Results of PBT and vPvB assessment**

No data available

**12.6 Other adverse effects**

**Additional ecological information:** Do not allow material to run into surface waters, wastewater, or soil. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal

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**SECTION 13- DISPOSAL CONSIDERATIONS**

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**13.1 Waste Treatment Methods**

*Always wear proper protective equipment as you would while spraying the two-component foam in a well-ventilated area.*

**Procedure for handling empty or partially used disposable cylinders:**

1. DO NOT INCINERATE TANKS
2. Dispense the foam into a waste container like a cardboard box or plastic bag. Depressurize the used cylinders using the dispensing unit with a new nozzle attached. Spray the foam until one of the components/cylinders no longer sprays chemical.
3. Remove the nozzle and then continue to depressurize by dispensing the chemicals into a waste container (a box lined with a plastic bag) that has adequate industrial liquid absorbing medium in the bottom. Dispense the residual chemicals until the pressure is down to a minimum or there are just large bubbles in the hose.
4. Close the cylinder valves completely, and then operate the dispensing unit again to empty and depressurize the hoses. Use a 9/16" wrench and remove the hoses from the cylinders. Use caution in case there is some residual chemical and/or pressure in the hoses.
5. Invert the cylinder and point away from face. Slowly open the cylinder over the waste container to catch any residual spray.
6. Return the cylinder to an upright position. Shake the container; there should not be any sloshing of liquid. Make sure to leave valves OPEN-do not close.
7. DISPOSE OF EMPTY CYLINDERS ACCORDING TO APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS. CHECK WITH YOUR LOCAL WASTE DISPOSAL SERVICE FOR GUIDANCE.

NOTE: After dispensing if one cylinder has chemical left in it; treat as hazardous material.

**Procedure for handling empty refillable tanks:**

THESE TANKS ARE RETURNABLE. These tanks are shipped back to Fomo Products, Inc. to be cleaned, refilled, and redistributed. Return instructions are included in or on the A-tank collar.

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**SECTION 14- TRANSPORTATION**

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Note: Transportation information is for reference only. Customer is urged to consult 49 CFR 100-177, IMDG, IATA, EC, United Nations TDG and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

	Containers Less Than 1000 cu. cm. (1 liter)	Containers Greater Than 1000 cu. cm. (1 liter)
<b>Ground</b>	Consumer Commodity ORM-D	UN1956 Compressed Gas n.o.s. (Fluorinated hydrocarbon, nitrogen) 2.2 (Non-Flammable Gas Label)
<b>Air</b>	UN1950 Aerosols, Non-flammable 2.2 (Non-flammable Gas Label) LIMITED QUANTITY Packing Instructions (Cargo & Passenger) 203	UN1956 Compressed Gas n.o.s. (Fluorinated hydrocarbon, nitrogen) 2.2 (Non-flammable Gas Label) Packing Instruction (Cargo & Passenger) 200
<b>Water</b>	UN1950 Aerosols, Non-flammable 2.2 (Non-flammable Gas Label) LIMITED QUANTITY	UN1956 Compressed Gas n.o.s. (Fluorinated hydrocarbon, nitrogen) 2.2 (Non-flammable Gas Label)

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## SECTION 15- REGULATORY

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### 15.1 Safety, health, and environmental regulations/legislations specific for the substance or mixture

#### U.S. Federal Regulations:

**OSHA Hazard Communication Standard:** This material is classified as hazardous in accordance with OSHA 29 CFR 1910-1200

**TSCA Status:** All components of this product are listed on the Toxic Substance Control Act (TSCA) Inventory. This product is not subject to TSCA 12(b) Export Notification.

#### **Superfund Amendments and Reauthorization Act (SARA)**

**SARA Section 311/312 Hazard Categories:** Acute Health Hazard, Sudden Release of Pressure Hazard

**SARA 313 Information:** No components of the product are subject to reporting levels established by Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986.

**SARA 302/304 Extremely Hazardous Substance:** No components of the product exceed the threshold (de minimis) reporting levels established by these sections of the Title III of SARA.

**SARA 302/304 Emergency Planning & Notification:** No components of the product exceed the threshold (de minimis) report levels established by these sections of the Title III of SARA.

**Comprehensive Response Compensation and Liability Act (CERCLA):** None of the substances in this product are contained in levels that exceed the threshold (de minimis) reporting levels established by CERCLA

**Clean Air Act (CAA)** – This product does not have any components listed as a Hazardous Air Pollutant (HAP) designated in CAA Section 112 (b). This product does not contain any Class 1 or Class 2 Ozone depleters.

**Clean Water Act (CWA)** – This products does not have any components listed as a Hazardous Substance under the CWA. None of the chemicals in these products are listed as Priority Pollutants under the CWA. None of the chemicals listed in these products are listed as Toxic Pollutants under the CWA.

#### U.S. State Regulations:

**California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986:** This product contains trace amount of substances known to the State of California to cause cancer or other reproductive harm.

#### **Other U.S. State Inventories:**

Diethylene glycol (CAS#111-46-6) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/air Pollutants lists: MN, PA

1,1,1,2- Tetrafluoroethane (CAS #811-97-2) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists: ME, WI

#### Canada

##### **WHMIS Hazard Symbol and Classification:**



A- Compressed Gas

**Canada Controlled Product Regulations (CPR):** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulation, and the SDS contains all the information required by the Controlled Products Regulations.

**Canadian Ingredient Disclosure List (IDL):** None of the substances in this product are listed on the IDL.

**Canadian National Pollutant Release Inventory (NPRI):** None of the components of this product are listed on the NPRI

#### European Economic Community

**Labeling (67/548/EEC or 1999/45/EC):** None allocated

**Risk Phrases:** R22 Harmful if swallowed

R36 Irritating to eyes

R38 Irritating to skin

**WGK, Germany (Water danger/protection):** 1

#### Global Chemical Inventory Lists:

United States: Toxic Substance Control Act (TSCA)- Yes

Canada: Domestic Substances List (DSL)- Yes

Canada: Non-Domestic Substances List (NDSL)- No

Europe: Inventory of New and Existing Chemicals- (EINECS)- Yes

Australia: Australian Inventory of Chemical Substances (AICS)- Yes

New Zealand: New Zealand Inventory of Chemicals (NZLoC)- Yes

China: Inventory of Existing Chemical Substances in China (IECSC)- Yes

Japan: Inventory of Existing and New Chemical Substances (ENCS)- Yes

Korea: Existing Chemicals List (ECL)- Yes

Philippines: Philippines Inventory of Chemicals and Chemical Substances (PICCS)- Yes

**15.2 Chemical safety assessment:** For this product a chemical safety assessment was not carried out

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**SECTION 16- OTHER**

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**NFPA: Health Hazard 2; Flammability 1; Reactivity 1**

**HMIS: Health Hazard 2; Flammability 1; Physical Hazard 1**

Hazard Rating: 0=minimal, 1= slight, 2=moderate, 3=severe, 4= extreme

The information and recommendations set forth herein are presented in good faith and believed to be correct as of the date hereof. The manufacturer makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving it will make their own determination as to its suitability for their purposes prior to use. In no event will the manufacturer be responsible for damages of any nature whatsoever resulting from the use of or reliance upon information. No representations or warranties, either expressed or implied, of merchantability or fitness for a particular use are made hereunder with respect to this information or the product to which information refers.

Information contained herein is deemed to be reliable, conservative and accurate. Fomo Products, Inc. reserves the right to change the design, specifications or any other features at any time and without notice, while otherwise maintaining regulatory compliance.

**Revision-Updated to GHS Format, March 24, 2015 (Date of Preparation) Version 2.1**

**Replaces Version 2.0- November 18, 2014**



# Material Safety Data Sheet

The Dow Chemical Company

**Product Name:** STYROFOAM(TM) CM 2060 Polyol

**Issue Date:** 11/04/2009

**Print Date:** 05 Nov 2009

The Dow Chemical Company encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

## 1. Product and Company Identification

**Product Name**

STYROFOAM(TM) CM 2060 Polyol

**COMPANY IDENTIFICATION**

The Dow Chemical Company  
2030 Willard H. Dow Center  
Midland, MI 48674  
USA

Customer Information Number:

800-258-2436

**EMERGENCY TELEPHONE NUMBER**

**24-Hour Emergency Contact:**

989-636-4400

**Local Emergency Contact:**

989-636-4400

## 2. Hazards Identification

**Emergency Overview**

**Color:** Blue

**Physical State:** Liquid.

**Odor:** Amine.

**Hazards of product:**

WARNING! Causes eye irritation. May be harmful if inhaled. Vapor reduces oxygen available for breathing. May cause anesthetic effects. May cause central nervous system effects; may cause respiratory tract irritation. May be harmful if swallowed. Isolate area. Keep upwind of spill. Toxic fumes may be released in fire situations. Highly toxic to fish and/or other aquatic organisms.

**OSHA Hazard Communication Standard**

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**Potential Health Effects**

**Eye Contact:** May cause severe eye irritation. May cause corneal injury. Vapor of amines may cause swelling of the cornea resulting in visual disturbances such as blurred or hazy vision. Bright lights may appear to be surrounded by halos. Effects may be delayed and typically disappear spontaneously.

**Skin Contact:** Repeated contact may cause skin irritation with local redness.

**Skin Absorption:** Prolonged skin contact is unlikely to result in absorption of harmful amounts.

**Inhalation:** Prolonged excessive exposure may cause adverse effects. In confined or poorly ventilated areas, vapor can easily accumulate and can cause unconsciousness and death due to displacement of oxygen. May cause respiratory irritation and central nervous system depression. Symptoms may include headache, dizziness and drowsiness, progressing to incoordination and unconsciousness. Symptoms of excessive exposure may be anesthetic or narcotic effects; dizziness and drowsiness may be observed. Excessive exposure may increase sensitivity to epinephrine and increase myocardial irritability (irregular heartbeats).

**Ingestion:** Low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury.

**Effects of Repeated Exposure:** Contains a component which is reported to be a weak organophosphate-type cholinesterase inhibitor. Excessive exposure may produce organophosphate type cholinesterase inhibition. Signs and symptoms of excessive exposure may be headache, dizziness, incoordination, muscle twitching, tremors, nausea, abdominal cramps, diarrhea, sweating, pinpoint pupils, blurred vision, salivation, tearing, tightness in chest, excessive urination, convulsions. In laboratory animals, repeated vapor exposure to bis(dimethylaminoethyl)ether resulted in respiratory and eye effects at 10 ppm and above, and death at 47 ppm and above. Contains component(s) which have been reported to cause effects on the following organs in animals: Heart. Respiratory tract.

**Birth Defects/Developmental Effects:** Contains component(s) which, in laboratory animals, have been toxic to the fetus only at doses toxic to the mother.

**Reproductive Effects:** In animal studies on component(s), effects on reproduction were seen only at doses that produced significant toxicity to the parent animals.

**3. Composition Information**

Component	CAS #	Amount
1,4-Benzenedicarboxylic Acid, Dimethyl Ester, manuf. of, by-products from, Polymers with Diethylene Glycol	70749-97-2	>= 30.0 - <= 60.0 %
Phenol, polymer with formaldehyde , propylene oxide and ethylene oxide	25134-86-5	>= 10.0 - <= 30.0 %
1,1,1,3,3 - Pentafluoropropane	460-73-1	>= 10.0 - <= 30.0 %
Triethyl phosphate	78-40-0	>= 5.0 - <= 10.0 %
2-(2-Hydroxyethoxy)ethyl-2-hydroxypropyl-3,4,5,6-tetrabromo phthalate	20566-35-2	>= 3.0 - <= 7.0 %
N,N-Dimethylcyclohexylamine	98-94-2	>= 1.0 - <= 5.0 %

**4. First-aid measures**

**Eye Contact:** Immediately flush eyes with water; remove contact lenses, if present, after the first 5 minutes, then continue flushing eyes for at least 15 minutes. Obtain medical attention without delay, preferably from an ophthalmologist. Eye wash fountain should be located in immediate work area.

**Skin Contact:** Wash skin with plenty of water.

**Inhalation:** Move person to fresh air. If not breathing, give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask, etc). If breathing is difficult, oxygen should be administered by qualified personnel. Call a physician or transport to a medical facility.

**Ingestion:** If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

**Notes to Physician:** Maintain adequate ventilation and oxygenation of the patient. Exposure may increase "myocardial irritability". Do not administer sympathomimetic drugs such as epinephrine unless absolutely necessary. Exposure to amine vapors may cause minor transient edema of the

corneal epithelium (glauropsia) with blurred vision, blue haze and halos around bright objects. Effects disappear in a few hours and temporarily reduce ability to drive vehicles. Cholinesterase inhibition has been noted in human exposure but is not of benefit in determining exposure and is not correlated with signs of exposure. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

**Emergency Personnel Protection:** First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

## 5. Fire Fighting Measures

**Extinguishing Media:** Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Do not use direct water stream. May spread fire. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.

**Fire Fighting Procedures:** Keep people away. Isolate fire and deny unnecessary entry. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. Do not use direct water stream. May spread fire. Move container from fire area if this is possible without hazard. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage. Review the "Accidental Release Measures" and the "Ecological Information" sections of this (M)SDS.

**Special Protective Equipment for Firefighters:** Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant fire fighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location. For protective equipment in post-fire or non-fire clean-up situations, refer to the relevant sections.

**Unusual Fire and Explosion Hazards:** Container may rupture from gas generation in a fire situation. Blowing agent vaporizes quickly at room temperature. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids.

**Hazardous Combustion Products:** During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide. Hydrogen halides.

## 6. Accidental Release Measures

**Steps to be Taken if Material is Released or Spilled:** Contain spilled material if possible. Absorb with materials such as: Dirt. Sand. Sawdust. Collect in suitable and properly labeled containers. Wash the spill site with water. See Section 13, Disposal Considerations, for additional information.

**Personal Precautions:** Isolate area. Keep unnecessary and unprotected personnel from entering the area. Spilled material may cause a slipping hazard. Refer to Section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

**Environmental Precautions:** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

## 7. Handling and Storage

### Handling

**General Handling:** Avoid contact with eyes. Do not swallow. Avoid breathing vapor. Wash thoroughly after handling. Keep container closed. Use with adequate ventilation. This material is hygroscopic in nature. Do not enter confined spaces unless adequately ventilated. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

**Other Precautions:** Spills of these organic materials on hot fibrous insulations may lead to lowering of the autoignition temperatures possibly resulting in spontaneous combustion.

### Storage

Protect from atmospheric moisture. Store in a dry place. Avoid prolonged exposure to heat and air. Store in the following material(s): Carbon steel. Stainless steel. Polypropylene. Polyethylene-lined container. Teflon. Glass-lined container. Aluminum. Plasite 3066 lined container. Plasite 3070 lined container. 316 stainless steel. See Section 10 for more specific information.

**Shelf life: Use within**      **Storage temperature:**  
6 Months                      15 - 32 °C

## 8. Exposure Controls / Personal Protection

### Exposure Limits

Component	List	Type	Value
1,1,1,3,3 - Pentafluoropropane	AIHA WEEL	TWA	1,644 mg/m <sup>3</sup> 300 ppm
N,N-Dimethylcyclohexylamine	Dow IHG	TWA	1 ppm SKIN
Bis-(N,N-dimethylaminoethyl)ether	ACGIH	TWA	0.05 ppm SKIN
	ACGIH	STEL	0.15 ppm SKIN

A "skin" notation following the inhalation exposure guideline refers to the potential for dermal absorption of the material including mucous membranes and the eyes either by contact with vapors or by direct skin contact.

It is intended to alert the reader that inhalation may not be the only route of exposure and that measures to minimize dermal exposures should be considered.

### Personal Protection

**Eye/Face Protection:** Use chemical goggles. Eye wash fountain should be located in immediate work area. If exposure causes eye discomfort, use a full-face respirator.

**Skin Protection:** Wear clean, body-covering clothing.

**Hand protection:** Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. Examples of preferred glove barrier materials include: Chlorinated polyethylene. Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Polyvinyl alcohol ("PVA"). Styrene/butadiene rubber. Viton. Examples of acceptable glove barrier materials include: Butyl rubber. Natural rubber ("latex"). Polyvinyl chloride ("PVC" or "vinyl"). NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

**Respiratory Protection:** Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use an approved respirator. When respiratory protection is required, use an approved positive-pressure self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply. For emergency conditions, use an approved positive-pressure self-contained breathing apparatus. In confined or poorly ventilated areas, use an approved self-contained breathing apparatus or positive pressure air line with auxiliary self-contained air supply.

**Ingestion:** Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating.



**Engineering Controls**

**Ventilation:** Use engineering controls to maintain airborne level below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use only in enclosed systems or with local exhaust ventilation. Exhaust systems should be designed to move the air away from the source of vapor/aerosol generation and people working at this point. Lethal concentrations may exist in areas with poor ventilation.

## 9. Physical and Chemical Properties

<b>Physical State</b>	Liquid.
<b>Color</b>	Blue
<b>Odor</b>	Amine.
<b>Odor Threshold</b>	No test data available
<b>Flash Point - Closed Cup</b>	100 °C (212 °F) <i>Calculated</i>
<b>Flammability (solid, gas)</b>	Not applicable to liquids
<b>Flammable Limits In Air</b>	<b>Lower:</b> No test data available <b>Upper:</b> No test data available
<b>Autoignition Temperature</b>	No test data available
<b>Vapor Pressure</b>	69 psi @ 55 °C <i>Estimated.</i>
<b>Boiling Point (760 mmHg)</b>	No test data available.
<b>Vapor Density (air = 1)</b>	No test data available
<b>Specific Gravity (H2O = 1)</b>	1.206 <i>ASTM D891</i>
<b>Freezing Point</b>	No test data available
<b>Melting Point</b>	Not applicable to liquids
<b>Solubility in water (by weight)</b>	No test data available
<b>pH</b>	No test data available
<b>Decomposition Temperature</b>	No test data available
<b>Partition coefficient, n-octanol/water (log Pow)</b>	No data available for this product. See Section 12 for individual component data.
<b>Evaporation Rate (Butyl Acetate = 1)</b>	No test data available
<b>Kinematic Viscosity</b>	375 cSt @ 25 °C <i>ASTM D4878</i>

## 10. Stability and Reactivity

**Stability/Instability**

Stable under recommended storage conditions. See Storage, Section 7.

**Conditions to Avoid:** Product can oxidize at elevated temperatures. Elevated temperatures can cause pressure buildup in closed containers due to the release of blowing agents. Generation of gas during decomposition can cause pressure in closed systems.

**Incompatible Materials:** Avoid contact with oxidizing materials. Avoid contact with: Strong acids. Strong bases. Avoid contact with metals such as: Brass. Zinc. Copper. Avoid unintended contact with isocyanates. The reaction of polyols and isocyanates generates heat.

**Hazardous Polymerization**

Will not occur by itself.

**Thermal Decomposition**

Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Carbon dioxide. Alcohols. Ethers. Hydrocarbons. Hydrogen halides. Ketones. Polymer fragments.

## 11. Toxicological Information

### Acute Toxicity

#### Ingestion

Single dose oral LD50 has not been determined. Estimated. LD50, Rat > 2,000 mg/kg

#### Skin Absorption

The dermal LD50 has not been determined. Estimated. LD50, Rabbit > 2,000 mg/kg

### Repeated Dose Toxicity

Contains a component which is reported to be a weak organophosphate-type cholinesterase inhibitor. Excessive exposure may produce organophosphate type cholinesterase inhibition. Signs and symptoms of excessive exposure may be headache, dizziness, incoordination, muscle twitching, tremors, nausea, abdominal cramps, diarrhea, sweating, pinpoint pupils, blurred vision, salivation, tearing, tightness in chest, excessive urination, convulsions. In laboratory animals, repeated vapor exposure to bis(dimethylaminoethyl)ether resulted in respiratory and eye effects at 10 ppm and above, and death at 47 ppm and above. Contains component(s) which have been reported to cause effects on the following organs in animals: Heart. Respiratory tract.

### Chronic Toxicity and Carcinogenicity

No relevant information found.

### Developmental Toxicity

Contains component(s) which, in laboratory animals, have been toxic to the fetus only at doses toxic to the mother.

### Reproductive Toxicity

In animal studies on component(s), effects on reproduction were seen only at doses that produced significant toxicity to the parent animals.

### Genetic Toxicology

Contains component(s) which were negative in some in vitro genetic toxicity studies and positive in others. Contains component(s) which were negative in some animal genetic toxicity studies and positive in others.

## 12. Ecological Information

### ENVIRONMENTAL FATE

Data for Component: **1,4-Benzenedicarboxylic Acid, Dimethyl Ester, manuf. of, by-products from, Polymers with Diethylene Glycol**

#### Movement & Partitioning

For the major component(s): Bioconcentration potential is low (BCF less than 100 or log Pow less than 3).

#### Persistence and Degradability

Biodegradation under aerobic static laboratory conditions is moderate (BOD20 or BOD28/ThOD between 10 and 40%).

#### Biological oxygen demand (BOD):

BOD 5	BOD 10	BOD 20	BOD 28
17 %	29 %	>= 29 %	

Chemical Oxygen Demand: 1.50 mg/mg

Data for Component: **Phenol, polymer with formaldehyde , propylene oxide and ethylene oxide**

#### Movement & Partitioning

No bioconcentration is expected because of the relatively high molecular weight (MW greater than 1000).

#### Persistence and Degradability

Material is expected to biodegrade only very slowly (in the environment). Fails to pass OECD/EEC tests for ready biodegradability.

#### OECD Biodegradation Tests:

Biodegradation	Exposure Time	Method
16 %	28 d	OECD 301B Test

Data for Component: **1,1,1,3,3 - Pentafluoropropane**

#### Movement & Partitioning

Bioconcentration potential is low (BCF less than 100 or log Pow less than 3). Potential for mobility in soil is medium (Koc between 150 and 500).

**Henry's Law Constant (H):** 6.89E-02 atm\*m3/mole; 25 °C Estimated.

**Partition coefficient, n-octanol/water (log Pow):** 1.35 Measured

**Partition coefficient, soil organic carbon/water (Koc):** 280 Estimated.

#### Persistence and Degradability

Material is expected to biodegrade only very slowly (in the environment). Fails to pass OECD/EEC tests for ready biodegradability.

#### Indirect Photodegradation with OH Radicals

Rate Constant	Atmospheric Half-life	Method
2.97E-14 cm3/s	360 d	Estimated.

#### OECD Biodegradation Tests:

Biodegradation	Exposure Time	Method
8 %	28 d	OECD 301D Test

**Theoretical Oxygen Demand:** 0.60 mg/mg

Data for Component: **Triethyl phosphate**

#### Movement & Partitioning

Bioconcentration potential is low (BCF < 100 or Log Pow < 3). Potential for mobility in soil is very high (Koc between 0 and 50). Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process.

**Henry's Law Constant (H):** 3.60E-08 atm\*m3/mole; 25 °C Measured

**Partition coefficient, n-octanol/water (log Pow):** 0.80 Measured

**Partition coefficient, soil organic carbon/water (Koc):** 48 Estimated.

#### Persistence and Degradability

Biodegradation under aerobic laboratory conditions is below detectable limits (BOD20 or BOD28/ThOD < 2.5%).

#### Indirect Photodegradation with OH Radicals

Rate Constant	Atmospheric Half-life	Method
5.794E-11 cm3/s	0.18 d	Estimated.

#### Biological oxygen demand (BOD):

BOD 5	BOD 10	BOD 20	BOD 28
0 %			

**Theoretical Oxygen Demand:** 1.58 mg/mg

Data for Component: **2-(2-Hydroxyethoxy)ethyl-2-hydroxypropyl-3,4,5,6-tetrabromo phthalate**

#### Movement & Partitioning

Bioconcentration potential is low (BCF < 100 or Log Pow < 3). Potential for mobility in soil is very high (Koc between 0 and 50). Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process.

**Henry's Law Constant (H):** 2.74E-16 atm\*m3/mole; 25 °C Estimated.

**Partition coefficient, n-octanol/water (log Pow):** 3.83 Estimated.

**Partition coefficient, soil organic carbon/water (Koc):** 10 Estimated.

**Bioconcentration Factor (BCF):** 39; Estimated.

#### Persistence and Degradability

No relevant information found.

**Theoretical Oxygen Demand:** 0.74 mg/mg

Data for Component: **N,N-Dimethylcyclohexylamine**

#### Movement & Partitioning

Bioconcentration potential is low (BCF < 100 or Log Pow < 3). Potential for mobility in soil is high (Koc between 50 and 150).

**Henry's Law Constant (H):** 2.35E-05 atm\*m3/mole; 25 °C Measured

**Partition coefficient, n-octanol/water (log Pow):** 2.31 Estimated.

Partition coefficient, soil organic carbon/water (Koc): 70 Estimated.

#### Persistence and Degradability

Biodegradation under aerobic static laboratory conditions is low (BOD20 or BOD28/ThOD between 2.5 and 10%). Material is ultimately biodegradable (reaches > 70% mineralization in OECD test(s) for inherent biodegradability).

#### Indirect Photodegradation with OH Radicals

Rate Constant	Atmospheric Half-life	Method
1.0289E-10 cm <sup>3</sup> /s	0.104 d	Estimated.

#### OECD Biodegradation Tests:

Biodegradation	Exposure Time	Method
88 %	24 d	OECD 302B Test

#### Biological oxygen demand (BOD):

BOD 5	BOD 10	BOD 20	BOD 28
4.7 %	5 %	5.3 %	8.2 %

Theoretical Oxygen Demand: 3.40 mg/mg

#### ECOTOXICITY

Data for Component: **1,4-Benzenedicarboxylic Acid, Dimethyl Ester, manuf. of, by-products from, Polymers with Diethylene Glycol**

Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

#### Fish Acute & Prolonged Toxicity

LC50, fathead minnow (*Pimephales promelas*), 96 h: > 500 mg/l

#### Aquatic Invertebrate Acute Toxicity

LC50, water flea *Daphnia magna*, 48 h: > 500 mg/l

Data for Component: **Phenol, polymer with formaldehyde, propylene oxide and ethylene oxide**

Material is slightly toxic to fish on an acute basis (LC50 between 10 and 100 mg/L).

#### Fish Acute & Prolonged Toxicity

LC50, zebra fish (*Brachydanio rerio*), static, 96 h: 57.1 mg/l

#### Toxicity to Micro-organisms

EC50, OECD 209 Test; activated sludge, respiration inhibition, 30 min: > 200 mg/l

Data for Component: **1,1,1,3,3 - Pentafluoropropane**

Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

#### Fish Acute & Prolonged Toxicity

LC50, rainbow trout (*Oncorhynchus mykiss*), static renewal, 96 h: > 100 mg/l

#### Aquatic Invertebrate Acute Toxicity

EC50, water flea *Daphnia magna*, static, 48 h, immobilization: > 100 mg/l

Data for Component: **Triethyl phosphate**

Material is practically non-toxic to fish on an acute basis (LC50 > 100 mg/L).

#### Fish Acute & Prolonged Toxicity

LC50, Japanese medaka (*Oryzias latipes*), static, 48 h: > 500 mg/l

Data for Component: **2-(2-Hydroxyethoxy)ethyl-2-hydroxypropyl-3,4,5,6-tetrabromo phthalate**

Material is slightly toxic to fish on an acute basis (LC50 between 10 and 100 mg/L).

#### Fish Acute & Prolonged Toxicity

LC50, bluegill (*Lepomis macrochirus*), 96 h: 12 mg/l

Data for Component: **N,N-Dimethylcyclohexylamine**

Material is very highly toxic to aquatic organisms on an acute basis (LC50/EC50 <0.1 mg/L in the most sensitive species).

#### Fish Acute & Prolonged Toxicity

LC50, rainbow trout (*Oncorhynchus mykiss*), static, 96 h: 28.1 mg/l

#### Aquatic Invertebrate Acute Toxicity

LC50, water flea Daphnia magna, static, 48 h: 75 mg/l

**Aquatic Plant Toxicity**

EC50, alga Scenedesmus sp., biomass growth inhibition, 96 h: 0.0885 mg/l

**13. Disposal Considerations**

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. AS YOUR SUPPLIER, WE HAVE NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION: Composition Information. FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: Recycler. Reclaimer. Incinerator or other thermal destruction device. For additional information, refer to: Handling & Storage Information, MSDS Section 7 Stability & Reactivity Information, MSDS Section 10 Regulatory Information, MSDS Section 15

**14. Transport Information****DOT Non-Bulk**

NOT REGULATED

**DOT Bulk**

NOT REGULATED

**IMDG**

NOT REGULATED

**ICAO/IATA**

**Proper Shipping Name:** AVIATION REGULATED LIQUID, N.O.S.

**Technical Name:** 1,1,1,3,3-Pentafluoropropane

**Hazard Class:** 9 **ID Number:** UN3334 **Cargo Packing Instruction:** 906

**Passenger Packing Instruction:** 906

*This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.*

**15. Regulatory Information****OSHA Hazard Communication Standard**

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312**

<b>Immediate (Acute) Health Hazard</b>	Yes
<b>Delayed (Chronic) Health Hazard</b>	No
<b>Fire Hazard</b>	No
<b>Reactive Hazard</b>	No
<b>Sudden Release of Pressure Hazard</b>	No

**Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313**

To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

**Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Hazardous Substances List and/or Pennsylvania Environmental Hazardous Substance List:**

To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

**Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Special Hazardous Substances List:**

The following product components are cited in the Pennsylvania Special Hazardous Substance List, and are present at levels which require reporting.

**California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)**

This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

**US. Toxic Substances Control Act**

All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30

**CEPA - Domestic Substances List (DSL)**

All substances contained in this product are listed on the Canadian Domestic Substances List (DSL) or are not required to be listed.

<b>16. Other Information</b>
------------------------------

**Revision**

Identification Number: 1040710 / 0000 / Issue Date 11/04/2009 / Version: 1.0

Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

**Legend**

N/A	Not available
W/W	Weight/Weight
OEL	Occupational Exposure Limit
STEL	Short Term Exposure Limit
TWA	Time Weighted Average
ACGIH	American Conference of Governmental Industrial Hygienists, Inc.
DOW IHG	Dow Industrial Hygiene Guideline
WEEL	Workplace Environmental Exposure Level
HAZ_DES	Hazard Designation
Action Level	A value set by OSHA that is lower than the PEL which will trigger the need for activities such as exposure monitoring and medical surveillance if exceeded.

*The Dow Chemical Company urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to*

*the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.*



## FROTH-PAK™ FOAM INSULATION

### 1. PRODUCT NAME

FROTH-PAK™ Foam Insulation

### 2. MANUFACTURER

The Dow Chemical Company  
Dow Building Solutions  
200 Larkin  
Midland, MI 48674  
1-866-583-BLUE (2583)  
Fax 1-989-832-1465  
[www.dowbuildingsolutions.com](http://www.dowbuildingsolutions.com)

### 3. PRODUCT DESCRIPTION

#### BASIC USE

FROTH-PAK™ Foam Insulation is a two-component, quick-cure polyurethane foam that fills cavities, penetrations, cracks and expansion joints. Unlike one-component foam, FROTH-PAK™ Foam Insulation is a chemically cured foam, significantly reducing curing time.

FROTH-PAK™ Foam Insulation dispenses, expands and becomes tack-free in seconds. The product will skin over in 30-40 seconds and will be completely cured in minutes.\*

The Class-A rating (flame spread of 25 or less) of FROTH-PAK™ Foam Insulation allows its use in a wide range of interior and exterior industrial, commercial, institutional and residential settings. Check with local codes prior to use. If used in an exterior setting, a coating must be applied for ultraviolet (UV) protection.

#### SIZES

FROTH-PAK™ Foam Insulation is typically sold as a complete 42 lb (FROTH-PAK™ 200) portable kit that includes pressurized “A” and “B” cylinders, plus dispensing gun/hose assembly and accessories. FROTH-PAK™ Foam Insulation is also available in refillable, returnable cylinders for commercial applications requiring a large amount of foam. See Table 1 for yield and size information.

### 4. TECHNICAL DATA

#### APPLICABLE STANDARDS

ASTM International

- C203 – Standard Test Methods for Breaking Load and Flexural Properties of Block-Type Thermal Insulation
- C273 – Standard Test Method for Shear Properties of Sandwich Core Materials
- C518 – Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus
- D1621 – Standard Test Method for Compressive Properties of Rigid Cellular Plastics
- D1622 – Standard Test Method for Apparent Density of Rigid Cellular Plastics
- D1623 – Standard Test Method for Tensile and Tensile Adhesion Properties of Rigid Cellular Plastics
- D2842 – Standard Test Method for Water Absorption of Rigid Cellular Plastics
- E96 – Standard Test Methods for Water Vapor Transmission of Materials
- E283 – Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls and Doors Under Specified Pressure Differences Across the Specimen
- E2178 – Standard Test Method for Air Permeance of Building Materials

### PHYSICAL PROPERTIES

FROTH-PAK™ Foam Insulation exhibits the typical properties and characteristics indicated in Table 2 when tested as represented.

### FIRE PROTECTION

Cured FROTH-PAK™ foam is combustible and will burn if exposed to open flame or sparks from high-energy sources. Do not expose to temperatures above 240°F.

### CODE COMPLIANCES

FROTH-PAK™ Foam Insulation complies with the following codes:

- Underwriters Laboratories, Inc. (UL) Classified, see Classification Certificate R7813
- National Fire Protection Association – per NFPA 286 testing, can be left exposed in non-fire-resistant rated roof/wall junctures, maximum 6" high and 2" deep (unlimited width)

Contact your Dow sales representative or local authorities for state and local building code requirements and related acceptances.

### 5. INSTALLATION

Complete operating instructions are provided with each FROTH-PAK™ Foam Insulation purchase. Read all information and cautions before application. **Note: Avoid overfilling restricted spaces. Chemicals exert force during reaction, and expansion of foam may result in substrate deformation.**

**TABLE 1: SIZES AND THEORETICAL YIELDS FOR FROTH-PAK™ FOAM INSULATION**

PRODUCT	THEORETICAL YIELD <sup>(1)</sup> , BOARD FT
<i>Kits</i>	
FROTH-PAK™ 200	200
FROTH-PAK™ 620	620
<i>Refillable Cylinders (commercial use)</i>	
FROTH-PAK™ 17 (gal)	2,060
FROTH-PAK™ 60 (gal)	6,860
FROTH-PAK™ 120 (gal)	15,430
FROTH-PAK™ 350 (gal)	43,890

(1) The theoretical yield has become an industry standard for identifying certain sizes of two-component kits. Theoretical yield calculations are performed in perfect laboratory conditions, without taking into account the loss of blowing agent or the variations in application methods and types.



## SAFETY AND CONDITIONS OF USE

- Read the instructions and Material Safety Data Sheets carefully before use.
- FROTH-PAK™ spray polyurethane foam contains isocyanate, hydrofluorocarbon blowing agent and polyol. Do not breathe vapor or mist. Use only in well-ventilated areas or with proper respiratory protection. Supplied air or an approved air-purifying respirator equipped with an organic vapor sorbent and a P100 particulate filter may be required to maintain exposure levels below

ACGIH, OSHA, WEEL or other applicable limits. For situations where the atmospheric levels may exceed the level for which an air-purifying respirator is effective, use a positive-pressure, air-supplying respirator (air line or self-contained breathing apparatus).

- Isocyanate is irritating to the eyes, skin and respiratory system, and may cause sensitization by inhalation or skin contact.
- FROTH-PAK™ foam will adhere to most surfaces and skin. Do not get foam on skin. Wear protective clothing (including long sleeves),

gloves, and goggles or safety glasses. Cured foam must be mechanically removed or allowed to wear off in time.

- The contents are under pressure.
- FROTH-PAK™ foam should not be used around heaters, furnaces, fireplaces, recessed lighting fixtures or other applications where the foam may come in contact with heat-conducting surfaces. Cured FROTH-PAK™ foam is combustible and will burn if exposed to open flame or sparks from high-energy sources. Do not expose to temperatures above 240°F.

**TABLE 2: TYPICAL PHYSICAL PROPERTIES OF FROTH-PAK™ FOAM INSULATION**

PROPERTY AND TEST METHOD	VALUE
Flame Spread/Smoke Developed <sup>(1)(2)</sup> , ASTM E84/UL 723	25/350
Nominal Density, ASTM D1622, lb/ft <sup>3</sup>	1.75
Thermal Resistance <sup>(3)</sup> per inch, ASTM C518, ft <sup>2</sup> •h•°F/Btu, R-value, min.	
Initial	6.6
Aged 90 days at 140°F	5.6
Air Leakage, ASTM E283, cfm/ft <sup>2</sup> @ 1.57 psf	0
ASTM E2178, L/s/m <sup>2</sup> @ 75 Pa	0
Water Vapor Permeance, ASTM E96	
perm @ 1" thick	3.9
perm @ 2" thick	2.0
Water Absorption, ASTM D2842, % by volume	2.17
Dimensional Stability, ASTM D2126, % volume change	
100°F/100% RH @ 1wk	4.6
100°F/100% RH @ 2wks	5.0
158°F/100% RH @ 1wk	6.5
158°F/100% RH @ 2wks	5.1
-40°F/amb RH @ 1wk	0.9
-40°F/amb RH @ 2wks	0.9
158°F/amb RH @ 1wk	3.1
158°F/amb RH @ 2wks	2.3
Compressive Strength, ASTM D1621, lb/in <sup>2</sup> , parallel	21.1
Flexural Strength, ASTM C203, lb/in <sup>2</sup> , parallel	22.7
Tensile Strength, ASTM D1623, lb/in <sup>2</sup> , parallel	26.7
Shear Strength, ASTM C273, lb/in <sup>2</sup> , parallel	16.7
Maximum Service Temperature, °F	240

(1) Tested at 2" thickness, full coverage.

(2) This numerical flame spread rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.

(3) R means resistance to heat flow. The higher the R-value, the greater the insulating power.

Visit [www.dowbuildingsolutions.com](http://www.dowbuildingsolutions.com) or contact a local Dow representative for more specific instructions.

## 6. AVAILABILITY

FROTH-PAK™ Foam Insulation is distributed through an extensive network. For more information, call 1-800-232-2436.

## 7. WARRANTY

Not applicable.

## 8. MAINTENANCE

Not applicable.

## 9. TECHNICAL SERVICES

Dow can provide technical information to help address questions when using FROTH-PAK™ Foam Insulation. Technical personnel are available to assist with any insulation project. For technical assistance, call 1-866-583-BLUE (2583).

## 10. FILING SYSTEMS

- [www.dowbuildingsolutions.com](http://www.dowbuildingsolutions.com)
- [www.sweets.com](http://www.sweets.com)

**[www.dowbuildingsolutions.com](http://www.dowbuildingsolutions.com)**

**Technical Information**  
1-866-583-BLUE (2583)  
**Sales Information**  
1-800-232-2436

THE DOW CHEMICAL COMPANY  
200 Larkin  
Midland, MI 48674

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### Dow Polyurethane Foam Insulation and Sealants

CAUTION: When cured, these products are combustible and will burn if exposed to open flame or sparks from high-energy sources. Do not expose to temperatures above 240°F. For more information, consult MSDS, call Dow at 1-866-583-BLUE (2583) or contact your local building inspector. In an emergency, call 1-989-636-4400.

FROTH-PAK™ spray polyurethane foam contains isocyanate, hydrofluorocarbon blowing agent and polyol. Read the instructions and Material Safety Data Sheets carefully before use. Wear protective clothing (including long sleeves), gloves, goggles or safety glasses, and proper respiratory protection. Supplied air or an approved air-purifying respirator equipped with an organic vapor sorbent and a P100 particulate filter may be required to maintain exposure levels below ACGIH, OSHA, WEEL or other applicable limits. Provide adequate ventilation. Contents under pressure.

Building and/or construction practices unrelated to building materials could greatly affect moisture and the potential for mold formation. No material supplier including Dow can give assurance that mold will not develop in any specific system.



# Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and  
GHS

Printing date 03.04.2014

Revision: 03.04.2014

## 1 Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- **Trade name:** Touch N Seal Foam Kit 600 ICC Part - A
- **Article number:** EHS2732 - SDS / A REGULAR
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Polyurethane-sealant
- **1.3 Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**  
Convenience Products, division of Clayton Corp.  
866 Horan Drive  
Fenton, MO 63026-2416  
Phone: 636-349-5855
- **1.4 Emergency telephone number:**  
ChemTel Inc.  
(800)255-3924, +1 (813)248-0585



## 2 Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



Acute Tox. 4 H332 Harmful if inhaled.  
Skin Irrit. 2 H315 Causes skin irritation.  
Eye Irrit. 2 H319 Causes serious eye irritation.  
Skin Sens. 1 H317 May cause an allergic skin reaction.  
STOT SE 3 H335 May cause respiratory irritation.  
H229 Pressurised container: May burst if heated.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Xn; Harmful

R20-40-48/20: Harmful by inhalation. Limited evidence of a carcinogenic effect. Harmful: danger of serious damage to health by prolonged exposure through inhalation.



Xn; Sensitising

R42/43: May cause sensitisation by inhalation and skin contact.

(Contd. on page 2)

# Safety Data Sheet

## according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS

Printing date 03.04.2014

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Trade name: Touch N Seal Foam Kit 600 ICC Part - A

(Contd. of page 1)



Xi; Irritant

R36/37/38: Irritating to eyes, respiratory system and skin.

· **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Warning! Pressurized container.

· **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

· **Hazard pictograms**



GHS07 GHS08

· **Signal word** Danger

· **Hazard-determining components of labelling:**

diphenylmethanediisocyanate, isomers and homologues

4,4'-methylenediphenyl diisocyanate

· **Hazard statements**

H229 Pressurised container: May burst if heated.

H332 Harmful if inhaled.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

· **Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P285 In case of inadequate ventilation wear respiratory protection.

P264 Wash thoroughly after handling.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 3)

# Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and  
GHS

Printing date 03.04.2014

Revision: 03.04.2014

Trade name: Touch N Seal Foam Kit 600 ICC Part - A

(Contd. of page 2)

· **Additional information:**

Contains isocyanates. May produce an allergic reaction.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

· **Hazard description:**

· **WHMIS-symbols:**

A - Compressed gas

D2A - Very toxic material causing other toxic effects



· **NFPA ratings (scale 0 - 4)**



Health = 2

Fire = 0

Reactivity = 1

· **HMIS-ratings (scale 0 - 4)**



Health = \*2

Fire = 0

Reactivity = 1

· **HMIS Long Term Health Hazard Substances**

101-68-8	4,4'-methylenediphenyl diisocyanate
9016-87-9	diphenylmethanediisocyanate, isomers and homologues

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

## 3 Composition/information on ingredients

· **3.2 Mixtures**

· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

(Contd. on page 4)

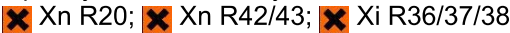
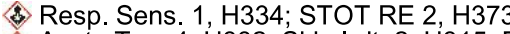
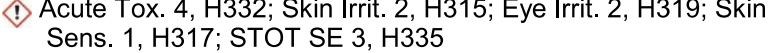
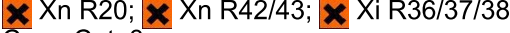
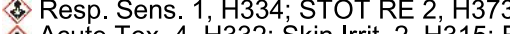
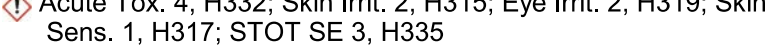

# Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and  
GHS

Printing date 03.04.2014

Revision: 03.04.2014

Trade name: Touch N Seal Foam Kit 600 ICC Part - A

(Contd. of page 3)		
CAS: 9016-87-9	diphenylmethanediisocyanate, isomers and homologues  Carc. Cat. 3  	> 50%
CAS: 101-68-8 EINECS: 202-966-0 Index number: 615-005-00-9	4,4'-methylenediphenyl diisocyanate  Carc. Cat. 3  	25-50%
CAS: 811-97-2 EINECS: 212-377-0	Norflurane 	10-25%

· **Additional information:** For the wording of the listed risk phrases refer to section 16.

## 4 First aid measures

### · 4.1 Description of first aid measures

#### · General information:

Take affected persons out into the fresh air.

Do not leave affected persons unattended.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

#### · After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

#### · After skin contact:

Immediately wash with water and soap and rinse thoroughly.

Do not pull solidified product off the skin.

If skin irritation continues, consult a doctor.

#### · After eye contact:

Protect unharmed eye.

Rinse opened eye for several minutes under running water.

Call a doctor immediately.

Do not remove contact lenses if worn.

#### · After swallowing:

Unlikely route of exposure.

Do not induce vomiting; call for medical help immediately.

### · 4.2 Most important symptoms and effects, both acute and delayed

Asthma attacks

Headache

Allergic reactions

Coughing

Breathing difficulty

Dizziness

(Contd. on page 5)

# Safety Data Sheet

## according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS

Printing date 03.04.2014

Revision: 03.04.2014

Trade name: Touch N Seal Foam Kit 600 ICC Part - A

(Contd. of page 4)

- **Hazards**

Danger of impaired breathing.  
 Danger of pulmonary oedema.  
 Danger of convulsion.  
 Danger of disturbed cardiac rhythm.  
 Condition may deteriorate with alcohol consumption.

- **4.3 Indication of any immediate medical attention and special treatment needed**

Severe allergic skin reaction, bronchial spasms and anaphylactic shock are possible.  
 If necessary oxygen respiration treatment.  
 Later observation for pneumonia and pulmonary oedema.  
 Monitor circulation, possible shock treatment.  
 Treat skin and mucous membrane with antihistamine and corticoid preparations.

### 5 Firefighting measures

- **5.1 Extinguishing media**

- **Suitable extinguishing agents:**

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- **For safety reasons unsuitable extinguishing agents:** None.

- **5.2 Special hazards arising from the substance or mixture**

Danger of receptacles bursting because of high vapour pressure when heated.  
 In case of fire, the following can be released:

Nitrogen oxides (NO<sub>x</sub>)

Hydrogen cyanide (HCN)

Carbon monoxide (CO)

Under certain fire conditions, traces of other toxic gases cannot be excluded.

- **5.3 Advice for firefighters**

- **Protective equipment:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

- **Additional information** Cool endangered receptacles with water spray.

### 6 Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**

Use respiratory protective device against the effects of fumes/dust/aerosol.

Remove persons from danger area.

Ensure adequate ventilation

Wear protective equipment. Keep unprotected persons away.

Protect from heat.

- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

- **6.3 Methods and material for containment and cleaning up:**

Allow to solidify. Pick up mechanically.

Clean the affected area carefully; suitable cleaners are:

Warm water and cleansing agent

Dispose contaminated material as waste according to item 13.

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· **6.4 Reference to other sections**

- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.
- See Section 13 for disposal information.

## 7 Handling and storage

· **7.1 Precautions for safe handling**

- Use only in well ventilated areas.
- Take note of emission threshold.
- Ensure good ventilation/exhaustion at the workplace.

· **Information about fire - and explosion protection:**

- Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C, i.e. electric lights. Do not pierce or burn, even after use.
- Do not spray onto a naked flame or any incandescent material.

· **7.2 Conditions for safe storage, including any incompatibilities**

· **Storage:**

· **Requirements to be met by storerooms and receptacles:**

- Observe official regulations on storing packagings with pressurized containers.
- Store in a cool location.
- Provide ventilation for receptacles.

· **Information about storage in one common storage facility:**

- Store away from foodstuffs.
- Do not store together with acids.
- Store away from oxidizing agents.

· **Further information about storage conditions:**

- Store in cool, dry conditions in well sealed receptacles.
- Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.
- Protect from heat and direct sunlight.
- Store receptacle in a well ventilated area.

· **7.3 Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

**101-68-8 4,4'-methylenediphenyl diisocyanate**

PEL (USA)	Short-term value: C 0,2 mg/m <sup>3</sup> , C 0,02 ppm
REL (USA)	Short-term value: C 0,2* mg/m <sup>3</sup> , C 0,02* ppm
	Long-term value: 0,05 mg/m <sup>3</sup> , 0,005 ppm
	*10-min

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TLV (USA)	0,051 mg/m <sup>3</sup> , 0,005 ppm
EL (Canada)	Short-term value: C 0,01 ppm Long-term value: 0,005 ppm Skin; S
EV (Canada)	0,005 ppm
<b>811-97-2 Norflurane</b>	
WEEL (USA)	1000 ppm

- **DNELs** No further relevant information available.
- **PNECs** No further relevant information available.
- **Additional information:** The lists valid during the making were used as basis.

## · 8.2 Exposure controls

### · Personal protective equipment:

#### · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing.  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.

#### · Respiratory protection:

Use suitable respiratory protective device in case of insufficient ventilation.  
Use suitable respiratory protective device when high concentrations are present.

#### · Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

#### · Material of gloves

Nitrile rubber, NBR

PVC gloves

Fluorocarbon rubber (Viton)

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

#### · Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

#### · Not suitable are gloves made of the following materials: Natural rubber, NR

#### · Eye protection:

Contact lenses should not be worn.

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Safety glasses

Goggles recommended during refilling

- **Body protection:** Impervious protective clothing
- **Limitation and supervision of exposure into the environment**  
No further relevant information available.
- **Risk management measures**  
See Section 7 for additional information.  
No further relevant information available.

## 9 Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
  - Form: Aerosolized liquid with compressed gas in cylinders
  - Colour: Cream coloured
- **Odour:** Characteristic
- **Odour threshold:** Not determined.
- **pH-value:** Not determined.
- **Change in condition**
  - Melting point/Melting range: Not Determined.
  - Boiling point/Boiling range: Not applicable, as aerosol.
- **Flash point:** Not applicable, as aerosol.
- **Flammability (solid, gaseous):** Not applicable.
- **Auto/Self-ignition temperature:** Not determined.
- **Decomposition temperature:** Not determined.
- **Self-igniting:** Product is not self-igniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**
  - Lower: Not determined.
  - Upper: Not determined.
- **Vapour pressure at 20 °C:** 5716 hPa
- **Density at 20 °C:** 1,03 g/cm<sup>3</sup>
- **Relative density** Not determined.
- **Vapour density** Not determined.
- **Evaporation rate** Not applicable.

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- **Solubility in / Miscibility with water:** Not miscible or difficult to mix.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
  - Dynamic:** Not determined.
  - Kinematic:** Not determined.
- **Solvent content:**
  - VOC (US EPA Method 24)** 0 g/l
- **9.2 Other information** No further relevant information available.

## 10 Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used and stored according to specifications.
- **10.3 Possibility of hazardous reactions**  
Reacts with alcohols, amines, aqueous acids and alkalis.  
Contact with acids releases toxic gases.  
Danger of receptacles bursting because of high vapour pressure when heated.  
Reacts with oxidizing agents.  
Exothermic polymerization.
- **10.4 Conditions to avoid** Store away from oxidizing agents.
- **10.5 Incompatible materials:** Contact with acids liberates toxic gas.
- **10.6 Hazardous decomposition products:**  
Carbon monoxide and carbon dioxide  
Ammonia  
Isocyanate  
Nitrogen oxides

## 11 Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**

<b>LD/LC50 values relevant for classification:</b>
--

<b>101-68-8 4,4'-methylenediphenyl diisocyanate</b>
---

Oral	LD50	2200 mg/kg (mouse)
------	------	--------------------

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:**  
Sensitization possible through inhalation.  
Sensitization possible through skin contact.

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- **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Harmful

Irritant

Toxic and/or corrosive effects may be delayed up to 24 hours.

- **Sensitisation:** Sensitization possible by inhalation and/or dermal contact.

- **Repeated dose toxicity:** Repeated exposures may result in skin and/or respiratory sensitivity.

## 12 Ecological information

- **12.1 Toxicity**

- **Aquatic toxicity:** The product contains materials that are harmful to the environment.

- **12.2 Persistence and degradability** The product is partially biodegradable. Significant residuals remain.

- **12.3 Bioaccumulative potential** Does not accumulate in organisms.

- **12.4 Mobility in soil** No further relevant information available.

- **Additional ecological information:**

- **General notes:**

This statement was deduced from products with a similar structure or composition.

Due to available data on eliminability/decomposition and bioaccumulation potential prolonged term damage of the environment can not be excluded.

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- **12.5 Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **12.6 Other adverse effects** No further relevant information available.

## 13 Disposal considerations

- **13.1 Waste treatment methods**

- **Recommendation**

Can be disposed of with household garbage after solidification following consultation with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

Contact waste processors for recycling information.

- **Uncleaned packaging:**

- **Recommendation:**

Packagings that may not be cleansed are to be disposed of in the same manner as the product.

Disposal must be made according to official regulations.

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## 14 Transport information

- 14.1 UN-Number
- DOT, ADR, IMDG, IATA
- 14.2 UN proper shipping name
- DOT, IMDG, IATA
- ADR
- 14.3 Transport hazard class(es)
- DOT
- 
- Class
- Label
- ADR
- 
- Class
- Label
- IMDG, IATA
- 
- Class
- Label
- 14.4 Packing group
- DOT, ADR, IMDG, IATA
- 14.5 Environmental hazards:
- Marine pollutant:
- 14.6 Special precautions for user
- Danger code (Kemler):
- EMS Number:
- 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
- Transport/Additional information:
- ADR
- Limited quantities (LQ)
- Transport category

UN3500

Chemical under pressure, n.o.s. (Fluorinated Hydrocarbon, Nitrogen)  
3500 CHEMICAL UNDER PRESSURE, N.O.S. (Fluorinated Hydrocarbon, Nitrogen)

2.2

2.2

2 8A Gases.

2.2

2.2

2.2

Not Regulated

No

Warning: Gases.

20

F-D,S-U

Not applicable.

120 ml

3

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- Tunnel restriction code
- UN "Model Regulation":

C/E  
UN3500, CHEMICAL UNDER PRESSURE, N.O.S.  
(Fluorinated Hydrocarbon, Nitrogen), 2.2

## 15 Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- United States (USA)
- SARA

### · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

### · Section 313 (Specific toxic chemical listings):

9016-87-9 diphenylmethanediisocyanate, isomeres and homologues

101-68-8 4,4'-methylenediphenyl diisocyanate

### · TSCA (Toxic Substances Control Act):

All ingredients are listed.

### · Proposition 65 (California):

#### · Chemicals known to cause cancer:

None of the ingredients is listed.

#### · Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

#### · Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

#### · Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

### · Carcinogenic Categories

#### · EPA (Environmental Protection Agency)

9016-87-9 diphenylmethanediisocyanate, isomeres and homologues

CBD

101-68-8 4,4'-methylenediphenyl diisocyanate

CBD

#### · IARC (International Agency for Research on Cancer)

9016-87-9 diphenylmethanediisocyanate, isomeres and homologues

3

101-68-8 4,4'-methylenediphenyl diisocyanate

3

#### · TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

#### · NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

#### · Canada

#### · Canadian Domestic Substances List (DSL)

All ingredients are listed.

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<b>· Canadian Ingredient Disclosure list (limit 0.1%)</b>	
101-68-8	4,4'-methylenediphenyl diisocyanate
<b>· Canadian Ingredient Disclosure list (limit 1%)</b>	
None of the ingredients is listed.	
<b>· Other regulations, limitations and prohibitive regulations</b>	
<b>· Substances of very high concern (SVHC) according to REACH, Article 57</b>	
None of the ingredients is listed.	
<b>· 15.2 Chemical safety assessment:</b> A Chemical Safety Assessment has not been carried out.	

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**· Relevant phrases**

H280 Contains gas under pressure; may explode if heated.  
 H315 Causes skin irritation.  
 H317 May cause an allergic skin reaction.  
 H319 Causes serious eye irritation.  
 H332 Harmful if inhaled.  
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 H335 May cause respiratory irritation.  
 H373 May cause damage to organs through prolonged or repeated exposure.  
 R20 Harmful by inhalation.  
 R36/37/38 Irritating to eyes, respiratory system and skin.  
 R42/43 May cause sensitisation by inhalation and skin contact.

**· Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
 IMDG: International Maritime Code for Dangerous Goods  
 DOT: US Department of Transportation  
 IATA: International Air Transport Association  
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
 ACGIH: American Conference of Governmental Industrial Hygienists  
 EINECS: European Inventory of Existing Commercial Chemical Substances  
 ELINCS: European List of Notified Chemical Substances  
 CAS: Chemical Abstracts Service (division of the American Chemical Society)  
 NFPA: National Fire Protection Association (USA)  
 HMIS: Hazardous Materials Identification System (USA)  
 WHMIS: Workplace Hazardous Materials Information System (Canada)  
 DNEL: Derived No-Effect Level (REACH)  
 PNEC: Predicted No-Effect Concentration (REACH)  
 LC50: Lethal concentration, 50 percent  
 LD50: Lethal dose, 50 percent  
 : Flammable aerosols, Hazard Category 3  
 Press. Gas: Gases under pressure: Compressed gas  
 Acute Tox. 4: Acute toxicity, Hazard Category 4  
 Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2  
 Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2  
 Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1

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Skin Sens. 1: Sensitisation - Skin, Hazard Category 1  
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3  
STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

**Sources**

SDS Prepared by:

ChemTel Inc.

1305 North Florida Avenue

Tampa, Florida USA 33602-2902

Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573

Website: [www.chemtelinc.com](http://www.chemtelinc.com)

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## 1 Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- **Trade name:** Touch N Seal Foam Kit 600 ICC Part - B
- **Article number:** EHS2732 – SDS / B REGULAR
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Polyurethane-sealant
- **1.3 Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**  
Convenience Products, division of Clayton Corp.  
866 Horan Drive  
Fenton, MO 63026-2416  
Phone: 636-349-5855
- **1.4 Emergency telephone number:**  
ChemTel Inc.  
(800)255-3924, +1 (813)248-0585



## 2 Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



health hazard

Repr. 1A     H360 May damage fertility or the unborn child.



Acute Tox. 4   H302 Harmful if swallowed.

Skin Irrit. 2   H315 Causes skin irritation.

Eye Irrit. 2   H319 Causes serious eye irritation.

H229 Pressurised container: May burst if heated.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



T; Toxic

R60: May impair fertility.



Xn; Harmful

R22: Harmful if swallowed.



Xi; Irritant

R36: Irritating to eyes.

- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

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Warning! Pressurized container.

**Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

**2.2 Label elements****Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

**Hazard pictograms**

GHS07 GHS08

**Signal word** Danger**Hazard-determining components of labelling:**

Polyether polyol

Methyloxirane polymer with oxirane, ether with 2,6-bis[(bis(2-hydroxyethyl)amino) methyl]-4-nonylphenol (5:1)

halogenated aliphatic polyether polyol

**Hazard statements**

H229 Pressurised container: May burst if heated.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H360 May damage fertility or the unborn child.

**Precautionary statements**

P281 Use personal protective equipment as required.

P264 Wash thoroughly after handling.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

**Additional information:**

Contains diglycidyl 1,2-cyclohexanedicarboxylate, Neodecanoic Acid. May produce an allergic reaction.

Restricted to professional users.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

**Hazard description:****WHMIS-symbols:**

D1B - Toxic material causing immediate and serious toxic effects

D2A - Very toxic material causing other toxic effects

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· **NFPA ratings (scale 0 - 4)**

Health = 2  
Fire = 0  
Reactivity = 1

· **HMIS-ratings (scale 0 - 4)**

Health = \*2  
Fire = 0  
Reactivity = 1

\* - Indicates a long term health hazard from repeated or prolonged exposures.

· **HMIS Long Term Health Hazard Substances**

None of the ingredients is listed.

· **2.3 Other hazards**· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

## 3 Composition/information on ingredients

· **3.2 Mixtures**

· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 811-97-2 EINECS: 212-377-0	Norflurane ⚠ Press. Gas, H280	10-25%
	Polyether polyol ☒ Xn R22; ☒ Xi R36/37/38 ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	10-25%
CAS: 68441-62-3	halogenated aliphatic polyether polyol ☒ Xn R22; ☒ Xi R36 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319	10-25%
CAS: 460-73-1	1,1,1,3,3-Pentafluoropropane, (Genetron®245fa) ⚠ Press. Gas, H280	<10%

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








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CAS: 52019-35-9	Methyloxirane polymer with oxirane, ether with 2,6-bis[(bis(2-hydroxyethyl) amino) methyl]-4-nonylphenol (5:1)  T R60;  Xi R36/37/38  Repr. 1A, H360  Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	<10%
CAS: 5493-45-8 EINECS: 226-826-3	diglycidyl 1,2-cyclohexanedicarboxylate  Xi R36/37/38;  Xi R43  Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	<10%
CAS: 26896-20-8 EINECS: 248-093-9	Neodecanoic Acid  Xn R22;  Xi R38-41;  Xi R43  Eye Dam. 1, H318  Acute Tox. 4, H302; Skin Irrit. 2, H315; Skin Sens. 1, H317	<10%

· **Additional information:** For the wording of the listed risk phrases refer to section 16.

## 4 First aid measures

### · 4.1 Description of first aid measures

#### · General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

#### · After skin contact:

Immediately rinse with water.

If skin irritation continues, consult a doctor.

#### · After eye contact:

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

#### · After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

### · 4.2 Most important symptoms and effects, both acute and delayed

Gastric or intestinal disorders.

Dizziness

Coughing

Allergic reactions

· **Hazards** No further relevant information available.

### · 4.3 Indication of any immediate medical attention and special treatment needed

If swallowed, gastric irrigation.

If necessary oxygen respiration treatment.

Treat skin and mucous membrane with antihistamine and corticoid preparations.

In cases of irritation to the lungs, initial treatment with corticoid steroid inhalants.

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## 5 Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** None.
- **5.2 Special hazards arising from the substance or mixture**  
In case of fire, the following can be released:  
Carbon monoxide (CO)  
Nitrogen oxides (NO<sub>x</sub>)  
Under certain fire conditions, traces of other toxic gases cannot be excluded.
- **5.3 Advice for firefighters**
- **Protective equipment:**  
Wear self-contained respiratory protective device.  
Wear fully protective suit.
- **Additional information** Cool endangered receptacles with water spray.

## 6 Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Use respiratory protective device against the effects of fumes/dust/aerosol.  
Ensure adequate ventilation  
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**  
Allow to solidify. Pick up mechanically.  
Dispose contaminated material as waste according to item 13.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

## 7 Handling and storage

- **7.1 Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.
- **Information about fire - and explosion protection:** Keep respiratory protective device available.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Observe official regulations on storing packagings with pressurized containers.  
Avoid storage near extreme heat, ignition sources or open flame.
- **Information about storage in one common storage facility:**  
Do not store together with oxidizing and acidic materials.

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Store away from foodstuffs.

- **Further information about storage conditions:** Store in cool, dry conditions in well sealed receptacles.
- **7.3 Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

### 8.1 Control parameters

- **Ingredients with limit values that require monitoring at the workplace:**

811-97-2 Norflurane

WEEL (USA) 1000 ppm

- **DNELs** No further relevant information available.
- **PNECs** No further relevant information available.
- **Additional information:** The lists valid during the making were used as basis.

### 8.2 Exposure controls

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing.  
Wash hands before breaks and at the end of work.  
Store protective clothing separately.  
Do not inhale gases / fumes / aerosols.  
Avoid contact with the eyes and skin.

- **Respiratory protection:**

Use suitable respiratory protective device when high concentrations are present.  
Use suitable respiratory protective device in case of insufficient ventilation.

- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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- **Eye protection:**  
Contact lenses should not be worn.



Safety glasses

- **Body protection:** Protective work clothing
- **Limitation and supervision of exposure into the environment**  
No further relevant information available.
- **Risk management measures**  
See Section 7 for additional information.  
No further relevant information available.

## 9 Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
  - Form: Aerosol
  - Colour: Amber coloured
- **Odour:** Like aromates
- **Odour threshold:** Not determined.
- **pH-value:** Not determined.
- **Change in condition**
  - Melting point/Melting range: Not Determined.
  - Boiling point/Boiling range: -15 °F / -26 °C
- **Flash point:** Not applicable, as aerosol.
- **Flammability (solid, gaseous):** Not applicable.
- **Auto/Self-ignition temperature:** >500 °F / >260 °C
- **Decomposition temperature:** Not determined.
- **Self-igniting:** Product is not self-igniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**
  - Lower: Not determined.
  - Upper: Not determined.
- **Vapour pressure at 20 °C:** 5716 hPa
- **Density at 20 °C:** 1,2 g/cm<sup>3</sup>
- **Relative density** Not determined.
- **Vapour density** Not determined.
- **Evaporation rate** Not applicable.

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- **Solubility in / Miscibility with water:** Fully miscible.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
  - Dynamic:** Not determined.
  - Kinematic:** Not determined.
- **Solvent content:**
  - Organic solvents:** 0,0 %
  - Water:** 0,7 %
  - VOC (US EPA Method 24)** 0 g/l
- **9.2 Other information** No further relevant information available.

## 10 Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used and stored according to specifications.
- **10.3 Possibility of hazardous reactions**  
Reacts with catalysts.  
Reacts with peroxides.  
Reacts with strong oxidizing agents.  
Reacts with strong acids.  
Exothermic polymerization.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**  
Carbon monoxide and carbon dioxide  
Phosphorus compounds  
Chlorine compounds  
Nitrogen oxides (NO<sub>x</sub>)  
Poisonous gases/vapours  
Phosgene

## 11 Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** Slight irritant effect on skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:**  
Sensitizing effect by skin contact is possible by prolonged exposure.  
Sensitizing effect through inhalation is possible by prolonged exposure.

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- **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

- Harmful

- Irritant

- Toxic and/or corrosive effects may be delayed up to 24 hours.

- **Repeated dose toxicity:** May cause damage to organs through prolonged or repeated exposure.

- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):**

- Repr. 1A

## 12 Ecological information

- **12.1 Toxicity**

- **Aquatic toxicity:** No further relevant information available.

- **12.2 Persistence and degradability** No further relevant information available.

- **12.3 Bioaccumulative potential** No further relevant information available.

- **12.4 Mobility in soil** No further relevant information available.

- **Additional ecological information:**

- **General notes:**

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

- **12.5 Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **12.6 Other adverse effects** No further relevant information available.

## 13 Disposal considerations

- **13.1 Waste treatment methods**

- **Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packaging:**

- **Recommendation:** Disposal must be made according to official regulations.

- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

## 14 Transport information

- **14.1 UN-Number**

- **DOT, ADR, IMDG, IATA**

UN3500

- **14.2 UN proper shipping name**

- **DOT, IMDG, IATA**

Chemical under pressure, n.o.s. (Fluorinated Hydrocarbon, Nitrogen)

- **ADR**

3500 CHEMICAL UNDER PRESSURE, N.O.S  
(Fluorinated Hydrocarbon, Nitrogen)

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## · 14.3 Transport hazard class(es)

## · DOT



· Class 2.2  
· Label 2.2

## · ADR



· Class 2 8A Gases.  
· Label 2.2

## · IMDG, IATA



· Class 2.2  
· Label 2.2

## · 14.4 Packing group

· DOT, ADR, IMDG, IATA Not Regulated

## · 14.5 Environmental hazards:

· Marine pollutant: No

· 14.6 Special precautions for user Warning: Gases.

· Danger code (Kemler): 20

· EMS Number: F-D,S-U

· 14.7 Transport in bulk according to Annex II of  
MARPOL73/78 and the IBC Code Not applicable.

## · Transport/Additional information:

## · ADR

· Limited quantities (LQ) 120 ml

· Transport category 3

· Tunnel restriction code C/E

· UN "Model Regulation": UN3500, CHEMICAL UNDER PRESSURE, N.O.S.  
(Fluorinated Hydrocarbon, Nitrogen), 2.2

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## 15 Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **United States (USA)**
- **SARA**

- **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

- **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

- **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

- **Proposition 65 (California):**

- **Chemicals known to cause cancer:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

- **Carcinogenic Categories**

- **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

- **Canada**

- **Canadian Domestic Substances List (DSL)**

All ingredients are listed.

- **Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients is listed.

- **Canadian Ingredient Disclosure list (limit 1%)**

None of the ingredients is listed.

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**Other regulations, limitations and prohibitive regulations**
**Substances of very high concern (SVHC) according to REACH, Article 57**

None of the ingredients is listed.

**15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**Relevant phrases**

H280 Contains gas under pressure; may explode if heated.  
 H302 Harmful if swallowed.  
 H315 Causes skin irritation.  
 H317 May cause an allergic skin reaction.  
 H318 Causes serious eye damage.  
 H319 Causes serious eye irritation.  
 H335 May cause respiratory irritation.  
 H360 May damage fertility or the unborn child.

R22 Harmful if swallowed.  
 R36 Irritating to eyes.  
 R36/37/38 Irritating to eyes, respiratory system and skin.  
 R38 Irritating to skin.  
 R41 Risk of serious damage to eyes.  
 R43 May cause sensitisation by skin contact.  
 R60 May impair fertility.

**Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
 IMDG: International Maritime Code for Dangerous Goods  
 DOT: US Department of Transportation  
 IATA: International Air Transport Association  
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
 ACGIH: American Conference of Governmental Industrial Hygienists  
 EINECS: European Inventory of Existing Commercial Chemical Substances  
 ELINCS: European List of Notified Chemical Substances  
 CAS: Chemical Abstracts Service (division of the American Chemical Society)  
 NFPA: National Fire Protection Association (USA)  
 HMIS: Hazardous Materials Identification System (USA)  
 WHMIS: Workplace Hazardous Materials Information System (Canada)  
 DNEL: Derived No-Effect Level (REACH)  
 PNEC: Predicted No-Effect Concentration (REACH)  
 : Flammable aerosols, Hazard Category 3  
 Press. Gas: Gases under pressure: Compressed gas  
 Acute Tox. 4: Acute toxicity, Hazard Category 4  
 Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2  
 Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1  
 Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2  
 Skin Sens. 1: Sensitisation - Skin, Hazard Category 1  
 Repr. 1A: Reproductive toxicity, Hazard Category 1A  
 STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

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**Sources**

SDS Prepared by:

ChemTel Inc.

1305 North Florida Avenue

Tampa, Florida USA 33602-2902

Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573

Website: [www.chemtelinc.com](http://www.chemtelinc.com)



# International Fireproof Technology, Inc.

17528 Von Karman Ave. Irvine, CA 92614

## Safety Data Sheet – DC315

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### 1. Product and Company Identification

Product: Water Based Fireproof Foam Paint

Product Code: DC315

Company: International Fireproof Technology, Inc.  
17528 Von Karman Ave. Irvine, CA 92614

Office: 949-975-8588

Emergency Telephone Number: CHEMTREC 1-800-424-9300

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### 2. Hazards Identification

**Hazard classification:** Acute toxicity (Oral) Cat.4, Skin irritation Cat.3,  
Eye irritation Cat. 2B, Carcinogenicity Cat.2B



**Pictogram :**

**Signal Words :** Warning

**Hazard statement :** May be harmful if swallowed  
Causes mild skin irritation  
Cause eye irritation  
Suspected of causing cancer

**Precautionary statement :**

Prevention : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear eye or face protection. Do not breathe vapor. Wash hands thoroughly after handling.

Response : Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Storage : Store locked up.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Supplemental label elements :**

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

**FOR INDUSTRIAL USE ONLY.**

Hazards not otherwise classified : None known.

### 3. Composition/Information on Ingredients

<u>Ingredient</u>	<u>CAS No</u>	<u>Percent</u>
Titanium Dioxide	13463-67-7	10 ~ 25 %
Melamine	108-78-1	10 ~ 25 %
Pentaerythritol	115-77-5	10 ~ 20 %

Company: International Fireproof Technology, Inc.  
17528 Von Karman Ave. Irvine, CA 92614

Office: 949-975-8588

Emergency Telephone Number: CHEMTREC 1-800-424-9300

### 4. First Aid Measures

**Inhalation :** Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**Ingestion :** Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Skin Contact :** Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Eye** Immediately flush eyes with plenty of water, occasionally lifting the

Contact : upper and lower eyelids. Check for and remove any contact lenses.  
Continue to rinse for at least 10 minutes. Get medical attention

**Potential acute health effects :**

Inhalation : Exposure to decomposition products may cause a health hazard.  
Serious effects may be delayed following exposure

Ingestion : May be irritating to mouth, throat and stomach.

Skin contact : No known significant effects or critical hazards.

Eye contact : Causes eye irritation.

## **5. Fire Fighting Measures**

Suitable extinguishing media :	Use an extinguishing agent suitable for the surrounding fire.
Specific hazards arising from the chemical :	In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products:	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides metal oxide/oxides
Special protective actions for fire-fighters:	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters:	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## **6. Accidental Release Measures**

**Personal precautions, protective equipment and emergency procedures**

For non-emergency Personnel :	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
-------------------------------	--

For emergency responders :	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".
Environmental precautions:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### **Methods and materials for containment and cleaning up**

Small spill:	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill:	Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## **7. Handling and Storage**

Handling:	<ol style="list-style-type: none"> <li>1. Container must be labeled, close containers when not in use.</li> <li>2. Ventilate designated places to avoid the release of vapor or mist when using.</li> <li>3. Suitable fire extinguisher and spill it shall be kept readily available to deal with fire and emergency response to device leakage.</li> </ol>
Storage:	Comply with the storage and handling of flammable or combustible materials regulations. Store in cool and dry area, away from heat, sparks and freezing temperatures. Use up as soon as possible after opening the lid; Ideal storage temperature is 5 °C ~ 35 °C



## 8. Exposure Controls/Personal Protection

<u><b>Ingredient</b></u>	<u><b>Regulatory Code</b></u>	<u><b>Classification</b></u>
Titanium Dioxide	ACGIH TLV (United States, 4/2014)	TWA: 10 mg/m <sup>3</sup> 8 hours.
	OSHA PEL (United States, 2/2013)	TWA: 15 mg/m <sup>3</sup> 8 hours. Form: Total dust
Melamine	AIHA WEEL (United States, 10/2011)	TWA: 10 mg/m <sup>3</sup> 8 hours. Form: Inhalable
		TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Respirable
Pentaerythritol	NIOSH REL (United States, 10/2013)	TWA: 5 mg/m <sup>3</sup> 10 hours. Form: Respirable fraction TWA: 10 mg/m <sup>3</sup> 10 hours. Form: Total
	ACGIH TLV (United States, 4/2014)	T TWA: 10 mg/m <sup>3</sup> 8 hours.
	OSHA PEL (United States, 2/2013)	TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Respirable Fraction TWA: 15 mg/m <sup>3</sup> 8 hours. Form: Total dust

**Appropriate engineering controls:** If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Environmental exposure controls:** Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### **Individual protection measures**

**Hygiene measures:** Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the

following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

### **Skin protection**

**Hand protection:** Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Body protection:** Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other skin protection:** Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection:** Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

---

## **9. Physical and Chemical Properties**

Appearance :	White liquid
Odor :	Mild emulsion odor
pH :	7.0±1.0
Density (25°C):	1.35±0.1 g/cm <sup>3</sup>
Viscosity (at 25°C):	8000 ~ 20000 cps
Volatile :	30 ~ 35□
Solubility :	Water miscible
Partition coefficient: n-octanol / water	N/A
Flash point :	> 100°C

Boiling point/boiling range :	> 100°C
Melting point/range :	N/A
Evaporation rate :	N/A
Vapor pressure :	N/A
Relative vapor density :	N/A
Auto-ignition temperature :	N/A
Flammability (solid, gas) :	N/A
Lower explosion limit :	N/A
Upper explosion limit :	N/A
Self-ignition temperature :	N/A
Decomposition temperature	N/A

---

## **10. Stability and Reactivity**

Stability:	Stable under ordinary conditions of use and storage.
Special Condition of Hazardous Reaction	N/A
Incompatibilities:	Organic solvent
Materials to Avoid	Strong acid or alkali and oxidant
Hazardous decomposition products	Will emit smoke, CO, CO <sub>2</sub> when burned

## 11.Toxicological Information

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Melamine	LD50 Oral	Rat	3161 mg/kg	---
Pentaerythritol	LD50 Oral	Rat	18500 mg/kg	---

### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Melamine	Eyes : Mild irritant	Rabbit	---	24 hours 500 milligrams	---
Pentaerythritol	Skin : Mild irritant	Human	---	72 hours 300 Micrograms Intermittent	---

### Classification

Product/ingredient name	OSHA	IARC	NTP
Melamine	---	3	---
Pentaerythritol	---	2B	---

### Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Pentaerythritol	Category 3	Not applicable	Respiratory tract irritation and Narcotic effects

### Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Pentaerythritol	Category 2	Not determined	Respiratory tract irritation and Narcotic effects

## 12.Ecological Information

### Toxicity

Product/ingredient name	Result	Species	Exposure
Melamine	Acute EC50 33600000	Daphnia –	48 hours

	µg/l Fresh water	Daphnia magna	
Pentaerythritol	Acute LC50 >1000000 µg/l Marine water	Fish – Fundulus heteroclitus	96 hours

**Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
Melamine	---	<3.8	low
Pentaerythritol	---	1.26	low
Titanium Dioxide	---	352	low

---

**13. Disposal Considerations**

Disposal methods: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

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**14. Transport Information**

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
UN number	Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
UN proper shipping name					
Transport hazard class(es)					
Packing group					
Environmental hazards	No	No	No	No	No
Additional information	Special provisions Not Applicable	Special provisions Not Applicable	Special provisions Not Applicable	Special provisions Not Applicable	Special provisions Not Applicable

Special precautions  
for user:

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air,

etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

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## 15. Regulatory Information

<b>Ingredient</b>	<b>CAS No</b>	<b>Regulatory Code</b>	<b>Classification</b>
Titanium Dioxide	13463-67-7	CAPROP	CA Prop 65
		IARG2B	IARC - Group 2B - Possibly Carcinogenic to Humans
		WHMHAZ	WHMIS - Canada Hazardous Chemicals
		WMPR	List of WM Priority Chemicals Feb 2014
Melamine	108-78-1	CFPLOW	Flash Points in Flammable/Combustible Range
		WHMHAZ	WHMIS - Canada Hazardous Chemicals
Pentaerythritol	115-77-5	WHMHAZ	WHMIS - Canada Hazardous Chemicals

---

## 16. Other Information

This information is based on our present state of knowledge. It should not therefore be construed as guaranteeing specific properties of the products described or their suitability for a particular application.

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**Revision Information: 8/12/2015**

**Prepared by: International Fireproof Technology Inc.**

**Phone Number: 949-975-8588**



# International Fireproof Technology, Inc.

17528 Von Karman Ave. Irvine, CA 92614

## Safety Data Sheet – DC315

### 1. Product and Company Identification

Product: Water Based Fireproof Foam Paint

Product Code: DC315

Company: International Fireproof Technology, Inc.  
17528 Von Karman Ave. Irvine, CA 92614

Office: 949-975-8588

Emergency Telephone Number: CHEMTREC 1-800-424-9300

### 2. Hazards Identification

**Hazard classification:** Acute toxicity (Oral) Cat.4, Skin irritation Cat.3,  
Eye irritation Cat. 2B, Carcinogenicity Cat.2B



**Pictogram :**

**Signal Words :** Warning

**Hazard statement :** May be harmful if swallowed  
Causes mild skin irritation  
Cause eye irritation  
Suspected of causing cancer

**Precautionary statement :**

Prevention : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear eye or face protection. Do not breathe vapor. Wash hands thoroughly after handling.

Response : Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Storage : Store locked up.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Supplemental label elements :**

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

**FOR INDUSTRIAL USE ONLY.**

Hazards not otherwise classified : None known.

### 3. Composition/Information on Ingredients

<u>Ingredient</u>	<u>CAS No</u>	<u>Percent</u>
Titanium Dioxide	13463-67-7	10 ~ 25 %
Melamine	108-78-1	10 ~ 25 %
Pentaerythritol	115-77-5	10 ~ 20 %

Company:	International Fireproof Technology, Inc. 17528 Von Karman Ave. Irvine, CA 92614
Office:	949-975-8588
Emergency Telephone Number:	CHEMTREC 1-800-424-9300

### 4. First Aid Measures

**Inhalation :** Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**Ingestion :** Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Skin Contact :** Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Eye** Immediately flush eyes with plenty of water, occasionally lifting the

Contact : upper and lower eyelids. Check for and remove any contact lenses.  
Continue to rinse for at least 10 minutes. Get medical attention

**Potential acute health effects :**

Inhalation : Exposure to decomposition products may cause a health hazard.

Serious effects may be delayed following exposure

Ingestion : May be irritating to mouth, throat and stomach.

Skin contact : No known significant effects or critical hazards.

Eye contact : Causes eye irritation.

## 5. Fire Fighting Measures

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products: Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides  
metal oxide/oxides

Special protective actions for fire-fighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## 6. Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures**

For non-emergency Personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.



For emergency responders :	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".
Environmental precautions:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### **Methods and materials for containment and cleaning up**

Small spill:	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill:	Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## **7. Handling and Storage**

Handling:	<ol style="list-style-type: none"> <li>1. Container must be labeled, close containers when not in use.</li> <li>2. Ventilate designated places to avoid the release of vapor or mist when using.</li> <li>3. Suitable fire extinguisher and spill it shall be kept readily available to deal with fire and emergency response to device leakage.</li> </ol>
Storage:	Comply with the storage and handling of flammable or combustible materials regulations. Store in cool and dry area, away from heat, sparks and freezing temperatures. Use up as soon as possible after opening the lid; Ideal storage temperature is 5 °C ~ 35 °C

## 8. Exposure Controls/Personal Protection

<b><u>Ingredient</u></b>	<b><u>Regulatory Code</u></b>	<b><u>Classification</u></b>
Titanium Dioxide	ACGIH TLV (United States, 4/2014)	TWA: 10 mg/m <sup>3</sup> 8 hours.
	OSHA PEL (United States, 2/2013)	TWA: 15 mg/m <sup>3</sup> 8 hours. Form: Total dust
Melamine	AIHA WEEL (United States, 10/2011)	TWA: 10 mg/m <sup>3</sup> 8 hours. Form: Inhalable
		TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Respirable
Pentaerythritol	NIOSH REL (United States, 10/2013)	TWA: 5 mg/m <sup>3</sup> 10 hours. Form: Respirable fraction TWA: 10 mg/m <sup>3</sup> 10 hours. Form: Total
	ACGIH TLV (United States, 4/2014)	T TWA: 10 mg/m <sup>3</sup> 8 hours.
	OSHA PEL (United States, 2/2013)	TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Respirable Fraction TWA: 15 mg/m <sup>3</sup> 8 hours. Form: Total dust

Appropriate engineering controls: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### **Individual protection measures**

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the

following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

### **Skin protection**

**Hand protection:** Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Body protection:** Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other skin protection:** Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection:** Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

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## **9. Physical and Chemical Properties**

Appearance :	White liquid
Odor :	Mild emulsion odor
pH :	7.0±1.0
Density (25°C):	1.35±0.1 g/cm <sup>3</sup>
Viscosity (at 25°C):	8000 ~ 20000 cps
Volatile :	30 ~ 35□
Solubility :	Water miscible
Partition coefficient: n-octanol / water	N/A
Flash point :	> 100°C

Boiling point/boiling range :	> 100°C
Melting point/range :	N/A
Evaporation rate :	N/A
Vapor pressure :	N/A
Relative vapor density :	N/A
Auto-ignition temperature :	N/A
Flammability (solid, gas) :	N/A
Lower explosion limit :	N/A
Upper explosion limit :	N/A
Self-ignition temperature :	N/A
Decomposition temperature	N/A

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## **10. Stability and Reactivity**

Stability:	Stable under ordinary conditions of use and storage.
Special Condition of Hazardous Reaction	N/A
Incompatibilities:	Organic solvent
Materials to Avoid	Strong acid or alkali and oxidant
Hazardous decomposition products	Will emit smoke, CO, CO <sub>2</sub> when burned

## 11. Toxicological Information

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Melamine	LD50 Oral	Rat	3161 mg/kg	---
Pentaerythritol	LD50 Oral	Rat	18500 mg/kg	---

### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Melamine	Eyes : Mild irritant	Rabbit	---	24 hours 500 milligrams	---
Pentaerythritol	Skin : Mild irritant	Human	---	72 hours 300 Micrograms Intermittent	---

### Classification

Product/ingredient name	OSHA	IARC	NTP
Melamine	---	3	---
Pentaerythritol	---	2B	---

### Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Pentaerythritol	Category 3	Not applicable	Respiratory tract irritation and Narcotic effects

### Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Pentaerythritol	Category 2	Not determined	Respiratory tract irritation and Narcotic effects

## 12. Ecological Information

### Toxicity

Product/ingredient name	Result	Species	Exposure
Melamine	Acute EC50 33600000	Daphnia –	48 hours

	µg/l Fresh water	Daphnia magna	
Pentaerythritol	Acute LC50 >1000000 µg/l Marine water	Fish – Fundulus heteroclitus	96 hours

**Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
Melamine	---	<3.8	low
Pentaerythritol	---	1.26	low
Titanium Dioxide	---	352	low

---

---

## 13. Disposal Considerations

Disposal methods: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

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## 14. Transport Information

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
UN number	Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
UN proper shipping name					
Transport hazard class(es)					
Packing group					
Environmental hazards	No	No	No	No	No
Additional information	Special provisions Not Applicable	Special provisions Not Applicable	Special provisions Not Applicable	Special provisions Not Applicable	Special provisions Not Applicable

Special precautions  
for user:

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air,

etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

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## 15. Regulatory Information

<b><u>Ingredient</u></b>	<b><u>CAS No</u></b>	<b><u>Regulatory Code</u></b>	<b><u>Classification</u></b>
Titanium Dioxide	13463-67-7	CAPROP	CA Prop 65
		IARG2B	IARC - Group 2B - Possibly Carcinogenic to Humans
		WHMHAZ	WHMIS - Canada Hazardous Chemicals
		WMPR	List of WM Priority Chemicals Feb 2014
Melamine	108-78-1	CFLOW	Flash Points in Flammable/Combustible Range
		WHMHAZ	WHMIS - Canada Hazardous Chemicals
Pentaerythritol	115-77-5	WHMHAZ	WHMIS - Canada Hazardous Chemicals

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## 16. Other Information

This information is based on our present state of knowledge. It should not therefore be construed as guaranteeing specific properties of the products described or their suitability for a particular application.

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**Revision Information: 8/12/2015**

**Prepared by: International Fireproof Technology Inc.**

**Phone Number: 949-975-8588**

Printing date 12/14/2015

Reviewed on 02/25/2015

## 1 Identification

- **Product identifier**
- **Trade name:** Foamsulate™ A-Component
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Accella Polyurethane Systems, LLC  
1255 Kennestone Circle, Suite 200  
Marietta, GA 30066  
USA  
www.premiumspray.com
- **Information department:** EH&S Department
- **Emergency telephone number:**  
During normal operating hours: (770) 528-9556  
ChemTrec: (800) 424-9300

## 2 Hazard(s) identification

- **Classification of the substance or mixture**



Health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Carc. 2 H351 Suspected of causing cancer.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



Acute Tox. 4 H332 Harmful if inhaled.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H335 May cause respiratory irritation.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS07



GHS08

- **Signal word** *Danger*
- **Hazard-determining components of labeling:**  
diphenylmethanediisocyanate, isomers and homologues  
4,4'-methylenediphenyl diisocyanate  
o-(p-isocyanatobenzyl)phenyl isocyanate
- **Hazard statements**  
Harmful if inhaled.

(Contd. on page 2)

Printing date 12/14/2015

Reviewed on 02/25/2015

**Trade name: Foamsulate™ A-Component**

(Contd. of page 1)

*Causes skin irritation.*

*Causes serious eye irritation.*

*May cause allergy or asthma symptoms or breathing difficulties if inhaled.*

*May cause an allergic skin reaction.*

*Suspected of causing cancer.*

*May cause respiratory irritation.*

*May cause damage to organs through prolonged or repeated exposure.*

**· Precautionary statements**

*In case of inadequate ventilation wear respiratory protection.*

*Avoid breathing dust/fume/gas/mist/vapors/spray*

*Wear protective gloves/protective clothing/eye protection/face protection.*

*Wash thoroughly after handling.*

*Use only outdoors or in a well-ventilated area.*

*Contaminated work clothing must not be allowed out of the workplace.*

*Obtain special instructions before use.*

*Do not handle until all safety precautions have been read and understood.*

*If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.*

*Continue rinsing.*

*If experiencing respiratory symptoms: Call a POISON CENTER/doctor.*

*IF INHALED: Remove person to fresh air and keep comfortable for breathing.*

*Call a POISON CENTER/doctor if you feel unwell.*

*Wash contaminated clothing before reuse.*

*IF exposed or concerned: Get medical advice/attention.*

*If skin irritation or rash occurs: Get medical advice/attention.*

*If eye irritation persists: Get medical advice/attention.*

*Get medical advice/attention if you feel unwell.*

*In case of fire: Use for extinction: CO2, sand, extinguishing powder.*

*In case of fire: Use for extinction: Water spray.*

*IF ON SKIN: Wash with plenty of water.*

*Take off contaminated clothing and wash it before reuse.*

*Store locked up.*

*Store in a well-ventilated place. Keep container tightly closed.*

*Dispose of contents/container in accordance with local/regional/national/international regulations.*

**· Classification system:**

**· NFPA ratings (scale 0 - 4)**



Health = 1

Fire = 1

Reactivity = 0

**· HMIS-ratings (scale 0 - 4)**



Health = \*2

Fire = 1

Reactivity = 0

**· Other hazards**

**· Results of PBT and vPvB assessment**

**· PBT:** Not applicable.

**· vPvB:** Not applicable.

(Contd. on page 3)



Printing date 12/14/2015

Reviewed on 02/25/2015

**Trade name: Foamsulate™ A-Component**

(Contd. of page 2)

### 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· <b>Dangerous components:</b>		
9016-87-9	diphenylmethanediisocyanate, isomeres and homologues Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317; STOT SE 3, H335	30-60%
101-68-8	4,4'-methylenediphenyl diisocyanate Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317; STOT SE 3, H335	15-40%
5873-54-1	o-(p-isocyanatobenzyl)phenyl isocyanate Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317; STOT SE 3, H335	1-5%

### 4 First-aid measures

- **Description of first aid measures**
- **General information:**  
Symptoms of exposure may occur after several hours; therefore medical observation for at least 48 hours after exposure.  
First Aid responders should pay attention to self-protection and use the recommended protective clothing. If potential for exposure exists refer to Section 8 for specific personal protective equipment.
- **After inhalation:**  
Supply fresh air and to be sure call for a doctor.  
In case of unconsciousness place patient stably in side position for transportation.  
If breathing is difficult, oxygen should be administered by qualified personnel.
- **After skin contact:**  
Immediately wash with water and soap and rinse thoroughly.  
Get medical attention if symptoms occur.  
Wash clothing before reuse.  
Clean shoes thoroughly before reuse.  
Suitable emergency safety shower should be immediately available.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**  
Do not induce vomiting; immediately call for medical help.  
Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.
- **Information for doctor:**  
Symptomatic treatment and supportive therapy as indicated. Following severe exposure the patient should be kept under medical review for at least 48 hours.
- **Most important symptoms and effects, both acute and delayed**  
Eye Contact: Adverse symptoms may include the following: pain or irritation, watering, redness  
Inhalation: Adverse symptoms may include: Respiratory tract irritation, coughing, wheezing and breathing difficulties, asthma.  
Skin Contact: Adverse symptoms may include the following: irritation, redness.  
Ingestion: No specific data

(Contd. on page 4)

Printing date 12/14/2015

Reviewed on 02/25/2015

**Trade name: Foamsulate™ A-Component**

(Contd. of page 3)

- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

## 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
Use fire fighting measures that suit the environment.  
ABC powder  
Carbon dioxide
- **For safety reasons unsuitable extinguishing agents:**  
Unsuitable extinguishing media: Water may be used if no other available and then in copious quantities. Reaction between water and hot isocyanate may be vigorous. Prevent washings from entering water courses, keep fire exposed containers cool by spraying with water.
- **Special hazards arising from the substance or mixture**  
In a fire or if heated, a pressure increase will occur and the container may burst.  
Combustion products may include: Carbon monoxide, carbon dioxide, nitrogen oxides, hydrocarbons and HCN.
- **Advice for firefighters**  
Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Stay up wind and keep out of low areas where gases (fumes) can accumulate.
- **Protective equipment:**  
Mouth respiratory protective device.  
Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. PVC boots, gloves, safety helmet and protective clothing should be worn.  
Wear full protective suit.
- **Additional information**  
Due to reaction of water producing CO<sub>2</sub>-gas, a hazardous build-up of pressure could result if contaminated containers are re-sealed. Containers may burst if overheated.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
- **Environmental precautions:**  
Prevent from entering into soil or ditches. Inform the relevant authorities if the product has caused environmental pollution.  
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Absorb with materials such as: Dirt, Vermiculite, Sand, Clay.  
Ensure adequate ventilation.  
Contain spilled material if possible. Do NOT use absorbent materials such as: Cement powder (Note: may generate heat). Collect in suitable and properly label open containers. Do not place in sealed containers. Suitable containers include: Metal drums, Plastic drums, Polylined fiber pacs. Wash spill site with large quantities of water. Attempt to neutralize by adding suitable decontaminant solution: Formulation 1: sodium carbonate 5 - 10%; liquid detergent 0.2 - 2%; water to make up to 100%, OR Formulation 2: concentrated ammonia solution 3- 8%; liquid detergent 0.2 -2%; water to make up to 100%. If ammonia is used, use good

(Contd. on page 5)

Printing date 12/14/2015

Reviewed on 02/25/2015

**Trade name: Foamsulate™ A-Component**

(Contd. of page 4)

ventilation to prevent vapor exposure. See Section 13, for additional information.

· **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## 7 Handling and storage

· **Handling:**

· **Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.

Avoid contact with eyes and prolonged or repeated contact with skin.

Wash thoroughly after handling.

· **Information about protection against explosions and fires: No special measures required.**

· **Conditions for safe storage, including any incompatibilities**

· **Storage:**

· **Requirements to be met by storerooms and receptacles: No special requirements.**

· **Information about storage in one common storage facility:**

Store in dry place. Protect from atmospheric moisture. Do not store product contaminated with water to prevent potential hazardous reaction

· **Further information about storage conditions:**

Keep receptacle tightly sealed.

Storage Period: 12 months

Storage Temp: 15 -35 °C

· **Specific end use(s) See the technical data sheet on this product for further information.**

## 8 Exposure controls/personal protection

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

**101-68-8 4,4'-methylenediphenyl diisocyanate**

PEL Ceiling limit value: 0.2 mg/m<sup>3</sup>, 0.02 ppm

REL Long-term value: 0.05 mg/m<sup>3</sup>, 0.005 ppm  
Ceiling limit value: 0.2\* mg/m<sup>3</sup>, 0.02\* ppm  
\*10-min

TLV Long-term value: 0.051 mg/m<sup>3</sup>, 0.005 ppm

· **Additional information: The lists that were valid during the creation were used as basis.**

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Wash contaminated clothing before reuse.

Ensure that eyewash stations and safety showers are close to the workstation area.

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· **Breathing equipment:**

*In case of brief exposure at low atmospheric levels use an approved air-purifying respiratory equipped with an organic vapor sorbent and a particle filter. In case of intensive or longer exposure use a positive pressure air-supplying respirator (air line or self-contained breathing apparatus).*

· **Protection of hands:**



Protective gloves

*The workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.*

· **Material of gloves**

*Use chemical resistant gloves classified under Standard EN374: Protective gloves against chemicals and micro-organisms. Examples of preferred glove barrier materials include: Butyl rubber, Polyethylene, EVAL, Neoprene, Nitrile, Viton. When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher is recommended.*

· **Penetration time of glove material**

*The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.*

· **Eye protection:**



*Tightly sealed chemical goggles consistent with EN 166 or equivalent. Wear a face-shield which allows use of chemical goggles, or wear full-face respirator to protect face and eyes when there is any likelihood of splashes.*

· **Body protection:**

*Personal protective clothing for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.*

## 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

<b>Form:</b>	Fluid
<b>Color:</b>	According to product specification
<b>Odor:</b>	Characteristic
<b>Odor threshold:</b>	Not determined.

· **pH-value:** Not determined.

· **Change in condition**

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	Undetermined.

· **Flash point:** 218 °C (424 °F)

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:** 400 °C (752 °F)

· **Decomposition temperature:** Not determined.

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· <b>Auto igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
<b>Lower:</b>	0.4 Vol %
<b>Upper:</b>	Not determined.
· <b>Vapor pressure:</b>	Not determined.
· <b>Density:</b>	Not determined.
· <b>Relative density</b>	Not determined.
· <b>Vapor density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with Water:</b>	Not miscible or difficult to mix.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
<b>Organic solvents:</b>	0.0 %
· <b>Other information</b>	No further relevant information available.

## 10 Stability and reactivity

### · **Reactivity**

Diisocyanates react with many materials and the rate of reaction increases with temperature as well as increased contact; these reactions can be violent. Contact is increased by stirring or if the other material mixes with the diisocyanate. Diisocyanates are not soluble in water and sink to the bottom, but react slowly at the interface. The reaction forms carbon dioxide gas and a layer of solid polyurea. Reaction with water will generate carbon dioxide and heat.

· **Chemical stability** This product is stable at recommended storage conditions (See Section 7).

· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

### · **Possibility of hazardous reactions**

Can occur. Exposure to elevated temperatures can cause product to decompose and generate gas. This can cause pressure build-up and/or rupturing of closed containers. Polymerization can be catalyzed by: Strong bases. Water.

### · **Conditions to avoid**

Exposure to elevated temperatures can cause product to decompose. Generation of gas during decomposition can cause pressure in closed systems. Pressure build-up can be rapid. Avoid moisture. Material reacts slowly with water, releasing carbon dioxide which can cause pressure buildup and rupture of closed containers. Elevated temperatures accelerate this reaction.

· **Incompatible materials:** Water, alcohols, amines, bases and acids

### · **Hazardous decomposition products:**

Combustion products may include: carbon oxides (CO, CO<sub>2</sub>) nitrogen oxides (NO, NO<sub>2</sub>, etc.) hydrocarbons and HCN.

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## 11 Toxicological information

· **Information on toxicological effects**

· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

**9016-87-9 diphenylmethanediisocyanate, isomers and homologues**

Oral	LD50	>10000 mg/kg (rat)
Dermal	LD50	>9400 mg/kg (rabbit)
Inhalative	LC50/4 h	0.49 mg/l (rat)

**101-68-8 4,4'-methylenediphenyl diisocyanate**

Oral	LD50	>10000 mg/kg (rat)
Dermal	LD50	>9400 mg/kg (rabbit)
Inhalative	LC50/4 h	0.49 mg/l (rat)

· **Primary irritant effect:**

· **on the skin:**

Irritant to skin and mucous membranes.

Irritating effect.

· **on the eye:** Irritating effect.

· **Sensitization:**

Sensitization possible through inhalation.

Sensitization possible through skin contact.

· **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful

Irritant

May cause damage to organs through prolonged or repeated exposure if inhaled. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

9016-87-9	diphenylmethanediisocyanate, isomers and homologues
101-68-8	4,4'-methylenediphenyl diisocyanate

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

## 12 Ecological information

· **Toxicity**

· **Aquatic toxicity:**

**9016-87-9 diphenylmethanediisocyanate, isomers and homologues**

EC50 (static)	>1000 mg/kg (daphnia)
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**101-68-8 4,4'-methylenediphenyl diisocyanate**

EC50 (static)	>1000 mg/kg (daphnia)
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· **Persistence and degradability** No further relevant information available.

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- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (Self-assessment): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**  
The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

· <b>UN-Number</b>	
· <b>DOT</b>	UN3082
· <b>ADN, IMDG, IATA</b>	not regulated
· <b>UN proper shipping name</b>	
· <b>DOT</b>	Environmentally hazardous substances, liquid, n.o.s. (Methylene Diphenyl Diisocyanate)
· <b>ADN, IMDG, IATA</b>	not regulated
· <b>Transport hazard class(es)</b>	
· <b>DOT</b>	DOT Non-Bulk: Not Regulated
· <b>Class</b>	9 Miscellaneous dangerous substances and articles
· <b>Label</b>	9
· <b>ADN/R Class:</b>	not regulated
· <b>Packing group</b>	
· <b>DOT</b>	III
· <b>IMDG, IATA</b>	not regulated
· <b>Environmental hazards:</b>	
· <b>Marine pollutant:</b>	No

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- |   |                 |
|---|-----------------|
| · <b>Special precautions for user</b>   | Not applicable. |
| · <b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b> | Not applicable. |
| · <b>UN "Model Regulation":</b>   | not regulated   |

## 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **Clean Air Act**

101-68-8	4,4'-methylenediphenyl diisocyanate	15-40%
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· **Clean Water Act**

None of the ingredients is listed.

· **SARA**

· **SARA 302/304 Extremely Hazardous Substance**

None of the ingredients is listed.

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

9016-87-9	diphenylmethanediisocyanate, isomers and homologues
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101-68-8	4,4'-methylenediphenyl diisocyanate
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· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Massachusetts Right To Know**

All ingredients are listed.

· **New Jersey Right To Know**

All ingredients are listed.

· **Pennsylvania Right To Know**

All ingredients are listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

9016-87-9	diphenylmethanediisocyanate, isomers and homologues	CBD
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101-68-8	4,4'-methylenediphenyl diisocyanate	D, CBD
· <b>TLV (Threshold Limit Value established by ACGIH)</b>		
None of the ingredients is listed.		
· <b>NIOSH-Ca (National Institute for Occupational Safety and Health)</b>		
-		

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS07 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**

diphenylmethanediisocyanate, isomers and homologues

4,4'-methylenediphenyl diisocyanate

o-(p-isocyanatobenzyl)phenyl isocyanate

· **Hazard statements**

Harmful if inhaled.

Causes skin irritation.

Causes serious eye irritation.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

Suspected of causing cancer.

May cause respiratory irritation.

May cause damage to organs through prolonged or repeated exposure.

· **Precautionary statements**

In case of inadequate ventilation wear respiratory protection.

Avoid breathing dust/fume/gas/mist/vapors/spray

Wear protective gloves/protective clothing/eye protection/face protection.

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Contaminated work clothing must not be allowed out of the workplace.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER/doctor if you feel unwell.

Wash contaminated clothing before reuse.

IF exposed or concerned: Get medical advice/attention.

If skin irritation or rash occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Get medical advice/attention if you feel unwell.

In case of fire: Use for extinction: CO2, sand, extinguishing powder.

In case of fire: Use for extinction: Water spray.

IF ON SKIN: Wash with plenty of water.

Take off contaminated clothing and wash it before reuse.

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**Trade name: Foamsulate™ A-Component**

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Store locked up.

Store in a well-ventilated place. Keep container tightly closed.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information

Accella Polyurethane Systems, LLC urges each customer of recipient of this (M)SDS to study it carefully and consult

appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown on this (M)SDS. However, no warranty, express or implied is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his/her activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDS, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.

· **Recommended restriction of use FOR PROFESSIONAL USE ONLY**

· **Department issuing SDS:** Environmental Health & Safety Department.

· **Contact:** M. Phillips

· **Date of preparation / last revision** 12/14/2015 / -

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

Carc. 2: Carcinogenicity, Hazard Category 2

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

## 1 Identification

- **Product identifier**
- **Trade name:** Foamsulate™ 220 Series Resin (Mid)
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Accella Polyurethane Systems, LLC  
1255 Kennestone Circle, Suite 200  
Marietta, GA 30066  
USA  
www.premiumspray.com
- **Information department:** EH&S Department
- **Emergency telephone number:**  
During normal operating hours: (770) 528-9556  
ChemTrec: (800) 424-9300

## 2 Hazard(s) identification

- **Classification of the substance or mixture**



Health hazard

STOT SE 2 H371 May cause damage to organs.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



Corrosion

Eye Dam. 1 H318 Causes serious eye damage.



Skin Irrit. 2 H315 Causes skin irritation.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS05



GHS08

- **Signal word** Danger
- **Hazard-determining components of labeling:**  
Polyol(s)  
N,N-bis[3-(dimethylamino)propyl]-N',N'-dimethylpropane-1,3-diamine
- **Hazard statements**  
Causes skin irritation.  
Causes serious eye damage.  
May cause damage to organs.

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*May cause damage to organs through prolonged or repeated exposure.*

· **Precautionary statements**

*Do not breathe dust/fume/gas/mist/vapors/spray.*

*In case of inadequate ventilation wear respiratory protection.*

*Wear protective gloves/protective clothing/eye protection/face protection.*

*Wash thoroughly after handling.*

*Do not eat, drink or smoke when using this product.*

*If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.*

*Continue rinsing.*

*Wash contaminated clothing before reuse.*

*If skin irritation or rash occurs: Get medical advice/attention.*

*If eye irritation persists: Get medical advice/attention.*

*Get medical advice/attention if you feel unwell.*

*In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.*

*IF ON SKIN: Wash with plenty of water.*

*IF exposed or concerned: Call a POISON CENTER/doctor.*

*Store in a well-ventilated place. Keep container tightly closed.*

*Dispose of contents/container in accordance with local/regional/national/international regulations.*

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 2

Fire = 1

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = 2

Fire = 1

Reactivity = 0

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

### 3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

	Polyol(s)	30-60%
	STOT SE 2, H371; STOT RE 2, H373	
940912-28-7	Polyether Polyol	7-13%
	Acute Tox. 4, H302	
13674-84-5	tris(2-chlorisopropyl)-phosphate	5-10%
	Acute Tox. 4, H302	
406-58-6	1,1,1,3,3-pentafluorobutane	5-10%
	Flam. Liq. 2, H225	

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33329-35-0	N,N-bis[3-(dimethylamino)propyl]-N',N'-dimethylpropane-1,3-diamine	1-5%
	Skin Corr. 1A, H314; Eye Dam. 1, H318; Acute Tox. 4, H312	
77098-07-8	Tetrabromophthalic Acid diester/diol	1-5%
111-46-6	diethylene glycol	1-5%
	Acute Tox. 4, H302	
56-81-5	glycerol	1-5%
78-40-0	triethyl phosphate	1-5%
	Acute Tox. 4, H302	
460-73-1	1,1,1,3,3-Pentafluoropropane	1-5%
	Press. Gas, H280; Simple Asphyxiant	
3033-62-3	N,N,N',N'-tetramethyl-2,2'-oxybis(ethylamine)	≤ 1.0%
	Acute Tox. 3, H311; Skin Corr. 1A, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; Acute Tox. 4, H332; Flam. Liq. 4, H227	

#### 4 First-aid measures

· **Description of first aid measures**

· **General information:**

Immediately remove any clothing soiled by the product.

Remove breathing apparatus only after contaminated clothing have been completely removed.

In case of irregular breathing or respiratory arrest provide artificial respiration.

First Aid responders should pay attention to self-protection and use the recommended protective clothing. If potential for exposure exists refer to Section 8 for specific personal protective equipment.

· **After inhalation:**

Supply fresh air or oxygen; call for doctor.

In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

Suitable emergency safety shower should be immediately available.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:**

Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

· **Information for doctor:**

Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

· **Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

#### 5 Fire-fighting measures

· **Extinguishing media**

· **Suitable extinguishing agents:**

CO2, extinguishing powder or water spray. Fight larger fires with water spray.

Use fire fighting measures that suit the environment.

· **For safety reasons unsuitable extinguishing agents:** Do not use direct water stream. May spread fire.

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- **Special hazards arising from the substance or mixture**  
During heating or in case of fire poisonous gases are produced.  
There are no known unusual fire or explosion hazards.
- **Advice for firefighters**
- **Protective equipment:**  
Mouth respiratory protective device.  
Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. PVC boots, gloves, safety helmet and protective clothing should be worn.
- **Additional information**  
Keep people away. Isolate fire and deny unnecessary entry. Use water spray to cool fire exposed containers. Fight fire from protected location or safe distance. Move container(s) from fire area if this is possible without hazard. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Contain fire water run-off if possible. Fire water run-off if not contained, may cause environmental damage.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.  
Isolate area. Keep unnecessary and unprotected personnel from entering the area. Spilled material may cause slipping hazard. Refer to Section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.
- **Environmental precautions:**  
Inform respective authorities in case of seepage into water course or sewage system.  
Prevent from entering into soil or ditches. Inform the relevant authorities if the product has caused environmental pollution.  
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Ensure adequate ventilation.  
Contain spilled material if possible. Absorb with materials such as: Dirt, Sand, Sawdust. Collect in suitable and properly labeled containers. Wash the spill site with water. See Section 13, Disposal Considerations, for additional information.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.  
Do not swallow. Wash thoroughly after handling. Keep container closed. See Section 8, Exposure Controls and Personal Protection.
- **Information about protection against explosions and fires:**  
Keep ignition sources away - Do not smoke.  
Keep respiratory protective device available.

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- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**  
Keep receptacle tightly sealed.  
Storage Period: 6 months  
Storage Temp: 15 -35 °C
- **Specific end use(s)** See the technical data sheet on this product for further information.

## 8 Exposure controls/personal protection

### · Control parameters

#### · Components with limit values that require monitoring at the workplace:

<b>940912-28-7 Polyether Polyol</b>	
PPM	Ceiling limit value: .3 mg/m <sup>3</sup>
<b>111-46-6 diethylene glycol</b>	
WEEL	Long-term value: 10 mg/m <sup>3</sup>
<b>56-81-5 glycerol</b>	
PEL	Long-term value: 15 * 5** mg/m <sup>3</sup> mist; *total dust **respirable fraction
TLV	Long-term value: 10 mg/m <sup>3</sup> TLV withdrawn-insufficient data human occup. exp.
<b>78-40-0 triethyl phosphate</b>	
WEEL	Long-term value: 7.45 mg/m <sup>3</sup>
<b>460-73-1 1,1,1,3,3-Pentafluoropropane</b>	
TWA	Long-term value: 1644 mg/m <sup>3</sup> 300 ppm
<b>3033-62-3 N,N,N',N'-tetramethyl-2,2'-oxybis(ethylamine)</b>	
REL	Minimize exp.; NIAX Catalyst ESN; Pocket Guide App.C
TLV	Short-term value: 0.98 mg/m <sup>3</sup> , 0.15 ppm Long-term value: 0.33 mg/m <sup>3</sup> , 0.05 ppm Skin

· **Additional information:** The lists that were valid during the creation were used as basis.

### · Exposure controls

#### · Personal protective equipment:

#### · General protective and hygienic measures:

- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing.
- Wash hands before breaks and at the end of work.
- Store protective clothing separately.
- Avoid contact with the eyes and skin.

#### · Breathing equipment:

In case of brief exposure at low atmospheric levels use an approved air-purifying respiratory equipped with an organic vapor sorbent and a particle filter. In case of intensive or longer exposure use a positive pressure air-supplying respirator (air line or self-contained breathing apparatus).

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Reviewed on 01/26/2015

**Trade name: Foamsulate™ 220 Series Resin (Mid)**

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· **Protection of hands:**



Protective gloves

The workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

· **Material of gloves**

Use chemical resistant gloves classified under Standard EN374: Protective gloves against chemicals and micro-organisms. Examples of preferred glove barrier materials include: Butyl rubber, Polyethylene, EVAL, Neoprene, Nitrile, Viton. When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher is recommended.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed chemical goggles consistent with EN 166 or equivalent. Wear a face-shield which allows use of chemical goggles, or wear full-face respirator to protect face and eyes when there is any likelihood of splashes.

· **Body protection:**

Personal protective clothing for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

## 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:	Liquid
Color:	Amber colored
Odor:	Amine-like
Odor threshold:	Not determined.

· **pH-value:** Not determined.

· **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.

· **Flash point:** > 100 °C (> 212 °F)

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:**

Decomposition temperature: Not determined.

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

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Printing date 12/10/2015

Reviewed on 01/26/2015

**Trade name: Foamsulate™ 220 Series Resin (Mid)**

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- **Explosion limits:**
  - Lower:** Not determined.
  - Upper:** Not determined.
- **Vapor pressure:** Not determined.
- **Density:** Not determined.
- **Relative density:** Not determined.
- **Vapor density:** Not determined.
- **Evaporation rate:** Not determined.
- **Solubility in / Miscibility with Water:** Not miscible or difficult to mix.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
  - Dynamic:** Not determined.
  - Kinematic:** Not determined.
- **Other information:** No further relevant information available.

## 10 Stability and reactivity

- **Reactivity:** No further relevant information available.
- **Chemical stability:** This product is stable at recommended storage conditions (See Section 7).
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** Avoid moisture to protect product quality.
- **Incompatible materials:**  
Avoid contact with oxidizing materials. Avoid contact with: Strong acids. Strong bases. Avoid unintended contact with isocyanates. The reaction of polyols and isocyanates generate heat.
- **Hazardous decomposition products:** CO and CO<sub>2</sub>

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

### 940912-28-7 Polyether Polyol

Oral	LD50	1370 mg/kg (rat)
Dermal	LD50	12800 mg/kg (rabbit)

### 33329-35-0 N,N-bis[3-(dimethylamino)propyl]-N',N'-dimethylpropane-1,3-diamine

Oral	LD50	2445 mg/kg (rat)
Dermal	LD50	1150 mg/kg (rabbit)
Inhalative	LC50/4 h	1.9 mg/l (rat)

- **Primary irritant effect:**
  - **on the skin:** Irritant to skin and mucous membranes.
  - **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.

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**Trade name: Foamsulate™ 220 Series Resin (Mid)**

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· **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Toxic

Irritant

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

940912-28-7 Polyether Polyol

· **NTP (National Toxicology Program)**

940912-28-7 Polyether Polyol

· **OSHA-Ca (Occupational Safety & Health Administration)**

940912-28-7 Polyether Polyol

13674-84-5 tris(2-chlorisopropyl)-phosphate

## 12 Ecological information

· **Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **Persistence and degradability** No further relevant information available.

· **Behavior in environmental systems:**

· **Bioaccumulative potential** No further relevant information available.

· **Mobility in soil** No further relevant information available.

· **Additional ecological information:**

· **General notes:**

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

· **Waste treatment methods**

· **Recommendation:**

Waste Disposal: Incinerate in a licensed facility. Do not discharge into waterways or sewer systems.

Container Disposal: Steel drums must be emptied (as defined by RCRA, Section 261.7 or state regulations that may be more stringent) and can be sent to a licensed drum reconditioner for reuse, a scrap metal dealer, or an approved landfill. Drums destined for a scrap dealer or landfill must be punctured or crushed to prevent reuse.

· **Uncleaned packagings:**

· **Recommendation:** Disposal must be made according to official regulations.

US  
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**Trade name: Foamsulate™ 220 Series Resin (Mid)**

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## 14 Transport information

· <b>UN-Number</b>	
· <b>DOT, ADN, IMDG, IATA</b>	not regulated
· <b>UN proper shipping name</b>	
· <b>DOT, ADN, IMDG, IATA</b>	not regulated
· <b>Transport hazard class(es)</b>	
· <b>DOT</b>	DOT Non-Bulk: Not Regulated
· <b>Class</b>	not regulated
· <b>ADN/R Class:</b>	not regulated
· <b>Packing group</b>	
· <b>DOT, IMDG, IATA</b>	not regulated
· <b>Environmental hazards:</b>	
· <b>Marine pollutant:</b>	No
· <b>Special precautions for user</b>	Not applicable.
· <b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable.
· <b>UN "Model Regulation":</b>	not regulated

## 15 Regulatory information

· <b>Safety, health and environmental regulations/legislation specific for the substance or mixture</b>	
· <b>Clean Air Act</b>	
	None of the ingredients is listed.
· <b>Clean Water Act</b>	
	None of the ingredients is listed.
· <b>Sara</b>	
· <b>SARA 302/304 Extremely Hazardous Substance</b>	
	None of the ingredients is listed.
· <b>Section 355 (extremely hazardous substances):</b>	
	None of the ingredients is listed.
· <b>Section 313 (Specific toxic chemical listings):</b>	
940912-28-7	Polyether Polyol
· <b>TSCA (Toxic Substances Control Act):</b>	
	All ingredients are listed.
· <b>Massachusetts Right To Know</b>	
460-73-1	1,1,1,3,3-Pentafluoropropane
· <b>New Jersey Right To Know</b>	
112-60-7	Tetraethylene glycol
· <b>Pennsylvania Right To Know</b>	
112-60-7	Tetraethylene glycol

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Reviewed on 01/26/2015

**Trade name: Foamsulate™ 220 Series Resin (Mid)**

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· **Proposition 65**

· **Chemicals known to cause cancer:**

940912-28-7	Polyether Polyol
13674-84-5	tris(2-chlorisopropyl)-phosphate
77098-07-8	Tetrabromophthalic Acid diester/diol
460-73-1	1,1,1,3,3-Pentafluoropropane

· **Chemicals known to cause reproductive toxicity for females:**

940912-28-7	Polyether Polyol
13674-84-5	tris(2-chlorisopropyl)-phosphate

· **Chemicals known to cause reproductive toxicity for males:**

940912-28-7	Polyether Polyol
13674-84-5	tris(2-chlorisopropyl)-phosphate

· **Chemicals known to cause developmental toxicity:**

940912-28-7	Polyether Polyol
13674-84-5	tris(2-chlorisopropyl)-phosphate

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

-

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS05 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**

Polyol(s)  
N,N-bis[3-(dimethylamino)propyl]-N',N'-dimethylpropane-1,3-diamine

· **Hazard statements**

Causes skin irritation.  
Causes serious eye damage.  
May cause damage to organs.  
May cause damage to organs through prolonged or repeated exposure.

· **Precautionary statements**

Do not breathe dust/fume/gas/mist/vapors/spray.  
In case of inadequate ventilation wear respiratory protection.  
Wear protective gloves/protective clothing/eye protection/face protection.  
Wash thoroughly after handling.  
Do not eat, drink or smoke when using this product.

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Printing date 12/10/2015

Reviewed on 01/26/2015

**Trade name: Foamsulate™ 220 Series Resin (Mid)**

(Contd. of page 10)

*If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*

*Wash contaminated clothing before reuse.*

*If skin irritation or rash occurs: Get medical advice/attention.*

*If eye irritation persists: Get medical advice/attention.*

*Get medical advice/attention if you feel unwell.*

*In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.*

*IF ON SKIN: Wash with plenty of water.*

*IF exposed or concerned: Call a POISON CENTER/doctor.*

*Store in a well-ventilated place. Keep container tightly closed.*

*Dispose of contents/container in accordance with local/regional/national/international regulations.*

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information

Accella Polyurethane Systems, LLC urges each customer or recipient of this (M)SDS to study it carefully and consult

appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown on this (M)SDS. However, no warranty, express or implied is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his/her activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDS, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.

· **Department issuing SDS:** Environmental Health & Safety Department.

· **Contact:** M. Phillips

· **Date of preparation / last revision** 12/10/2015 / -

· **Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Press. Gas: Gases under pressure: Compressed gas

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Flam. Liq. 4: Flammable liquids, Hazard Category 4

Acute Tox. 4: Acute toxicity, Hazard Category 4

Acute Tox. 3: Acute toxicity, Hazard Category 3

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

STOT SE 2: Specific target organ toxicity - Single exposure, Hazard Category 2

STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

## Field Safety Data Sheet Index

### **Air Barrier**

1. Henry Air-Bloc 06
2. Henry Air-Bloc 21 FR
3. Henry Air-Bloc 21
4. Henry Air-Bloc 21S
5. Henry Air-Bloc 31MR
6. Henry Air-Bloc 32MR
7. Henry Air-Bloc 33MR
8. Henry HE574 Blueskin LVC Adhesive
9. Henry BH200SA Blueskin SA
10. Henry BH200SAL Blueskin SA LT
11. Henry Blueskin VP 100
12. Henry Blueskin VP 160
13. Henry BH300 Foilskin
14. Henry HE571 Blueskin Adhesive
15. Henry HE925 BES Sealant
16. Henry HE573 Blueskin LVC Spray Adhesive Primer
17. Henry HE022BWB Air-Bloc Liquid Flashing
18. Carlisle CCW-702 Adhesive
19. Carlisle CCW-704 Mastic
20. Carlisle CCW-705 FR-A Membrane
21. Carlisle CCW-705 LT Membrane
22. Carlisle CCW 705 Membrane
23. Carlisle Barriseal-S

24. Carlisle Barriseal – R
25. Carlisle Barritech – VP
26. Carlisle Barricoat – S
27. Carlisle Barricoat – R
28. Carlisle LM 800XL Mastic
29. Carlise CCW MiraDRI 860
30. Grace Liquid (TSL)
31. Grace Perm-A-Barrier Liquid Part A
32. Grace Perm-A-Barrier, Liquid Part B
33. Grace Procor Flushing Oil
34. Grace Perm-A-Barrier-VPL
35. Grace Waterproofing Membrane
36. Grace Bituthene Mastic
37. Grace Perm-A-Barrier-Primer-Plus
38. Grace Perm-A-Barrier-WB-Primer
39. Grace Bituthene Adhesive Primer B2 LVC
40. Grace Bituthene-Liquid-Membrane-Part A
41. Grace Bituthene-Liquid-Membrane-Part B
42. Grace Bituthene-Deck-Prep-Part A
43. Grace Bituthene-Deck-Prep-Part B
44. Grace-S100-Sealant

Issue Date 03-Dec-2015

Revision Date 03-Dec-2015

Version 1

### 1. IDENTIFICATION

**Product identifier**

**Product Name** AIR BLOC 06WB -WATERBASED

**Other means of identification**

**Product Code** HE06AB

**Synonyms** None

**Recommended use of the chemical and restrictions on use**

**Recommended Use** Adhesives and/or sealants

**Uses advised against** No information available

**Details of the supplier of the safety data sheet**

**Manufacturer Address**

HENRY COMPANY

999 N. Sepulveda Blvd., Suite 800

El Segundo, CA 90245-2716

Web Site: [www.henry.com](http://www.henry.com) [www.ca.henry.com](http://www.ca.henry.com)

**Emergency telephone number**

**Company Phone Number** 800-486-1278

**Emergency Telephone** CHEMTREC: 800-424-9300

CHEMTREC: 703-527-3887

CANUTEC: 613-966-6666

### 2. HAZARDS IDENTIFICATION

**Classification**

**OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Specific target organ toxicity (single exposure)	Category 3

**Label elements**

**Emergency Overview**

**Warning**

**Hazard statements**

Causes skin irritation

Causes serious eye irritation

May cause respiratory irritation





**Appearance** viscous**Physical state** liquid**Odor** Slight**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area

**Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention  
IF ON SKIN: Wash with plenty of soap and water  
If skin irritation occurs: Get medical advice/attention  
Take off contaminated clothing and wash before reuse  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
Call a POISON CENTER or doctor/physician if you feel unwell

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed  
Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

May be harmful in contact with skin.

**Unknown acute toxicity**

15.68775515% of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS****Substance**

Not applicable

**Mixture**

Chemical Name	CAS No	Weight-%
Asphalt *	8052-42-4	30 - 60
Water *	7732-18-5	30 - 60
Latex polymer blend *	Proprietary	5 - 10

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

**4. FIRST AID MEASURES****Description of first aid measures****General advice**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). If symptoms persist, call a physician.

**Eye contact**

Keep eye wide open while rinsing. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If symptoms persist, call a physician.

**Skin contact**

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician. Wash contaminated clothing

before reuse.

**Inhalation**

Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If symptoms persist, call a physician.

**Ingestion**

Call a physician or poison control center immediately. Do not induce vomiting without medical advice. Rinse mouth. Never give anything by mouth to an unconscious person.

**Self-protection of the first aider**

Use personal protective equipment as required.

**Most important symptoms and effects, both acute and delayed****Symptoms**

May cause redness and tearing of the eyes. Coughing and/ or wheezing. May cause skin irritation.

**Indication of any immediate medical attention and special treatment needed****Note to physicians**

Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry chemical, CO<sub>2</sub>, sand, earth, water spray or regular foam.

**Unsuitable extinguishing media** Do not use a solid water stream as it may scatter and spread fire.

**Specific hazards arising from the chemical**

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

**Explosion data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures****Personal precautions**

Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required.

**Environmental precautions****Environmental precautions**

See Section 12 for additional ecological information.

**Methods and material for containment and cleaning up****Methods for containment**

Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up**

Use personal protective equipment as required. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Take up mechanically, placing in appropriate containers for disposal.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling** Ensure adequate ventilation, especially in confined areas. Handle in accordance with good industrial hygiene and safety practice. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep container tightly closed in a dry and well-ventilated place. Keep in properly labeled containers.

**Incompatible materials** Strong oxidizing agents. Strong acids. Strong bases.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Asphalt 8052-42-4	TWA: 0.5 mg/m <sup>3</sup> benzene soluble aerosol fume, inhalable fraction	-	Ceiling: 5 mg/m <sup>3</sup> fume 15 min

NIOSH IDLH Immediately Dangerous to Life or Health

**Appropriate engineering controls**

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Wear protective gloves and protective clothing.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

<b>Physical state</b>	liquid	<b>Odor</b>	Slight
<b>Appearance</b>	viscous	<b>Odor threshold</b>	No information available
<b>Color</b>	black		
<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>	
<b>pH</b>	6-10		
<b>Melting point / freezing point</b>	No information available		
<b>Boiling point / boiling range</b>	> 100 °C / 212 °F		
<b>Flash point</b>	> 100 °C / 212 °F	Tag Closed Cup	
<b>Evaporation rate</b>	No information available		
<b>Flammability (solid, gas)</b>	No information available		
<b>Flammability Limit in Air</b>			
<b>Upper flammability limit:</b>	No information available		
<b>Lower flammability limit:</b>	No information available		
<b>Vapor pressure</b>	No information available		
<b>Vapor density</b>	No information available		
<b>Relative density</b>	1.0 - 1.2		
<b>Water solubility</b>	dispersible		

<b>Solubility in other solvents</b>	No information available	
<b>Partition coefficient</b>	No information available	
<b>Autoignition temperature</b>	No information available	
<b>Decomposition temperature</b>	No information available	
<b>Kinematic viscosity</b>	> 100 mm <sup>2</sup> /s	@ 40 °C
<b>Dynamic viscosity</b>	No information available	
<b>Explosive properties</b>	Not an explosive	
<b>Oxidizing properties</b>	Not applicable	

**Other Information**

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC Content (%)</b>	No information available
<b>Density</b>	No information available
<b>Bulk density</b>	No information available

**10. STABILITY AND REACTIVITY****Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

elevated temperature. Incompatible materials. Keep at &gt;0 °C.

**Incompatible materials**

Strong oxidizing agents. Strong acids. Strong bases.

**Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Product Information**

<b>Inhalation</b>	May cause irritation of respiratory tract.
<b>Eye contact</b>	Severely irritating to eyes.
<b>Skin contact</b>	Irritating to skin.
<b>Ingestion</b>	No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Asphalt 8052-42-4	> 5000 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	-
Water 7732-18-5	> 90 mL/kg ( Rat )	-	-

**Information on toxicological effects**

<b>Symptoms</b>	May cause redness and tearing of the eyes. Coughing and/ or wheezing. May cause skin irritation.
-----------------	--

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<b>Sensitization</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.

**Carcinogenicity**

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Asphalt 8052-42-4	-	Group 2B	-	X

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

**Reproductive toxicity**

No information available.

**STOT - single exposure**

Target Organs. Respiratory system. Eyes. Skin.

**STOT - repeated exposure**

No information available.

**Target Organ Effects**

Eyes, Respiratory system, Skin, lungs.

**Aspiration hazard**

No information available.

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 7,823.00 mg/kg

ATEmix (dermal) 3,158.00 mg/kg

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

99.68347 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

**Persistence and degradability**

No information available.

**Bioaccumulation**

Chemical Name	Partition coefficient
Asphalt 8052-42-4	6

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS****Waste treatment methods****Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging**

Do not reuse container.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

**14. TRANSPORT INFORMATION****DOT**

Not regulated

**TDG**

Not regulated

**IATA**

Not regulated

**IMDG**

Not regulated

## 15. REGULATORY INFORMATION

### International Inventories

<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	Complies
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies

### Legend:

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

### US Federal Regulations

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

#### SARA 311/312 Hazard Categories

<b>Acute health hazard</b>	Yes
<b>Chronic Health Hazard</b>	No
<b>Fire hazard</b>	No
<b>Sudden release of pressure hazard</b>	No
<b>Reactive Hazard</b>	No

#### CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

#### CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

### US State Regulations

#### California Proposition 65

This product does not contain any Proposition 65 chemicals

#### U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Asphalt 8052-42-4	X	X	X
Potassium hydroxide 1310-58-3	X	X	X

#### U.S. EPA Label Information

**EPA Pesticide Registration Number** Not applicable

## 16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

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<u>NFPA</u>	Health hazards 2	Flammability 0	Instability 0	Physical and Chemical Properties -
<u>HMIS</u>	Health hazards 2	Flammability 0	Physical hazards 0	Personal protection X

Issue Date 03-Dec-2015

Revision Date 03-Dec-2015

**Revision Note**

No information available

**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**



# SAFETY DATA SHEET

Issue Date 20-Dec-2015

Revision Date 11-Mar-2016

Version 1

## 1. IDENTIFICATION

### Product identifier

**Product Name** HENRY AIR BLOC 21 FR TROWEL GRADE

### Other means of identification

**Product Code** HE021FR

**UN/ID no** UN1133

**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended Use** Adhesives and/or sealants

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### **Manufacturer Address**

HENRY COMPANY

999 N. Sepulveda Blvd., Suite 800

El Segundo, CA 90245-2716

Web Site: [www.henry.com](http://www.henry.com) [www.ca.henry.com](http://www.ca.henry.com)

### Emergency telephone number

**Company Phone Number** 800-486-1278

**Emergency Telephone** CHEMTREC: 800-424-9300

CHEMTREC: 703-527-3887

CANUTEC: 613-966-6666

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

### Label elements

#### **Emergency Overview**

#### **Danger**

#### **Hazard statements**

Causes skin irritation

Causes serious eye irritation

May cause drowsiness or dizziness

Highly flammable liquid and vapor



**Appearance** cream paste**Physical state** liquid**Odor** Strong Solvent**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Use only outdoors or in a well-ventilated area  
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
 Keep container tightly closed  
 Ground/bond container and receiving equipment  
 Use explosion-proof electrical/ ventilating/ lighting/ equipment  
 Use only non-sparking tools  
 Take precautionary measures against static discharge  
 Keep cool

**Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 If eye irritation persists: Get medical advice/attention  
 If skin irritation occurs: Get medical advice/attention  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
 Wash contaminated clothing before reuse  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 Call a POISON CENTER or doctor/physician if you feel unwell  
 In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed  
 Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

Toxic to aquatic life with long lasting effects.

**Unknown acute toxicity**

34.5336% of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance**

Not applicable

**Mixture**

Chemical Name	CAS No	Weight-%
Aluminum hydroxide (Al(OH) <sub>3</sub> ) *	21645-51-2	30 - 60
Naphtha, petroleum, hydrotreated light *	64742-49-0	10 - 30

Synthetic Polymer Blend *	Proprietary	10 - 30
Polymer Blend *	Proprietary	5 - 10
Bentonite *	1302-78-9	3 - 7
Paraffin oils *	8012-95-1	1 - 5

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

Product containing mineral oil with less than 3% DMSO extract as measured by IP 346

#### 4. FIRST AID MEASURES

##### Description of first aid measures

<b>General advice</b>	In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). If symptoms persist, call a physician.
<b>Eye contact</b>	Keep eye wide open while rinsing. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If symptoms persist, call a physician.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician. Wash contaminated clothing before reuse.
<b>Inhalation</b>	Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If symptoms persist, call a physician.
<b>Ingestion</b>	Call a physician or poison control center immediately. Do not induce vomiting without medical advice. Rinse mouth. Never give anything by mouth to an unconscious person.
<b>Self-protection of the first aider</b>	Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

##### Most important symptoms and effects, both acute and delayed

<b>Symptoms</b>	May cause redness and tearing of the eyes. Coughing and/ or wheezing. May cause skin irritation. Drowsiness. Dizziness.
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##### Indication of any immediate medical attention and special treatment needed

<b>Note to physicians</b>	Keep victim warm and quiet. Treat symptomatically.
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#### 5. FIRE-FIGHTING MEASURES

##### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry chemical, CO2, sand, earth, water spray or regular foam.

**Unsuitable extinguishing media** Do not use a solid water stream as it may scatter and spread fire.

##### Specific hazards arising from the chemical

Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Thermal decomposition can lead to release of irritating and toxic gases and vapors.

##### Explosion data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

##### Protective equipment and precautions for firefighters

Move containers from fire area if you can do it without risk.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required. Keep people away from and upwind of spill/leak.

**Other Information** Water spray may reduce vapor; but may not prevent ignition in closed spaces.

### Environmental precautions

**Environmental precautions** Prevent entry into waterways, sewers, basements or confined areas.

### Methods and material for containment and cleaning up

**Methods for containment** A vapor suppressing foam may be used to reduce vapors. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

**Methods for cleaning up** Use clean non-sparking tools to collect absorbed material. Dike far ahead of liquid spill for later disposal.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling** Ensure adequate ventilation, especially in confined areas. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. All equipment used when handling the product must be grounded. Use with local exhaust ventilation. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).

**Incompatible materials** Strong acids. Strong oxidizing agents. Strong bases.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Aluminum hydroxide (Al(OH) <sub>3</sub> ) 21645-51-2	TWA: 1 mg/m <sup>3</sup> respirable fraction	-	-
Bentonite 1302-78-9	TWA: 1 mg/m <sup>3</sup> respirable fraction	-	-
Paraffin oils 8012-95-1	TWA: 5 mg/m <sup>3</sup> inhalable fraction excluding metal working fluids, highly & severely refined TWA: 5 mg/m <sup>3</sup> inhalable fraction excluding metal working fluids	TWA: 5 mg/m <sup>3</sup>	IDLH: 2500 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>

NIOSH IDLH *Immediately Dangerous to Life or Health*

### Appropriate engineering controls

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles).
<b>Skin and body protection</b>	Wear protective gloves and protective clothing.
<b>Respiratory protection</b>	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
<b>General Hygiene Considerations</b>	When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

<b>Physical state</b>	liquid	<b>Odor</b>	Strong Solvent
<b>Appearance</b>	cream paste	<b>Odor threshold</b>	No information available
<b>Color</b>	white beige		
<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>	
<b>pH</b>	No information available		
<b>Melting point / freezing point</b>	No information available		
<b>Boiling point / boiling range</b>	> 64 °C / 147 °F		
<b>Flash point</b>	-18 °C / 0 °F	Tag Closed Cup	
<b>Evaporation rate</b>	> 1		
<b>Flammability (solid, gas)</b>	No information available		
<b>Flammability Limit in Air</b>			
<b>Upper flammability limit:</b>	11.6		
<b>Lower flammability limit:</b>	1.8		
<b>Vapor pressure</b>	20 kPa	@ 25 °C	
<b>Vapor density</b>	3		
<b>Relative density</b>	1.25		
<b>Water solubility</b>	Insoluble in water		
<b>Solubility in other solvents</b>	No information available		
<b>Partition coefficient</b>	No information available		
<b>Autoignition temperature</b>	257 °C / 495 °F		
<b>Decomposition temperature</b>	No information available		
<b>Kinematic viscosity</b>	> 100 mm <sup>2</sup> /s	@ 40 °C	
<b>Dynamic viscosity</b>	No information available		
<b>Explosive properties</b>	Not an explosive		
<b>Oxidizing properties</b>	Not applicable		

**Other Information**

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC Content (%)</b>	No information available
<b>Density</b>	No information available
<b>Bulk density</b>	No information available

**10. STABILITY AND REACTIVITY****Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Heat, flames and sparks. Incompatible materials.

**Incompatible materials**

Strong acids. Strong oxidizing agents. Strong bases.

**Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure****Product Information**

<b>Inhalation</b>	May cause drowsiness or dizziness.
<b>Eye contact</b>	Irritating to eyes.
<b>Skin contact</b>	Irritating to skin.
<b>Ingestion</b>	No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Aluminum hydroxide (Al(OH) <sub>3</sub> ) 21645-51-2	> 5000 mg/kg ( Rat )	-	-
Naphtha, petroleum, hydrotreated light 64742-49-0	> 5000 mg/kg ( Rat )	> 3160 mg/kg ( Rabbit )	= 73680 ppm ( Rat ) 4 h
Bentonite 1302-78-9	> 5000 mg/kg ( Rat )	-	-
Paraffin oils 8012-95-1	> 24 g/kg ( Rat )	-	= 2062 ppm ( Rat ) 4 h

**Information on toxicological effects**

**Symptoms** May cause redness and tearing of the eyes. Vapors may cause drowsiness and dizziness. Coughing and/ or wheezing. May cause skin irritation.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** No information available.  
**Germ cell mutagenicity** No information available.  
**Carcinogenicity** The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346. This note applies only to certain complex oil derived substances in Annex I. The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Polymer Blend	-	Group 3	-	-
Paraffin oils 8012-95-1	A2	Group 1 Group 3	-	X

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Not classifiable as a human carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

**Reproductive toxicity** No information available.  
**STOT - single exposure** Target Organs. Respiratory system. Central nervous system.  
**STOT - repeated exposure** No information available.  
**Chronic toxicity** Avoid repeated exposure.  
**Target Organ Effects** Central nervous system, Eyes, Peripheral Nervous System (PNS), Respiratory system, Skin.

<b>Neurological effects</b>	Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal.
<b>Aspiration hazard</b>	No information available.

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document .

<b>ATEmix (oral)</b>	67,273.00 mg/kg
<b>ATEmix (inhalation-dust/mist)</b>	1,271.20 mg/l

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Toxic to aquatic life with long lasting effects

34.56195 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS****Waste treatment methods**

<b>Disposal of wastes</b>	This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).
<b>Contaminated packaging</b>	Do not reuse container.
<b>US EPA Waste Number</b>	D001

This product contains one or more substances that are listed with the State of California as a hazardous waste.

**14. TRANSPORT INFORMATION****DOT**

<b>UN/ID no</b>	UN1133
<b>Proper shipping name</b>	Adhesives
<b>Hazard Class</b>	3
<b>Packing Group</b>	II
<b>Special Provisions</b>	149, B52, IB2, T4, TP1, TP8
<b>Description</b>	UN1133, Adhesives, 3, II
<b>Emergency Response Guide Number</b>	128

**TDG**

<b>UN/ID no</b>	UN1133
<b>Proper shipping name</b>	Adhesives
<b>Hazard Class</b>	3
<b>Packing Group</b>	II
<b>Description</b>	UN1133, Adhesives, 3, II

**IATA**

<b>UN/ID no</b>	UN1133
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<b>Proper shipping name</b>	Adhesives
<b>Hazard Class</b>	3
<b>Packing Group</b>	II
<b>ERG Code</b>	3L
<b>Special Provisions</b>	A3
<b>Description</b>	UN1133, Adhesives, 3, II

**IMDG**

<b>UN/ID no</b>	UN1133
<b>Proper shipping name</b>	Adhesives
<b>Hazard Class</b>	3
<b>Packing Group</b>	II
<b>EmS-No</b>	F-E, S-D
<b>Marine pollutant</b>	This product contains a chemical which is listed as a marine pollutant according to IMDG/IMO
<b>Description</b>	UN1133, Adhesives, 3, II, (-18°C c.c.)

<b>15. REGULATORY INFORMATION</b>
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**International Inventories**

<b>TSCA</b>	Complies
<b>DSL/NDL</b>	Complies
<b>EINECS/ELINCS</b>	Complies
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

<b>Acute health hazard</b>	Yes
<b>Chronic Health Hazard</b>	No
<b>Fire hazard</b>	Yes
<b>Sudden release of pressure hazard</b>	No
<b>Reactive Hazard</b>	No

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**US State Regulations**

**California Proposition 65**

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
Quartz - 14808-60-7	Carcinogen

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Paraffin oils 8012-95-1	X	X	X
Quartz 14808-60-7	X	X	X

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

<b>NFPA</b>	Health hazards 2	Flammability 3	Instability 0	Physical and Chemical Properties -
<b>HMIS</b>	Health hazards 2	Flammability 3	Physical hazards 0	Personal protection X

Issue Date 20-Dec-2015

Revision Date 11-Mar-2016

**Revision Note**

No information available

**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**





# SAFETY DATA SHEET

Issue Date 09-Jul-2015

Revision Date 09-Jul-2015

Version 1

## 1. IDENTIFICATION

### Product identifier

**Product Name** AIR-BLOC 21 - TROWEL GRADE

### Other means of identification

**Product Code** HE021AA

**UN/ID no** UN1133

**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended Use** Air barrier insulation adhesive.

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### **Manufacturer Address**

HENRY COMPANY

999 N. Sepulveda Blvd., Suite 800

El Segundo, CA 90245-2716

Company Contact: Technical Services

Telephone Number: 800-486-1278

Web Site: www.henry.com www.ca.henry.com

### Emergency telephone number

**Emergency Telephone** CHEMTREC: 800-424-9300

CHEMTREC: 703-527-3887

CANUTEC: 613-966-6666

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

### Label elements

#### **Emergency Overview**

#### **Danger**

#### **Hazard statements**

Causes skin irritation

Causes serious eye irritation

May cause respiratory irritation. May cause drowsiness or dizziness

Highly flammable liquid and vapor

**Appearance** viscous cream**Physical state** liquid**Odor** Petroleum distillates**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Use only outdoors or in a well-ventilated area  
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
 Keep container tightly closed  
 Ground/bond container and receiving equipment  
 Use explosion-proof electrical/ ventilating / lighting/ mixing / equipment  
 Use only non-sparking tools  
 Take precautionary measures against static discharge  
 Keep cool

**Precautionary Statements - Response**

Specific treatment (see .? on this label)  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 If eye irritation persists: Get medical advice/attention  
 If skin irritation occurs: Get medical advice/attention  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
 Wash contaminated clothing before reuse  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 Call a POISON CENTER or doctor/physician if you feel unwell  
 In case of fire: Use CO2, dry chemical, or foam for extinction

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed  
 Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOc)**

Not applicable

**Other Information**

May be harmful in contact with skin Toxic to aquatic life with long lasting effects Toxic to aquatic life

Unknown acute toxicity 72% of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance**

Chemical Name	CAS No	Weight-%	Trade Secret
Calcium Carbonate	1317-65-3	30 - 60	*
Naphtha, petroleum, hydrotreated light	64742-49-0	10 - 30	*
Synthetic Polymer Blend	Proprietary	10 - 30	*
Petroleum distillates, solvent dewaxed heavy	64742-65-0	1 - 5	*

paraffinic - DMOS-extract < 3%			
Bentonite	1302-78-9	1 - 5	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

#### 4. FIRST AID MEASURES

##### Description of first aid measures

<b>Eye contact</b>	Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists: Get medical advice/attention.
<b>Skin contact</b>	Wash with soap and water. If symptoms persist, call a physician.
<b>Inhalation</b>	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a physician.
<b>Ingestion</b>	Call a physician or poison control center immediately. Do not induce vomiting without medical advice.

##### Most important symptoms and effects, both acute and delayed

<b>Symptoms</b>	Drowsiness. Dizziness.
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##### Indication of any immediate medical attention and special treatment needed

<b>Note to physicians</b>	Treat symptomatically.
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#### 5. FIRE-FIGHTING MEASURES

##### Suitable extinguishing media

Dry chemical, CO<sub>2</sub>, water spray or alcohol-resistant foam.

**Unsuitable extinguishing media** Do not use a solid water stream as it may scatter and spread fire.

##### Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

##### Explosion data

**Sensitivity to Mechanical Impact** Not applicable.

**Sensitivity to Static Discharge** May be ignited by heat, sparks or flames.

##### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal precautions, protective equipment and emergency procedures

<b>Personal precautions</b>	Ensure adequate ventilation, especially in confined areas.
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##### Environmental precautions

<b>Environmental precautions</b>	See Section 12 for additional ecological information.
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##### Methods and material for containment and cleaning up

<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so.
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**Methods for cleaning up** Pick up and transfer to properly labeled containers.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible materials** Strong oxidizing agents. Strong acids. Strong bases.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Calcium Carbonate 1317-65-3	-	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 15 mg/m <sup>3</sup> total dust (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 10 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable dust
Bentonite 1302-78-9	TWA: 1 mg/m <sup>3</sup> respirable fraction	-	-

NIOSH IDLH Immediately Dangerous to Life or Health

**Other Information** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

### Appropriate engineering controls

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Wear protective gloves and protective clothing.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	liquid	<b>Odor</b>	Petroleum distillates
<b>Appearance</b>	viscous cream	<b>Odor threshold</b>	No information available
<b>Color</b>	beige		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	
Melting point / freezing point	No information available	
Boiling point / boiling range	90 °C / 194 °F	
Flash point	-7 °C / 19 °F	
Evaporation rate	< 1	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	9%	
Lower flammability limit:	1%	
Vapor pressure	>50 mmHg @ 25C	
Vapor density	>1	Note - (Air = 1)
Relative density	1.25	
Water solubility	Insoluble in water	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	216 °C / 421 °F	
Decomposition temperature	No information available	
Kinematic viscosity	>20 CSt @ 40C	
Dynamic viscosity	No information available	
Explosive properties	Not an explosive	
Oxidizing properties	Not applicable	

**Other Information**

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	No information available

## 10. STABILITY AND REACTIVITY

**Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Heat, flames and sparks.

**Incompatible materials**

Strong oxidizing agents. Strong acids. Strong bases.

**Hazardous Decomposition Products**Thermal decomposition can lead to release of irritating and toxic gases and vapors. Carbon dioxide (CO<sub>2</sub>). Carbon monoxide.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

<b>Product Information</b>	No data available
<b>Inhalation</b>	May cause irritation of respiratory tract. May cause drowsiness or dizziness.
<b>Eye contact</b>	Irritating to eyes.
<b>Skin contact</b>	Irritating to skin.
<b>Ingestion</b>	No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Naphtha, petroleum, hydrotreated light 64742-49-0	> 5000 mg/kg ( Rat )	> 3160 mg/kg ( Rabbit )	= 73680 ppm ( Rat ) 4 h
Bentonite 1302-78-9	> 5000 mg/kg ( Rat )	-	-

**Information on toxicological effects****Symptoms**

Vapors may cause drowsiness and dizziness. Redness.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Sensitization**

No information available.

**Germ cell mutagenicity**

No information available.

**Carcinogenicity**

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Petroleum distillates, solvent dewaxed heavy paraffinic - DMOS-extract < 3% 64742-65-0	A2	Group 1	-	X

**ACGIH (American Conference of Governmental Industrial Hygienists)**

A2 - Suspected Human Carcinogen

**IARC (International Agency for Research on Cancer)**

Group 1 - Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

Not classifiable as a human carcinogen

**OSHA (Occupational Safety and Health Administration of the US Department of Labor)**

X - Present

**Reproductive toxicity**

No information available.

**STOT - single exposure**

Target Organs. Respiratory system. Central nervous system.

**STOT - repeated exposure**

No information available.

**Target Organ Effects**

Eyes, Respiratory system, Skin.

**Aspiration hazard**

No information available.

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 5,606.00 mg/kg

ATEmix (dermal) 2,242.00 mg/kg

ATEmix (inhalation-dust/mist) 4.53 mg/kg

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

72 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Naphtha, petroleum, hydrotreated light 64742-49-0	-	-	2.6: 96 h Chaetogammarus marinus mg/L LC50
Bentonite 1302-78-9	-	19000: 96 h Oncorhynchus mykiss mg/L LC50 static 8.0 - 19.0: 96 h Salmo gairdneri g/L LC50	-
Petroleum distillates, solvent dewaxed heavy paraffinic - DMOS-extract < 3% 64742-65-0	-	5000: 96 h Oncorhynchus mykiss mg/L LC50	1000: 48 h Daphnia magna mg/L EC50

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS****Waste treatment methods****Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging**

Do not reuse container.

**14. TRANSPORT INFORMATION****DOT**

UN/ID no	UN1133
Proper shipping name	Adhesives
Hazard Class	3
Packing Group	II

**TDG**

UN/ID no	Not regulated
UN/ID no	UN1133
Proper shipping name	Adhesives
Hazard Class	3
Packing Group	II

**IATA**

UN/ID no	UN1133
Proper shipping name	Adhesives
Hazard Class	3
Packing Group	II

**IMDG**

UN/ID no	UN1133
Proper shipping name	Adhesives
Hazard Class	3
Packing Group	II

**15. REGULATORY INFORMATION****International Inventories**

TSCA	Complies
DSL/NDL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies

PICCS Complies  
AICS Complies

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List  
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
 ENCS - Japan Existing and New Chemical Substances  
 IECSC - China Inventory of Existing Chemical Substances  
 KECL - Korean Existing and Evaluated Chemical Substances  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances  
 AICS - Australian Inventory of Chemical Substances

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**US State Regulations****California Proposition 65**

This product contains chemicals known to the state of California to cause cancer.

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Calcium Carbonate 1317-65-3	X	X	X

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

<b><u>NFPA</u></b>	Health hazards 2	Flammability 2	Instability 0	Physical and Chemical Properties -
<b><u>HMIS</u></b>	Health hazards 2	Flammability 2	Physical hazards 0	Personal protection X

Issue Date 09-Jul-2015  
 Revision Date 09-Jul-2015

Revision Note  
 No information available

**Disclaimer**



The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**



# SAFETY DATA SHEET

Issue Date 09-Jul-2015

Revision Date 09-Jul-2015

Version 1

## 1. IDENTIFICATION

### Product identifier

**Product Name** AIRBLOC 21S – SPRAY GRADE

### Other means of identification

**Product Code** HE021SG

**UN/ID no** UN1133

**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended Use** Rubberized liquid vapor/air barrier.

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### **Manufacturer Address**

HENRY COMPANY

999 N. Sepulveda Blvd., Suite 800

El Segundo, CA 90245-2716

Company Contact: Technical Services

Telephone Number: 800-486-1278

Web Site: [www.henry.com](http://www.henry.com) [www.ca.henry.com](http://www.ca.henry.com)

### Emergency telephone number

**Emergency Telephone** CHEMTREC: 800-424-9300

CHEMTREC: 703-527-3887

CANUTEC: 613-966-6666

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 3

### Label elements

#### **Emergency Overview**

#### **Warning**

#### **Hazard statements**

Causes skin irritation

Causes serious eye irritation

May cause respiratory irritation. May cause drowsiness or dizziness

Flammable liquid and vapor

**Appearance** viscous cream**Physical state** liquid**Odor** Petroleum distillates**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Use only outdoors or in a well-ventilated area  
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
 Keep container tightly closed  
 Ground/bond container and receiving equipment  
 Use explosion-proof electrical/ ventilating / lighting/ mixing / equipment  
 Use only non-sparking tools  
 Take precautionary measures against static discharge  
 Keep cool

**Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 If eye irritation persists: Get medical advice/attention  
 If skin irritation occurs: Get medical advice/attention  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
 Wash contaminated clothing before reuse  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 Call a POISON CENTER or doctor/physician if you feel unwell  
 In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed  
 Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

May be harmful in contact with skin Toxic to aquatic life with long lasting effects Toxic to aquatic life

Unknown acute toxicity 72% of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance**

Chemical Name	CAS No	Weight-%	Trade Secret
Mineral Spirits	64742-47-8	10 - 30	*
Calcium Carbonate	1317-65-3	10 - 30	*
Synthetic Polymer Blend	Proprietary	10 - 30	*
Epoxidized Soybean Oil	8013-07-8	10 - 30	*

Rubber Compounds	Proprietary	5 - 10	*
Petroleum distillates, solvent dewaxed heavy paraffinic - DMOS-extract < 3%	64742-65-0	1 - 5	*
Attapulgate	12174-11-7	1 - 5	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

#### 4. FIRST AID MEASURES

##### Description of first aid measures

<b>Eye contact</b>	Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists: Get medical advice/attention.
<b>Skin contact</b>	Wash with soap and water. If symptoms persist, call a physician.
<b>Inhalation</b>	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a physician.
<b>Ingestion</b>	Call a physician or poison control center immediately. Do not induce vomiting without medical advice.

##### Most important symptoms and effects, both acute and delayed

<b>Symptoms</b>	Drowsiness. Dizziness.
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##### Indication of any immediate medical attention and special treatment needed

<b>Note to physicians</b>	Treat symptomatically.
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#### 5. FIRE-FIGHTING MEASURES

##### Suitable extinguishing media

Dry chemical, CO<sub>2</sub>, water spray or alcohol-resistant foam.

**Unsuitable extinguishing media** Do not use a solid water stream as it may scatter and spread fire.

##### Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

##### Explosion data

**Sensitivity to Mechanical Impact** Not applicable.

**Sensitivity to Static Discharge** May be ignited by heat, sparks or flames.

##### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal precautions, protective equipment and emergency procedures

<b>Personal precautions</b>	Ensure adequate ventilation, especially in confined areas.
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##### Environmental precautions

<b>Environmental precautions</b>	See Section 12 for additional ecological information.
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##### Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible materials** Strong oxidizing agents. Strong acids. Strong bases.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Calcium Carbonate 1317-65-3	-	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 15 mg/m <sup>3</sup> total dust (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 10 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable dust
Attapulgate 12174-11-7	TWA: 1 mg/m <sup>3</sup> respirable fraction	-	-

*NIOSH IDLH Immediately Dangerous to Life or Health*

**Other Information** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

### Appropriate engineering controls

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Wear protective gloves and protective clothing.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	liquid	<b>Odor</b>	Petroleum distillates
<b>Appearance</b>	viscous cream		

Color	beige	Odor threshold	No information available
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<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	
Melting point / freezing point	No information available	
Boiling point / boiling range	155 °C / 311 °F	
Flash point	42 °C / 108 °F	
Evaporation rate	< 1	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	9%	
Lower flammability limit:	1%	
Vapor pressure	1.1 mmHg @ 25C	
Vapor density	>1	Note - (Air = 1)
Relative density	1.12	
Water solubility	Insoluble in water	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	216 °C / 421 °F	
Decomposition temperature	No information available	
Kinematic viscosity	>20 CSt @ 40C	
Dynamic viscosity	No information available	
Explosive properties	Not an explosive	
Oxidizing properties	Not applicable	

**Other Information**

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	No information available

## 10. STABILITY AND REACTIVITY

**Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Heat, flames and sparks.

**Incompatible materials**

Strong oxidizing agents. Strong acids. Strong bases.

**Hazardous Decomposition Products**Thermal decomposition can lead to release of irritating and toxic gases and vapors. Carbon dioxide (CO<sub>2</sub>). Carbon monoxide.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

Product Information	No data available
Inhalation	May cause irritation of respiratory tract. May cause drowsiness or dizziness.
Eye contact	Irritating to eyes.
Skin contact	Irritating to skin.

**Ingestion**

No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Mineral Spirits 64742-47-8	> 5000 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	> 5.2 mg/L ( Rat ) 4 h

**Information on toxicological effects****Symptoms**

Vapors may cause drowsiness and dizziness. Redness.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Sensitization**

No information available.

**Germ cell mutagenicity**

No information available.

**Carcinogenicity**

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Petroleum distillates, solvent dewaxed heavy paraffinic - DMOS-extract < 3% 64742-65-0	A2	Group 1	-	X
Attapulgate 12174-11-7	-	Group 2B Group 3	-	X

**ACGIH (American Conference of Governmental Industrial Hygienists)**

A2 - Suspected Human Carcinogen

**IARC (International Agency for Research on Cancer)**

Group 1 - Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

Not classifiable as a human carcinogen

**OSHA (Occupational Safety and Health Administration of the US Department of Labor)**

X - Present

**Reproductive toxicity**

No information available.

**STOT - single exposure**

Target Organs. Respiratory system. Central nervous system.

**STOT - repeated exposure**

No information available.

**Target Organ Effects**

Eyes, Respiratory system, Skin.

**Aspiration hazard**

No information available.

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 5,606.00 mg/kg

ATEmix (dermal) 2,242.00 mg/kg

ATEmix (inhalation-dust/mist) 4.53 mg/kg

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

72 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Mineral Spirits 64742-47-8	-	45: 96 h Pimephales promelas mg/L LC50 flow-through 2.2: 96 h Lepomis macrochirus mg/L LC50 static 2.4: 96 h Oncorhynchus mykiss mg/L LC50 static	4720: 96 h Den-dronereides heteropoda mg/L LC50
Petroleum distillates, solvent dewaxed heavy paraffinic - DMOS-extract < 3% 64742-65-0	-	5000: 96 h Oncorhynchus mykiss mg/L LC50	1000: 48 h Daphnia magna mg/L EC50

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS****Waste treatment methods****Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging**

Do not reuse container.

**14. TRANSPORT INFORMATION****DOT**

UN/ID no	UN1133
Proper shipping name	Adhesives
Hazard Class	3
Packing Group	III

**TDG**

UN/ID no	Not regulated
UN/ID no	UN1133
Proper shipping name	Adhesives
Hazard Class	3
Packing Group	III

**IATA**

UN/ID no	UN1133
Proper shipping name	Adhesives
Hazard Class	3
Packing Group	III

**IMDG**

UN/ID no	UN1133
Proper shipping name	Adhesives
Hazard Class	3
Packing Group	III

**15. REGULATORY INFORMATION****International Inventories**

TSCA	Complies
DSL/NDL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies



PICCS Complies  
AICS Complies

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List  
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
 ENCS - Japan Existing and New Chemical Substances  
 IECSC - China Inventory of Existing Chemical Substances  
 KECL - Korean Existing and Evaluated Chemical Substances  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances  
 AICS - Australian Inventory of Chemical Substances

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**US State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
Attapulgate - 12174-11-7	Carcinogen

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Calcium Carbonate 1317-65-3	X	X	X

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

<b><u>NFPA</u></b>	Health hazards 2	Flammability 2	Instability 0	Physical and Chemical Properties -
<b><u>HMIS</u></b>	Health hazards 2	Flammability 2	Physical hazards 0	Personal protection X

Issue Date 09-Jul-2015  
 Revision Date 09-Jul-2015  
 Revision Note

No information available

**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**



# SAFETY DATA SHEET

Issue Date 10-May-2015

Revision Date 10-May-2015

Version 1

## 1. IDENTIFICATION

### Product identifier

**Product Name** AIR-BLOC 31MR VAPOR PERMEABLE EMULSION AIR BARRIER MEMBRANE

### Other means of identification

**Product Code** HE031

**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended Use** Sealant.

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### **Manufacturer Address**

HENRY COMPANY

999 N. Sepulveda Blvd., Suite 800

El Segundo, CA 90245-2716

Company Contact: Technical Services

Telephone Number: 800-486-1278

Web Site: [www.henry.com](http://www.henry.com) [www.ca.henry.com](http://www.ca.henry.com)

### Emergency telephone number

**Emergency Telephone** CHEMTREC: 800-424-9300

CHEMTREC: 703-527-3887

CANUTEC: 613-966-6666

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Not classified
Acute toxicity - Dermal	Not classified
Acute toxicity - Inhalation (Gases)	Not classified
Acute toxicity - Inhalation (Vapors)	Not classified
Acute toxicity - Inhalation (Dusts/Mists)	Not classified
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Respiratory sensitization	Not classified
Skin sensitization	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Not classified
Aspiration toxicity	Not classified

### Label elements

#### **Emergency Overview**

**Warning**

**Hazard statements**

Causes skin irritation  
Causes serious eye irritation  
May cause respiratory irritation



**Appearance** White, viscous

**Physical state** liquid

**Odor** Slight

**Precautionary Statements - Prevention**

Wear protective gloves/protective clothing/eye protection/face protection  
Wash hands thoroughly after handling  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention  
IF ON SKIN: Wash with plenty of soap and water  
If skin irritation occurs: Get medical advice/attention  
Wash contaminated clothing before reuse  
IF INHALED: Call a POISON CENTER or doctor if you feel unwell

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed  
Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

Respirable silica (quartz) is classified as carcinogenic by: IARC (Group 1 - human carcinogen); NTP (known carcinogen); and ACGIH (Group 2A - suspected human carcinogen). This product is in a form that makes exposure to respirable silica unlikely when it is applied as directed.

Unknown acute toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Substance**

Chemical Name	CAS No.	Weight-%	Trade Secret
Water	7732-18-5	20 - 40	*
Calcium Carbonate	1317-65-3	20 - 40	*
Acrylic Polymers	NA - Mixture	10 - 30	*
Titanium Dioxide	13463-67-7	1 - 10	*

Silica, Quartz	14808-60-7	0.1 - 1	*
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\*The exact percentage (concentration) of composition has been withheld as a trade secret.

#### 4. FIRST AID MEASURES

##### Description of first aid measures

Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin contact	Wash skin with soap and water.
Inhalation	Remove to fresh air.
Ingestion	Clean mouth with water and drink afterwards plenty of water.

##### Most important symptoms and effects, both acute and delayed

Symptoms	No information available.
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##### Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.
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#### 5. FIRE-FIGHTING MEASURES

##### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** CAUTION: Use of water spray when fighting fire may be inefficient.

##### Specific hazards arising from the chemical

No information available.

##### Explosion data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

##### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure adequate ventilation, especially in confined areas.
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##### Environmental precautions

Environmental precautions	See Section 12 for additional ecological information.
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##### Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so.
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Methods for cleaning up	Pick up and transfer to properly labeled containers.
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## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible materials** None known based on information supplied.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Titanium Dioxide 13463-67-7	-	TWA: 15 mg/m <sup>3</sup> total dust (vacated) TWA: 10 mg/m <sup>3</sup> total dust	-
Calcium carbonate 1317-65-3	-	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 15 mg/m <sup>3</sup> total dust (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 10 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable dust

### Appropriate engineering controls

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Wear protective gloves and protective clothing.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	liquid	<b>Odor</b>	Slight
<b>Appearance</b>	viscous	<b>Odor threshold</b>	No information available
<b>Color</b>	white		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	6-11	
<b>Melting point / freezing point</b>	No information available	
<b>Boiling point / boiling range</b>	> 100 °C	

Flash point	> 100 °C
Evaporation rate	No information available
Flammability (solid, gas)	No information available
Flammability Limit in Air	
Upper flammability limit:	No information available
Lower flammability limit:	No information available
Vapor pressure	No information available
Vapor density	No information available
Relative density	>1
Water solubility	No information available
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Kinematic viscosity	No information available
Dynamic viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information available

#### Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	No information available

### 10. STABILITY AND REACTIVITY

#### Reactivity

No data available

#### Chemical stability

Stable under recommended storage conditions.

#### Possibility of Hazardous Reactions

None under normal processing.

#### Conditions to avoid

Extremes of temperature and direct sunlight.

#### Incompatible materials

None known based on information supplied.

#### Hazardous Decomposition Products

None known based on information supplied.

### 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

Product Information	No data available
Inhalation	May cause irritation.
Eye contact	Severely irritating to eyes.
Skin contact	Irritating to skin.
Ingestion	No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Water	> 90 mL/kg ( Rat )	-	-

7732-18-5			
Titanium Dioxide 13463-67-7	> 10000 mg/kg ( Rat )	-	-

#### Information on toxicological effects

**Symptoms** No information available.

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Sensitization** No information available.  
**Germ cell mutagenicity** No information available.  
**Carcinogenicity** No information available.

Chemical Name	ACGIH	IARC	NTP	OSHA
Titanium Dioxide 13463-67-7	-	-	-	X

**Reproductive toxicity** No information available.  
**STOT - single exposure** No information available.  
**STOT - repeated exposure** No information available.  
**Aspiration hazard** No information available.

#### Numerical measures of toxicity - Product Information

ATEmix (oral)	8,000.00
ATEmix (dermal)	8,000.00
ATEmix (inhalation-gas)	99,999.00
ATEmix (inhalation-dust/mist)	20.00
ATEmix (inhalation-vapor)	99,999.00

## 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

0 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

#### Persistence and degradability

No information available.

#### Bioaccumulation

No information available

#### Other adverse effects

**Ozone** No information available

Not applicable

## 13. DISPOSAL CONSIDERATIONS

#### Waste treatment methods

**Disposal of wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging** Do not reuse container.



#### 14. TRANSPORT INFORMATION

DOT Not regulated

TDG Not regulated

IATA Not regulated

IMDG Not regulated

#### 15. REGULATORY INFORMATION

##### International Inventories

TSCA	Complies
DSL/NDL	Complies
EINECS/ELINCS	Complies
ENCS	Does not comply
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

##### Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List  
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
ENCS - Japan Existing and New Chemical Substances  
IECSC - China Inventory of Existing Chemical Substances  
KECL - Korean Existing and Evaluated Chemical Substances  
PICCS - Philippines Inventory of Chemicals and Chemical Substances  
AICS - Australian Inventory of Chemical Substances

##### US Federal Regulations

##### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

##### SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

##### CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

##### CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

## US State Regulations

### California Proposition 65

This product contains chemicals known to the state of California to cause cancer

### U.S. State Right-to-Know Regulations

### U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

## 16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

<u>NFPA</u>	Health hazards	1	Flammability	1	Instability	0	Physical and Chemical Properties	-
<u>HMIS</u>	Health hazards	1	Flammability	1	Physical hazards	0	Personal protection	X

Issue Date 10-May-2015

Revision Date 10-May-2015

### Revision Note

No information available

### Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet



# SAFETY DATA SHEET

Issue Date 11-May-2015

Revision Date 11-May-2015

Version 1

## 1. IDENTIFICATION

### Product identifier

**Product Name** AIR-BLOC 32MR LIQUID EMULSION AIR/VAPOR BARRIER MEMBRANE

### Other means of identification

**Product Code** HE032

**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended Use** Sealant.

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### **Manufacturer Address**

HENRY COMPANY

999 N. Sepulveda Blvd., Suite 800

El Segundo, CA 90245-2716

Company Contact: Technical Services

Telephone Number: 800-486-1278

Web Site: [www.henry.com](http://www.henry.com) [www.ca.henry.com](http://www.ca.henry.com)

### Emergency telephone number

**Emergency Telephone** CHEMTREC: 800-424-9300

CHEMTREC: 703-527-3887

CANUTEC: 613-966-6666

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Not classified
Acute toxicity - Dermal	Not classified
Acute toxicity - Inhalation (Gases)	Not classified
Acute toxicity - Inhalation (Vapors)	Not classified
Acute toxicity - Inhalation (Dusts/Mists)	Not classified
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Respiratory sensitization	Not classified
Skin sensitization	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Category 1B
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Not classified
Aspiration toxicity	Not classified

### Label elements

#### **Emergency Overview**

**Danger**

**Hazard statements**

May damage fertility or the unborn child  
Causes skin irritation  
Causes serious eye irritation  
May cause respiratory irritation



**Appearance** viscous

**Physical state** liquid

**Odor** Slight

**Precautionary Statements - Prevention**

Wear protective gloves/protective clothing/eye protection/face protection  
Wash hands thoroughly after handling  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area  
Do not handle until all safety precautions have been read and understood  
Obtain special instructions before use

**Precautionary Statements - Response**

Call a POISON CENTER or doctor/physician if you feel unwell  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention  
IF ON SKIN: Wash with plenty of soap and water  
If skin irritation occurs: Get medical advice/attention  
Wash contaminated clothing before reuse  
IF INHALED: Call a POISON CENTER or doctor if you feel unwell

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed  
Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

Very toxic to aquatic life with long lasting effects Very toxic to aquatic life

Unknown acute toxicity

67% of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Substance**

Chemical Name	CAS No.	Weight-%	Trade Secret
Acrylic Polymers	Proprietary	20 - 40	*

Water	7732-18-5	20 - 50	*
Calcium carbonate	1317-65-3	1 - 5	*
Butyl benzyl phthalate	85-68-7	1 - 5	*
Titanium Dioxide	13463-67-7	1 - 5	*
Petroleum distillates, heavy naphthenic	64742-11-6	1 - 10	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

#### 4. FIRST AID MEASURES

##### Description of first aid measures

Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin contact	Wash skin with soap and water.
Inhalation	Remove to fresh air.
Ingestion	Clean mouth with water and drink afterwards plenty of water.

##### Most important symptoms and effects, both acute and delayed

Symptoms	No information available.
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##### Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.
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#### 5. FIRE-FIGHTING MEASURES

##### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** CAUTION: Use of water spray when fighting fire may be inefficient.

##### Specific hazards arising from the chemical

No information available.

##### Explosion data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

##### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure adequate ventilation, especially in confined areas.
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##### Environmental precautions

Environmental precautions	See Section 12 for additional ecological information.
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##### Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible materials** None known based on information supplied.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Calcium carbonate 1317-65-3	-	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 15 mg/m <sup>3</sup> total dust (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 10 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable dust
Titanium Dioxide 13463-67-7	-	TWA: 15 mg/m <sup>3</sup> total dust (vacated) TWA: 10 mg/m <sup>3</sup> total dust	-

### Appropriate engineering controls

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Wear protective gloves and protective clothing.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	liquid	<b>Odor</b>	Slight
<b>Appearance</b>	viscous	<b>Odor threshold</b>	No information available
<b>Color</b>	white		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	6-11	
Melting point / freezing point	No information available	
Boiling point / boiling range	> 100 °C	
Flash point	> 100 °C	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Relative density	>1	
Water solubility	Dispersible	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

#### Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	No information available

### 10. STABILITY AND REACTIVITY

#### Reactivity

No data available

#### Chemical stability

Stable under recommended storage conditions.

#### Possibility of Hazardous Reactions

None under normal processing.

#### Conditions to avoid

Extremes of temperature and direct sunlight.

#### Incompatible materials

None known based on information supplied.

#### Hazardous Decomposition Products

None known based on information supplied.

### 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

Product Information	No data available
Inhalation	May cause irritation.
Eye contact	Severely irritating to eyes.
Skin contact	Irritating to skin.

**Ingestion** No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Water 7732-18-5	> 90 mL/kg ( Rat )	-	-
Butyl benzyl phthalate 85-68-7	= 2330 mg/kg ( Rat )	= 6700 mg/kg ( Rat )	> 6.7 mg/L ( Rat ) 4 h
Titanium Dioxide 13463-67-7	> 10000 mg/kg ( Rat )	-	-
Petroleum distillates, heavy naphthenic 64742-11-6	> 5000 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	> 5.2 mg/L ( Rat ) 4 h

#### Information on toxicological effects

**Symptoms** No information available.

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** No information available.

Chemical Name	ACGIH	IARC	NTP	OSHA
Butyl benzyl phthalate 85-68-7	-	Group 3	-	-
Titanium Dioxide 13463-67-7	-	-	-	X

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

#### Numerical measures of toxicity - Product Information

ATEmix (oral)	9,157.00
ATEmix (dermal)	20,117.00
ATEmix (inhalation-gas)	99,999.00
ATEmix (inhalation-dust/mist)	26.70
ATEmix (inhalation-vapor)	99,999.00

## 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

72 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Butyl benzyl phthalate 85-68-7	0.02 - 0.25: 96 h Pseudokirchneriella subcapitata mg/L EC50 0.2 - 28.2: 72 h Pseudokirchneriella subcapitata mg/L EC50	1.0 - 10.0: 96 h Oncorhynchus mykiss mg/L LC50 static 0.82: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 1.39 - 3.88: 96 h Pimephales promelas mg/L LC50 flow-through 0.78: 96 h Pimephales promelas mg/L LC50 static 1.0 - 10.0: 96 h Lepomis macrochirus mg/L LC50 static	0.9 - 1.1: 48 h Daphnia magna mg/L EC50 Static 0.76: 48 h Daphnia magna mg/L EC50 Flow through 1.28: 48 h Daphnia magna mg/L EC50 semi-static 0.97: 48 h Daphnia magna mg/L EC50

#### Persistence and degradability

No information available.

#### Bioaccumulation

Bioaccumulative potential.



Chemical Name	Partition coefficient
Butyl benzyl phthalate 85-68-7	3.57 - 4.91

**Other adverse effects**  
**Ozone** No information available  
Not applicable

### 13. DISPOSAL CONSIDERATIONS

#### Waste treatment methods

**Disposal of wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging** Do not reuse container.

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Butyl benzyl phthalate 85-68-7	-	Included in waste stream: F039	-	-

### 14. TRANSPORT INFORMATION

**DOT** Not regulated

**TDG** Not regulated

**IATA** Not regulated

**IMDG** Not regulated

### 15. REGULATORY INFORMATION

#### International Inventories

TSCA Complies  
DSL/NDL Does not comply  
EINECS/ELINCS Does not comply  
ENCS Does not comply  
IECSC Does not comply  
KECL Complies  
PICCS Complies  
AICS Does not comply

#### Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List  
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
ENCS - Japan Existing and New Chemical Substances  
IECSC - China Inventory of Existing Chemical Substances  
KECL - Korean Existing and Evaluated Chemical Substances  
PICCS - Philippines Inventory of Chemicals and Chemical Substances  
AICS - Australian Inventory of Chemical Substances

#### US Federal Regulations

### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

### SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

### CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Butyl benzyl phthalate 85-68-7	-	X	X	-

### CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Butyl benzyl phthalate 85-68-7	100 lb	-	RQ 100 lb final RQ RQ 45.4 kg final RQ

### US State Regulations

#### California Proposition 65

This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

### U.S. State Right-to-Know Regulations

#### U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

## 16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

<b>NFPA</b>	Health hazards 2	Flammability 1	Instability 0	Physical and Chemical Properties -
<b>HMIS</b>	Health hazards 2*	Flammability 1	Physical hazards 0	Personal protection X

Issue Date 11-May-2015

Revision Date 11-May-2015

Revision Note

No information available

#### Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet



# SAFETY DATA SHEET

Issue Date 13-Jun-2015

Revision Date 13-Jun-2015

Version 1

## 1. IDENTIFICATION

### Product identifier

**Product Name** AIR-BLOC 33MR UV RESISTANT VAPOR  
PERM AIR & WHTR BARR MEM

### Other means of identification

**Product Code** HE033  
**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended Use** Sealant.  
**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### **Manufacturer Address**

HENRY COMPANY  
999 N. Sepulveda Blvd., Suite 800  
El Segundo, CA 90245-2716  
Company Contact: Technical Services  
Telephone Number: 800-486-1278  
Web Site: www.henry.com www.ca.henry.com

### Emergency telephone number

**Emergency Telephone** CHEMTREC: 800-424-9300  
CHEMTREC: 703-527-3887  
CANUTEC: 613-966-6666

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Not classified
Acute toxicity - Dermal	Not classified
Acute toxicity - Inhalation (Gases)	Not classified
Acute toxicity - Inhalation (Vapors)	Not classified
Acute toxicity - Inhalation (Dusts/Mists)	Not classified
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Respiratory sensitization	Not classified
Skin sensitization	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Category 1B
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Not classified
Aspiration toxicity	Not classified

### Label elements

Emergency Overview

**Danger**

**Hazard statements**

May damage fertility or the unborn child  
Causes skin irritation  
Causes serious eye irritation  
May cause respiratory irritation



**Appearance** viscous

**Physical state** liquid

**Odor** Slight

**Precautionary Statements - Prevention**

Wear protective gloves/protective clothing/eye protection/face protection  
Wash hands thoroughly after handling  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area  
Do not handle until all safety precautions have been read and understood  
Obtain special instructions before use

**Precautionary Statements - Response**

Call a POISON CENTER or doctor/physician if you feel unwell  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention  
IF ON SKIN: Wash with plenty of soap and water  
If skin irritation occurs: Get medical advice/attention  
Wash contaminated clothing before reuse  
IF INHALED: Call a POISON CENTER or doctor if you feel unwell

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed  
Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

Very toxic to aquatic life with long lasting effects Very toxic to aquatic life

Unknown acute toxicity

67% of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Substance**

Chemical Name	CAS No	Weight-%	Trade Secret
---------------	--------	----------	--------------

Water	7732-18-5	15 - 40	*
Aluminum Hydroxide	21645-51-2	15 - 40	*
Acrylic Polymer Blend	Proprietary	10 - 30	*
Cellulose Fiber	9004-34-6	1 - 5	*
Butyl benzyl phthalate	85-68-7	1 - 5	*
Bentonite	1302-78-9	1 - 5	*
Ethylene glycol	107-21-1	1 - 5	*
Diethylene glycol monobutyl ether	112-34-5	1 - 5	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

#### 4. FIRST AID MEASURES

##### Description of first aid measures

Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin contact	Wash skin with soap and water.
Inhalation	Remove to fresh air.
Ingestion	Clean mouth with water and drink afterwards plenty of water.

##### Most important symptoms and effects, both acute and delayed

Symptoms	No information available.
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##### Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.
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#### 5. FIRE-FIGHTING MEASURES

##### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** CAUTION: Use of water spray when fighting fire may be inefficient.

##### Specific hazards arising from the chemical

No information available.

##### Explosion data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

##### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure adequate ventilation, especially in confined areas.
----------------------	--

##### Environmental precautions

**Environmental precautions** See Section 12 for additional ecological information.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible materials** Strong oxidizing agents. Strong acids. Strong bases.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Aluminum Hydroxide 21645-51-2	TWA: 1 mg/m <sup>3</sup> respirable fraction	-	-
Cellulose Fiber 9004-34-6	TWA: 10 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 15 mg/m <sup>3</sup> total dust (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 5 mg/m <sup>3</sup> (vacated) STEL: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable dust TWA: 1 mg/m <sup>3</sup>
Bentonite 1302-78-9	TWA: 1 mg/m <sup>3</sup> respirable fraction	-	-
Ethylene glycol 107-21-1	Ceiling: 100 mg/m <sup>3</sup> aerosol only	(vacated) Ceiling: 50 ppm (vacated) Ceiling: 125 mg/m <sup>3</sup>	-
Diethylene glycol monobutyl ether 112-34-5	TWA: 10 ppm inhalable fraction and vapor	-	-

**Appropriate engineering controls**

**Engineering Controls** Showers  
 Eyewash stations  
 Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Wear protective gloves and protective clothing.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

Physical state	liquid	Odor	Slight
Appearance	viscous	Odor threshold	No information available
Color	white		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	6-11	
Melting point / freezing point	No information available	
Boiling point / boiling range	> 100 °C	
Flash point	> 100 °C	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Relative density	>1	
Water solubility	No information available	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

### Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	No information available

## 10. STABILITY AND REACTIVITY

### Reactivity

No data available

### Chemical stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

### Conditions to avoid

Extremes of temperature and direct sunlight.

### Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

### Hazardous Decomposition Products

None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

<b>Product Information</b>	No data available
<b>Inhalation</b>	May cause irritation.
<b>Eye contact</b>	Severely irritating to eyes.
<b>Skin contact</b>	Irritating to skin.
<b>Ingestion</b>	No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Water 7732-18-5	> 90 mL/kg ( Rat )	-	-
Aluminum Hydroxide 21645-51-2	> 5000 mg/kg ( Rat )	-	-
Cellulose Fiber 9004-34-6	> 5 g/kg ( Rat )	> 2 g/kg ( Rabbit )	> 5800 mg/m <sup>3</sup> ( Rat ) 4 h
Butyl benzyl phthalate 85-68-7	= 2330 mg/kg ( Rat )	= 6700 mg/kg ( Rat )	> 6.7 mg/L ( Rat ) 4 h
Bentonite 1302-78-9	> 5000 mg/kg ( Rat )	-	-
Ethylene glycol 107-21-1	= 4700 mg/kg ( Rat )	= 10600 mg/kg ( Rat ) = 9530 µL/kg ( Rabbit )	-
Diethylene glycol monobutyl ether 112-34-5	= 5660 mg/kg ( Rat )	= 2700 mg/kg ( Rabbit )	-

#### Information on toxicological effects

**Symptoms** No information available.

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Skin corrosion/irritation** Irritating to skin.  
**Serious eye damage/eye irritation** Irritating to eyes.  
**Irritation** Irritating to eyes, respiratory system and skin.  
**Sensitization** No information available.  
**Germ cell mutagenicity** No information available.  
**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Cellulose Fiber 9004-34-6	-	Group 1	Known	X
Butyl benzyl phthalate 85-68-7	-	Group 3	-	-

**Reproductive toxicity** Contains a known or suspected reproductive toxin.  
**STOT - single exposure** Respiratory system.  
**STOT - repeated exposure** No information available.  
**Aspiration hazard** No information available.

#### Numerical measures of toxicity - Product Information

ATEmix (oral)	9,157.00
ATEmix (dermal)	20,117.00
ATEmix (inhalation-gas)	99,999.00
ATEmix (inhalation-dust/mist)	26.70
ATEmix (inhalation-vapor)	99,999.00

## 12. ECOLOGICAL INFORMATION

#### Ecotoxicity



72 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Bentonite 1302-78-9	-	19000: 96 h Oncorhynchus mykiss mg/L LC50 static 8.0 - 19.0: 96 h Salmo gairdneri g/L LC50	-
Butyl benzyl phthalate 85-68-7	0.02 - 0.25: 96 h Pseudokirchneriella subcapitata mg/L EC50 0.2 - 28.2: 72 h Pseudokirchneriella subcapitata mg/L EC50	1.0 - 10.0: 96 h Oncorhynchus mykiss mg/L LC50 static 0.82: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 1.39 - 3.88: 96 h Pimephales promelas mg/L LC50 flow-through 0.78: 96 h Pimephales promelas mg/L LC50 static 1.0 - 10.0: 96 h Lepomis macrochirus mg/L LC50 static	0.9 - 1.1: 48 h Daphnia magna mg/L EC50 Static 0.76: 48 h Daphnia magna mg/L EC50 Flow through 1.28: 48 h Daphnia magna mg/L EC50 semi-static 0.97: 48 h Daphnia magna mg/L EC50
Ethylene glycol 107-21-1	6500 - 13000: 96 h Pseudokirchneriella subcapitata mg/L EC50	41000: 96 h Oncorhynchus mykiss mg/L LC50 14 - 18: 96 h Oncorhynchus mykiss mL/L LC50 static 27540: 96 h Lepomis macrochirus mg/L LC50 static 40761: 96 h Oncorhynchus mykiss mg/L LC50 static 40000 - 60000: 96 h Pimephales promelas mg/L LC50 static 16000: 96 h Poecilia reticulata mg/L LC50 static	46300: 48 h Daphnia magna mg/L EC50
Diethylene glycol monobutyl ether 112-34-5	100: 96 h Desmodesmus subspicatus mg/L EC50	1300: 96 h Lepomis macrochirus mg/L LC50 static	100: 48 h Daphnia magna mg/L EC50 2850: 24 h Daphnia magna mg/L EC50

**Persistence and degradability**

No information available.

**Bioaccumulation**

Bioaccumulative potential.

Chemical Name	Partition coefficient
Butyl benzyl phthalate 85-68-7	4.91
Ethylene glycol 107-21-1	-1.93

**Other adverse effects**

Ozone

No information available

Not applicable

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging**

Do not reuse container.

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Butyl benzyl phthalate 85-68-7	-	Included in waste stream: F039	-	-

**14. TRANSPORT INFORMATION**

**DOT**

Not regulated

**TDG** Not regulated

**IATA** Not regulated

**IMDG** Not regulated

## 15. REGULATORY INFORMATION

### **International Inventories**

<b>TSCA</b>	Complies
<b>DSL/NDL</b>	Complies
<b>EINECS/ELINCS</b>	Complies
<b>ENCS</b>	Complies
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies

### **Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

### **US Federal Regulations**

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

#### **SARA 311/312 Hazard Categories**

<b>Acute health hazard</b>	Yes
<b>Chronic Health Hazard</b>	Yes
<b>Fire hazard</b>	No
<b>Sudden release of pressure hazard</b>	No
<b>Reactive Hazard</b>	No

#### **CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Butyl benzyl phthalate 85-68-7	-	X	X	-

#### **CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Butyl benzyl phthalate 85-68-7	100 lb	-	RQ 100 lb final RQ RQ 45.4 kg final RQ
Ethylene glycol 107-21-1	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

### US State Regulations

#### California Proposition 65

This product contains chemicals known to the state of California to cause cancer. This product contains chemicals known to the state of California to cause birth defects or other reproductive harm

### U.S. State Right-to-Know Regulations

#### U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

## 16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

<u>NFPA</u>	Health hazards 2	Flammability 1	Instability 0	Physical and Chemical Properties -
<u>HMIS</u>	Health hazards 2*	Flammability 1	Physical hazards 0	Personal protection X

Issue Date 13-Jun-2015

Revision Date 13-Jun-2015

#### Revision Note

No information available

#### Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet



# SAFETY DATA SHEET

Issue Date 13-Jun-2015

Revision Date 13-Jun-2015

Version 1

## 1. IDENTIFICATION

### Product identifier

Product Name BLUESKIN LVC ADHESIVE

### Other means of identification

Product Code HE574

Synonyms None

### Recommended use of the chemical and restrictions on use

Recommended Use Adhesive/Primer.

Uses advised against No information available

### Details of the supplier of the safety data sheet

#### **Manufacturer Address**

HENRY COMPANY

999 N. Sepulveda Blvd., Suite 800

El Segundo, CA 90245-2716

Company Contact: Technical Services

Telephone Number: 800-486-1278

Web Site: [www.henry.com](http://www.henry.com) [www.ca.henry.com](http://www.ca.henry.com)

### Emergency telephone number

Emergency Telephone CHEMTREC: 800-424-9300

CHEMTREC: 703-527-3887

CANUTEC: 613-966-6666

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

### Label elements

#### **Emergency Overview**

#### **Danger**

#### **Hazard statements**

Causes skin irritation

Causes serious eye irritation

May cause respiratory irritation. May cause drowsiness or dizziness

Highly flammable liquid and vapor

**Appearance** viscous**Physical state** liquid**Odor** Solvent**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Use only outdoors or in a well-ventilated area  
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
 Keep container tightly closed  
 Ground/bond container and receiving equipment  
 Use only non-sparking tools  
 Take precautionary measures against static discharge  
 Keep cool  
 Use explosion-proof electrical/ ventilating / lighting/ mixing / equipment

**Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 If eye irritation persists: Get medical advice/attention  
 If skin irritation occurs: Get medical advice/attention  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
 Wash contaminated clothing before reuse  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 Call a POISON CENTER or doctor/physician if you feel unwell  
 In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed  
 Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

Toxic to aquatic life with long lasting effects  
 Unknown acute toxicity 26.92960329% of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance**

Chemical Name	CAS No	Weight-%	Trade Secret
Methyl acetate	79-20-9	30 - 60	*
Hydrocarbon Resins	Proprietary	15 - 40	*
Hexane (Mixed Isomers)	110-54-3	7 - 13	*
Benzene, 1-chloro-4-(trifluoromethyl)	98-56-6	7 - 13	*
Mineral Oil	64742-52-5	3 - 7	*
Cyclohexane	110-82-7	1 - 5	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

#### 4. FIRST AID MEASURES

##### Description of first aid measures

<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists: Get medical advice/attention.
<b>Skin contact</b>	Wash off immediately with plenty of water. If skin irritation persists, call a physician.
<b>Inhalation</b>	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a physician.
<b>Ingestion</b>	If swallowed, call a poison control center or physician immediately. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

##### Most important symptoms and effects, both acute and delayed

<b>Symptoms</b>	Drowsiness. Dizziness.
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##### Indication of any immediate medical attention and special treatment needed

<b>Note to physicians</b>	Treat symptomatically.
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#### 5. FIRE-FIGHTING MEASURES

##### Suitable extinguishing media

CO<sub>2</sub>, dry chemical, dry sand, alcohol-resistant foam. Use water spray or fog; do not use straight streams. Cool containers with flooding quantities of water until well after fire is out.

**Unsuitable extinguishing media** CAUTION: Use of water spray when fighting fire may be inefficient.

##### Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

**Hazardous combustion products** Carbon monoxide. Carbon dioxide (CO<sub>2</sub>). Flammable/toxic gases may accumulate in confined areas (basements, tanks, hopper/tank cars etc.).

##### Explosion data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** May be ignited by heat, sparks or flames.

##### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal precautions, protective equipment and emergency procedures

<b>Personal precautions</b>	Ensure adequate ventilation, especially in confined areas.
<b>For emergency responders</b>	Use personal protection recommended in Section 8.

##### Environmental precautions

<b>Environmental precautions</b>	See Section 12 for additional ecological information.
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##### Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep container tightly closed in a dry and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).

**Incompatible materials** Incompatible with strong acids and bases. Strong oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

**Exposure Guidelines** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Methyl acetate 79-20-9	STEL: 250 ppm TWA: 200 ppm	TWA: 200 ppm TWA: 610 mg/m <sup>3</sup> (vacated) TWA: 200 ppm (vacated) TWA: 610 mg/m <sup>3</sup> (vacated) STEL: 250 ppm (vacated) STEL: 760 mg/m <sup>3</sup>	IDLH: 3100 ppm TWA: 200 ppm TWA: 610 mg/m <sup>3</sup> STEL: 250 ppm STEL: 760 mg/m <sup>3</sup>
Hexane (Mixed Isomers) 110-54-3	TWA: 50 ppm S*	TWA: 500 ppm TWA: 1800 mg/m <sup>3</sup> (vacated) TWA: 50 ppm (vacated) TWA: 180 mg/m <sup>3</sup>	IDLH: 1100 ppm TWA: 50 ppm TWA: 180 mg/m <sup>3</sup>
Benzene, 1-chloro-4-(trifluoromethyl) 98-56-6	TWA: 2.5 mg/m <sup>3</sup> F	TWA: 2.5 mg/m <sup>3</sup> F TWA: 2.5 mg/m <sup>3</sup> dust (vacated) TWA: 2.5 mg/m <sup>3</sup>	-
Cyclohexane 110-82-7	TWA: 100 ppm	TWA: 300 ppm TWA: 1050 mg/m <sup>3</sup> (vacated) TWA: 300 ppm (vacated) TWA: 1050 mg/m <sup>3</sup>	IDLH: 1300 ppm TWA: 300 ppm TWA: 1050 mg/m <sup>3</sup>

### Appropriate engineering controls

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Wear protective gloves and protective clothing.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

Physical state	liquid	Odor	Solvent
Appearance	viscous	Odor threshold	No information available
Color	beige		
<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>	
pH	No information available	Not applicable	
Melting point / freezing point	No information available		
Boiling point / boiling range	> 56 °C / 133 °F		
Flash point	-23 °C / -9 °F		
Evaporation rate	> 1		
Flammability (solid, gas)	No information available		
Flammability Limit in Air			
Upper flammability limit:	16%		
Lower flammability limit:	1.2%		
Vapor pressure	33 kPa @20C		
Vapor density	Heavier than air		
Relative density	0.92		
Water solubility	partially soluble		
Solubility in other solvents	No information available		
Partition coefficient	No information available		
Autoignition temperature	255 °C / 491 °F		
Decomposition temperature	No information available		
Kinematic viscosity	>20 cSt @ 40C		
Dynamic viscosity	No information available		
Explosive properties	Not an explosive		
Oxidizing properties	Not applicable		

### Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	No information available

## 10. STABILITY AND REACTIVITY

### Reactivity

No data available

### Chemical stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

### Conditions to avoid

Heat, flames and sparks. Take precautionary measures against static discharges.

### Incompatible materials

Incompatible with strong acids and bases. Strong oxidizing agents.

### Hazardous Decomposition Products

Carbon monoxide. Carbon dioxide (CO<sub>2</sub>). Thermal decomposition can lead to release of irritating and toxic gases and vapors.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure



<b>Product Information</b>	No data available
<b>Inhalation</b>	May cause drowsiness or dizziness. Inhalation of vapors in high concentration may cause irritation of respiratory system. Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal.
<b>Eye contact</b>	Irritating to eyes.
<b>Skin contact</b>	Irritating to skin. Prolonged skin contact may defat the skin and produce dermatitis.
<b>Ingestion</b>	No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Methyl acetate 79-20-9	> 5 g/kg ( Rat )	> 5 g/kg ( Rabbit )	= 16000 ppm ( Rat ) 4 h
Hexane (Mixed Isomers) 110-54-3	= 25 g/kg ( Rat )	= 3000 mg/kg ( Rabbit )	= 48000 ppm ( Rat ) 4 h
Benzene, 1-chloro-4-(trifluoromethyl) 98-56-6	= 13 g/kg ( Rat )	> 2 mL/kg ( Rabbit )	= 33 mg/L ( Rat ) 4 h
Cyclohexane 110-82-7	= 12705 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	= 13.9 mg/L ( Rat ) 4 h

**Information on toxicological effects**

**Symptoms** Redness. Vapors may cause drowsiness and dizziness.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** No information available.  
**Germ cell mutagenicity** No information available.  
**Carcinogenicity** No information available.

Chemical Name	ACGIH	IARC	NTP	OSHA
Mineral Oil 64742-52-5	A2	Group 1	-	X

**Reproductive toxicity** No information available.  
**STOT - single exposure** No information available.  
**STOT - repeated exposure** No information available.  
**Aspiration hazard** No information available.

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document .

**ATEmix (oral)** 8,558.00 mg/kg  
**ATEmix (dermal)** 6,240.00 mg/kg  
**ATEmix (inhalation-dust/mist)** 214.90 mg/kg  
**ATEmix (inhalation-vapor)** 45,789.00 mg/l

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

28.93536 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Methyl acetate 79-20-9	120: 72 h Desmodesmus subspicatus mg/L EC50	295 - 348: 96 h Pimephales promelas mg/L LC50 flow-through 250 - 350: 96 h Brachydanio rerio mg/L LC50 static	1026.7: 48 h Daphnia magna mg/L EC50
Hexane (Mixed Isomers) 110-54-3	-	2.1 - 2.98: 96 h Pimephales promelas mg/L LC50 flow-through	1000: 24 h Daphnia magna mg/L EC50
Benzene,	-	11.5 - 15.8: 48 h Lepomis	3.68: 48 h Daphnia magna mg/L

1-chloro-4-(trifluoromethyl) 98-56-6		macrochirus mg/L LC50 static	EC50
Mineral Oil 64742-52-5	-	5000: 96 h Oncorhynchus mykiss mg/L LC50	1000: 48 h Daphnia magna mg/L EC50
Cyclohexane 110-82-7	500: 72 h Desmodemus subspicatus mg/L EC50	3.96 - 5.18: 96 h Pimephales promelas mg/L LC50 flow-through 23.03 - 42.07: 96 h Pimephales promelas mg/L LC50 static 24.99 - 44.69: 96 h Lepomis macrochirus mg/L LC50 static 48.87 - 68.76: 96 h Poecilia reticulata mg/L LC50 static	400: 24 h Daphnia magna mg/L EC50

**Persistence and degradability**

No information available.

**Bioaccumulation**

Bioaccumulative potential.

Chemical Name	Partition coefficient
Methyl acetate 79-20-9	0.18
Benzene, 1-chloro-4-(trifluoromethyl) 98-56-6	3.7
Cyclohexane 110-82-7	3.44

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS****Waste treatment methods****Disposal of wastes**

This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261). Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging**

Do not reuse container.

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Cyclohexane 110-82-7	-	-	-	U056

Chemical Name	California Hazardous Waste Status
Methyl acetate 79-20-9	Toxic Ignitable
Hexane (Mixed Isomers) 110-54-3	Toxic Ignitable
Cyclohexane 110-82-7	Toxic Ignitable

**14. TRANSPORT INFORMATION****DOT**

UN/ID no UN1133  
 Proper shipping name Adhesives  
 Hazard Class 3  
 Packing Group II

**TDG**

UN/ID no UN1133

Proper shipping name Adhesives  
 Hazard Class 3  
 Packing Group II

**IATA**

UN/ID no UN1133  
 Proper shipping name Adhesives  
 Hazard Class 3  
 Packing Group II

**IMDG**

UN/ID no UN1133  
 Proper shipping name Adhesives  
 Hazard Class 3  
 Packing Group II

<b>15. REGULATORY INFORMATION</b>
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**International Inventories**

TSCA Complies  
 DSL/NDL Complies  
 EINECS/ELINCS Complies  
 ENCS Complies  
 IECSC Complies  
 KECL Complies  
 PICCS Complies  
 AICS Complies

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List  
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
 ENCS - Japan Existing and New Chemical Substances  
 IECSC - China Inventory of Existing Chemical Substances  
 KECL - Korean Existing and Evaluated Chemical Substances  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances  
 AICS - Australian Inventory of Chemical Substances

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

**CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Cyclohexane	1000 lb	-	-	X

110-82-7				
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**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Hexane (Mixed Isomers) 110-54-3	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Cyclohexane 110-82-7	1000 lb	-	RQ 1000 lb final RQ RQ 454 kg final RQ

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations****U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

<b><u>NFPA</u></b>	Health hazards 2	Flammability 3	Instability 0	Physical and Chemical Properties -
<b><u>HMIS</u></b>	Health hazards 2	Flammability 3	Physical hazards 0	Personal protection X

Issue Date 13-Jun-2015

Revision Date 13-Jun-2015

**Revision Note**

No information available

**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet



# SAFETY DATA SHEET

Issue Date 25-MAY-2015

Revision Date 25-MAY-2015

Version 1

## 1. IDENTIFICATION

### Product identifier

Product Name BLUESKIN SA

### Other means of identification

Product Code BH200SA

Synonyms None

### Recommended use of the chemical and restrictions on use

Recommended Use Membrane/Underlayment.

Uses advised against No information available

### Details of the supplier of the safety data sheet

#### Manufacturer Address

HENRY COMPANY

999 N. Sepulveda Blvd., Suite 800

El Segundo, CA 90245-2716

Company Contact: Technical Services

Telephone Number: 800-486-1278

Web Site: [www.henry.com](http://www.henry.com) [www.ca.henry.com](http://www.ca.henry.com)

### Emergency telephone number

Emergency Telephone CHEMTREC: 800-424-9300

CHEMTREC: 703-527-3887

CANUTEC: 613-966-6666

## 2. HAZARDS IDENTIFICATION

### Classification

#### OSHA Regulatory Status

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Not classified
Acute toxicity - Dermal	Not classified
Acute toxicity - Inhalation (Gases)	Not classified
Acute toxicity - Inhalation (Vapors)	Not classified
Acute toxicity - Inhalation (Dusts/Mists)	Not classified
Skin corrosion/irritation	Not classified
Serious eye damage/eye irritation	Not classified
Respiratory sensitization	Not classified
Skin sensitization	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
Specific target organ toxicity (single exposure)	Not classified
Specific target organ toxicity (repeated exposure)	Not classified
Aspiration toxicity	Not classified

### Label elements

#### Emergency Overview

**Hazard statements**

None

**Appearance** Reinforced fabric/sheet      **Physical state** Solid      **Odor** Slight/None**Precautionary Statements - Prevention**

Not applicable

**Precautionary Statements - Storage**

Not applicable

**Precautionary Statements - Disposal**

Not applicable

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

Not applicable

Unknown acute toxicity

100% of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS****Substance**

The product contains no substances which at their given concentration, are considered to be hazardous to health.

Chemical Name	CAS No.	Weight-%	Trade Secret
Asphalt	8052-42-4	40 - 60	*
Fillers/Reinforcement	NA - Mixture	30 - 50	*
Rubber Compounds	NA – Mixture	1 - 15	*
Mineral Oil	64742-52-5	1 - 5	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

**4. FIRST AID MEASURES****Description of first aid measures**

**Eye contact** Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

**Skin contact** Wash skin with soap and water.

**Inhalation** Remove to fresh air.

**Ingestion** Clean mouth with water and drink afterwards plenty of water.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** No information available.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** CAUTION: Use of water spray when fighting fire may be inefficient.

### Specific hazards arising from the chemical

No information available.

### Explosion data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Ensure adequate ventilation, especially in confined areas.

### Environmental precautions

**Environmental precautions** See Section 12 for additional ecological information.

### Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible materials** None known based on information supplied.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

**Exposure Guidelines** This product, as supplied and used, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

### Appropriate engineering controls

**Engineering Controls** Showers  
Eyewash stations

Ventilation systems.

#### **Individual protection measures, such as personal protective equipment**

<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles).
<b>Skin and body protection</b>	Wear protective gloves and protective clothing.
<b>Respiratory protection</b>	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

### **9. PHYSICAL AND CHEMICAL PROPERTIES**

#### **Information on basic physical and chemical properties**

<b>Physical state</b>	Solid	<b>Odor</b>	Slight/None
<b>Appearance</b>	Reinforced fabric/sheet	<b>Odor threshold</b>	No information available
<b>Color</b>	black		

<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>
pH	Not applicable	
Melting point / freezing point	No information available	
Boiling point / boiling range	> 100 °C	
Flash point	> 100 °C	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Relative density	>1	
Water solubility	No information available	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

#### **Other Information**

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	No information available

### **10. STABILITY AND REACTIVITY**

#### **Reactivity**

No data available

#### **Chemical stability**



Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Extremes of temperature and direct sunlight.

**Incompatible materials**

None known based on information supplied.

**Hazardous Decomposition Products**

None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

<b>Product Information</b>	No data available
<b>Inhalation</b>	None known.
<b>Eye contact</b>	None known.
<b>Skin contact</b>	None known.
<b>Ingestion</b>	No data available.

**Information on toxicological effects**

<b>Symptoms</b>	No information available.
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**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<b>Sensitization</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	No information available.
<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Aspiration hazard</b>	No information available.

**Numerical measures of toxicity - Product Information**

<b>ATEmix (oral)</b>	99,999.00
<b>ATEmix (dermal)</b>	99,999.00
<b>ATEmix (inhalation-gas)</b>	99,999.00
<b>ATEmix (inhalation-dust/mist)</b>	99,999.00
<b>ATEmix (inhalation-vapor)</b>	99,999.00

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

None known

100 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

**Persistence and degradability**

No information available.

**Bioaccumulation**

Bioaccumulative potential.

**Other adverse effects**  
**Ozone**

No information available  
Not applicable

### 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods**

**Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging**

Do not reuse container.

### 14. TRANSPORT INFORMATION

**DOT**

Not regulated

**TDG**

Not regulated

**IATA**

Not regulated

**IMDG**

Not regulated

### 15. REGULATORY INFORMATION

**International Inventories**

TSCA	Complies
DSL/NDL	Complies
EINECS/ELINCS	Complies
ENCS	Does not comply
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List  
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
ENCS - Japan Existing and New Chemical Substances  
IECSC - China Inventory of Existing Chemical Substances  
KECL - Korean Existing and Evaluated Chemical Substances  
PICCS - Philippines Inventory of Chemicals and Chemical Substances  
AICS - Australian Inventory of Chemical Substances

**US Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations****U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

<b><u>NFPA</u></b>	Health hazards 0	Flammability 0	Instability 0	Physical and Chemical Properties -
<b><u>HMIS</u></b>	Health hazards 0	Flammability 0	Physical hazards 0	Personal protection X

Issue Date 25-MAY-2015

Revision Date 25-MAY-2015

**Revision Note**

No information available

**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet



# SAFETY DATA SHEET

Issue Date 10-May-2015

Revision Date 10-May-2015

Version 1

## 1. IDENTIFICATION

### Product identifier

Product Name BLUESKIN SA LT

### Other means of identification

Product Code BH200SAL

Synonyms None

### Recommended use of the chemical and restrictions on use

Recommended Use Membrane.

Uses advised against No information available

### Details of the supplier of the safety data sheet

#### **Manufacturer Address**

HENRY COMPANY

999 N. Sepulveda Blvd., Suite 800

El Segundo, CA 90245-2716

Company Contact: Technical Services

Telephone Number: 800-486-1278

Web Site: [www.henry.com](http://www.henry.com) [www.ca.henry.com](http://www.ca.henry.com)

### Emergency telephone number

Emergency Telephone CHEMTREC: 800-424-9300

CHEMTREC: 703-527-3887

CANUTEC: 613-966-6666

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Not classified
Acute toxicity - Dermal	Not classified
Acute toxicity - Inhalation (Gases)	Not classified
Acute toxicity - Inhalation (Vapors)	Not classified
Acute toxicity - Inhalation (Dusts/Mists)	Not classified
Skin corrosion/irritation	Not classified
Serious eye damage/eye irritation	Not classified
Respiratory sensitization	Not classified
Skin sensitization	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
Specific target organ toxicity (single exposure)	Not classified
Specific target organ toxicity (repeated exposure)	Not classified
Aspiration toxicity	Not classified

### Label elements

#### **Emergency Overview**

**Hazard statements**

None

**Appearance** Reinforced fabric/sheet **Physical state** Solid **Odor** Slight/None**Precautionary Statements - Prevention**

Not applicable

**Precautionary Statements - Storage**

Not applicable

**Precautionary Statements - Disposal**

Not applicable

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

Not applicable

Unknown acute toxicity

100% of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS****Substance**

The product contains no substances which at their given concentration, are considered to be hazardous to health.

Chemical Name	CAS No.	Weight-%	Trade Secret
Asphalt	8052-42-4	60 - 80	*
Rubber Compounds	NA – Mixture	10 - 20	*
Polyethylene	9002-88-4	5 - 10	*
Mineral Oil	64742-52-5	5 - 10	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

**4. FIRST AID MEASURES****Description of first aid measures**

**Eye contact** Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

**Skin contact** Wash skin with soap and water.

**Inhalation** Remove to fresh air.

**Ingestion** Clean mouth with water and drink afterwards plenty of water.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** No information available.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** CAUTION: Use of water spray when fighting fire may be inefficient.

### Specific hazards arising from the chemical

No information available.

### Explosion data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Ensure adequate ventilation, especially in confined areas.

### Environmental precautions

**Environmental precautions** See Section 12 for additional ecological information.

### Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible materials** None known based on information supplied.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

**Exposure Guidelines** This product, as supplied and used, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

### Appropriate engineering controls

**Engineering Controls** Showers  
Eyewash stations

Ventilation systems.

#### **Individual protection measures, such as personal protective equipment**

<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles).
<b>Skin and body protection</b>	Wear protective gloves and protective clothing.
<b>Respiratory protection</b>	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

### **9. PHYSICAL AND CHEMICAL PROPERTIES**

#### **Information on basic physical and chemical properties**

<b>Physical state</b>	Solid	<b>Odor</b>	Slight/None
<b>Appearance</b>	Reinforced fabric/sheet	<b>Odor threshold</b>	No information available
<b>Color</b>	Blue		

<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>
<b>pH</b>	Not applicable	
<b>Melting point / freezing point</b>	No information available	
<b>Boiling point / boiling range</b>	> 100 °C	
<b>Flash point</b>	> 100 °C	
<b>Evaporation rate</b>	No information available	
<b>Flammability (solid, gas)</b>	No information available	
<b>Flammability Limit in Air</b>		
<b>Upper flammability limit:</b>	No information available	
<b>Lower flammability limit:</b>	No information available	
<b>Vapor pressure</b>	No information available	
<b>Vapor density</b>	No information available	
<b>Relative density</b>	>1	
<b>Water solubility</b>	No information available	
<b>Solubility in other solvents</b>	No information available	
<b>Partition coefficient</b>	No information available	
<b>Autoignition temperature</b>	No information available	
<b>Decomposition temperature</b>	No information available	
<b>Kinematic viscosity</b>	No information available	
<b>Dynamic viscosity</b>	No information available	
<b>Explosive properties</b>	No information available	
<b>Oxidizing properties</b>	No information available	

#### **Other Information**

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC Content (%)</b>	No information available
<b>Density</b>	No information available
<b>Bulk density</b>	No information available

### **10. STABILITY AND REACTIVITY**

#### **Reactivity**

No data available

#### **Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Extremes of temperature and direct sunlight.

**Incompatible materials**

None known based on information supplied.

**Hazardous Decomposition Products**

None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

<b>Product Information</b>	No data available
<b>Inhalation</b>	None known.
<b>Eye contact</b>	None known.
<b>Skin contact</b>	None known.
<b>Ingestion</b>	No data available.

**Information on toxicological effects**

<b>Symptoms</b>	No information available.
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**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<b>Sensitization</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	No information available.
<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Aspiration hazard</b>	No information available.

**Numerical measures of toxicity - Product Information**

<b>ATEmix (oral)</b>	99,999.00
<b>ATEmix (dermal)</b>	99,999.00
<b>ATEmix (inhalation-gas)</b>	99,999.00
<b>ATEmix (inhalation-dust/mist)</b>	99,999.00
<b>ATEmix (inhalation-vapor)</b>	99,999.00

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

None known

100 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

**Persistence and degradability**

No information available.

**Bioaccumulation**



Bioaccumulative potential.

**Other adverse effects**  
Ozone

No information available  
Not applicable

### 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods**

**Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging**

Do not reuse container.

### 14. TRANSPORT INFORMATION

**DOT**

Not regulated

**TDG**

Not regulated

**IATA**

Not regulated

**IMDG**

Not regulated

### 15. REGULATORY INFORMATION

**International Inventories**

TSCA	Complies
DSL/NDL	Complies
EINECS/ELINCS	Complies
ENCS	Does not comply
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List  
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
 ENCS - Japan Existing and New Chemical Substances  
 IECSC - China Inventory of Existing Chemical Substances  
 KECL - Korean Existing and Evaluated Chemical Substances  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances  
 AICS - Australian Inventory of Chemical Substances

**US Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations****U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

<b><u>NFPA</u></b>	Health hazards 0	Flammability 0	Instability 0	Physical and Chemical Properties -
<b><u>HMIS</u></b>	Health hazards 0	Flammability 0	Physical hazards 0	Personal protection X

Issue Date 10-May-2015

Revision Date 10-May-2015

**Revision Note**

No information available

**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet



# SAFETY DATA SHEET

Issue Date 31-MAY-2015

Revision Date 31-MAY-2015

Version 1

## 1. IDENTIFICATION

### Product identifier

**Product Name** Blueskin VP 100 Self Adhered

### Other means of identification

**Product Code** HE100GUSA

**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended Use** Membrane.

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### **Manufacturer Address**

HENRY COMPANY

999 N. Sepulveda Blvd., Suite 800

El Segundo, CA 90245-2716

Company Contact: Technical Services

Telephone Number: 800-486-1278

Web Site: [www.henry.com](http://www.henry.com) [www.ca.henry.com](http://www.ca.henry.com)

### Emergency telephone number

**Emergency Telephone** CHEMTREC: 800-424-9300

CHEMTREC: 703-527-3887

CANUTEC: 613-966-6666

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Not classified
Acute toxicity - Dermal	Not classified
Acute toxicity - Inhalation (Gases)	Not classified
Acute toxicity - Inhalation (Vapors)	Not classified
Acute toxicity - Inhalation (Dusts/Mists)	Not classified
Skin corrosion/irritation	Not classified
Serious eye damage/eye irritation	Not classified
Respiratory sensitization	Not classified
Skin sensitization	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
Specific target organ toxicity (single exposure)	Not classified
Specific target organ toxicity (repeated exposure)	Not classified
Aspiration toxicity	Not classified

### Label elements

#### **Emergency Overview**

**Hazard statements**

None

**Appearance** Rolled film/sheet **Physical state** Solid **Odor** Slight/None**Precautionary Statements - Prevention**

Not applicable

**Precautionary Statements - Storage**

Not applicable

**Precautionary Statements - Disposal**

Not applicable

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

Not applicable

Unknown acute toxicity

100% of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS****Substance**

The product contains no substances which at their given concentration, are considered to be hazardous to health.

Chemical Name	CAS No.	Weight-%	Trade Secret
Modified Polyolefins	NA – Mixture	30 - 75	*
Polyethylene	9002-88-4	30 - 75	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

**4. FIRST AID MEASURES****Description of first aid measures**

**Eye contact** Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

**Skin contact** Wash skin with soap and water.

**Inhalation** Remove to fresh air.

**Ingestion** Clean mouth with water and drink afterwards plenty of water.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** No information available.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** CAUTION: Use of water spray when fighting fire may be inefficient.

### Specific hazards arising from the chemical

No information available.

### Explosion data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Ensure adequate ventilation, especially in confined areas.

### Environmental precautions

**Environmental precautions** See Section 12 for additional ecological information.

### Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible materials** None known based on information supplied.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

**Exposure Guidelines** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

### Appropriate engineering controls

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles).
<b>Skin and body protection</b>	Wear protective gloves and protective clothing.
<b>Respiratory protection</b>	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
<b>General Hygiene Considerations</b>	Handle in accordance with good industrial hygiene and safety practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

<b>Physical state</b>	Solid	<b>Odor</b>	Slight/None
<b>Appearance</b>	Rolled film/sheet	<b>Odor threshold</b>	No information available
<b>Color</b>	Blue		
<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>	
<b>pH</b>	Not applicable		
<b>Melting point / freezing point</b>	No information available		
<b>Boiling point / boiling range</b>	> 100 °C		
<b>Flash point</b>	> 100 °C		
<b>Evaporation rate</b>	No information available		
<b>Flammability (solid, gas)</b>	No information available		
<b>Flammability Limit in Air</b>			
<b>Upper flammability limit:</b>	No information available		
<b>Lower flammability limit:</b>	No information available		
<b>Vapor pressure</b>	No information available		
<b>Vapor density</b>	No information available		
<b>Relative density</b>	>1		
<b>Water solubility</b>	No information available		
<b>Solubility in other solvents</b>	No information available		
<b>Partition coefficient</b>	No information available		
<b>Autoignition temperature</b>	No information available		
<b>Decomposition temperature</b>	No information available		
<b>Kinematic viscosity</b>	No information available		
<b>Dynamic viscosity</b>	No information available		
<b>Explosive properties</b>	No information available		
<b>Oxidizing properties</b>	No information available		

**Other Information**

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC Content (%)</b>	No information available
<b>Density</b>	No information available
<b>Bulk density</b>	No information available

**10. STABILITY AND REACTIVITY****Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Extremes of temperature and direct sunlight.

**Incompatible materials**

None known based on information supplied.

**Hazardous Decomposition Products**

None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

Product Information	No data available
Inhalation	None known.
Eye contact	None known.
Skin contact	None known.
Ingestion	No data available.

**Information on toxicological effects**

Symptoms	No information available.
----------	---------------------------

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

Sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

**Numerical measures of toxicity - Product Information**

ATEmix (oral)	99,999.00
ATEmix (dermal)	99,999.00
ATEmix (inhalation-gas)	99,999.00
ATEmix (inhalation-dust/mist)	99,999.00
ATEmix (inhalation-vapor)	99,999.00

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

None known

100 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

**Persistence and degradability**

No information available.

**Bioaccumulation**

Bioaccumulative potential.

<b><u>Other adverse effects</u></b>	No information available
<b>Ozone</b>	Not applicable

### 13. DISPOSAL CONSIDERATIONS

#### **Waste treatment methods**

<b>Disposal of wastes</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated packaging</b>	Do not reuse container.

### 14. TRANSPORT INFORMATION

**DOT** Not regulated

**TDG** Not regulated

**IATA** Not regulated

**IMDG** Not regulated

### 15. REGULATORY INFORMATION

#### **International Inventories**

<b>TSCA</b>	Complies
<b>DSL/NDL</b>	Complies
<b>EINECS/ELINCS</b>	Complies
<b>ENCS</b>	Does not comply
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies

#### **Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

#### **US Federal Regulations**

##### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372



**SARA 311/312 Hazard Categories**

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations****U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

<b><u>NFPA</u></b>	Health hazards 0	Flammability 0	Instability 0	Physical and Chemical Properties -
<b><u>HMIS</u></b>	Health hazards 0	Flammability 0	Physical hazards 0	Personal protection X

Issue Date 31-MAY-2015

Revision Date 31-MAY-2015

**Revision Note**

No information available

**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**



# SAFETY DATA SHEET

Issue Date 31-MAY-2015

Revision Date 31-MAY-2015

Version 1

## 1. IDENTIFICATION

### Product identifier

**Product Name** Blueskin VP 160 Self Adhered

### Other means of identification

**Product Code** HE160GUSA

**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended Use** Membrane.

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### **Manufacturer Address**

HENRY COMPANY

999 N. Sepulveda Blvd., Suite 800

El Segundo, CA 90245-2716

Company Contact: Technical Services

Telephone Number: 800-486-1278

Web Site: [www.henry.com](http://www.henry.com) [www.ca.henry.com](http://www.ca.henry.com)

### Emergency telephone number

**Emergency Telephone** CHEMTREC: 800-424-9300

CHEMTREC: 703-527-3887

CANUTEC: 613-966-6666

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Not classified
Acute toxicity - Dermal	Not classified
Acute toxicity - Inhalation (Gases)	Not classified
Acute toxicity - Inhalation (Vapors)	Not classified
Acute toxicity - Inhalation (Dusts/Mists)	Not classified
Skin corrosion/irritation	Not classified
Serious eye damage/eye irritation	Not classified
Respiratory sensitization	Not classified
Skin sensitization	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
Specific target organ toxicity (single exposure)	Not classified
Specific target organ toxicity (repeated exposure)	Not classified
Aspiration toxicity	Not classified

### Label elements

#### **Emergency Overview**

**Hazard statements**

None

**Appearance** Rolled film/sheet      **Physical state** Solid      **Odor** Slight/None**Precautionary Statements - Prevention**

Not applicable

**Precautionary Statements - Storage**

Not applicable

**Precautionary Statements - Disposal**

Not applicable

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

Not applicable

Unknown acute toxicity

100% of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS****Substance**

The product contains no substances which at their given concentration, are considered to be hazardous to health.

Chemical Name	CAS No.	Weight-%	Trade Secret
Modified Polyolefins	NA – Mixture	30 - 75	*
Polyethylene	9002-88-4	30 - 75	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

**4. FIRST AID MEASURES****Description of first aid measures**

**Eye contact** Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

**Skin contact** Wash skin with soap and water.

**Inhalation** Remove to fresh air.

**Ingestion** Clean mouth with water and drink afterwards plenty of water.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** No information available.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** CAUTION: Use of water spray when fighting fire may be inefficient.

### Specific hazards arising from the chemical

No information available.

### Explosion data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Ensure adequate ventilation, especially in confined areas.

### Environmental precautions

**Environmental precautions** See Section 12 for additional ecological information.

### Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible materials** None known based on information supplied.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

**Exposure Guidelines** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

### Appropriate engineering controls

**Engineering Controls**  
Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles).
<b>Skin and body protection</b>	Wear protective gloves and protective clothing.
<b>Respiratory protection</b>	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
<b>General Hygiene Considerations</b>	Handle in accordance with good industrial hygiene and safety practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

<b>Physical state</b>	Solid	<b>Odor</b>	Slight/None
<b>Appearance</b>	Rolled film/sheet	<b>Odor threshold</b>	No information available
<b>Color</b>	Blue		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not applicable	
Melting point / freezing point	No information available	
Boiling point / boiling range	> 100 °C	
Flash point	> 100 °C	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Relative density	>1	
Water solubility	No information available	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

**Other Information**

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC Content (%)</b>	No information available
<b>Density</b>	No information available
<b>Bulk density</b>	No information available

**10. STABILITY AND REACTIVITY****Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Extremes of temperature and direct sunlight.

**Incompatible materials**

None known based on information supplied.

**Hazardous Decomposition Products**

None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

Product Information	No data available
Inhalation	None known.
Eye contact	None known.
Skin contact	None known.
Ingestion	No data available.

**Information on toxicological effects**

Symptoms	No information available.
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**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

Sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

**Numerical measures of toxicity - Product Information**

ATEmix (oral)	99,999.00
ATEmix (dermal)	99,999.00
ATEmix (inhalation-gas)	99,999.00
ATEmix (inhalation-dust/mist)	99,999.00
ATEmix (inhalation-vapor)	99,999.00

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

None known

100 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

**Persistence and degradability**

No information available.

**Bioaccumulation**

Bioaccumulative potential.

<b><u>Other adverse effects</u></b>	No information available
<b>Ozone</b>	Not applicable

### 13. DISPOSAL CONSIDERATIONS

#### **Waste treatment methods**

<b>Disposal of wastes</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated packaging</b>	Do not reuse container.

### 14. TRANSPORT INFORMATION

**DOT** Not regulated

**TDG** Not regulated

**IATA** Not regulated

**IMDG** Not regulated

### 15. REGULATORY INFORMATION

#### **International Inventories**

<b>TSCA</b>	Complies
<b>DSL/NDL</b>	Complies
<b>EINECS/ELINCS</b>	Complies
<b>ENCS</b>	Does not comply
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies

#### **Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

#### **US Federal Regulations**

##### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations****U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

<b><u>NFPA</u></b>	Health hazards 0	Flammability 0	Instability 0	Physical and Chemical Properties -
<b><u>HMIS</u></b>	Health hazards 0	Flammability 0	Physical hazards 0	Personal protection X

Issue Date 31-MAY-2015

Revision Date 31-MAY-2015

**Revision Note**

No information available

**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**





# SAFETY DATA SHEET

Issue Date 27-Jan-2016

Revision Date 27-Jan-2016

Version 1

## 1. IDENTIFICATION

### Product identifier

**Product Name** FOILSKIN

### Other means of identification

**Product Code** BH003

**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended Use** Waterproofing Sealers

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### **Manufacturer Address**

HENRY COMPANY

999 N. Sepulveda Blvd., Suite 800

El Segundo, CA 90245-2716

Web Site: [www.henry.com](http://www.henry.com) [www.ca.henry.com](http://www.ca.henry.com)

### Emergency telephone number

**Company Phone Number** 800-486-1278

**Emergency Telephone** CHEMTREC: 800-424-9300

CHEMTREC: 703-527-3887

CANUTEC: 613-966-6666

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This article doesn't contain hazardous substances or mixtures intended to be released under normal or reasonably foreseeable conditions of use This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

### Label elements

#### **Emergency Overview**

**Not classified**

#### **Hazard statements**

None

**Appearance** Solid sheet

**Physical state** Solid

**Odor** Slight

#### **Precautionary Statements - Prevention**

Not applicable

#### **Precautionary Statements - Response**

Not applicable

### Hazards not otherwise classified (HNOC)

Not applicable

**Other Information**

Not applicable.

**Unknown acute toxicity**

35.64268897% of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS****Substance**

Not applicable

**Mixture**

This article doesn't contain hazardous substances or mixtures intended to be released under normal or reasonably foreseeable conditions of use.

Chemical Name	CAS No	Weight-%
Asphalt *	8052-42-4	60 - 100
Distillates, petroleum, hydrotreated heavy naphthenic *	64742-52-5	5 - 10
Polymer Blend *	Proprietary	5 - 10
Rubber Compounds *	Proprietary	1 - 5

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

Product containing mineral oil with less than 3% DMSO extract as measured by IP 346

**4. FIRST AID MEASURES****Description of first aid measures**

<b>General advice</b>	In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). If symptoms persist, call a physician.
<b>Eye contact</b>	Keep eye wide open while rinsing. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If symptoms persist, call a physician.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician. Wash contaminated clothing before reuse.
<b>Inhalation</b>	Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If symptoms persist, call a physician.
<b>Ingestion</b>	Call a physician or poison control center immediately. Do not induce vomiting without medical advice. Rinse mouth. Never give anything by mouth to an unconscious person.
<b>Self-protection of the first aider</b>	Use personal protective equipment as required.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** None known.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

**5. FIRE-FIGHTING MEASURES**

**Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry chemical, CO<sub>2</sub>, sand, earth, water spray or regular foam.

**Unsuitable extinguishing media** Do not use a solid water stream as it may scatter and spread fire.

**Specific hazards arising from the chemical**

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

**Explosion data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Use personal protective equipment as required.

**Environmental precautions**

**Environmental precautions** Collect spillage. Dispose of contents/container to an approved waste disposal plant.

**Methods and material for containment and cleaning up**

**Methods for containment** No information available.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

**7. HANDLING AND STORAGE****Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Use personal protective equipment as required.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep container tightly closed in a dry and well-ventilated place.

**Incompatible materials** Strong oxidizing agents. Strong acids. Strong bases.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters****Exposure Guidelines**

This article doesn't contain hazardous substances or mixtures intended to be released under normal or reasonably foreseeable conditions of use.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Asphalt 8052-42-4	TWA: 0.5 mg/m <sup>3</sup> benzene soluble aerosol fume, inhalable fraction	-	Ceiling: 5 mg/m <sup>3</sup> fume 15 min

NIOSH IDLH *Immediately Dangerous to Life or Health*

**Appropriate engineering controls**

**Engineering Controls** Showers  
Eyewash stations

Ventilation systems.

#### **Individual protection measures, such as personal protective equipment**

<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles).
<b>Skin and body protection</b>	Wear protective gloves and protective clothing.
<b>Respiratory protection</b>	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

### **9. PHYSICAL AND CHEMICAL PROPERTIES**

#### **Information on basic physical and chemical properties**

<b>Physical state</b>	Solid	<b>Odor</b>	Slight
<b>Appearance</b>	Solid sheet	<b>Odor threshold</b>	No information available
<b>Color</b>	Multiple Colors		
<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>	
<b>pH</b>	Not applicable		
<b>Melting point / freezing point</b>	No information available		
<b>Boiling point / boiling range</b>	No information available		
<b>Flash point</b>	No information available		
<b>Evaporation rate</b>	No information available	Not applicable	
<b>Flammability (solid, gas)</b>	No information available		
<b>Flammability Limit in Air</b>			
<b>Upper flammability limit:</b>	No information available		
<b>Lower flammability limit:</b>	No information available		
<b>Vapor pressure</b>	0		
<b>Vapor density</b>	No information available		
<b>Relative density</b>	>1		
<b>Water solubility</b>	Insoluble in water		
<b>Solubility in other solvents</b>	No information available		
<b>Partition coefficient</b>	No information available		
<b>Autoignition temperature</b>	>260 °C / >500 °F		
<b>Decomposition temperature</b>	No information available		
<b>Kinematic viscosity</b>	No information available	Not applicable	
<b>Dynamic viscosity</b>	No information available	Not applicable	
<b>Explosive properties</b>	Not an explosive		
<b>Oxidizing properties</b>	Not applicable		

#### **Other Information**

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC Content (%)</b>	No information available
<b>Density</b>	No information available
<b>Bulk density</b>	No information available

### **10. STABILITY AND REACTIVITY**

#### **Reactivity**

No data available

#### **Chemical stability**

Stable under recommended storage conditions.

#### **Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Storage near to reactive materials. elevated temperature.

**Incompatible materials**

Strong oxidizing agents. Strong acids. Strong bases.

**Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

Inhalation	None known.
Eye contact	None known.
Skin contact	None known.
Ingestion	No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Asphalt 8052-42-4	> 5000 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	-

### Information on toxicological effects

**Symptoms** No information available.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Sensitization** No information available.  
**Germ cell mutagenicity** No information available.  
**Carcinogenicity** The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346. This note applies only to certain complex oil derived substances in Annex I. The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Asphalt 8052-42-4	-	Group 2B	-	X
Distillates, petroleum, hydrotreated heavy naphthenic 64742-52-5	A2	Group 1	-	X
Polymer Blend	-	Group 3	-	-

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

Not classifiable as a human carcinogen

Group 1 - Carcinogenic to Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

**Reproductive toxicity** No information available.  
**STOT - single exposure** No information available.  
**STOT - repeated exposure** No information available.  
**Target Organ Effects** Eyes, Respiratory system, Skin.  
**Aspiration hazard** No information available.

### Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	5,012.00
ATEmix (dermal)	2,005.00
ATEmix (inhalation-dust/mist)	42.18

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

None known

100 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

### Persistence and degradability

No information available.

### Bioaccumulation

Chemical Name	Partition coefficient
Asphalt 8052-42-4	6

### Other adverse effects

No information available

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

#### Disposal of wastes

Disposal should be in accordance with applicable regional, national and local laws and regulations.

#### Contaminated packaging

Do not reuse container.

## 14. TRANSPORT INFORMATION

DOT Not regulated

TDG Not regulated

IATA Not regulated

IMDG Not regulated

## 15. REGULATORY INFORMATION

### International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

### Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances  
 KECL - Korean Existing and Evaluated Chemical Substances  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances  
 AICS - Australian Inventory of Chemical Substances

### US Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

#### SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

#### CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

#### CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

### US State Regulations

#### California Proposition 65

This product does not contain any Proposition 65 chemicals

#### U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Asphalt 8052-42-4	X	X	X

#### U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

### 16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

<u>NFPA</u>	Health hazards 0	Flammability 1	Instability 0	Physical and Chemical Properties -
<u>HMIS</u>	Health hazards 0	Flammability 1	Physical hazards 0	Personal protection X

Issue Date 27-Jan-2016

Revision Date 27-Jan-2016

#### Revision Note

No information available

#### Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**



# SAFETY DATA SHEET

Issue Date 13-Jun-2015

Revision Date 13-Jun-2015

Version 1

## 1. IDENTIFICATION

### Product identifier

Product Name BLUESKIN ADHESIVE

### Other means of identification

Product Code HE571

Synonyms None

### Recommended use of the chemical and restrictions on use

Recommended Use Adhesive/primer.

Uses advised against No information available

### Details of the supplier of the safety data sheet

#### **Manufacturer Address**

HENRY COMPANY

999 N. Sepulveda Blvd., Suite 800

El Segundo, CA 90245-2716

Company Contact: Technical Services

Telephone Number: 800-486-1278

Web Site: [www.henry.com](http://www.henry.com) [www.ca.henry.com](http://www.ca.henry.com)

### Emergency telephone number

Emergency Telephone CHEMTREC: 800-424-9300

CHEMTREC: 703-527-3887

CANUTEC: 613-966-6666

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

### Label elements

#### **Emergency Overview**

#### **Danger**

#### **Hazard statements**

Causes skin irritation

Causes serious eye irritation

May cause respiratory irritation. May cause drowsiness or dizziness

Highly flammable liquid and vapor



**Appearance** viscous**Physical state** liquid**Odor** Solvent**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Use only outdoors or in a well-ventilated area  
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
 Keep container tightly closed  
 Ground/bond container and receiving equipment  
 Use only non-sparking tools  
 Take precautionary measures against static discharge  
 Keep cool  
 Use explosion-proof electrical/ ventilating / lighting/ mixing / equipment

**Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 If eye irritation persists: Get medical advice/attention  
 If skin irritation occurs: Get medical advice/attention  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
 Wash contaminated clothing before reuse  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 Call a POISON CENTER or doctor/physician if you feel unwell  
 In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed  
 Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

Toxic to aquatic life with long lasting effects  
 Unknown acute toxicity 26.92960329% of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance**

Chemical Name	CAS No	Weight-%	Trade Secret
Acetone	67-64-1	15 - 40	*
Hexane (Mixed Isomers)	110-54-3	10 - 30	*
Hydrocarbon Resins	Proprietary	10 - 30	*
Rubber Compounds	9003-55-8	5 - 10	*
Stoddard Solvent/Mineral Spirits	64742-88-7	3 - 7	*
Mineral Oil	8012-95-1	1 - 5	*
Bentonite	1302-78-9	1 - 5	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

#### 4. FIRST AID MEASURES

##### Description of first aid measures

<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists: Get medical advice/attention.
<b>Skin contact</b>	Wash off immediately with plenty of water. If skin irritation persists, call a physician.
<b>Inhalation</b>	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a physician.
<b>Ingestion</b>	If swallowed, call a poison control center or physician immediately. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

##### Most important symptoms and effects, both acute and delayed

**Symptoms** Drowsiness. Dizziness.

##### Indication of any immediate medical attention and special treatment needed

**Note to physicians** Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

##### Suitable extinguishing media

CO<sub>2</sub>, dry chemical, dry sand, alcohol-resistant foam. Use water spray or fog; do not use straight streams. Cool containers with flooding quantities of water until well after fire is out.

**Unsuitable extinguishing media** CAUTION: Use of water spray when fighting fire may be inefficient.

##### Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors. Vapors are heavier than air and may accumulate in low areas causing a fire hazard. Vapors may cause a flash fire.

**Hazardous combustion products** Carbon monoxide. Carbon dioxide (CO<sub>2</sub>). Flammable/toxic gases may accumulate in confined areas (basements, tanks, hopper/tank cars etc.).

##### Explosion data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** May be ignited by heat, sparks or flames.

##### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Ensure adequate ventilation, especially in confined areas.

**For emergency responders** Use personal protection recommended in Section 8.

##### Environmental precautions

**Environmental precautions** See Section 12 for additional ecological information.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

**7. HANDLING AND STORAGE****Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep container tightly closed in a dry and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).

**Incompatible materials** Incompatible with strong acids and bases. Strong oxidizing agents.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters**

**Exposure Guidelines** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Acetone 67-64-1	STEL: 500 ppm TWA: 250 ppm	TWA: 1000 ppm TWA: 2400 mg/m <sup>3</sup> (vacated) TWA: 750 ppm (vacated) TWA: 1800 mg/m <sup>3</sup> (vacated) STEL: 2400 mg/m <sup>3</sup> The acetone STEL does not apply to the cellulose acetate fiber industry. It is in effect for all other sectors (vacated) STEL: 1000 ppm	IDLH: 2500 ppm TWA: 250 ppm TWA: 590 mg/m <sup>3</sup>
Hexane (Mixed Isomers) 110-54-3	TWA: 50 ppm S*	TWA: 500 ppm TWA: 1800 mg/m <sup>3</sup> (vacated) TWA: 50 ppm (vacated) TWA: 180 mg/m <sup>3</sup>	IDLH: 1100 ppm TWA: 50 ppm TWA: 180 mg/m <sup>3</sup>
Mineral Oil 8012-95-1	TWA: 5 mg/m <sup>3</sup> inhalable fraction excluding metal working fluids, highly & severely refined TWA: 5 mg/m <sup>3</sup> inhalable fraction excluding metal working fluids	TWA: 5 mg/m <sup>3</sup> (vacated) TWA: 5 mg/m <sup>3</sup>	IDLH: 2500 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>
Bentonite 1302-78-9	TWA: 1 mg/m <sup>3</sup> respirable fraction	-	-

**Appropriate engineering controls**

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Wear protective gloves and protective clothing.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	liquid	<b>Odor</b>	Solvent
<b>Appearance</b>	viscous	<b>Odor threshold</b>	No information available
<b>Color</b>	blue		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	Not applicable
Melting point / freezing point	No information available	
Boiling point / boiling range	> 56 °C / 133 °F	
Flash point	-28 °C / -18 °F	
Evaporation rate	> 1	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	13	
Lower flammability limit:	1%	
Vapor pressure	33 kPa @20C	
Vapor density	Heavier than air	
Relative density	0.8 (liquid portion)	
Water solubility	partially soluble	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	233 °C / 451 °F	
Decomposition temperature	No information available	
Kinematic viscosity	>20 cSt @ 40C	
Dynamic viscosity	No information available	
Explosive properties	Not an explosive	
Oxidizing properties	Not applicable	

### Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	No information available

## 10. STABILITY AND REACTIVITY

### Reactivity

No data available

### Chemical stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

### Conditions to avoid

Heat, flames and sparks. Take precautionary measures against static discharges.

### Incompatible materials

Incompatible with strong acids and bases. Strong oxidizing agents.

### Hazardous Decomposition Products

Carbon monoxide. Carbon dioxide (CO<sub>2</sub>). Thermal decomposition can lead to release of irritating and toxic gases and vapors.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

<b>Product Information</b>	No data available
<b>Inhalation</b>	May cause drowsiness or dizziness. Inhalation of vapors in high concentration may cause irritation of respiratory system. Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal.
<b>Eye contact</b>	Irritating to eyes.
<b>Skin contact</b>	Irritating to skin. Prolonged skin contact may defat the skin and produce dermatitis.
<b>Ingestion</b>	No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Acetone 67-64-1	= 5800 mg/kg ( Rat )	-	= 50100 mg/m <sup>3</sup> ( Rat ) 8 h
Hexane (Mixed Isomers) 110-54-3	= 25 g/kg ( Rat )	= 3000 mg/kg ( Rabbit )	= 48000 ppm ( Rat ) 4 h
Stoddard Solvent/Mineral Spirits 64742-88-7	> 5000 mg/kg ( Rat )	= 3000 mg/kg ( Rabbit )	> 5.28 mg/L ( Rat ) 4 h
Mineral Oil 8012-95-1	> 24 g/kg ( Rat )	-	= 2062 ppm ( Rat ) 4 h
Bentonite 1302-78-9	> 5000 mg/kg ( Rat )	-	-

### Information on toxicological effects

**Symptoms** Redness. Vapors may cause drowsiness and dizziness.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Sensitization** No information available.  
**Germ cell mutagenicity** No information available.  
**Carcinogenicity** No information available.

Chemical Name	ACGIH	IARC	NTP	OSHA
Rubber Compounds 9003-55-8	-	Group 3	-	-
Mineral Oil 8012-95-1	A2	Group 1 Group 3	-	X

**Reproductive toxicity** No information available.  
**STOT - single exposure** No information available.  
**STOT - repeated exposure** No information available.  
**Aspiration hazard** No information available.

### Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	8,558.00 mg/kg
ATEmix (dermal)	6,240.00 mg/kg
ATEmix (inhalation-dust/mist)	214.90 mg/kg
ATEmix (inhalation-vapor)	45,789.00 mg/l

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

28.93536 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Acetone 67-64-1	-	4.74 - 6.33: 96 h Oncorhynchus mykiss mL/L LC50 6210 - 8120: 96 h Pimephales promelas mg/L LC50 static 8300: 96 h Lepomis macrochirus mg/L LC50	10294 - 17704: 48 h Daphnia magna mg/L EC50 Static 12600 - 12700: 48 h Daphnia magna mg/L EC50
Bentonite 1302-78-9	-	19000: 96 h Oncorhynchus mykiss mg/L LC50 static 8.0 - 19.0: 96 h Salmo gairdneri g/L LC50	-

#### Persistence and degradability

No information available.

#### Bioaccumulation

Bioaccumulative potential.

Chemical Name	Partition coefficient
Acetone 67-64-1	-0.24

#### Other adverse effects

No information available

### 13. DISPOSAL CONSIDERATIONS

#### Waste treatment methods

##### Disposal of wastes

This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261). Disposal should be in accordance with applicable regional, national and local laws and regulations.

##### Contaminated packaging

Do not reuse container.

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Acetone 67-64-1	-	Included in waste stream: F039	-	U002

Chemical Name	California Hazardous Waste Status
Acetone 67-64-1	Ignitable
Hexane (Mixed Isomers) 110-54-3	Toxic Ignitable

### 14. TRANSPORT INFORMATION

#### DOT

UN/ID no UN1133  
 Proper shipping name Adhesives  
 Hazard Class 3  
 Packing Group II

#### TDG

UN/ID no UN1133  
 Proper shipping name Adhesives  
 Hazard Class 3  
 Packing Group II

**IATA**

UN/ID no	UN1133
Proper shipping name	Adhesives
Hazard Class	3
Packing Group	II

**IMDG**

UN/ID no	UN1133
Proper shipping name	Adhesives
Hazard Class	3
Packing Group	II

**15. REGULATORY INFORMATION****International Inventories**

TSCA	Complies
DSL/NDL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Acetone 67-64-1	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Hexane (Mixed Isomers) 110-54-3	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations****U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

<b>16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION</b>
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<b><u>NFPA</u></b>	Health hazards 2	Flammability 3	Instability 0	Physical and Chemical Properties -
<b><u>HMIS</u></b>	Health hazards 2	Flammability 3	Physical hazards 0	Personal protection X

Issue Date 13-Jun-2015

Revision Date 13-Jun-2015

**Revision Note**

No information available

**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**





# SAFETY DATA SHEET

Issue Date 10-May-2015

Revision Date 10-May-2015

Version 1

## 1. IDENTIFICATION

### Product identifier

**Product Name** Henry 925 BES Sealant Black

### Other means of identification

**Product Code** HE925B

**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended Use** Sealant.

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### **Manufacturer Address**

HENRY COMPANY

999 N. Sepulveda Blvd., Suite 800

El Segundo, CA 90245-2716

Company Contact: Technical Services

Telephone Number: 800-486-1278

Web Site: [www.henry.com](http://www.henry.com) [www.ca.henry.com](http://www.ca.henry.com)

### Emergency telephone number

**Emergency Telephone** CHEMTREC: 800-424-9300

CHEMTREC: 703-527-3887

CANUTEC: 613-966-6666

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Not classified
Acute toxicity - Dermal	Not classified
Acute toxicity - Inhalation (Gases)	Not classified
Acute toxicity - Inhalation (Vapors)	Not classified
Acute toxicity - Inhalation (Dusts/Mists)	Not classified
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Respiratory sensitization	Not classified
Skin sensitization	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Not classified
Aspiration toxicity	Not classified

### Label elements

#### **Emergency Overview**

**Warning****Hazard statements**

Causes skin irritation  
 Causes serious eye irritation  
 May cause respiratory irritation

**Appearance** Black, viscous**Physical state** liquid**Odor** Slight**Precautionary Statements - Prevention**

Wear protective gloves/protective clothing/eye protection/face protection  
 Wash hands thoroughly after handling  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Use only outdoors or in a well-ventilated area

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 If eye irritation persists: Get medical advice/attention  
 IF ON SKIN: Wash with plenty of soap and water  
 If skin irritation occurs: Get medical advice/attention  
 Wash contaminated clothing before reuse  
 IF INHALED: Call a POISON CENTER or doctor if you feel unwell

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed  
 Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

Unknown acute toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance**

Chemical Name	CAS No.	Weight-%	Trade Secret
Calcium Carbonate	1317-65-3	40 - 60	*
Polymers	NA - Mixture	20 - 30	*
Polyether Diol	25322-69-4	10 - 20	*
Titanium Dioxide	13463-67-7	5 - 15	*
Carbon Black	1333-86-4	1 - 5	*
Silica, Quartz	14808-60-7	0.1 - 1	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

#### 4. FIRST AID MEASURES

##### Description of first aid measures

Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin contact	Wash skin with soap and water.
Inhalation	Remove to fresh air.
Ingestion	Clean mouth with water and drink afterwards plenty of water.

##### Most important symptoms and effects, both acute and delayed

Symptoms	No information available.
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##### Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.
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#### 5. FIRE-FIGHTING MEASURES

##### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** CAUTION: Use of water spray when fighting fire may be inefficient.

##### Specific hazards arising from the chemical

No information available.

##### Explosion data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

##### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure adequate ventilation, especially in confined areas.
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##### Environmental precautions

Environmental precautions	See Section 12 for additional ecological information.
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##### Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so.
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Methods for cleaning up	Pick up and transfer to properly labeled containers.
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#### 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible materials** None known based on information supplied.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters****Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Titanium Dioxide 13463-67-7	-	TWA: 15 mg/m <sup>3</sup> total dust (vacated) TWA: 10 mg/m <sup>3</sup> total dust	-
Calcium carbonate 1317-65-3	-	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 15 mg/m <sup>3</sup> total dust (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 10 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable dust

**Appropriate engineering controls**

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Wear protective gloves and protective clothing.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

<b>Physical state</b>	liquid	<b>Odor</b>	Slight
<b>Appearance</b>	viscous	<b>Odor threshold</b>	No information available
<b>Color</b>	Black		

<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>
<b>pH</b>	6-11	
<b>Melting point / freezing point</b>	No information available	
<b>Boiling point / boiling range</b>	> 100 °C	
<b>Flash point</b>	> 100 °C	
<b>Evaporation rate</b>	No information available	
<b>Flammability (solid, gas)</b>	No information available	
<b>Flammability Limit in Air</b>		

Upper flammability limit:	No information available
Lower flammability limit:	No information available
Vapor pressure	No information available
Vapor density	No information available
Relative density	>1
Water solubility	No information available
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Kinematic viscosity	No information available
Dynamic viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information available

**Other Information**

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	No information available

<b>10. STABILITY AND REACTIVITY</b>
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**Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Extremes of temperature and direct sunlight.

**Incompatible materials**

None known based on information supplied.

**Hazardous Decomposition Products**

None known based on information supplied.

<b>11. TOXICOLOGICAL INFORMATION</b>
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**Information on likely routes of exposure**

<b>Product Information</b>	No data available
<b>Inhalation</b>	May cause irritation.
<b>Eye contact</b>	Severely irritating to eyes.
<b>Skin contact</b>	Irritating to skin.
<b>Ingestion</b>	No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Water 7732-18-5	> 90 mL/kg ( Rat )	-	-
Titanium Dioxide 13463-67-7	> 10000 mg/kg ( Rat )	-	-

**Information on toxicological effects**

**Symptoms** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** No information available.  
**Germ cell mutagenicity** No information available.  
**Carcinogenicity** No information available.

Chemical Name	ACGIH	IARC	NTP	OSHA
Titanium Dioxide 13463-67-7	-	-	-	X

**Reproductive toxicity** No information available.  
**STOT - single exposure** No information available.  
**STOT - repeated exposure** No information available.  
**Aspiration hazard** No information available.

**Numerical measures of toxicity - Product Information**

ATEmix (oral) 8,000.00  
 ATEmix (dermal) 8,000.00  
 ATEmix (inhalation-gas) 99,999.00  
 ATEmix (inhalation-dust/mist) 20.00  
 ATEmix (inhalation-vapor) 99,999.00

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

0 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Other adverse effects**

**Ozone**

No information available  
 Not applicable

## 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods**

**Disposal of wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging** Do not reuse container.

## 14. TRANSPORT INFORMATION

**DOT** Not regulated

**TDG** Not regulated

IATA Not regulated

IMDG Not regulated

## 15. REGULATORY INFORMATION

### International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Does not comply
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

### Legend:

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

### US Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

#### SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

#### CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

#### CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

### US State Regulations

#### California Proposition 65

This product contains chemicals known to the state of California to cause cancer

#### U.S. State Right-to-Know Regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

<u>NFPA</u>	Health hazards	1	Flammability	1	Instability	0	Physical and Chemical Properties	-
<u>HMIS</u>	Health hazards	1	Flammability	1	Physical hazards	0	Personal protection	X

Issue Date 10-May-2015

Revision Date 10-May-2015

**Revision Note**

No information available

**Disclaimer**

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**End of Safety Data Sheet**





# SAFETY DATA SHEET

Issue Date 15-Jun-2015

Revision Date 15-Jun-2015

Version 1

## 1. IDENTIFICATION

### Product identifier

**Product Name** BLUESKIN LVC SPRAY PRIMER

### Other means of identification

**Product Code** HE573  
**UN/ID no** UN1950  
**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended Use** Adhesive/Primer.  
**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### **Manufacturer Address**

HENRY COMPANY  
999 N. Sepulveda Blvd., Suite 800  
El Segundo, CA 90245-2716  
Company Contact: Technical Services  
Telephone Number: 800-486-1278  
Web Site: www.henry.com www.ca.henry.com

### Emergency telephone number

**Emergency Telephone** CHEMTREC: 800-424-9300  
CHEMTREC: 703-527-3887  
CANUTEC: 613-966-6666

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable aerosols	Category 1

### Label elements

#### **Emergency Overview**

#### **Danger**

#### **Hazard statements**

Causes skin irritation  
Causes serious eye irritation  
May cause respiratory irritation. May cause drowsiness or dizziness  
Extremely flammable aerosol

**Appearance** Liquefied gas**Physical state** Aerosol**Odor** Petroleum distillates**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Use only outdoors or in a well-ventilated area  
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
 Pressurized container: Do not pierce or burn, even after use  
 Do not spray on an open flame or other ignition source

**Precautionary Statements - Response**

Specific treatment (see .? on this label)  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 If eye irritation persists: Get medical advice/attention  
 IF ON SKIN: Wash with plenty of soap and water  
 If skin irritation occurs: Get medical advice/attention  
 Take off contaminated clothing and wash before reuse  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 Call a POISON CENTER or doctor/physician if you feel unwell

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed  
 Store locked up  
 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

May be harmful in contact with skin Harmful to aquatic life with long lasting effects Harmful to aquatic life

Unknown acute toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance**

Not applicable

**Mixture**

Chemical Name	CAS No	Weight-%	Trade Secret
Methyl acetate	79-20-9	30 - 60	*
Synthetic Polymer Blend	Proprietary	30 - 60	*
Hydrocarbon Propellant	Proprietary	10 - 30	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

#### 4. FIRST AID MEASURES

##### Description of first aid measures

Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists: Get medical advice/attention.
Skin contact	Wash with soap and water. If symptoms persist, call a physician.
Inhalation	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a physician.
Ingestion	Clean mouth with water and drink afterwards plenty of water.

##### Most important symptoms and effects, both acute and delayed

Symptoms	Drowsiness. Dizziness.
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##### Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.
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#### 5. FIRE-FIGHTING MEASURES

##### Suitable extinguishing media

Dry chemical, CO<sub>2</sub>, alcohol-resistant foam or water spray.

**Unsuitable extinguishing media** CAUTION: Use of water spray when fighting fire may be inefficient.

##### Specific hazards arising from the chemical

Flash back possible over considerable distance. Containers may explode when heated.

##### Explosion data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** May be ignited by heat, sparks or flames.

##### Protective equipment and precautions for firefighters

Cool containers with flooding quantities of water until well after fire is out.

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure adequate ventilation, especially in confined areas.
For emergency responders	Be aware that gases can spread at ground level (heavier than air) and pay attention to the wind direction. Pay attention to flashback. Remove all sources of ignition. Use personal protective equipment as required.

##### Environmental precautions

Environmental precautions	See Section 12 for additional ecological information.
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##### Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Pick up and transfer to properly labeled containers.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).

**Incompatible materials** Strong oxidizing agents. Strong acids. Strong bases.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Methyl acetate 79-20-9	STEL: 250 ppm TWA: 200 ppm	TWA: 200 ppm TWA: 610 mg/m <sup>3</sup> (vacated) TWA: 200 ppm (vacated) TWA: 610 mg/m <sup>3</sup> (vacated) STEL: 250 ppm (vacated) STEL: 760 mg/m <sup>3</sup>	IDLH: 3100 ppm TWA: 200 ppm TWA: 610 mg/m <sup>3</sup> STEL: 250 ppm STEL: 760 mg/m <sup>3</sup>

### Appropriate engineering controls

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Wear protective gloves and protective clothing.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	Aerosol	<b>Odor</b>	Petroleum distillates
<b>Appearance</b>	Liquefied gas	<b>Odor threshold</b>	No information available
<b>Color</b>	black		
<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>	
pH	No information available		
Melting point / freezing point	No information available		
Boiling point / boiling range	< 0 °C / 32 °F		
Flash point	< -30 °C / < -22 °F		
Evaporation rate	No information available		
Flammability (solid, gas)	No information available		

<b>Flammability Limit in Air</b>	
Upper flammability limit:	36.5%
Lower flammability limit:	0.6%
Vapor pressure	No information available
Vapor density	No information available
Relative density	0.9 - 1.3
Water solubility	No information available
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	223 °C / 433 °F
Decomposition temperature	No information available
Kinematic viscosity	>100 mm <sup>2</sup> /s @ 40 °C
Dynamic viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information available

**Other Information**

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	No information available

## 10. STABILITY AND REACTIVITY

**Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Extremes of temperature and direct sunlight. Heat, flames and sparks.

**Incompatible materials**

Strong oxidizing agents. Strong acids. Strong bases.

**Hazardous Decomposition Products**Thermal decomposition can lead to release of irritating and toxic gases and vapors. Carbon dioxide (CO<sub>2</sub>). Carbon monoxide.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

<b>Product Information</b>	No data available
<b>Inhalation</b>	May cause irritation of respiratory tract. May cause drowsiness or dizziness.
<b>Eye contact</b>	Irritating to eyes.
<b>Skin contact</b>	Irritating to skin.
<b>Ingestion</b>	No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Methyl acetate 79-20-9	> 5 g/kg ( Rat )	> 5 g/kg ( Rabbit )	= 16000 ppm ( Rat ) 4 h

**Information on toxicological effects**

**Symptoms** Vapors may cause drowsiness and dizziness.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** No information available.  
**Germ cell mutagenicity** No information available.  
**Carcinogenicity** No information available.  
**Reproductive toxicity** No information available.  
**STOT - single exposure** Target Organs. Respiratory system.  
**STOT - repeated exposure** No information available.  
**Target Organ Effects** Respiratory system, Eyes, Skin, Central nervous system.  
**Neurological effects** Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal.  
**Aspiration hazard** No information available.

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document .

**ATEmix (oral)** 5,183.00 mg/kg  
**ATEmix (dermal)** 3,600.00 mg/kg  
**ATEmix (inhalation-gas)** 3,148,048.14 mg/l  
**ATEmix (inhalation-dust/mist)** 15.00 mg/kg mg/l

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

10 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Methyl acetate 79-20-9	120: 72 h Desmodesmus subspicatus mg/L EC50	295 - 348: 96 h Pimephales promelas mg/L LC50 flow-through 250 - 350: 96 h Brachydanio rerio mg/L LC50 static	1026.7: 48 h Daphnia magna mg/L EC50

**Persistence and degradability**

Not readily biodegradable.

**Bioaccumulation**

Bioaccumulative potential.

Chemical Name	Partition coefficient
Methyl acetate 79-20-9	0.18
Hydrocarbon Propellant	2.8

**Other adverse effects** No information available

## 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods**

**Disposal of wastes** This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261). Dispose of in accordance with federal, state and local regulations.

**Contaminated packaging** Pressurized container: Do not pierce or burn, even after use. Do not reuse container.

Chemical Name	California Hazardous Waste Status
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Methyl acetate 79-20-9	Toxic Ignitable
---------------------------	--------------------

**14. TRANSPORT INFORMATION****DOT**

UN/ID no	UN1950
Proper shipping name	Aerosols
Hazard Class	2.1
Description	May be shipped as a limited quantity or as a consumer commodity (ORM-D)

**TDG**

UN/ID no	UN1950
Proper shipping name	Aerosols
Hazard Class	2.1
Description	May be shipped as a limited quantity.

**IATA**

UN/ID no	UN1950
Proper shipping name	Aerosols
Hazard Class	2.1
Special Provisions	May be shipped as a limited quantity.

**IMDG**

UN/ID no	UN1950
Proper shipping name	Aerosols
Hazard Class	2.1
Description	May be shipped as a limited quantity.

**15. REGULATORY INFORMATION**

All components used in this product are on the TSCA Inventory and the Canadian DSL.

**International Inventories**

TSCA	Complies
DSL/NDL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	Yes
Sudden release of pressure hazard	Yes
Reactive Hazard	No

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations****U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

<b><u>NFPA</u></b>	Health hazards 2	Flammability 4	Instability 0	Physical and Chemical Properties -
<b><u>HMIS</u></b>	Health hazards 2	Flammability 4	Physical hazards 0	Personal protection X

Issue Date 15-Jun-2015

Revision Date 15-Jun-2015

**Revision Note**

No information available

**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet





# SAFETY DATA SHEET

Issue Date 16-Jun-2015

Revision Date 16-Jun-2015

Version 1

## 1. IDENTIFICATION

### Product identifier

**Product Name** AIR-BLOC LF LIQUID APPLIED WINDOW AND DOOR FLSH MEMBRANE

### Other means of identification

**Product Code** HE022BWB

**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended Use** Sealant.

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### **Manufacturer Address**

HENRY COMPANY

999 N. Sepulveda Blvd., Suite 800

El Segundo, CA 90245-2716

Company Contact: Technical Services

Telephone Number: 800-486-1278

Web Site: [www.henry.com](http://www.henry.com) [www.ca.henry.com](http://www.ca.henry.com)

### Emergency telephone number

**Emergency Telephone** CHEMTREC: 800-424-9300

CHEMTREC: 703-527-3887

CANUTEC: 613-966-6666

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Not classified
Acute toxicity - Dermal	Not classified
Acute toxicity - Inhalation (Gases)	Not classified
Acute toxicity - Inhalation (Vapors)	Not classified
Acute toxicity - Inhalation (Dusts/Mists)	Not classified
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Respiratory sensitization	Not classified
Skin sensitization	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Not classified
Aspiration toxicity	Not classified

### Label elements

#### **Emergency Overview**

**Warning**

**Hazard statements**

Causes skin irritation  
Causes serious eye irritation  
May cause respiratory irritation



**Appearance** viscous

**Physical state** liquid

**Odor** Slight

**Precautionary Statements - Prevention**

Wear protective gloves/protective clothing/eye protection/face protection  
Wash hands thoroughly after handling  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area

**Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention  
IF ON SKIN: Wash with plenty of soap and water  
If skin irritation occurs: Get medical advice/attention  
Wash contaminated clothing before reuse  
IF INHALED: Call a POISON CENTER or doctor if you feel unwell

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed  
Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

IARC has classified occupational exposure to straight-run bitumen and their emissions during road paving as a carcinogen (category 2B - possibly carcinogenic to humans).

Unknown acute toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Substance**

Chemical Name	CAS No	Weight-%	Trade Secret
Calcium Carbonate	1317-65-3	30 - 60	*
Silyl-terminated Polyether	Proprietary	10 - 30	*
Polyol Blend	Proprietary	5 - 10	*

Mica	12001-26-2	5 - 10	*
Non-phthalate plasticizer	Proprietary	5 - 10	*
Cyclosiloxane	Proprietary	1 - 5	*
Silica, quartz	14808-60-7	<0.1	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

#### 4. FIRST AID MEASURES

##### Description of first aid measures

Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin contact	Wash skin with soap and water.
Inhalation	Remove to fresh air.
Ingestion	Clean mouth with water and drink afterwards plenty of water.

##### Most important symptoms and effects, both acute and delayed

Symptoms No information available.

##### Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

##### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** CAUTION: Use of water spray when fighting fire may be inefficient.

##### Specific hazards arising from the chemical

No information available.

##### Explosion data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

##### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Ensure adequate ventilation, especially in confined areas.

##### Environmental precautions

**Environmental precautions** See Section 12 for additional ecological information.

##### Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible materials** Strong oxidizing agents. Strong acids. Strong bases.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Calcium Carbonate 1317-65-3	-	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 15 mg/m <sup>3</sup> total dust (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 10 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable dust
Mica 12001-26-2	TWA: 3 mg/m <sup>3</sup> respirable fraction	(vacated) TWA: 3 mg/m <sup>3</sup> respirable dust <1% Crystalline silica TWA: 20 mppcf <1% Crystalline silica	IDLH: 1500 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup> containing <1% Quartz respirable dust
Silica, quartz 14808-60-7	TWA: 0.025 mg/m <sup>3</sup> respirable fraction	(vacated) TWA: 0.1 mg/m <sup>3</sup> respirable dust : (30)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA total dust : (250)/(%SiO <sub>2</sub> + 5) mppcf TWA respirable fraction : (10)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA respirable fraction	IDLH: 50 mg/m <sup>3</sup> respirable dust TWA: 0.05 mg/m <sup>3</sup> respirable dust

### Appropriate engineering controls

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Wear protective gloves and protective clothing.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Information on basic physical and chemical properties

Physical state	liquid	Odor	Slight
Appearance	viscous	Odor threshold	No information available
Color	blue		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	6-11	
Melting point / freezing point	No information available	
Boiling point / boiling range	> 100 °C / 212 °F	
Flash point	> 100 °C / > 212 °F	
Evaporation rate	0	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	0 kPa at 25C	
Vapor density	No information available	
Relative density	1.56	
Water solubility	insoluble	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	>50,000 cSt @ 25C	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

#### Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	No information available

### 10. STABILITY AND REACTIVITY

#### Reactivity

No data available

#### Chemical stability

Stable under recommended storage conditions.

#### Possibility of Hazardous Reactions

None under normal processing.

#### Conditions to avoid

Extremes of temperature and direct sunlight. Exposure to air or moisture over prolonged periods.

#### Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

#### Hazardous Decomposition Products

Carbon monoxide. Carbon dioxide (CO<sub>2</sub>). Thermal decomposition can lead to release of irritating and toxic gases and vapors.

### 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

Product Information	No data available
---------------------	-------------------

Inhalation	May cause irritation.
Eye contact	Severely irritating to eyes.
Skin contact	Irritating to skin.
Ingestion	No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Polyol Blend	= 3750 mg/kg ( Rat ) > 2 g/kg ( Rat )	-	-
Silica, quartz 14808-60-7	= 500 mg/kg ( Rat )	-	-

#### Information on toxicological effects

**Symptoms** No information available.

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Sensitization** No information available.  
**Germ cell mutagenicity** No information available.  
**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Silica, quartz 14808-60-7	A2	Group 1	Known	X

**Reproductive toxicity** No information available.  
**STOT - single exposure** Target Organs. Respiratory system.  
**STOT - repeated exposure** No information available.  
**Aspiration hazard** No information available.

#### Numerical measures of toxicity - Product Information

ATEmix (oral)	8,000.00 mg/kg
ATEmix (dermal)	8,000.00 mg/kg
ATEmix (inhalation-gas)	99,999.00 ppm
ATEmix (inhalation-dust/mist)	20.00 mg/kg
ATEmix (inhalation-vapor)	99,999.00 mg/l

## 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

0 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

#### Persistence and degradability

No information available.

#### Bioaccumulation

Bioaccumulative potential.

#### Other adverse effects

**Ozone** No information available  
Not applicable

## 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods**

<b>Disposal of wastes</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated packaging</b>	Do not reuse container.

**14. TRANSPORT INFORMATION**

<b><u>DOT</u></b>	Not regulated
<b><u>TDG</u></b>	Not regulated
<b><u>IATA</u></b>	Not regulated
<b><u>IMDG</u></b>	Not regulated

**15. REGULATORY INFORMATION**

**International Inventories**

<b>TSCA</b>	Complies
<b>DSL/NDL</b>	Complies
<b>EINECS/ELINCS</b>	Complies
<b>ENCS</b>	Complies
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

**US Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

<b>Acute health hazard</b>	Yes
<b>Chronic Health Hazard</b>	No
<b>Fire hazard</b>	No
<b>Sudden release of pressure hazard</b>	No

Reactive Hazard

No

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**US State Regulations**

**California Proposition 65**

This product contains chemicals known to the state of California to cause cancer.

**U.S. State Right-to-Know Regulations**

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

<b><u>NFPA</u></b>	Health hazards 1	Flammability 1	Instability 0	Physical and Chemical Properties -
<b><u>HMIS</u></b>	Health hazards 1	Flammability 1	Physical hazards 0	Personal protection X

Issue Date 16-Jun-2015

Revision Date 16-Jun-2015

Revision Note

No information available

**Disclaimer**

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**End of Safety Data Sheet**



## Safety Data Sheet

Material Name: CCW-702

Product #: 305363

---

### Section 1 - PRODUCT AND COMPANY IDENTIFICATION

---

**Material Name**

CCW-702

**Synonyms**

Sovent-based contact adhesive

**Chemical Family**

Adhesive

**Product Use**

Adhesive

**Restrictions on Use**

For industrial use only

**Manufacturer Information**

Carlisle Coatings and Waterproofing, Inc

900 Hensley Lane

Wylie, TX 75098

www.carlisleccw.com

MSDS Assistance – 972-442-6545

Technical Assistance – 888-229-2199

Customer Service – 888-229-0199

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### Section 2 - HAZARDS IDENTIFICATION

---

**Classification in accordance with paragraph (d) of 29 CFR 1910.1200.**

Flammable Liquids - Category 2

Skin Corrosion/Irritation - Category 2

Serious Eye Damage/Eye Irritation - Category 2A

Specific Target Organ Toxicity - Single Exposure - Category 3

Specific Target Organ Toxicity - Repeated Exposure - Category 1 ( central nervous system,kidneys )

Specific Target Organ Toxicity - Repeated Exposure - Category 2 ( blood )

**GHS Label Elements**

**Symbol(s)**



**Signal Word**

Danger

**Hazard Statement(s)**

## Safety Data Sheet

**Material Name: CCW-702**

**Product #: 305363**

Highly flammable liquid and vapor  
Causes skin irritation  
Causes serious eye irritation  
May cause respiratory irritation. May cause drowsiness or dizziness  
Causes damage to organs through prolonged or repeated exposure  
May cause damage to organs through prolonged or repeated exposure

### Precautionary Statement(s)

#### Prevention

Keep container tightly closed  
Keep away from heat/sparks/open flame/hot surfaces - No smoking  
Ground/Bond container and receiving equipment  
Use explosion-proof electrical/ventilating/lighting equipment  
Take precautionary measures against static discharge  
Use only non-sparking tools  
Use only outdoors or in a well-ventilated area  
Wear protective gloves/protective clothing/eye protection/face protection  
Do not breathe dust/fume/gas/mist/vapours/spray  
Wash thoroughly after handling  
Do not eat, drink or smoke when using this product

#### Response

In case of fire: Use appropriate media to extinguish  
IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing  
Call a POISON CENTER or doctor if you feel unwell  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention  
IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower  
If skin irritation occurs: Get medical advice/attention  
Take off contaminated clothing and wash before reuse  
Specific treatment (see label)

#### Storage

Store in a well-ventilated place. Keep container tightly closed  
Keep cool  
Store locked up

#### Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations

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### Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

---

CAS	Component Name	Percent
108-88-3	Toluene	40-70

## Safety Data Sheet

Material Name: CCW-702

Product #: 305363

67-64-1	Acetone	10-15
Proprietary	Petroleum hydrocarbon resin	10-30

---

### Section 4 - FIRST AID MEASURES

---

#### Inhalation

Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell.

#### Skin

Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

#### Eyes

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

#### Ingestion

If swallowed, get medical attention.

#### Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively.

#### Most Important Symptoms/Effects

##### Acute

Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness.

##### Delayed

Causes damage to central nervous system, kidney damage. May cause damage to the blood system.

---

### Section 5 - FIRE FIGHTING MEASURES

---

#### Extinguishing Media

##### Suitable Extinguishing Media

Use carbon dioxide, regular dry chemical, regular foam or water. Water may be ineffective.

##### Unsuitable Extinguishing Media

Do not use high-pressure water streams.

#### Special Hazards Arising from the Chemical

Highly flammable liquid and vapor.

#### Hazardous Combustion Products

Carbon monoxide, carbon dioxide, oxides of nitrogen

#### Advice for firefighters

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

## Safety Data Sheet

**Material Name: CCW-702**

**Product #: 305363**

### **Fire Fighting Measures**

Move container from fire area if it can be done without risk.

---

## **Section 6 - ACCIDENTAL RELEASE MEASURES**

---

### **Personal Precautions, Protective Equipment and Emergency Procedures**

Wear personal protective clothing and equipment, see Section 8.

### **Methods and Materials for Containment and Cleaning Up**

Remove all sources of ignition. Avoid breathing vapors. Wear self-contained breathing apparatus and protective clothing. Ventilate affected area. Use non-sparking tools and equipment. Collect with absorbent into suitable container. Prevent entry into sewers, drains, ditches, underground or confined spaces and waterways. Absorb with sand or other non-combustible material.

### **Environmental Precautions**

Avoid release to the environment. Collect spillage.

---

## **Section 7 - HANDLING AND STORAGE**

---

### **Precautions for Safe Handling**

Keep away from heat, sparks, open flame, and hot surfaces - No smoking. Use non-sparking tools. Use explosion-proof electrical/ventilating/lighting equipment. Ground/Bond container and receiving equipment. Avoid prolonged contact with skin. Avoid contact with eyes. Wash with plenty of soap and water. Wash contaminated clothing before reuse. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Wear protective gloves/eye protection/face protection. Do not breathe gas/fume/vapour/spray. Do not eat, drink, or smoke when using this product. KEEP OUT OF REACH OF CHILDREN.

### **Conditions for Safe Storage, Including any Incompatibilities**

Store in a well-ventilated place. Keep container tightly closed

Keep cool

Store locked up

Keep away from heat, sparks and flame. Keep container tightly closed. Do not puncture or burn containers, even when empty. Empty containers may contain product residue.

### **Incompatible Materials**

strong oxidizing agents, acids, bases

---

## **Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION**

---

### **Component Exposure Limits**

<b>Toluene</b>	108-88-3
ACGIH:	20 ppm TWA

## Safety Data Sheet

**Material Name: CCW-702**

**Product #: 305363**

NIOSH:	100 ppm TWA; 375 mg/m <sup>3</sup> TWA	150 ppm STEL; 560 mg/m <sup>3</sup> STEL
	500 ppm IDLH	
Europe:	50 ppm TWA; 192 mg/m <sup>3</sup> TWA	100 ppm STEL; 384 mg/m <sup>3</sup> STEL
	Possibility of significant uptake through the skin	
OSHA (US):	200 ppm TWA	300 ppm Ceiling
Mexico:	50 ppm TWA LMPE-PPT; 188 mg/m <sup>3</sup> TWA LMPE-PPT	
	Skin - potential for cutaneous absorption	
<b>Acetone</b>	67-64-1	
ACGIH:	250 ppm TWA	500 ppm STEL
NIOSH:	250 ppm TWA; 590 mg/m <sup>3</sup> TWA	
Europe:	500 ppm TWA; 1210 mg/m <sup>3</sup> TWA	
OSHA (US):	1000 ppm TWA; 2400 mg/m <sup>3</sup> TWA	
Mexico:	1000 ppm TWA LMPE-PPT; 2400 mg/m <sup>3</sup> TWA LMPE-PPT	
	1260 ppm STEL [LMPE-CT]; 3000 mg/m <sup>3</sup> STEL [LMPE-CT]	

### Biological limit value

There are no biological limit values for any of this product's components.

### Engineering Controls

Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits.

### Individual Protection Measures, such as Personal Protective Equipment

#### Eye/face protection

Wear splash resistant safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

#### Skin Protection

Wear appropriate chemical resistant clothing, Industrial Boots.

#### Respiratory Protection

A NIOSH approved air-purifying respirator with an appropriate cartridge or canister may be appropriate under certain circumstances where airborne concentrations are expected to exceed exposure limits.

#### Glove Recommendations

Wear appropriate chemical resistant gloves.

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## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

---

## Safety Data Sheet

Material Name: CCW-702

Product #: 305363

<b>Appearance</b>	thin dark blue liquid	<b>Physical State</b>	liquid
<b>Odor</b>	sweet,solvent	<b>Color</b>	dark blue
<b>Odor Threshold</b>	Not available	<b>pH</b>	Not available
<b>Melting Point</b>	-95 °C(-139°F)	<b>Boiling Point</b>	56 - 110 °C133-230°F)
<b>Freezing point</b>	Not available	<b>Evaporation Rate</b>	3.2
<b>Boiling Point Range</b>	Not available	<b>Flammability (solid, gas)</b>	Not available
<b>Autoignition</b>	465 °C(869°F)	<b>Flash Point</b>	-18 °C(-0.4°F)
<b>Lower Explosive Limit</b>	1.3	<b>Decomposition</b>	Not available
<b>Upper Explosive Limit</b>	12.8	<b>Vapor Pressure</b>	54.6 mmHg
<b>Vapor Density (air=1)</b>	3	<b>Specific Gravity (water=1)</b>	Not available
<b>Water Solubility</b>	Negligible	<b>Partition coefficient: n-octanol/water</b>	Not available
<b>Viscosity</b>	350 cps	<b>Solubility (Other)</b>	Hydrocarbons
<b>Density</b>	0.9	<b>VOC</b>	450 g/L

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### Section 10 - STABILITY AND REACTIVITY

---

#### Reactivity

No reactivity hazard is expected.

#### Chemical Stability

Stable under normal conditions of use.

#### Possibility of Hazardous Reactions

Will not polymerize.

#### Conditions to Avoid

Avoid heat, flames, sparks and other sources of ignition.

#### Incompatible Materials

Strong oxidizing agents, acids, bases

#### Hazardous decomposition products

Carbon monoxide, carbon dioxide, acids, bases

---

### Section 11 - TOXICOLOGICAL INFORMATION

---

#### Information on Likely Routes of Exposure

## Safety Data Sheet

**Material Name: CCW-702**

**Product #: 305363**

### **Inhalation**

May cause respiratory irritation. May cause drowsiness or dizziness.

### **Skin Contact**

Causes skin irritation.

### **Eye Contact**

Causes serious eye irritation.

### **Ingestion**

No information on significant adverse effects.

### **Acute and Chronic Toxicity**

#### **Component Analysis - LD50/LC50**

The components of this material have been reviewed in various sources and the following selected endpoints are published:

Toluene (108-88-3)

Oral LD50 Rat >7000 mg/kg

Dermal LD50 12 - 14 g/kg

Inhalation LC50 Rat 30 - 35 mg/L

Acetone (67-64-1)

Oral LD50 Rat 5800 mg/kg

Dermal Guinea pig >7246 mg/kg

Inhalation LC50 Rat 32000 ppm 4 h

### **Immediate Effects**

Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness.

### **Delayed Effects**

Causes damage to central nervous system, kidney damage. May cause damage to the blood system.

### **Irritation/Corrosivity Data**

Causes serious eye irritation, skin irritation, Irritation to respiratory tract.

### **Respiratory Sensitization**

No information available for the product.

### **Dermal Sensitization**

No information available for the product.

### **Component Carcinogenicity**

<b>Toluene</b>	108-88-3
ACGIH:	A4 - Not Classifiable as a Human Carcinogen
IARC:	Monograph 71 [1999]; Monograph 47 [1989] (Group 3 (not classifiable))
<b>Acetone</b>	67-64-1
ACGIH:	A4 - Not Classifiable as a Human Carcinogen

### **Germ Cell Mutagenicity**

## Safety Data Sheet

**Material Name: CCW-702**

**Product #: 305363**

No information available for the product.

**Reproductive Toxicity**

No information available for the product.

**Specific Target Organ Toxicity - Single Exposure**

central nervous system, respiratory system

**Specific Target Organ Toxicity - Repeated Exposure**

Central nervous system, kidney, blood

**Aspiration hazard**

No information available for the product.

**Medical Conditions Aggravated by Exposure**

No data available.

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### Section 12 - ECOLOGICAL INFORMATION

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**Component Analysis - Aquatic Toxicity**

<b>Toluene</b>	108-88-3
Fish:	LC50 96 h Pimephales promelas 15.22 - 19.05 mg/L [flow-through] (1 day old); LC50 96 h Pimephales promelas 12.6 mg/L [static]; LC50 96 h Oncorhynchus mykiss 5.89 - 7.81 mg/L [flow-through]; LC50 96 h Oncorhynchus mykiss 14.1 - 17.16 mg/L [static]; LC50 96 h Oncorhynchus mykiss 5.8 mg/L [semi-static]; LC50 96 h Lepomis macrochirus 11 - 15 mg/L [static]; LC50 96 h Oryzias latipes 54 mg/L [static]; LC50 96 h Poecilia reticulata 28.2 mg/L [semi-static]; LC50 96 h Poecilia reticulata 50.87 - 70.34 mg/L [static]
Algae:	EC50 96 h Pseudokirchneriella subcapitata >433 mg/L IUCLID; EC50 72 h Pseudokirchneriella subcapitata 12.5 mg/L [static] EPA
Invertebrate:	EC50 48 h Daphnia magna 5.46 - 9.83 mg/L [static] EPA; EC50 48 h Daphnia magna 11.5 mg/L IUCLID
<b>Acetone</b>	67-64-1
Fish:	LC50 96 h Oncorhynchus mykiss 4.74 - 6.33 mL/L; LC50 96 h Pimephales promelas 6210 - 8120 mg/L [static]; LC50 96 h Lepomis macrochirus 8300 mg/L
Invertebrate:	EC50 48 h Daphnia magna 10294 - 17704 mg/L [static] EPA; EC50 48 h Daphnia magna 12600 - 12700 mg/L IUCLID



## Safety Data Sheet

Material Name: CCW-702

Product #: 305363

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### Section 13 - DISPOSAL CONSIDERATIONS

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#### Disposal Methods

Dispose of contents/container in accordance with local/regional/national/international regulations. Subject to disposal regulations. U.S. EPA 40 CFR 262. Hazardous Waste Number(s): D001.

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### Section 14 - TRANSPORT INFORMATION

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#### US DOT Information:

Shipping Name: ADHESIVES

Hazard Class: 3

UN/NA #: UN1133

Packing Group: II

Required Label(s): 3

#### IATA Information:

Shipping Name: ADHESIVES

Hazard Class: 3

UN#: UN1133

Packing Group: II

Required Label(s): 3

#### TDG Information:

Shipping Name: ADHESIVES

Hazard Class: 3

UN#: UN1133

Packing Group: II

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### Section 15 - REGULATORY INFORMATION

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#### U.S. Federal Regulations

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

Toluene	108-88-3
SARA 313:	1 % de minimis concentration
CERCLA:	1000 lb final RQ; 454 kg final RQ
TSCA 12b:	Section 4 , 1 % de minimus concentration (related to Hydrocarbons, C>4)
Acetone	67-64-1
CERCLA:	5000 lb final RQ; 2270 kg final RQ

## Safety Data Sheet

**Material Name: CCW-702**

**Product #: 305363**

**SARA Section 311/312 (40 CFR 370 Subparts B and C)**

**Acute Health:** Yes **Chronic Health:** Yes **Fire:** Yes **Pressure:** No **Reactivity:** No

### U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
Toluene	108-88-3	Yes	Yes	Yes	Yes	Yes
Acetone	67-64-1	Yes	Yes	Yes	Yes	Yes

**The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):**

**WARNING!** This product contains a chemical known to the state of California to cause reproductive/developmental effects

Toluene	108-88-3
Repro/Dev. Tox	developmental toxicity , 1/1/1991

### Canadian WHMIS Ingredient Disclosure List (IDL)

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which meet WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL

Toluene	108-88-3
	1 %
Acetone	67-64-1
	1 %

### Component Analysis - Inventory

Toluene (108-88-3)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

Acetone (67-64-1)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

## Section 16 - OTHER INFORMATION

## Safety Data Sheet

**Material Name: CCW-702**

**Product #: 305363**

### HMIS Rating

Health: 3 Fire: 2 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe \* = Chronic hazard

### NFPA Ratings

Health: 2 Fire: 3 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

### Summary of Changes

New SDS: 4/30/2015

### Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States.

### Other Information

#### Disclaimer:

The information contained herein is based upon data and information available to us, and reflects our best professional judgment. This product may be formulated in part with components purchased from other companies. In many instances, especially when proprietary or trade secret materials are used, CCWI Company must rely upon the hazard evaluation of such components submitted by that product's manufacturer or importer. No warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of such data or information. The results to be obtained from the use thereof, or that any such use does not infringe any patent, since the information contained herein may be applied under conditions of use beyond our control and with which we may be unfamiliar, we do not assume responsibility for the results of such application. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular use.

## Safety Data Sheet

Material Name: CCW-704

Product #305360

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**Section 1 - PRODUCT AND COMPANY IDENTIFICATION**

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**Material Name**

CCW-704

**Synonyms**

Solvent-based rubberized bitumen mastic

**Chemical Family**

Mastic

**Product Use**

Detailing mastic for use with waterproofing membrane

**Restrictions on Use**

For industrial use only.

**Phone Numbers:**

Medical Emergency

CHEMTREC (USA): 800-424-9300

MSDS Assistance; 972-442-6545

Technical Assistance: 888-229-2199

Customer Service: 888-229-0199

**Manufacturer Information**

Carlisle Coatings and Waterproofing, Inc.

900 Hensley Lane

Wylie, TX 75098

www.carlisleccw.com

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**Section 2 - HAZARDS IDENTIFICATION**

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**Classification in accordance with paragraph (d) of 29 CFR 1910.1200.**

Flammable Liquids - Category 3

Skin Corrosion/Irritation - Category 2

Carcinogenicity - Category 2

Reproductive Toxicity - Category 1B

Specific Target Organ Toxicity - Single Exposure - Category 2 ( liver, kidneys, thymus )

Specific Target Organ Toxicity - Single Exposure - Category 3

**GHS Label Elements****Symbol(s)****Signal Word**

Danger

## Safety Data Sheet

**Material Name: CCW-704**

**Product #305360**

**Hazard Statement(s)**

Flammable liquid and vapor  
Causes skin irritation  
Suspected of causing cancer  
May damage fertility or the unborn child  
May cause damage to organs  
May cause respiratory irritation. May cause drowsiness or dizziness

**Precautionary Statement(s)**

**Prevention**

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Keep container tightly closed  
Keep away from heat/sparks/open flame/hot surfaces - No smoking  
Ground/Bond container and receiving equipment  
Use explosion-proof electrical/ventilating/lighting equipment  
Take precautionary measures against static discharge  
Use only non-sparking tools  
Use only outdoors or in a well-ventilated area  
Wear protective gloves/protective clothing/eye protection/face protection  
Do not breathe dust/fume/gas/mist/vapours/spray  
Wash thoroughly after handling  
Do not eat, drink or smoke when using this product

**Response**

In case of fire: Use appropriate media to extinguish  
If exposed or concerned: Call a POISON CENTER or doctor/physician  
IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing  
Call a POISON CENTER or doctor if you feel unwell  
IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower  
If skin irritation occurs: Get medical advice/attention  
Take off contaminated clothing and wash before reuse  
Specific treatment (see label)

**Storage**

Store in a well-ventilated place. Keep container tightly closed  
Keep cool  
Store locked up

**Disposal**

Dispose of contents/container in accordance with local/regional/national/international regulations

**Other Hazards**

No additional information available.

## Safety Data Sheet

Material Name: CCW-704

Product #305360

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**Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS**

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CAS	Component Name	Percent
8052-42-4	Asphalt	0-45
64742-93-4	Asphalt, oxidized	0-45
68955-27-1	Distillates, petroleum, petroleum residues vacuum	0-45
64741-56-6	Residues, petroleum, vacuum	0-45
64742-95-6	Solvent naphtha, petroleum, light aromatic	10-30
98-82-8	Cumene	0.1-1
95-63-6	Benzene, 1,2,4-trimethyl-	3-7
1330-20-7	Xylenes (o-, m-, p- isomers)	0.1-1
1317-65-3	Limestone	10-30
14808-60-7	Silica, crystalline	0.1-1
68953-58-2	Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite	5-10

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**Section 4 - FIRST AID MEASURES**

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**Description of Necessary Measures**

If exposed or concerned: Call a POISON CENTER or doctor/physician.

**Inhalation**

Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

**Skin**

Wash exposed skin with soap and water. Take off contaminated clothing and wash before reuse. If skin irritation occurs, get medical advice/attention.

**Eyes**

Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

## Safety Data Sheet

**Material Name: CCW-704**

**Product #305360**

### **Ingestion**

Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor if you feel unwell.

### **Indication of any immediate medical attention and special treatment needed**

Treat symptomatically and supportively.

### **Most Important Symptoms/Effects**

#### **Acute**

Causes skin irritation. May cause damage to the kidneys, liver, thymus. May cause respiratory irritation. May cause drowsiness or dizziness.

#### **Delayed**

Suspected of causing cancer. May damage fertility or the unborn child.

### **Note to Physicians**

Contains ASPHALT.

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## **Section 5 - FIRE FIGHTING MEASURES**

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### **Extinguishing Media**

#### **Suitable Extinguishing Media**

Use carbon dioxide, regular dry chemical, regular foam or water.

#### **Unsuitable Extinguishing Media**

None known.

### **Special Hazards Arising from the Chemical**

Flammable liquid and vapor. Vapors are heavier than air and may travel a considerable distance to a source of ignition and flashback.

### **Hazardous Combustion Products**

Oxides of carbon, hydrocarbons

### **Fire Fighting Measures**

Ground/Bond container and receiving equipment. Take precautionary measures against static discharge. Avoid inhalation of material or combustion by-products.

### **Special Protective Equipment and Precautions for Firefighters**

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

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## **Section 6 - ACCIDENTAL RELEASE MEASURES**

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### **Personal Precautions, Protective Equipment and Emergency Procedures**

Wear personal protective clothing and equipment, see Section 8.

### **Methods and Materials for Containment and Cleaning Up**

Remove all sources of ignition. Avoid inhalation of material or combustion by-products. Ventilate affected area. Absorb with earth, sand or other non-combustible material and transfer to container. Dispose in accordance with all applicable regulations.

## Safety Data Sheet

**Material Name: CCW-704**

**Product #305360**

### Environmental Precautions

Avoid release to the environment.

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## Section 7 - HANDLING AND STORAGE

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### Precautions for Safe Handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep container tightly closed. Keep away from heat/sparks/open flame/hot surfaces - No smoking. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Take precautionary measures against static discharge. Use only non-sparking tools. Use only outdoors or in a well-ventilated area. Avoid contact with eyes, skin and clothing. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/fume/gas/mist/vapours/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. KEEP OUT OF REACH OF CHILDREN.

### Conditions for Safe Storage, Including any Incompatibilities

Store in a well-ventilated place. Keep container tightly closed

Keep cool

Store locked up

Store below 100 F. Keep away from heat and ignition sources. Keep away from incompatible materials. Do not cut, puncture, or weld on or near this container.

### Incompatible Materials

Strong oxidizing agents

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## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

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### Component Exposure Limits

<b>Asphalt</b>	8052-42-4	
ACGIH:	0.5 mg/m <sup>3</sup> TWA as benzene soluble aerosol fume, inhalable fraction	
NIOSH:	5 mg/m <sup>3</sup> Ceiling fume 15 min	
Mexico:	5 mg/m <sup>3</sup> TWA LMPE-PPT	10 mg/m <sup>3</sup> STEL [LMPE-CT]
<b>Hydrogen sulfide</b>	7783-06-4	
ACGIH:	1 ppm TWA	5 ppm STEL
NIOSH:	10 ppm Ceiling 10 min; 15 mg/m <sup>3</sup> Ceiling 10 min	
	100 ppm IDLH	
Europe:	5 ppm TWA; 7 mg/m <sup>3</sup> TWA	10 ppm STEL; 14 mg/m <sup>3</sup> STEL



## Safety Data Sheet

Material Name: CCW-704

Product #305360

OSHA (US):	20 ppm Ceiling	
Mexico:	10 ppm TWA LMPE-PPT; 14 mg/m <sup>3</sup> TWA LMPE-PPT	
	15 ppm STEL [LMPE-CT]; 21 mg/m <sup>3</sup> STEL [LMPE-CT]	
<b>Cumene</b>	98-82-8	
ACGIH:	50 ppm TWA	
NIOSH:	50 ppm TWA; 245 mg/m <sup>3</sup> TWA	900 ppm IDLH (10% LEL)
	Potential for dermal absorption	
Europe:	20 ppm TWA; 100 mg/m <sup>3</sup> TWA	50 ppm STEL; 250 mg/m <sup>3</sup> STEL
	Possibility of significant uptake through the skin	
OSHA (US):	50 ppm TWA; 245 mg/m <sup>3</sup> TWA	
	prevent or reduce skin absorption	
Mexico:	50 ppm TWA LMPE-PPT; 245 mg/m <sup>3</sup> TWA LMPE-PPT	
	75 ppm STEL [LMPE-CT]; 365 mg/m <sup>3</sup> STEL [LMPE-CT]	
	Skin - potential for cutaneous absorption	
<b>Benzene, 1,2,4-trimethyl-</b>	95-63-6	
NIOSH:	25 ppm TWA; 125 mg/m <sup>3</sup> TWA	
Europe:	20 ppm TWA; 100 mg/m <sup>3</sup> TWA	
<b>Xylenes (o-, m-, p- isomers)</b>	1330-20-7	
ACGIH:	100 ppm TWA	150 ppm STEL
Europe:	50 ppm TWA (pure); 221 mg/m <sup>3</sup> TWA (pure)	
	Possibility of significant uptake through the skin	
	100 ppm STEL (pure); 442 mg/m <sup>3</sup> STEL (pure)	
OSHA (US):	100 ppm TWA; 435 mg/m <sup>3</sup> TWA	
Mexico:	100 ppm TWA LMPE-PPT; 435 mg/m <sup>3</sup> TWA LMPE-PPT	
	150 ppm STEL [LMPE-CT]; 655 mg/m <sup>3</sup> STEL [LMPE-CT]	

## Safety Data Sheet

Material Name: CCW-704

Product #305360

<b>Limestone</b>	1317-65-3	
NIOSH:	10 mg/m <sup>3</sup> TWA total dust; 5 mg/m <sup>3</sup> TWA respirable dust	
OSHA (US):	15 mg/m <sup>3</sup> TWA total dust; 5 mg/m <sup>3</sup> TWA respirable fraction	
Mexico:	10 mg/m <sup>3</sup> TWA LMPE-PPT	20 mg/m <sup>3</sup> STEL [LMPE-CT]
<b>Silica, crystalline</b>	14808-60-7	
ACGIH:	0.025 mg/m <sup>3</sup> TWA respirable fraction	
NIOSH:	0.05 mg/m <sup>3</sup> TWA respirable dust	50 mg/m <sup>3</sup> IDLH respirable dust
OSHA (US):	((30)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA) total dust; ((250)/(%SiO <sub>2</sub> + 5) mppcf TWA) respirable fraction; ((10)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA) respirable fraction	
Mexico:	0.1 mg/m <sup>3</sup> TWA LMPE-PPT respirable fraction	

### Biological limit value

There are no biological limit values for any of this product's components.

### Engineering Controls

Provide adequate ventilation. Ensure compliance with applicable exposure limits.

### Individual Protection Measures, such as Personal Protective Equipment

#### Eye/face protection

Wear safety glasses or safety goggles, with a faceshield, as appropriate.

#### Skin Protection

Wear chemical resistant clothing and rubber boots when potential for contact with the material exists.

#### Respiratory Protection

A NIOSH approved air-purifying respirator with an appropriate cartridge or canister may be appropriate under certain circumstances where airborne concentrations are expected to exceed exposure limits.

#### Glove Recommendations

Wear appropriate chemical resistant gloves.

#### Protective Materials

Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Black paste	<b>Physical State</b>	liquid
<b>Odor</b>	Petroleum	<b>Color</b>	Black
<b>Odor Threshold</b>	Not available	<b>pH</b>	Not available

## Safety Data Sheet

Material Name: CCW-704

Product #305360

<b>Melting Point</b>	Not available	<b>Boiling Point</b>	308 - 355 °F
<b>Freezing point</b>	Not available	<b>Evaporation Rate</b>	10 - 20 % volatile
<b>Boiling Point Range</b>	Not available	<b>Flammability (solid, gas)</b>	Not available
<b>Autoignition</b>	Not available	<b>Flash Point</b>	108 °F
<b>Lower Explosive Limit</b>	1.9 %	<b>Decomposition</b>	Not available
<b>Upper Explosive Limit</b>	12.6 %	<b>Vapor Pressure</b>	3 mmHg
<b>Vapor Density (air=1)</b>	4.2	<b>Specific Gravity (water=1)</b>	Not available
<b>Water Solubility</b>	Negligible	<b>Partition coefficient: n-octanol/water</b>	Not available
<b>Viscosity</b>	Not available	<b>Solubility (Other)</b>	Not available
<b>Density</b>	1.24 (relative)	<b>VOC</b>	200 g/L

### Other Information

No additional information available.

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## Section 10 - STABILITY AND REACTIVITY

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### Reactivity

No reactivity hazard is expected.

### Chemical Stability

Stable under normal conditions of use.

### Possibility of Hazardous Reactions

Hazardous polymerization will not occur.

### Conditions to Avoid

Avoid heat, flames, sparks and other sources of ignition. Avoid contact with incompatible materials.

### Incompatible Materials

Strong oxidizing agents

### Hazardous decomposition products

Oxides of carbon, hydrocarbons

---

## Section 11 - TOXICOLOGICAL INFORMATION

---

### Information on Likely Routes of Exposure

#### Inhalation

May cause respiratory irritation. May cause drowsiness or dizziness.

#### Skin Contact

Causes skin irritation.

## Safety Data Sheet

**Material Name: CCW-704**

**Product #305360**

### Eye Contact

May cause mild eye irritation.

### Ingestion

May be harmful if swallowed.

### Acute and Chronic Toxicity

#### Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

Asphalt (8052-42-4)

Oral LD50 Rat >5000 mg/kg

Dermal LD50 Rabbit >2000 mg/kg

Asphalt, oxidized (64742-93-4)

Oral LD50 Rat >5000 mg/kg

Dermal LD50 Rabbit >2000 mg/kg

Distillates, petroleum, petroleum residues vacuum (68955-27-1)

Oral LD50 Rat 4320 mg/kg

Dermal LD50 Rabbit >2000 mg/kg

Residues, petroleum, vacuum (64741-56-6)

Oral LD50 Rat 4320 mg/kg

Dermal LD50 Rabbit >2000 mg/kg

Hydrogen sulfide (7783-06-4)

Inhalation LC50 Rat 0.99 mg/L 1 h

Solvent naphtha, petroleum, light aromatic (64742-95-6)

Oral LD50 >3000 mg/kg

Dermal LD50 >3160 mg/kg

Inhalation LC50 Rat 3400 ppm 4 h

Cumene (98-82-8)

Oral LD50 Rat 1400 mg/kg

Dermal LD50 Rabbit 12300 µL/kg

Inhalation LC50 Rat >3577 ppm 6 h

Benzene, 1,2,4-trimethyl- (95-63-6)

Oral LD50 Rat 3280 mg/kg

Dermal LD50 Rabbit >3160 mg/kg

Inhalation LC50 Rat 18 g/m<sup>3</sup> 4 h

Xylenes (o-, m-, p- isomers) (1330-20-7)

Oral LD50 Rat 3500 mg/kg

Dermal LD50 Rabbit >4350 mg/kg

Inhalation LC50 Rat 29.08 mg/L 4 h

Limestone (1317-65-3)

Oral LD50 Rat 6450 mg/kg

Silica, crystalline (14808-60-7)

Oral LD50 Rat 500 mg/kg

Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite (68953-58-2)

Oral LD50 Rat >5000 mg/kg

Inhalation LC50 Rat >12.6 mg/L 4 h

## Safety Data Sheet

**Material Name: CCW-704**

**Product #305360**

### Immediate Effects

Causes skin irritation. May cause damage to the kidneys, liver, thymus. May cause respiratory irritation. May cause drowsiness or dizziness.

### Delayed Effects

Suspected of causing cancer. May damage fertility or the unborn child.

### Irritation/Corrosivity Data

Causes skin irritation. May cause respiratory irritation. May cause mild eye irritation.

### Respiratory Sensitization

No data available.

### Dermal Sensitization

No data available.

### Component Carcinogenicity

<b>Asphalt</b>	8052-42-4
ACGIH:	A4 - Not Classifiable as a Human Carcinogen (fume, coal tar-free)
IARC:	Monograph 103 [2013]; Supplement 7 [1987] (extracts of steam-refined and air-refined); Monograph 35 [1985] (Group 2B (possibly carcinogenic to humans))
DFG:	Category 2 (considered to be carcinogenic for man, aerosol and vapor)
OSHA:	Present
<b>Asphalt, oxidized</b>	64742-93-4
IARC:	Monograph 103 [2013] (and their emissions during roofing) (Group 2A (probably carcinogenic to humans))
OSHA:	Present
<b>Residues, petroleum, vacuum</b>	64741-56-6
IARC:	Monograph 103 [2013] (Group 2B (possibly carcinogenic to humans))
OSHA:	Present
<b>Polycyclic aromatic hydrocarbons</b>	130498-29-2
NTP:	Reasonably Anticipated To Be A Human Carcinogen
OSHA:	Present

## Safety Data Sheet

Material Name: CCW-704

Product #305360

<b>Cumene</b>	98-82-8
IARC:	Monograph 101 [2012] (Group 2B (possibly carcinogenic to humans))
NTP:	Reasonably Anticipated To Be A Human Carcinogen
DFG:	Category 3B (could be carcinogenic for man)
OSHA:	Present
<b>Xylenes (o-, m-, p-isomers)</b>	1330-20-7
ACGIH:	A4 - Not Classifiable as a Human Carcinogen
IARC:	Monograph 71 [1999]; Monograph 47 [1989] (Group 3 (not classifiable))
<b>Silica, crystalline</b>	14808-60-7
ACGIH:	A2 - Suspected Human Carcinogen
IARC:	Monograph 100C [2012]; Monograph 68 [1997] (Group 1 (carcinogenic to humans))
NTP:	Known Human Carcinogen (respirable size)
DFG:	Category 1 (causes cancer in man, alveola fraction)
OSHA:	Present (respirable size)

**Germ Cell Mutagenicity**

No data available.

**Tumorigenic Data**

No data available

**Reproductive Toxicity**

May damage fertility or the unborn child.

**Specific Target Organ Toxicity - Single Exposure**

kidneys, liver, thymus

**Specific Target Organ Toxicity - Repeated Exposure**

No target organs identified.

**Aspiration hazard**

No data available.

**Medical Conditions Aggravated by Exposure**

No data available.

## Safety Data Sheet

**Material Name: CCW-704**

**Product #305360**

### Additional Data

This product contains crystalline silica, which is a known carcinogen. However, this component is bound by the polymer portion of the sealant. The only way this component would be released is through incineration.

## Section 12 - ECOLOGICAL INFORMATION

### Ecotoxicity

Avoid release to the environment.

### Component Analysis - Aquatic Toxicity

<b>Asphalt, oxidized</b>	64742-93-4
Algae:	EC50 72 h Pseudokirchneriella subcapitata 56 mg/L IUCLID
<b>Distillates, petroleum, petroleum residues vacuum</b>	68955-27-1
Fish:	LC50 96 h Brachydanio rerio 48 mg/L [semi-static]
<b>Residues, petroleum, vacuum</b>	64741-56-6
Fish:	LC50 96 h Brachydanio rerio 48 mg/L [semi-static]
<b>Hydrogen sulfide</b>	7783-06-4
Fish:	LC50 96 h Lepomis macrochirus 0.0448 mg/L [flow-through]; LC50 96 h Pimephales promelas 0.016 mg/L [flow-through]
<b>Solvent naphtha, petroleum, light aromatic</b>	64742-95-6
Fish:	LC50 96 h Oncorhynchus mykiss 9.22 mg/L
Invertebrate:	EC50 48 h Daphnia magna 6.14 mg/L IUCLID
<b>Cumene</b>	98-82-8
Fish:	LC50 96 h Pimephales promelas 6.04 - 6.61 mg/L [flow-through]; LC50 96 h Oncorhynchus mykiss 4.8 mg/L [flow-through];

## Safety Data Sheet

**Material Name: CCW-704**

**Product #305360**

	LC50 96 h Oncorhynchus mykiss 2.7 mg/L [semi-static]; LC50 96 h Poecilia reticulata 5.1 mg/L [semi-static]
Algae:	EC50 72 h Pseudokirchneriella subcapitata 2.6 mg/L EPA
Invertebrate:	EC50 48 h Daphnia magna 0.6 mg/L IUCLID; EC50 48 h Daphnia magna 7.9 - 14.1 mg/L [static] EPA
<b>Benzene, 1,2,4-trimethyl-</b>	95-63-6
Fish:	LC50 96 h Pimephales promelas 7.19 - 8.28 mg/L [flow-through]
Invertebrate:	EC50 48 h Daphnia magna 6.14 mg/L IUCLID
<b>Xylenes (o-, m-, p-isomers)</b>	1330-20-7
Fish:	LC50 96 h Pimephales promelas 13.4 mg/L [flow-through]; LC50 96 h Oncorhynchus mykiss 2.661 - 4.093 mg/L [static]; LC50 96 h Oncorhynchus mykiss 13.5 - 17.3 mg/L; LC50 96 h Lepomis macrochirus 13.1 - 16.5 mg/L [flow-through]; LC50 96 h Lepomis macrochirus 19 mg/L; LC50 96 h Lepomis macrochirus 7.711 - 9.591 mg/L [static]; LC50 96 h Pimephales promelas 23.53 - 29.97 mg/L [static]; LC50 96 h Cyprinus carpio 780 mg/L [semi-static]; LC50 96 h Cyprinus carpio >780 mg/L; LC50 96 h Poecilia reticulata 30.26 - 40.75 mg/L [static]
Invertebrate:	EC50 48 h water flea 3.82 mg/L; LC50 48 h Gammarus lacustris 0.6 mg/L

### Persistence and Degradability

No information available for the product.

### Bioaccumulative Potential

No information available for the product.

### Mobility

No information available for the product.

### Other Toxicity

No additional information available.



## Safety Data Sheet

Material Name: CCW-704

Product #305360

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### Section 13 - DISPOSAL CONSIDERATIONS

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#### Disposal Methods

Dispose of contents/container in accordance with local/regional/national/international regulations.

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### Section 14 - TRANSPORT INFORMATION

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#### US DOT Information:

**Shipping Name:** Combustible liquid, n.o.s.

**Hazard Class:** Combustible liquid

**UN/NA #:** NA1993

**Packing Group:** III

**Required Label(s):** None

**Additional information:** Special Provisions (172.102): IB3, T1, T4, TP1

#### IATA Information:

**UN#:** UN1993

#### IMDG Information:

**UN#:** UN1993

#### TDG Information:

**UN#:** UN1993

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### Section 15 - REGULATORY INFORMATION

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#### U.S. Federal Regulations

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

Hydrogen sulfide	7783-06-4
SARA 302:	500 lb TPQ
SARA 313:	1 % de minimis concentration
CERCLA:	100 lb final RQ; 45.4 kg final RQ
OSHA (safety):	1500 lb TQ
SARA 304:	100 lb EPCRA RQ
Cumene	98-82-8
SARA 313:	1 % de minimis concentration

## Safety Data Sheet

**Material Name: CCW-704**

**Product #305360**

CERCLA:	5000 lb final RQ; 2270 kg final RQ
Benzene, 1,2,4-trimethyl-	95-63-6
SARA 313:	1 % de minimis concentration
Xylenes (o-, m-, p- isomers)	1330-20-7
SARA 313:	1 % de minimis concentration
CERCLA:	100 lb final RQ; 45.4 kg final RQ

### SARA Section 311/312 (40 CFR 370 Subparts B and C)

**Acute Health:** Yes **Chronic Health:** Yes **Fire:** Yes **Pressure:** No **Reactivity:** No

### U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
Asphalt	8052-42-4	Yes	Yes	Yes	Yes	Yes
Asphalt, oxidized	64742-93-4	No	No	No	Yes	No
Hydrogen sulfide	7783-06-4	Yes	Yes	Yes	Yes	Yes
Polycyclic aromatic hydrocarbons	130498-29-2	No	No	Yes	Yes	Yes
Cumene	98-82-8	Yes	Yes	Yes	Yes	Yes
Benzene, 1,2,4-trimethyl-	95-63-6	No	Yes	Yes	Yes	Yes
Xylenes (o-, m-, p- isomers)	1330-20-7	Yes	Yes	Yes	Yes	Yes
Limestone	1317-65-3	No	Yes	Yes	Yes	Yes
Silica, crystalline	14808-60-7	No	Yes	Yes	Yes	Yes

### The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

**WARNING!** This product contains a chemical known to the state of California to cause cancer

Cumene	98-82-8
Carc:	carcinogen , 4/6/2010
Silica, crystalline	14808-60-7
Carc:	carcinogen , 10/1/1988 (airborne particles of respirable size)

### Canadian WHMIS Ingredient Disclosure List (IDL)

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which meet WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL

## Safety Data Sheet

**Material Name: CCW-704**

**Product #305360**

Hydrogen sulfide	7783-06-4
	1 %
Cumene	98-82-8
	1 %
Benzene, 1,2,4-trimethyl-	95-63-6
	0.1 %
Silica, crystalline	14808-60-7
	1 %

### Component Analysis - Inventory

Asphalt (8052-42-4)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes

Asphalt, oxidized (64742-93-4)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	No

Distillates, petroleum, petroleum residues vacuum (68955-27-1)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	No	No	No	Yes	No	Yes	No	No

Residues, petroleum, vacuum (64741-56-6)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes

Hydrogen sulfide (7783-06-4)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

## Safety Data Sheet

**Material Name: CCW-704**

**Product #305360**

### Polycyclic aromatic hydrocarbons (130498-29-2)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
No	No	No	No	No	No	No	No	No	No	No	Yes

### Solvent naphtha, petroleum, light aromatic (64742-95-6)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes

### Cumene (98-82-8)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

### Benzene, 1,2,4-trimethyl- (95-63-6)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

### Xylenes (o-, m-, p- isomers) (1330-20-7)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

### Limestone (1317-65-3)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	NSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

### Silica, crystalline (14808-60-7)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

## Safety Data Sheet

**Material Name: CCW-704**

**Product #305360**

Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite (68953-58-2)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	No

### Section 16 - OTHER INFORMATION

#### HMIS Rating

Health: 2\* Fire: 2 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe \* = Chronic hazard

#### NFPA Ratings

Health: 2 Fire: 2 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

#### Summary of Changes

New SDS: June 2, 2015

#### Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States.

## Safety Data Sheet

**Material Name: CCW-704**

**Product #305360**

### **Other Information**

#### **Disclaimer:**

The information contained herein is based upon data and information available to us, and reflects our best professional judgment. This product may be formulated in part with components purchased from other companies. In many instances, especially when proprietary or trade secret materials are used, CCWI Company must rely upon the hazard evaluation of such components submitted by that product's manufacturer or importer. No warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of such data or information. The results to be obtained from the use thereof, or that any such use does not infringe any patent, since the information contained herein may be applied under conditions of use beyond our control and with which we may be unfamiliar, we do not assume responsibility for the results of such application. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular use

## Safety Data Sheet

**Material Name:** CCW 705FR-A

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### Section 1 - PRODUCT AND COMPANY IDENTIFICATION

---

**Material Name**

CCW 705FR-A

**Synonyms**

Self-Adhering Rubberized Asphalt Membrane

**Chemical Family**

Rubber Asphalt products

**Product Use**

Waterproofing airbarrier membrane

**Restrictions on Use**

For industrial use only.

**Manufacturer Information**

Carlisle Coatings and Waterproofing, Inc  
900 Hensley Lane  
Wylie, TX 75098  
www.carlisleccw.com

**Phone Numbers:**

Medical Emergency  
CHEMTREC (USA): 800-424-9300

MSDS Assistance: 972-442-6545  
Technical Assistance: 888-229-2199  
Customer Service: 888-229-0199

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### Section 2 - HAZARDS IDENTIFICATION

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**Classification in accordance with paragraph (d) of 29 CFR 1910.1200.**

Skin Corrosion/Irritation - Category 2

Reproductive Toxicity - Category 1B

Specific Target Organ Toxicity - Single Exposure - Category 2 ( liver, kidneys, thymus )

**GHS Label Elements**

**Symbol(s)**



**Signal Word**

Danger

**Hazard Statement(s)**

Causes skin irritation

May damage fertility or the unborn child

May cause damage to organs

**Precautionary Statement(s)**

**Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Wear protective gloves/protective clothing/eye protection/face protection

## Safety Data Sheet

**Material Name: CCW 705FR-A**

Do not breathe dust/fume/gas/mist/vapours/spray  
Wash thoroughly after handling  
Do not eat, drink or smoke when using this product

**Response**

If exposed or concerned: Call a POISON CENTER or doctor/physician  
IF ON SKIN: Wash with plenty of soap and water  
If skin irritation occurs: Get medical advice/attention  
Take off contaminated clothing and wash before reuse  
Specific treatment (see label)

**Storage**

Store locked up

**Disposal**

Dispose of contents/container in accordance with local/regional/national/international regulations

**Other Hazards**

No additional information available.

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### Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

---

CAS	Component Name	Percent
64742-52-5	Distillates, petroleum, hydrotreated heavy naphthenic	5-10
8052-42-4	Asphalt	0-75
64742-93-4	Asphalt, oxidized	0-75
68955-27-1	Distillates, petroleum, petroleum residues vacuum	0-75
64741-56-6	Residues, petroleum, vacuum	0-75
Mixture	Fatty acids, tall-oil, low-boiling	0.8

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### Section 4 - FIRST AID MEASURES

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**Description of Necessary Measures**

If exposed or concerned: Call a POISON CENTER or doctor/physician.

**Inhalation**

Inhalation unlikely due to physical form. Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

**Skin**

Wash exposed skin with soap and water. Take off contaminated clothing and wash before reuse. If skin irritation occurs, get medical advice/attention.



## Safety Data Sheet

**Material Name: CCW 705FR-A**

**Eyes**

Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

**Ingestion**

Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.

**Indication of any immediate medical attention and special treatment needed**

Treat symptomatically and supportively.

**Most Important Symptoms/Effects**

**Acute**

Causes skin irritation. May cause damage to the kidneys, liver, thymus.

**Delayed**

May damage fertility or the unborn child.

**Note to Physicians**

Contains ASPHALT.

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### Section 5 - FIRE FIGHTING MEASURES

---

**Extinguishing Media**

**Suitable Extinguishing Media**

Use carbon dioxide, regular dry chemical, regular foam or water.

**Unsuitable Extinguishing Media**

None known.

**Special Hazards Arising from the Chemical**

Slight fire hazard.

**Hazardous Combustion Products**

Oxides of carbon, hydrocarbons

**Special Protective Equipment and Precautions for Firefighters**

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

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### Section 6 - ACCIDENTAL RELEASE MEASURES

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**Personal Precautions, Protective Equipment and Emergency Procedures**

Wear personal protective clothing and equipment, see Section 8.

**Methods and Materials for Containment and Cleaning Up**

Remove all sources of ignition. Avoid inhalation of material or combustion by-products. Ventilate affected area. Absorb with earth, sand or other non-combustible material and transfer to container. Dispose in accordance with all applicable regulations.

**Environmental Precautions**

Avoid release to the environment.

## Safety Data Sheet

Material Name: CCW 705FR-A

### Section 7 - HANDLING AND STORAGE

#### Precautions for Safe Handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with eyes, skin and clothing. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/fume/gas/mist/vapours/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. KEEP OUT OF REACH OF CHILDREN.

#### Conditions for Safe Storage, Including any Incompatibilities

Store locked up

Store in a cool, dry place. Keep container tightly closed and in a well-ventilated place. Keep away from heat and ignition sources. Keep away from incompatible materials. Do not cut, puncture, or weld on or near this container.

#### Incompatible Materials

Strong acids, strong oxidizing agents

### Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

#### Component Exposure Limits

<b>Asphalt</b>	8052-42-4	
ACGIH:	0.5 mg/m <sup>3</sup> TWA as benzene soluble aerosol fume, inhalable fraction	
NIOSH:	5 mg/m <sup>3</sup> Ceiling fume 15 min	
Mexico:	5 mg/m <sup>3</sup> TWA LMPE-PPT	10 mg/m <sup>3</sup> STEL [LMPE-CT]
<b>Hydrogen sulfide</b>	7783-06-4	
ACGIH:	1 ppm TWA	5 ppm STEL
NIOSH:	10 ppm Ceiling 10 min; 15 mg/m <sup>3</sup> Ceiling 10 min	
	100 ppm IDLH	
Europe:	5 ppm TWA; 7 mg/m <sup>3</sup> TWA	10 ppm STEL; 14 mg/m <sup>3</sup> STEL
OSHA (US):	20 ppm Ceiling	
Mexico:	10 ppm TWA LMPE-PPT; 14 mg/m <sup>3</sup> TWA LMPE-PPT	
	15 ppm STEL [LMPE-CT]; 21 mg/m <sup>3</sup> STEL [LMPE-CT]	

#### Biological limit value

There are no biological limit values for any of this product's components.

#### Engineering Controls

Provide adequate ventilation. Ensure compliance with applicable exposure limits.

## Safety Data Sheet

**Material Name: CCW 705FR-A**

**Individual Protection Measures, such as Personal Protective Equipment**

**Eye/face protection**

Wear safety glasses or safety goggles, with a faceshield, as appropriate. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

**Skin Protection**

Wear chemical resistant clothing and rubber boots when potential for contact with the material exists. Recommended material: protective skin cream.

**Respiratory Protection**

A NIOSH approved air-purifying respirator with an appropriate cartridge or canister may be appropriate under certain circumstances where airborne concentrations are expected to exceed exposure limits.

**Glove Recommendations**

Wear appropriate chemical resistant gloves.

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### Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

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<b>Appearance</b>	Black rubberized asphalt on silver aluminum foil	<b>Physical State</b>	solid
<b>Odor</b>	Slight,petroleum	<b>Color</b>	Black on silver foil
<b>Odor Threshold</b>	Not available	<b>pH</b>	Not available
<b>Melting Point</b>	Not available	<b>Boiling Point</b>	Not available
<b>Freezing point</b>	Not available	<b>Evaporation Rate</b>	<0.01
<b>Boiling Point Range</b>	Not available	<b>Flammability (solid, gas)</b>	Not available
<b>Autoignition</b>	Not available	<b>Flash Point</b>	232°C (>450 °F)
<b>Lower Explosive Limit</b>	Not available	<b>Decomposition</b>	Not available
<b>Upper Explosive Limit</b>	Not available	<b>Vapor Pressure</b>	Not available
<b>Vapor Density (air=1)</b>	Not available	<b>Specific Gravity (water=1)</b>	Not available
<b>Water Solubility</b>	Negligible	<b>Partition coefficient: n-octanol/water</b>	Not available
<b>Viscosity</b>	Not available	<b>Solubility (Other)</b>	Not available
<b>Density</b>	1 - 1.2 (relative)		

**Other Information**

No additional information available.

## Safety Data Sheet

**Material Name: CCW 705FR-A**

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### Section 10 - STABILITY AND REACTIVITY

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**Reactivity**

No reactivity hazard is expected.

**Chemical Stability**

Stable under normal conditions of use.

**Possibility of Hazardous Reactions**

Hazardous polymerization will not occur.

**Conditions to Avoid**

Avoid heat, flames, sparks and other sources of ignition. Avoid contact with incompatible materials.

**Incompatible Materials**

Strong acids, strong oxidizing agents

**Hazardous decomposition products**

Oxides of carbon, hydrocarbons

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### Section 11 - TOXICOLOGICAL INFORMATION

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**Information on Likely Routes of Exposure**

**Inhalation**

Not a likely route of exposure.

**Skin Contact**

Causes skin irritation.

**Eye Contact**

May cause mild eye irritation.

**Ingestion**

May cause gastrointestinal irritation.

**Acute and Chronic Toxicity**

**Component Analysis - LD50/LC50**

The components of this material have been reviewed in various sources and the following selected endpoints are published:

Asphalt (8052-42-4)

Oral LD50 Rat >5000 mg/kg

Dermal LD50 Rabbit >2000 mg/kg

Asphalt, oxidized (64742-93-4)

Oral LD50 Rat >5000 mg/kg

Dermal LD50 Rabbit >2000 mg/kg

Distillates, petroleum, petroleum residues vacuum (68955-27-1)

Oral LD50 Rat 4320 mg/kg

Dermal LD50 Rabbit >2000 mg/kg

Residues, petroleum, vacuum (64741-56-6)

Oral LD50 Rat 4320 mg/kg

Dermal LD50 Rabbit >2000 mg/kg

Hydrogen sulfide (7783-06-4)

## Safety Data Sheet

### Material Name: CCW 705FR-A

Inhalation LC50 Rat 0.99 mg/L 1 h  
 Fatty acids, tall-oil, low-boiling (Mixture)  
 Oral LD50 Rat >2000 mg/kg  
 Dermal LD50 Rat >2000 mg/kg

### Immediate Effects

Causes skin irritation. May cause damage to the kidneys, liver, thymus.

### Delayed Effects

May damage fertility or the unborn child.

### Irritation/Corrosivity Data

May cause mild skin irritation. May cause mild eye irritation. May cause respiratory irritation.

### Respiratory Sensitization

No data available.

### Dermal Sensitization

No data available.

### Component Carcinogenicity

<b>Asphalt</b>	8052-42-4
ACGIH:	A4 - Not Classifiable as a Human Carcinogen (fume, coal tar-free)
IARC:	Monograph 103 [2013]; Supplement 7 [1987] (extracts of steam-refined and air-refined); Monograph 35 [1985] (Group 2B (possibly carcinogenic to humans))
DFG:	Category 2 (considered to be carcinogenic for man, aerosol and vapor)
OSHA:	Present
<b>Asphalt, oxidized</b>	64742-93-4
IARC:	Monograph 103 [2013] (and their emissions during roofing) (Group 2A (probably carcinogenic to humans))
OSHA:	Present
<b>Residues, petroleum, vacuum</b>	64741-56-6
IARC:	Monograph 103 [2013] (Group 2B (possibly carcinogenic to humans))
OSHA:	Present
<b>Polycyclic aromatic hydrocarbons</b>	130498-29-2
NTP:	Reasonably Anticipated To Be A Human Carcinogen
OSHA:	Present

## Safety Data Sheet

**Material Name: CCW 705FR-A****Germ Cell Mutagenicity**

No data available.

**Tumorigenic Data**

No data available

**Reproductive Toxicity**

May damage fertility or the unborn child.

**Specific Target Organ Toxicity - Single Exposure**

kidneys, liver, thymus

**Specific Target Organ Toxicity - Repeated Exposure**

No target organs identified.

**Aspiration hazard**

No data available.

**Medical Conditions Aggravated by Exposure**

No data available.

**Additional Data**

No additional information available.

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**Section 12 - ECOLOGICAL INFORMATION**

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**Ecotoxicity**

Avoid release to the environment.

**Component Analysis - Aquatic Toxicity**

<b>Distillates, petroleum, hydrotreated heavy naphthenic</b>	64742-52-5
Fish:	LC50 96 h Oncorhynchus mykiss >5000 mg/L
Invertebrate:	EC50 48 h Daphnia magna >1000 mg/L IUCLID
<b>Asphalt, oxidized</b>	64742-93-4
Algae:	EC50 72 h Pseudokirchneriella subcapitata 56 mg/L IUCLID
<b>Distillates, petroleum, petroleum residues vacuum</b>	68955-27-1
Fish:	LC50 96 h Brachydanio rerio 48 mg/L [semi-static]
<b>Residues, petroleum, vacuum</b>	64741-56-6
Fish:	LC50 96 h Brachydanio rerio 48 mg/L [semi-static]

## Safety Data Sheet

**Material Name: CCW 705FR-A**

<b>Hydrogen sulfide</b>	7783-06-4
Fish:	LC50 96 h Lepomis macrochirus 0.0448 mg/L [flow-through]; LC50 96 h Pimephales promelas 0.016 mg/L [flow-through]
Fatty acids, tall-oil, low-boiling	Mixture
Fish:	LC50 96 h Brachydanio rerio 50 - 100 mg/L [semi-static]
Algae:	EC50 72 h Pseudokirchneriella subcapitata >10 mg/L IUCLID
Invertebrate:	EC50 48 h Daphnia magna 70 mg/L IUCLID

### **Persistence and Degradability**

No information available for the product.

### **Bioaccumulative Potential**

No information available for the product.

### **Mobility**

No information available for the product.

### **Other Toxicity**

No additional information available.

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## **Section 13 - DISPOSAL CONSIDERATIONS**

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### **Disposal Methods**

Dispose of contents/container in accordance with local/regional/national/international regulations.

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## **Section 14 - TRANSPORT INFORMATION**

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### **US DOT Information:**

UN/NA #: Not regulated

### **IATA Information:**

UN#: Not regulated

### **IMDG Information:**

UN#: Not regulated

### **TDG Information:**

UN#: Not regulated

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## **Section 15 - REGULATORY INFORMATION**

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### **U.S. Federal Regulations**

## Safety Data Sheet

### Material Name: CCW 705FR-A

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

Hydrogen sulfide	7783-06-4
SARA 302:	500 lb TPQ
SARA 313:	1 % de minimis concentration
CERCLA:	100 lb final RQ; 45.4 kg final RQ
OSHA (safety):	1500 lb TQ
SARA 304:	100 lb EPCRA RQ

### SARA Section 311/312 (40 CFR 370 Subparts B and C)

**Acute Health:** Yes **Chronic Health:** Yes **Fire:** Yes **Pressure:** No **Reactivity:** No

### U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
Asphalt	8052-42-4	Yes	Yes	Yes	Yes	Yes
Asphalt, oxidized	64742-93-4	No	No	No	Yes	No
Hydrogen sulfide	7783-06-4	Yes	Yes	Yes	Yes	Yes
Polycyclic aromatic hydrocarbons	130498-29-2	No	No	Yes	Yes	Yes

### Not listed under California Proposition 65

### Canadian WHMIS Ingredient Disclosure List (IDL)

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which meet WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL

Hydrogen sulfide	7783-06-4
	1 %

### Component Analysis - Inventory

Distillates, petroleum, hydrotreated heavy naphthenic (64742-52-5)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes

### Asphalt (8052-42-4)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes



## Safety Data Sheet

**Material Name: CCW 705FR-A**

Asphalt, oxidized (64742-93-4)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	No

Distillates, petroleum, petroleum residues vacuum (68955-27-1)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	No	No	No	Yes	No	Yes	No	No

Residues, petroleum, vacuum (64741-56-6)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes

Hydrogen sulfide (7783-06-4)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

Polycyclic aromatic hydrocarbons (130498-29-2)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
No	No	No	No	No	No	No	No	No	No	No	Yes

Fatty acids, tall-oil, low-boiling (Mixture)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	No	No	No	Yes	No	Yes	Yes	No

### Section 16 - OTHER INFORMATION

#### HMIS Rating

Health: 2\* Fire: 1 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe \* = Chronic hazard

#### NFPA Ratings

Health: 2 Fire: 1 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

## Safety Data Sheet

**Material Name: CCW 705FR-A**

**Summary of Changes**

New SDS: May 18, 2015

**Key / Legend**

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States.

**Other Information**

**Disclaimer:**

The information contained herein is based upon data and information available to us, and reflects our best professional judgment. This product may be formulated in part with components purchased from other companies. In many instances, especially when proprietary or trade secret materials are used, CCWI Company must rely upon the hazard evaluation of such components submitted by that product's manufacturer or importer. No warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of such data or information. The results to be obtained from the use thereof, or that any such use does not infringe any patent, since the information contained herein may be applied under conditions of use beyond our control and with which we may be unfamiliar, we do not assume responsibility for the results of such application. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular use

## Safety Data Sheet

**Material Name: CCW 705 LT**

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### Section 1 - PRODUCT AND COMPANY IDENTIFICATION

---

**Material Name**

CCW 705 LT

**Synonyms**

Self-Adhering Rubberized Asphalt Membrane

**Chemical Family**

Rubber Asphalt products

**Product Use**

Waterproofing airbarrier membrane

**Restrictions on Use**

For industrial use only.

**Manufacturer Information**

Carlisle Coatings and Waterproofing, Inc  
900 Hensley Lane  
Wylie, TX 75098  
www.carlisleccw.com

**Phone Numbers:**

Medical Emergency  
CHEMTREC (USA): 800-424-9300

MSDS Assistance; 972-442-6545  
Technical Assistance: 888-229-2199  
Customer Service: 888-229-0199

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### Section 2 - HAZARDS IDENTIFICATION

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**Classification in accordance with paragraph (d) of 29 CFR 1910.1200.**

Skin Corrosion/Irritation - Category 2

Reproductive Toxicity - Category 1B

Specific Target Organ Toxicity - Single Exposure - Category 2 ( liver, kidneys, thymus )

**GHS Label Elements**

**Symbol(s)**



**Signal Word**

Danger

**Hazard Statement(s)**

Causes skin irritation

May damage fertility or the unborn child

May cause damage to organs

**Precautionary Statement(s)**

**Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Wear protective gloves/protective clothing/eye protection/face protection

## Safety Data Sheet

**Material Name: CCW 705 LT**

Do not breathe dust/fume/gas/mist/vapours/spray  
Wash thoroughly after handling  
Do not eat, drink or smoke when using this product

**Response**

If exposed or concerned: Call a POISON CENTER or doctor/physician  
IF ON SKIN: Wash with plenty of soap and water  
If skin irritation occurs: Get medical advice/attention  
Take off contaminated clothing and wash before reuse  
Specific treatment (see label)

**Storage**

Store locked up

**Disposal**

Dispose of contents/container in accordance with local/regional/national/international regulations

**Other Hazards**

No additional information available.

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### Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

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CAS	Component Name	Percent
64742-52-5	Distillates, petroleum, hydrotreated heavy naphthenic	5-10
8052-42-4	Asphalt	0-75
64742-93-4	Asphalt, oxidized	0-75
68955-27-1	Distillates, petroleum, petroleum residues vacuum	0-75
64741-56-6	Residues, petroleum, vacuum	0-75
Mixture	Fatty acids, tall-oil, low-boiling	0.8

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### Section 4 - FIRST AID MEASURES

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**Description of Necessary Measures**

If exposed or concerned: Call a POISON CENTER or doctor/physician.

**Inhalation**

Inhalation unlikely due to physical form. Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

**Skin**

Wash exposed skin with soap and water. Take off contaminated clothing and wash before reuse. If skin irritation occurs, get medical advice/attention.

## Safety Data Sheet

**Material Name: CCW 705 LT**

**Eyes**

Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

**Ingestion**

Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.

**Indication of any immediate medical attention and special treatment needed**

Treat symptomatically and supportively.

**Most Important Symptoms/Effects**

**Acute**

Causes skin irritation. May cause damage to the kidneys, liver, thymus.

**Delayed**

May damage fertility or the unborn child.

**Note to Physicians**

Contains ASPHALT.

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### Section 5 - FIRE FIGHTING MEASURES

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**Extinguishing Media**

**Suitable Extinguishing Media**

Use carbon dioxide, regular dry chemical, regular foam or water.

**Unsuitable Extinguishing Media**

None known.

**Special Hazards Arising from the Chemical**

Slight fire hazard.

**Hazardous Combustion Products**

Oxides of carbon, hydrocarbons

**Special Protective Equipment and Precautions for Firefighters**

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

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### Section 6 - ACCIDENTAL RELEASE MEASURES

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**Personal Precautions, Protective Equipment and Emergency Procedures**

Wear personal protective clothing and equipment, see Section 8.

**Methods and Materials for Containment and Cleaning Up**

Remove all sources of ignition. Avoid inhalation of material or combustion by-products. Ventilate affected area. Absorb with earth, sand or other non-combustible material and transfer to container. Dispose in accordance with all applicable regulations.

**Environmental Precautions**

Avoid release to the environment.

## Safety Data Sheet

Material Name: CCW 705 LT

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### Section 7 - HANDLING AND STORAGE

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#### Precautions for Safe Handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with eyes, skin and clothing. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/fume/gas/mist/vapours/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. KEEP OUT OF REACH OF CHILDREN.

#### Conditions for Safe Storage, Including any Incompatibilities

Store locked up

Store in a cool, dry place. Keep container tightly closed and in a well-ventilated place. Keep away from heat and ignition sources. Keep away from incompatible materials. Do not cut, puncture, or weld on or near this container.

#### Incompatible Materials

Strong acids, strong oxidizing agents

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### Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

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#### Component Exposure Limits

<b>Asphalt</b>	8052-42-4	
ACGIH:	0.5 mg/m <sup>3</sup> TWA as benzene soluble aerosol fume, inhalable fraction	
NIOSH:	5 mg/m <sup>3</sup> Ceiling fume 15 min	
Mexico:	5 mg/m <sup>3</sup> TWA LMPE-PPT	10 mg/m <sup>3</sup> STEL [LMPE-CT]
<b>Hydrogen sulfide</b>	7783-06-4	
ACGIH:	1 ppm TWA	5 ppm STEL
NIOSH:	10 ppm Ceiling 10 min; 15 mg/m <sup>3</sup> Ceiling 10 min	
	100 ppm IDLH	
Europe:	5 ppm TWA; 7 mg/m <sup>3</sup> TWA	10 ppm STEL; 14 mg/m <sup>3</sup> STEL
OSHA (US):	20 ppm Ceiling	
Mexico:	10 ppm TWA LMPE-PPT; 14 mg/m <sup>3</sup> TWA LMPE-PPT	
	15 ppm STEL [LMPE-CT]; 21 mg/m <sup>3</sup> STEL [LMPE-CT]	

#### Biological limit value

There are no biological limit values for any of this product's components.

#### Engineering Controls

Provide adequate ventilation. Ensure compliance with applicable exposure limits.

## Safety Data Sheet

**Material Name: CCW 705 LT**

### Individual Protection Measures, such as Personal Protective Equipment

#### Eye/face protection

Wear safety glasses or safety goggles, with a faceshield, as appropriate. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

#### Skin Protection

Wear chemical resistant clothing and rubber boots when potential for contact with the material exists. Recommended material: protective skin cream.

#### Respiratory Protection

A NIOSH approved air-purifying respirator with an appropriate cartridge or canister may be appropriate under certain circumstances where airborne concentrations are expected to exceed exposure limits.

#### Glove Recommendations

Wear appropriate chemical resistant gloves.

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### Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

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<b>Appearance</b>	Black rubberized asphalt	<b>Physical State</b>	solid
<b>Odor</b>	Slight,petroleum	<b>Color</b>	black
<b>Odor Threshold</b>	Not available	<b>pH</b>	Not available
<b>Melting Point</b>	Not available	<b>Boiling Point</b>	Not available
<b>Freezing point</b>	Not available	<b>Evaporation Rate</b>	<0.01
<b>Boiling Point Range</b>	Not available	<b>Flammability (solid, gas)</b>	Not available
<b>Autoignition</b>	Not available	<b>Flash Point</b>	232°C (>450 °F)
<b>Lower Explosive Limit</b>	Not available	<b>Decomposition</b>	Not available
<b>Upper Explosive Limit</b>	Not available	<b>Vapor Pressure</b>	Not available
<b>Vapor Density (air=1)</b>	Not available	<b>Specific Gravity (water=1)</b>	Not available
<b>Water Solubility</b>	Negligible	<b>Partition coefficient: n-octanol/water</b>	Not available
<b>Viscosity</b>	Not available	<b>Solubility (Other)</b>	Not available
<b>Density</b>	1 - 1.2 (relative)		

### Other Information

No additional information available.

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### Section 10 - STABILITY AND REACTIVITY

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#### Reactivity

No reactivity hazard is expected.

## Safety Data Sheet

**Material Name: CCW 705 LT**

**Chemical Stability**

Stable under normal conditions of use.

**Possibility of Hazardous Reactions**

Hazardous polymerization will not occur.

**Conditions to Avoid**

Avoid heat, flames, sparks and other sources of ignition. Avoid contact with incompatible materials.

**Incompatible Materials**

Strong acids, strong oxidizing agents

**Hazardous decomposition products**

Oxides of carbon, hydrocarbons

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### Section 11 - TOXICOLOGICAL INFORMATION

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**Information on Likely Routes of Exposure**

**Inhalation**

Not a likely route of exposure.

**Skin Contact**

Causes skin irritation.

**Eye Contact**

May cause mild eye irritation.

**Ingestion**

May cause gastrointestinal irritation.

**Acute and Chronic Toxicity**

**Component Analysis - LD50/LC50**

The components of this material have been reviewed in various sources and the following selected endpoints are published:

Asphalt (8052-42-4)

Oral LD50 Rat >5000 mg/kg

Dermal LD50 Rabbit >2000 mg/kg

Asphalt, oxidized (64742-93-4)

Oral LD50 Rat >5000 mg/kg

Dermal LD50 Rabbit >2000 mg/kg

Distillates, petroleum, petroleum residues vacuum (68955-27-1)

Oral LD50 Rat 4320 mg/kg

Dermal LD50 Rabbit >2000 mg/kg

Residues, petroleum, vacuum (64741-56-6)

Oral LD50 Rat 4320 mg/kg

Dermal LD50 Rabbit >2000 mg/kg

Hydrogen sulfide (7783-06-4)

Inhalation LC50 Rat 0.99 mg/L 1 h

Fatty acids, tall-oil, low-boiling (Mixture)

Oral LD50 Rat >2000 mg/kg

Dermal LD50 Rat >2000 mg/kg

**Immediate Effects**

Causes skin irritation. May cause damage to the kidneys, liver, thymus.



## Safety Data Sheet

**Material Name: CCW 705 LT**

**Delayed Effects**

May damage fertility or the unborn child.

**Irritation/Corrosivity Data**

May cause mild skin irritation. May cause mild eye irritation. May cause respiratory irritation.

**Respiratory Sensitization**

No data available.

**Dermal Sensitization**

No data available.

**Component Carcinogenicity**

<b>Asphalt</b>	8052-42-4
ACGIH:	A4 - Not Classifiable as a Human Carcinogen (fume, coal tar-free)
IARC:	Monograph 103 [2013]; Supplement 7 [1987] (extracts of steam-refined and air-refined); Monograph 35 [1985] (Group 2B (possibly carcinogenic to humans))
DFG:	Category 2 (considered to be carcinogenic for man, aerosol and vapor)
OSHA:	Present
<b>Asphalt, oxidized</b>	64742-93-4
IARC:	Monograph 103 [2013] (and their emissions during roofing) (Group 2A (probably carcinogenic to humans))
OSHA:	Present
<b>Residues, petroleum, vacuum</b>	64741-56-6
IARC:	Monograph 103 [2013] (Group 2B (possibly carcinogenic to humans))
OSHA:	Present
<b>Polycyclic aromatic hydrocarbons</b>	130498-29-2
NTP:	Reasonably Anticipated To Be A Human Carcinogen
OSHA:	Present

**Germ Cell Mutagenicity**

No data available.

**Tumorigenic Data**

No data available

## Safety Data Sheet

**Material Name: CCW 705 LT**

**Reproductive Toxicity**

May damage fertility or the unborn child.

**Specific Target Organ Toxicity - Single Exposure**

kidneys, liver, thymus

**Specific Target Organ Toxicity - Repeated Exposure**

No target organs identified.

**Aspiration hazard**

No data available.

**Medical Conditions Aggravated by Exposure**

No data available.

**Additional Data**

No additional information available.

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### Section 12 - ECOLOGICAL INFORMATION

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**Ecotoxicity**

Avoid release to the environment.

**Component Analysis - Aquatic Toxicity**

<b>Distillates, petroleum, hydrotreated heavy naphthenic</b>	64742-52-5
Fish:	LC50 96 h Oncorhynchus mykiss >5000 mg/L
Invertebrate:	EC50 48 h Daphnia magna >1000 mg/L IUCLID
<b>Asphalt, oxidized</b>	64742-93-4
Algae:	EC50 72 h Pseudokirchneriella subcapitata 56 mg/L IUCLID
<b>Distillates, petroleum, petroleum residues vacuum</b>	68955-27-1
Fish:	LC50 96 h Brachydanio rerio 48 mg/L [semi-static]
<b>Residues, petroleum, vacuum</b>	64741-56-6
Fish:	LC50 96 h Brachydanio rerio 48 mg/L [semi-static]
<b>Hydrogen sulfide</b>	7783-06-4
Fish:	LC50 96 h Lepomis macrochirus 0.0448 mg/L [flow-through]; LC50 96 h Pimephales promelas 0.016 mg/L [flow-through]

## Safety Data Sheet

**Material Name: CCW 705 LT**

Fatty acids, tall-oil, low-boiling	Mixture
Fish:	LC50 96 h Brachydanio rerio 50 - 100 mg/L [semi-static]
Algae:	EC50 72 h Pseudokirchneriella subcapitata >10 mg/L IUCLID
Invertebrate:	EC50 48 h Daphnia magna 70 mg/L IUCLID

**Persistence and Degradability**

No information available for the product.

**Bioaccumulative Potential**

No information available for the product.

**Mobility**

No information available for the product.

**Other Toxicity**

No additional information available.

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### Section 13 - DISPOSAL CONSIDERATIONS

---

**Disposal Methods**

Dispose of contents/container in accordance with local/regional/national/international regulations.

---

### Section 14 - TRANSPORT INFORMATION

---

**US DOT Information:**

UN/NA #: Not regulated

**IATA Information:**

UN#: Not regulated

**IMDG Information:**

UN#: Not regulated

**TDG Information:**

UN#: Not regulated

---

### Section 15 - REGULATORY INFORMATION

---

**U.S. Federal Regulations**

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

## Safety Data Sheet

**Material Name: CCW 705 LT**

Hydrogen sulfide	7783-06-4
SARA 302:	500 lb TPQ
SARA 313:	1 % de minimis concentration
CERCLA:	100 lb final RQ; 45.4 kg final RQ
OSHA (safety):	1500 lb TQ
SARA 304:	100 lb EPCRA RQ

**SARA Section 311/312 (40 CFR 370 Subparts B and C)**

**Acute Health:** Yes **Chronic Health:** Yes **Fire:** Yes **Pressure:** No **Reactivity:** No

### U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
Asphalt	8052-42-4	Yes	Yes	Yes	Yes	Yes
Asphalt, oxidized	64742-93-4	No	No	No	Yes	No
Hydrogen sulfide	7783-06-4	Yes	Yes	Yes	Yes	Yes
Polycyclic aromatic hydrocarbons	130498-29-2	No	No	Yes	Yes	Yes

**Not listed under California Proposition 65**

### Canadian WHMIS Ingredient Disclosure List (IDL)

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which meet WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL

Hydrogen sulfide	7783-06-4
	1 %

### Component Analysis - Inventory

Distillates, petroleum, hydrotreated heavy naphthenic (64742-52-5)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes

Asphalt (8052-42-4)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes

Asphalt, oxidized (64742-93-4)

## Safety Data Sheet

**Material Name: CCW 705 LT**

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	No

Distillates, petroleum, petroleum residues vacuum (68955-27-1)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	No	No	No	Yes	No	Yes	No	No

Residues, petroleum, vacuum (64741-56-6)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes

Hydrogen sulfide (7783-06-4)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

Polycyclic aromatic hydrocarbons (130498-29-2)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
No	No	No	No	No	No	No	No	No	No	No	Yes

Fatty acids, tall-oil, low-boiling (Mixture)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	No	No	No	Yes	No	Yes	Yes	No

### Section 16 - OTHER INFORMATION

#### HMIS Rating

Health: 2\* Fire: 1 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe \* = Chronic hazard

#### NFPA Ratings

Health: 2 Fire: 1 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

## Safety Data Sheet

**Material Name: CCW 705 LT**

**Summary of Changes**

New SDS: May 18, 2015

**Key / Legend**

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States.

**Other Information**

**Disclaimer:**

The information contained herein is based upon data and information available to us, and reflects our best professional judgment. This product may be formulated in part with components purchased from other companies. In many instances, especially when proprietary or trade secret materials are used, CCWI Company must rely upon the hazard evaluation of such components submitted by that product's manufacturer or importer. No warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of such data or information. The results to be obtained from the use thereof, or that any such use does not infringe any patent, since the information contained herein may be applied under conditions of use beyond our control and with which we may be unfamiliar, we do not assume responsibility for the results of such application. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular use

## Safety Data Sheet

**Material Name:** CCW 705

**Part No's:** 305304, 305307,  
305310, 305313, 305316,  
305319, 305323

---

### Section 1 - PRODUCT AND COMPANY IDENTIFICATION

---

**Material Name**

CCW 705

**Synonyms**

Self-Adhering Rubberized Asphalt Membrane

**Chemical Family**

Rubber Asphalt products

**Product Use**

Waterproofing airbarrier membrane

**Restrictions on Use**

For industrial use only.

**Phone Numbers:**

Medical Emergency

CHEMTREC (USA): 800-424-9300

MSDS Assistance; 972-442-6545

Technical Assistance: 888-229-2199

Customer Service: 888-229-0199

**Manufacturer Information**

Carlisle Coatings and Waterproofing, Inc

900 Hensley Lane

Wylie, TX 75098

[www.carlisleccw.com](http://www.carlisleccw.com)

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### Section 2 - HAZARDS IDENTIFICATION

---

**Classification in accordance with paragraph (d) of 29 CFR 1910.1200.**

Skin Corrosion/Irritation - Category 2

Reproductive Toxicity - Category 1B

Specific Target Organ Toxicity - Single Exposure - Category 2 ( liver, kidneys, thymus )

**GHS Label Elements**

**Symbol(s)**



**Signal Word**

Danger

**Hazard Statement(s)**

## Safety Data Sheet

**Material Name: CCW 705**

**Part No's: 305304, 305307,  
305310, 305313, 305316,  
305319, 305323**

Causes skin irritation  
May damage fertility or the unborn child  
May cause damage to organs

### Precautionary Statement(s)

#### Prevention

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Wear protective gloves/protective clothing/eye protection/face protection  
Do not breathe dust/fume/gas/mist/vapours/spray  
Wash thoroughly after handling  
Do not eat, drink or smoke when using this product

#### Response

If exposed or concerned: Call a POISON CENTER or doctor/physician  
IF ON SKIN: Wash with plenty of soap and water  
If skin irritation occurs: Get medical advice/attention  
Take off contaminated clothing and wash before reuse  
Specific treatment (see label)

#### Storage

Store locked up

#### Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations

#### Other Hazards

No additional information available.

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### Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

---

CAS	Component Name	Percent
64742-52-5	Distillates, petroleum, hydrotreated heavy naphthenic	5-10
8052-42-4	Asphalt	0-75
64742-93-4	Asphalt, oxidized	0-75
68955-27-1	Distillates, petroleum, petroleum residues vacuum	0-75
64741-56-6	Residues, petroleum, vacuum	0-75
Mixture	Fatty acids, tall-oil, low-boiling	0.8



## Safety Data Sheet

**Material Name: CCW 705**

**Part No's: 305304, 305307,  
305310, 305313, 305316,  
305319, 305323**

---

### Section 4 - FIRST AID MEASURES

---

#### **Description of Necessary Measures**

If exposed or concerned: Call a POISON CENTER or doctor/physician.

#### **Inhalation**

Inhalation unlikely due to physical form. Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

#### **Skin**

Wash exposed skin with soap and water. Take off contaminated clothing and wash before reuse. If skin irritation occurs, get medical advice/attention.

#### **Eyes**

Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

#### **Ingestion**

Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.

#### **Indication of any immediate medical attention and special treatment needed**

Treat symptomatically and supportively.

#### **Most Important Symptoms/Effects**

##### **Acute**

Causes skin irritation. May cause damage to the kidneys, liver, thymus.

##### **Delayed**

May damage fertility or the unborn child.

#### **Note to Physicians**

Contains ASPHALT.

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### Section 5 - FIRE FIGHTING MEASURES

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#### **Extinguishing Media**

##### **Suitable Extinguishing Media**

Use carbon dioxide, regular dry chemical, regular foam or water.

##### **Unsuitable Extinguishing Media**

None known.

#### **Special Hazards Arising from the Chemical**

Slight fire hazard.

#### **Hazardous Combustion Products**

Oxides of carbon, hydrocarbons

#### **Special Protective Equipment and Precautions for Firefighters**

## Safety Data Sheet

**Material Name: CCW 705**

**Part No's: 305304, 305307,  
305310, 305313, 305316,  
305319, 305323**

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

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### Section 6 - ACCIDENTAL RELEASE MEASURES

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#### **Personal Precautions, Protective Equipment and Emergency Procedures**

Wear personal protective clothing and equipment, see Section 8.

#### **Methods and Materials for Containment and Cleaning Up**

Remove all sources of ignition. Avoid inhalation of material or combustion by-products. Ventilate affected area. Absorb with earth, sand or other non-combustible material and transfer to container. Dispose in accordance with all applicable regulations.

#### **Environmental Precautions**

Avoid release to the environment.

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### Section 7 - HANDLING AND STORAGE

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#### **Precautions for Safe Handling**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with eyes, skin and clothing. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/fume/gas/mist/vapours/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. KEEP OUT OF REACH OF CHILDREN.

#### **Conditions for Safe Storage, Including any Incompatibilities**

Store locked up

Store in a cool, dry place. Keep container tightly closed and in a well-ventilated place. Keep away from heat and ignition sources. Keep away from incompatible materials. Do not cut, puncture, or weld on or near this container.

#### **Incompatible Materials**

Strong acids, strong oxidizing agents

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### Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

---

#### **Component Exposure Limits**

Asphalt	8052-42-4		
ACGIH:	0.5 mg/m <sup>3</sup> TWA as benzene soluble aerosol fume, inhalable fraction		
NIOSH:	5 mg/m <sup>3</sup> Ceiling fume 15 min		
Mexico:	5 mg/m <sup>3</sup> TWA LMPE-PPT	10 mg/m <sup>3</sup> STEL [LMPE-CT]	

## Safety Data Sheet

**Material Name: CCW 705**

**Part No's: 305304, 305307,  
305310, 305313, 305316,  
305319, 305323**

<b>Hydrogen sulfide</b>	7783-06-4	
ACGIH:	1 ppm TWA	5 ppm STEL
NIOSH:	10 ppm Ceiling 10 min; 15 mg/m <sup>3</sup> Ceiling 10 min	
	100 ppm IDLH	
Europe:	5 ppm TWA; 7 mg/m <sup>3</sup> TWA	10 ppm STEL; 14 mg/m <sup>3</sup> STEL
OSHA (US):	20 ppm Ceiling	
Mexico:	10 ppm TWA LMPE-PPT; 14 mg/m <sup>3</sup> TWA LMPE-PPT	
	15 ppm STEL [LMPE-CT]; 21 mg/m <sup>3</sup> STEL [LMPE-CT]	

### Biological limit value

There are no biological limit values for any of this product's components.

### Engineering Controls

Provide adequate ventilation. Ensure compliance with applicable exposure limits.

### Individual Protection Measures, such as Personal Protective Equipment

#### Eye/face protection

Wear safety glasses or safety goggles, with a faceshield, as appropriate. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

#### Skin Protection

Wear chemical resistant clothing and rubber boots when potential for contact with the material exists. Recommended material: protective skin cream.

#### Respiratory Protection

A NIOSH approved air-purifying respirator with an appropriate cartridge or canister may be appropriate under certain circumstances where airborne concentrations are expected to exceed exposure limits.

#### Glove Recommendations

Wear appropriate chemical resistant gloves.

## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Black rubberized asphalt on a blue HDPE film	<b>Physical State</b>	solid
<b>Odor</b>	Slight, petroleum	<b>Color</b>	Black on blue film
<b>Odor Threshold</b>	Not available	<b>pH</b>	Not available

## Safety Data Sheet

Material Name: CCW 705

Part No's: 305304, 305307,  
305310, 305313, 305316,  
305319, 305323

<b>Melting Point</b>	Not available	<b>Boiling Point</b>	Not available
<b>Freezing point</b>	Not available	<b>Evaporation Rate</b>	<0.01
<b>Boiling Point Range</b>	Not available	<b>Flammability (solid, gas)</b>	Not available
<b>Autoignition</b>	Not available	<b>Flash Point</b>	232°C (>450 °F)
<b>Lower Explosive Limit</b>	Not available	<b>Decomposition</b>	Not available
<b>Upper Explosive Limit</b>	Not available	<b>Vapor Pressure</b>	Not available
<b>Vapor Density (air=1)</b>	Not available	<b>Specific Gravity (water=1)</b>	Not available
<b>Water Solubility</b>	Negligible	<b>Partition coefficient: n-octanol/water</b>	Not available
<b>Viscosity</b>	Not available	<b>Solubility (Other)</b>	Not available
<b>Density</b>	1 - 1.2 (relative)		

### Other Information

No additional information available.

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## Section 10 - STABILITY AND REACTIVITY

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### Reactivity

No reactivity hazard is expected.

### Chemical Stability

Stable under normal conditions of use.

### Possibility of Hazardous Reactions

Hazardous polymerization will not occur.

### Conditions to Avoid

Avoid heat, flames, sparks and other sources of ignition. Avoid contact with incompatible materials.

### Incompatible Materials

Strong acids, strong oxidizing agents

### Hazardous decomposition products

Oxides of carbon, hydrocarbons

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## Section 11 - TOXICOLOGICAL INFORMATION

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### Information on Likely Routes of Exposure

## Safety Data Sheet

**Material Name: CCW 705**

**Part No's: 305304, 305307,  
305310, 305313, 305316,  
305319, 305323**

### **Inhalation**

Not a likely route of exposure.

### **Skin Contact**

Causes skin irritation.

### **Eye Contact**

May cause mild eye irritation.

### **Ingestion**

May cause gastrointestinal irritation.

### **Acute and Chronic Toxicity**

#### **Component Analysis - LD50/LC50**

The components of this material have been reviewed in various sources and the following selected endpoints are published:

Asphalt (8052-42-4)

Oral LD50 Rat >5000 mg/kg

Dermal LD50 Rabbit >2000 mg/kg

Asphalt, oxidized (64742-93-4)

Oral LD50 Rat >5000 mg/kg

Dermal LD50 Rabbit >2000 mg/kg

Distillates, petroleum, petroleum residues vacuum (68955-27-1)

Oral LD50 Rat 4320 mg/kg

Dermal LD50 Rabbit >2000 mg/kg

Residues, petroleum, vacuum (64741-56-6)

Oral LD50 Rat 4320 mg/kg

Dermal LD50 Rabbit >2000 mg/kg

Hydrogen sulfide (7783-06-4)

Inhalation LC50 Rat 0.99 mg/L 1 h

Fatty acids, tall-oil, low-boiling (Mixture)

Oral LD50 Rat >2000 mg/kg

Dermal LD50 Rat >2000 mg/kg

### **Immediate Effects**

Causes skin irritation. May cause damage to the kidneys, liver, thymus.

### **Delayed Effects**

May damage fertility or the unborn child.

### **Irritation/Corrosivity Data**

May cause mild skin irritation. May cause mild eye irritation. May cause respiratory irritation.

### **Respiratory Sensitization**

No data available.

### **Dermal Sensitization**

No data available.

### **Component Carcinogenicity**

<b>Asphalt</b>	8052-42-4
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## Safety Data Sheet

**Material Name: CCW 705**

**Part No's: 305304, 305307,  
305310, 305313, 305316,  
305319, 305323**

ACGIH:	A4 - Not Classifiable as a Human Carcinogen (fume, coal tar-free)
IARC:	Monograph 103 [2013]; Supplement 7 [1987] (extracts of steam-refined and air-refined); Monograph 35 [1985] (Group 2B (possibly carcinogenic to humans))
DFG:	Category 2 (considered to be carcinogenic for man, aerosol and vapor)
OSHA:	Present
<b>Asphalt, oxidized</b>	64742-93-4
IARC:	Monograph 103 [2013] (and their emissions during roofing) (Group 2A (probably carcinogenic to humans))
OSHA:	Present
<b>Residues, petroleum, vacuum</b>	64741-56-6
IARC:	Monograph 103 [2013] (Group 2B (possibly carcinogenic to humans))
OSHA:	Present
<b>Polycyclic aromatic hydrocarbons</b>	130498-29-2
NTP:	Reasonably Anticipated To Be A Human Carcinogen
OSHA:	Present

### Germ Cell Mutagenicity

No data available.

### Tumorigenic Data

No data available

### Reproductive Toxicity

May damage fertility or the unborn child.

### Specific Target Organ Toxicity - Single Exposure

kidneys, liver, thymus

### Specific Target Organ Toxicity - Repeated Exposure

No target organs identified.

### Aspiration hazard

No data available.

### Medical Conditions Aggravated by Exposure

## Safety Data Sheet

**Material Name: CCW 705**

**Part No's: 305304, 305307,  
305310, 305313, 305316,  
305319, 305323**

No data available.

### Additional Data

No additional information available.

## Section 12 - ECOLOGICAL INFORMATION

### Ecotoxicity

Avoid release to the environment.

### Component Analysis - Aquatic Toxicity

<b>Distillates, petroleum, hydrotreated heavy naphthenic</b>	64742-52-5
Fish:	LC50 96 h Oncorhynchus mykiss >5000 mg/L
Invertebrate:	EC50 48 h Daphnia magna >1000 mg/L IUCLID
<b>Asphalt, oxidized</b>	64742-93-4
Algae:	EC50 72 h Pseudokirchneriella subcapitata 56 mg/L IUCLID
<b>Distillates, petroleum, petroleum residues vacuum</b>	68955-27-1
Fish:	LC50 96 h Brachydanio rerio 48 mg/L [semi-static]
<b>Residues, petroleum, vacuum</b>	64741-56-6
Fish:	LC50 96 h Brachydanio rerio 48 mg/L [semi-static]
<b>Hydrogen sulfide</b>	7783-06-4
Fish:	LC50 96 h Lepomis macrochirus 0.0448 mg/L [flow-through]; LC50 96 h Pimephales promelas 0.016 mg/L [flow-through]
Fatty acids, tall-oil, low-boiling	Mixture
Fish:	LC50 96 h Brachydanio rerio 50 - 100 mg/L [semi-static]
Algae:	EC50 72 h Pseudokirchneriella subcapitata >10 mg/L IUCLID
Invertebrate:	EC50 48 h Daphnia magna 70 mg/L IUCLID

### Persistence and Degradability

## Safety Data Sheet

**Material Name: CCW 705**

**Part No's: 305304, 305307,  
305310, 305313, 305316,  
305319, 305323**

No information available for the product.

**Bioaccumulative Potential**

No information available for the product.

**Mobility**

No information available for the product.

**Other Toxicity**

No additional information available.

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### Section 13 - DISPOSAL CONSIDERATIONS

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**Disposal Methods**

Dispose of contents/container in accordance with local/regional/national/international regulations.

---

### Section 14 - TRANSPORT INFORMATION

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**US DOT Information:**

UN/NA #: Not regulated

**IATA Information:**

UN#: Not regulated

**IMDG Information:**

UN#: Not regulated

**TDG Information:**

UN#: Not regulated

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### Section 15 - REGULATORY INFORMATION

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**U.S. Federal Regulations**

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

Hydrogen sulfide	7783-06-4
SARA 302:	500 lb TPQ
SARA 313:	1 % de minimis concentration



## Safety Data Sheet

**Material Name: CCW 705**

**Part No's: 305304, 305307,  
305310, 305313, 305316,  
305319, 305323**

CERCLA:	100 lb final RQ; 45.4 kg final RQ
OSHA (safety):	1500 lb TQ
SARA 304:	100 lb EPCRA RQ

**SARA Section 311/312 (40 CFR 370 Subparts B and C)**

**Acute Health:** Yes **Chronic Health:** Yes **Fire:** Yes **Pressure:** No **Reactivity:** No

**U.S. State Regulations**

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
Asphalt	8052-42-4	Yes	Yes	Yes	Yes	Yes
Asphalt, oxidized	64742-93-4	No	No	No	Yes	No
Hydrogen sulfide	7783-06-4	Yes	Yes	Yes	Yes	Yes
Polycyclic aromatic hydrocarbons	130498-29-2	No	No	Yes	Yes	Yes

**Not listed under California Proposition 65**

**Canadian WHMIS Ingredient Disclosure List (IDL)**

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which meet WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL

Hydrogen sulfide	7783-06-4
	1 %

**Component Analysis - Inventory**

Distillates, petroleum, hydrotreated heavy naphthenic (64742-52-5)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes

Asphalt (8052-42-4)

## Safety Data Sheet

**Material Name: CCW 705**

**Part No's: 305304, 305307,  
305310, 305313, 305316,  
305319, 305323**

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes

Asphalt, oxidized (64742-93-4)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	No

Distillates, petroleum, petroleum residues vacuum (68955-27-1)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	No	No	No	Yes	No	Yes	No	No

Residues, petroleum, vacuum (64741-56-6)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes

Hydrogen sulfide (7783-06-4)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

Polycyclic aromatic hydrocarbons (130498-29-2)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
No	No	No	No	No	No	No	No	No	No	No	Yes

Fatty acids, tall-oil, low-boiling (Mixture)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	No	No	No	Yes	No	Yes	Yes	No

### Section 16 - OTHER INFORMATION

## Safety Data Sheet

**Material Name: CCW 705**

**Part No's: 305304, 305307,  
305310, 305313, 305316,  
305319, 305323**

### HMIS Rating

Health: 2\* Fire: 1 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe \* = Chronic hazard

### NFPA Ratings

Health: 2 Fire: 1 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

### Summary of Changes

New SDS: May 18, 2015

### Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States.

### Other Information

#### Disclaimer:

The information contained herein is based upon data and information available to us, and reflects our best professional judgment. This product may be formulated in part with components purchased from other companies. In many instances, especially when proprietary or trade secret materials are used, CCWI Company must rely upon the hazard evaluation of such components submitted by that product's manufacturer or importer. No warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of such data or information. The results to be obtained from the use thereof, or that any such use does not infringe any patent, since the information contained herein may be applied under conditions of use beyond our control and with which we may be unfamiliar, we do not assume responsibility for the results of such application. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular use

## Safety Data Sheet

**Material Name: CCW 705**

**Part No's: 305304, 305307,  
305310, 305313, 305316,  
305319, 305323**

## Safety Data Sheet

**Material Name: Barriseal-S**

**Product #:304920**

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### Section 1 - PRODUCT AND COMPANY IDENTIFICATION

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**Material Name**

Barriseal-S

**Synonyms**

Modified Water Based Asphalt Emulsion

**Chemical Family**

Waterproofing and vapor barrier membrane, spray application

**Product Use**

Water based non-permeable membrane for air and vapor barrier applications

**Restrictions on Use**

For industrial use only.

**Manufacturer Information**

Carlisle Coatings and Waterproofing Incorporated  
900 Hensley Lane  
Wylie, TX 75098  
[www.carlisle-ccw.com](http://www.carlisle-ccw.com)

**Phone Numbers:**

Medical Emergency  
CHEMTREC (USA): 800-424-9300

MSDS Assistance: 972-442-6545  
Technical Assistance: 888-229-2199  
Customer Service: 888-229-0199

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### Section 2 - HAZARDS IDENTIFICATION

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**Classification in accordance with paragraph (d) of 29 CFR 1910.1200.**

None needed according to classification criteria

**GHS Label Elements**

**Symbol(s)**

None needed according to classification criteria

**Signal Word**

None needed according to classification criteria

**Hazard Statement(s)**

None needed according to classification criteria

**Precautionary Statement(s)**

**Prevention**

None needed according to classification criteria

**Response**

None needed according to classification criteria

**Storage**

None needed according to classification criteria

## Safety Data Sheet

**Material Name: Barriseal-S**

**Product #:304920**

**Disposal**

Dispose of contents/container in accordance with local/regional/national/international regulations

**Other Hazards**

No additional information available.

---

### Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

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CAS	Component Name	Percent
Mixture	Asphalt emulsion	40-70
Mixture	Butanol polymer	10-30
Mixture	1,2-Benzisothiazolin-3-one mixture	0.1-1

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### Section 4 - FIRST AID MEASURES

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**Description of Necessary Measures**

Get medical advice/attention if you feel unwell.

**Inhalation**

Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell.

**Skin**

Wash exposed skin with soap and water. Remove contaminated clothing and wash it before reuse. If skin irritation or rash occurs, seek medical advice/attention. Recommended material: Use protective skin cream before handling the product.

**Eyes**

Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

**Ingestion**

Get medical attention immediately. Do NOT induce vomiting.

**Indication of any immediate medical attention and special treatment needed**

Treat symptomatically and supportively.

**Most Important Symptoms/Effects**

**Acute**

May cause mild skin irritation. May cause mild eye irritation.

**Delayed**

No information on significant adverse effects.

**Note to Physicians**

Contains ASPHALT.

---

## Safety Data Sheet

Material Name: Barriseal-S

Product #:304920

### Section 5 - FIRE FIGHTING MEASURES

---

#### **Extinguishing Media**

##### **Suitable Extinguishing Media**

Use carbon dioxide, regular dry chemical, regular foam or water.

##### **Unsuitable Extinguishing Media**

None known.

#### **Special Hazards Arising from the Chemical**

Slight fire hazard. May explode if heated in closed container.

#### **Hazardous Combustion Products**

Oxides of carbon, hydrocarbons. Fumes may also be irritating.

#### **Fire Fighting Measures**

Avoid inhalation of material or combustion by-products.

#### **Special Protective Equipment and Precautions for Firefighters**

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

### Section 6 - ACCIDENTAL RELEASE MEASURES

---

#### **Personal Precautions, Protective Equipment and Emergency Procedures**

Wear personal protective clothing and equipment, see Section 8.

#### **Methods and Materials for Containment and Cleaning Up**

Remove all sources of ignition. Avoid inhalation of material or combustion by-products. Ventilate affected area. Absorb with earth, sand or other non-combustible material and transfer to container. Dispose in accordance with all applicable regulations.

#### **Environmental Precautions**

Avoid release to the environment.

### Section 7 - HANDLING AND STORAGE

---

#### **Precautions for Safe Handling**

Avoid contact with eyes, skin and clothing. Wear protective gloves. KEEP OUT OF REACH OF CHILDREN.

#### **Conditions for Safe Storage, Including any Incompatibilities**

None needed according to classification criteria

Store in a cool, dry place. When not in use, keep containers tightly closed. Avoid extreme heat and cold.

#### **Incompatible Materials**

Strong acids, strong oxidizing agents

### Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

---

## Safety Data Sheet

**Material Name: Barriseal-S**

**Product #:304920**

### Component Exposure Limits

<b>Asphalt emulsion</b>	Mixture	
ACGIH:	0.5 mg/m <sup>3</sup> TWA as benzene soluble aerosol fume, inhalable fraction	
NIOSH:	5 mg/m <sup>3</sup> Ceiling fume 15 min	
Mexico:	5 mg/m <sup>3</sup> TWA LMPE-PPT	10 mg/m <sup>3</sup> STEL [LMPE-CT]

### Biological limit value

There are no biological limit values for any of this product's components.

### Engineering Controls

Provide adequate ventilation. Ensure compliance with applicable exposure limits.

### Individual Protection Measures, such as Personal Protective Equipment

#### Eye/face protection

Wear chemical safety goggles.

#### Skin Protection

Wear appropriate work clothing. Recommended material: protective skin cream.

#### Respiratory Protection

A NIOSH approved respirator with a dust, mist, and fume filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits or when symptoms have been observed that are indicative of overexposure.

#### Glove Recommendations

Wear protective gloves: rubber.

#### Protective Materials

Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	brown-black liquid	<b>Physical State</b>	liquid
<b>Odor</b>	ASPHALT	<b>Color</b>	brown-black
<b>Odor Threshold</b>	Not available	<b>pH</b>	10 - 11
<b>Melting Point</b>	Not available	<b>Boiling Point</b>	212 °F
<b>Freezing point</b>	Not available	<b>Evaporation Rate</b>	30 - 45 % volatile
<b>Boiling Point Range</b>	Not available	<b>Flammability (solid, gas)</b>	Not available
<b>Autoignition</b>	Not available	<b>Flash Point</b>	Not available
<b>Lower Explosive Limit</b>	Not available	<b>Decomposition</b>	Not available
<b>Upper Explosive Limit</b>	Not available	<b>Vapor Pressure</b>	<1 mmHg
<b>Vapor Density (air=1)</b>	>1	<b>Specific Gravity (water=1)</b>	Not available



## Safety Data Sheet

Material Name: Barriseal-S

Product #:304920

<b>Water Solubility</b>	Soluble	<b>Partition coefficient: n-octanol/water</b>	Not available
<b>Viscosity</b>	Not available	<b>Solubility (Other)</b>	Not available
<b>Density</b>	1.031 (relative)	<b>VOC</b>	<20 g/L (less water)

**Other Information**

No additional information available.

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**Section 10 - STABILITY AND REACTIVITY**

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**Reactivity**

No reactivity hazard is expected.

**Chemical Stability**

Stable under normal conditions of use.

**Possibility of Hazardous Reactions**

Hazardous polymerization will not occur.

**Conditions to Avoid**

Avoid heat, flames, sparks and other sources of ignition. Avoid contact with incompatible materials.

**Incompatible Materials**

Strong acids, strong oxidizing agents

**Hazardous decomposition products**

Oxides of carbon, hydrocarbons. Fumes may cause irritation.

---

**Section 11 - TOXICOLOGICAL INFORMATION**

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**Information on Likely Routes of Exposure****Inhalation**

May cause respiratory irritation.

**Skin Contact**

May cause mild skin irritation. Hot asphalt may cause thermal burns.

**Eye Contact**

May cause mild eye irritation.

**Ingestion**

May cause gastrointestinal irritation.

**Acute and Chronic Toxicity****Component Analysis - LD50/LC50**

The components of this material have been reviewed in various sources and the following selected endpoints are published:

Asphalt emulsion (Mixture)

## Safety Data Sheet

**Material Name: Barriseal-S****Product #:304920**

Oral LD50 Rat 6135 mg/kg  
Dermal LD50 Rabbit >2000 mg/kg  
Butanol polymer (Mixture)  
Oral LD50 Rat >2000 - 10000 mg/kg  
Dermal LD50 >5000 mg/kg  
Inhalation LC50 >5 mg/L mist 4 hr  
1,2-Benzisothiazolin-3-one mixture (Mixture)  
Oral LD50 Rat 2342 mg/kg  
Dermal LD50 Rabbit >5000 mg/kg  
Inhalation LC50 Rat 900 mg/m3 4 hr  
Carbamic acid mixture (Mixture)  
Oral LD50 Rat >2000 mg/kg  
Dermal LD50 Rabbit >2000 mg/kg  
Inhalation LC50 Rat >2.04 mg/L 4 hr

**Immediate Effects**

May cause respiratory tract irritation, skin irritation, and eye irritation.

**Delayed Effects**

No information on significant adverse effects.

**Irritation/Corrosivity Data**

May cause respiratory tract irritation, skin irritation, and eye irritation.

**Respiratory Sensitization**

No data available.

**Dermal Sensitization**

No data available.

**Component Carcinogenicity**

<b>Asphalt emulsion</b>	Mixture
ACGIH:	A4 - Not Classifiable as a Human Carcinogen (fume, coal tar-free)
IARC:	Monograph 103 [2013]; Supplement 7 [1987] (extracts of steam-refined and air-refined); Monograph 35 [1985] (Group 2B (possibly carcinogenic to humans))
DFG:	Category 2 (considered to be carcinogenic for man, aerosol and vapor)
OSHA:	Present

**Germ Cell Mutagenicity**

No data available.

**Tumorigenic Data**

No data available

**Reproductive Toxicity**

No data available.

**Specific Target Organ Toxicity - Single Exposure**

No data available.

## Safety Data Sheet

**Material Name: Barriseal-S****Product #:304920****Specific Target Organ Toxicity - Repeated Exposure**

No data available.

**Aspiration hazard**

No data available.

**Medical Conditions Aggravated by Exposure**

No data available.

**Additional Data**

No additional information available.

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**Section 12 - ECOLOGICAL INFORMATION**

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**Ecotoxicity**

Avoid release to the environment.

**Component Analysis - Aquatic Toxicity**

<b>Asphalt emulsion</b>	Mixture
Fish:	LC50 96 hr Fish 1797 mg/L
<b>Butanol polymer</b>	Mixture
Fish:	LC50 96 hr Brachydanio rerio >100 mg/L [static]
Invertebrate:	EC50 48 hr Daphnia magna >100 mg/L [static]
<b>1,2-Benzisothiazolin-3-one mixture</b>	Mixture
Fish:	LC50 96 hr Rainbow trout 21 mg/L [flow-through]
Invertebrate:	EC50 48 hr Daphnia magna 26 mg/L

**Persistence and Degradability**

No information available for the product.

**Bioaccumulative Potential**

No information available for the product.

**Mobility**

No information available for the product.

**Other Toxicity**

No additional information available.

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**Section 13 - DISPOSAL CONSIDERATIONS**

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## Safety Data Sheet

**Material Name: Barriseal-S**

**Product #:304920**

**Disposal Methods**

Dispose of contents/container in accordance with local/regional/national/international regulations.

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### Section 14 - TRANSPORT INFORMATION

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**US DOT Information:**

UN/NA #: Not regulated

**IATA Information:**

UN#: Not regulated

**IMDG Information:**

UN#: Not regulated

**TDG Information:**

UN#: Not regulated

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### Section 15 - REGULATORY INFORMATION

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**U.S. Federal Regulations**

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

Carbamic acid mixture	Mixture
CERCLA:	10 lb final RQ; 4.54 kg final RQ

**SARA Section 311/312 (40 CFR 370 Subparts B and C)**

**Acute Health:** Yes **Chronic Health:** No **Fire:** No **Pressure:** No **Reactivity:** No

**U.S. State Regulations**

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
Asphalt emulsion	Mixture	Yes	Yes	Yes	Yes	Yes
Carbamic acid mixture	Mixture	No	No	No	Yes	No

**Not listed under California Proposition 65**

**Canadian WHMIS Ingredient Disclosure List (IDL)**

The components of this product are either not listed on the IDL or are present below the threshold limit listed on the IDL.

**Component Analysis - Inventory**

Asphalt emulsion (Mixture)

## Safety Data Sheet

**Material Name: Barriseal-S**

**Product #:304920**

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes

### 1,2-Benzisothiazolin-3-one mixture (Mixture)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

### Carbamic acid mixture (Mixture)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes

## Section 16 - OTHER INFORMATION

### HMIS Rating

Health: 1 Fire: 1 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe \* = Chronic hazard

### NFPA Ratings

Health: 1 Fire: 1 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

### Summary of Changes

New SDS: May 20, 2015

### Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute

## Safety Data Sheet

**Material Name: Barriseal-S**

**Product #:304920**

for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States.

### **Other Information**

#### **Disclaimer:**

The information contained herein is based upon data and information available to us, and reflects our best professional judgment. This product may be formulated in part with components purchased from other companies. In many instances, especially when proprietary or trade secret materials are used, CCWI Company must rely upon the hazard evaluation of such components submitted by that product's manufacturer or importer. No warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of such data or information. The results to be obtained from the use thereof, or that any such use does not infringe any patent, since the information contained herein may be applied under conditions of use beyond our control and with which we may be unfamiliar, we do not assume responsibility for the results of such application. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular use.

## Safety Data Sheet

**Material Name:** Barriseal-R

**Product #:**304921

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### Section 1 - PRODUCT AND COMPANY IDENTIFICATION

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**Material Name**

Barriseal-R

**Synonyms**

Modified Water Based Asphalt Emulsion

**Product Use**

Water based non-permeable membrane for air and vapor barrier applications.

**Restrictions on Use**

None known

**Phone Numbers:**

Medical Emergency

CHEMTREC (USA): 800-424-9300

MSDS Assistance; 972-442-6545

Technical Assistance: 888-229-2199

Customer Service: 888-229-0199

**Manufacturer Information**

Carlisle Coatings and Waterproofing Incorporated

900 Hensley Lane

Wylie, TX 75098

[www.carlisle-ccw.com](http://www.carlisle-ccw.com)

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### Section 2 - HAZARDS IDENTIFICATION

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**Classification in accordance with paragraph (d) of 29 CFR 1910.1200.**

Reproductive Toxicity - Category 1B

**GHS Label Elements**

**Symbol(s)**



**Signal Word**

Danger

**Hazard Statement(s)**

May damage fertility or the unborn child

**Precautionary Statement(s)**

**Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Wear protective gloves/protective clothing/eye protection/face protection

**Response**

IF exposed or concerned: Get medical advice/attention

## Safety Data Sheet

**Material Name:** Barriseal-R

**Product #:**304921

**Storage**

Store locked up

**Disposal**

Dispose of contents/container in accordance with local/regional/national/international regulations

**Other Hazards**

Repeated or prolonged skin contact may result in irritation or dermatitis.

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### Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

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CAS	Component Name	Percent
8052-42-4	Asphalt	30-60
Mixture	Acrylic polymer mixture	1-5
Trade Secret	Fuller's earth + Silica, crystalline	3-7
14808-60-7	Quartz	0.1-1

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### Section 4 - FIRST AID MEASURES

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**Description of Necessary Measures**

IF exposed or concerned: Get medical advice/attention.

**Inhalation**

Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell.

**Skin**

Wash with plenty of soap and water. Remove contaminated clothing and wash it before reuse. If skin irritation occurs, get medical advice/attention.

**Eyes**

Flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately. If eye irritation persists: Get medical advice/attention.

**Ingestion**

If swallowed, do not induce vomiting. Get immediate medical attention.

**Indication of any immediate medical attention and special treatment needed**

Treat symptomatically and supportively.

**Most Important Symptoms/Effects**

**Acute**

No information on significant adverse effects.



## Safety Data Sheet

**Material Name: Barriseal-R**

**Product #:304921**

**Delayed**

May damage fertility or the unborn child.

---

### Section 5 - FIRE FIGHTING MEASURES

---

**Extinguishing Media**

**Suitable Extinguishing Media**

Use carbon dioxide, regular dry chemical, regular foam or water.

**Unsuitable Extinguishing Media**

None known

**Special Hazards Arising from the Chemical**

Slight fire hazard.

**Hazardous Combustion Products**

carbon monoxide, carbon dioxide, hydrocarbons, acrid odor fumes

**Advice for firefighters**

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

**Fire Fighting Measures**

Do not scatter spilled material with high-pressure water streams. Move container from fire area if it can be done without risk. Dike for later disposal. Cool containers with water. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. ALWAYS stay away from tanks engulfed in fire.

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### Section 6 - ACCIDENTAL RELEASE MEASURES

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**Personal Precautions, Protective Equipment and Emergency Procedures**

Wear personal protective clothing and equipment, see Section 8.

**Methods and Materials for Containment and Cleaning Up**

Keep unauthorized personnel away. Wear personal protective clothing and equipment. Keep out of water supplies and sewers. Use dry sand or vermiculite. Collect spilled material in appropriate container. Do not touch or walk through spilled material. Avoid inhalation of material or combustion by-products.

**Environmental Precautions**

Avoid release to the environment.

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### Section 7 - HANDLING AND STORAGE

---

**Precautions for Safe Handling**

Obtain instructions before use. Do not handle until all safety precautions have been read and understood. Avoid prolonged contact with skin. Wear protective gloves/protective clothing/eye protection/face protection. Avoid contact with skin and eyes.

**Conditions for Safe Storage, Including any Incompatibilities**

Store locked up

## Safety Data Sheet

**Material Name: Barriseal-R**

**Product #:304921**

Store in a cool dry place. When not in use, keep containers tightly closed. Protect from freezing.

### Incompatible Materials

Strong acids, Strong oxidizer

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

### Component Exposure Limits

<b>Asphalt</b>	8052-42-4	
ACGIH:	0.5 mg/m <sup>3</sup> TWA as benzene soluble aerosol fume, inhalable fraction	
NIOSH:	5 mg/m <sup>3</sup> Ceiling fume 15 min	
Mexico:	5 mg/m <sup>3</sup> TWA LMPE-PPT	10 mg/m <sup>3</sup> STEL [LMPE-CT]
<b>Acrylic polymer mixture</b>	Mixture	
ACGIH:	100 mg/m <sup>3</sup> Ceiling aerosol only	
Europe:	20 ppm TWA; 52 mg/m <sup>3</sup> TWA	40 ppm STEL; 104 mg/m <sup>3</sup> STEL
	Possibility of significant uptake through the skin	
Mexico:	100 mg/m <sup>3</sup> Ceiling aerosol	
<b>Quartz</b>	14808-60-7	
ACGIH:	0.025 mg/m <sup>3</sup> TWA respirable fraction	
NIOSH:	0.05 mg/m <sup>3</sup> TWA respirable dust	50 mg/m <sup>3</sup> IDLH respirable dust
OSHA (US):	((30)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA) total dust; ((250)/(%SiO <sub>2</sub> + 5) mppcf TWA) respirable fraction; ((10)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA) respirable fraction	
Mexico:	0.1 mg/m <sup>3</sup> TWA LMPE-PPT respirable fraction	

### Biological limit value

There are no biological limit values for any of this product's components.

### Engineering Controls

Provide adequate ventilation. Ensure compliance with applicable exposure limits.

### Individual Protection Measures, such as Personal Protective Equipment

#### Eye/face protection

Wear chemical safety goggles. Contact lenses should not be worn.

## Safety Data Sheet

Material Name: Barriseal-R

Product #:304921

**Skin Protection**

Wear appropriate chemical resistant clothing.

**Respiratory Protection**

A NIOSH approved air-purifying respirator with an appropriate cartridge or canister may be appropriate under certain circumstances where airborne concentrations are expected to exceed exposure limits.

**Glove Recommendations**

Wear appropriate chemical resistant gloves.

---

**Section 9 - PHYSICAL AND CHEMICAL PROPERTIES**

---

<b>Appearance</b>	creamy, yellow liquid	<b>Physical State</b>	liquid
<b>Odor</b>	ASPHALT	<b>Color</b>	brown-black
<b>Odor Threshold</b>	Not available	<b>pH</b>	10 - 11
<b>Melting Point</b>	Not available	<b>Boiling Point</b>	212 °F
<b>Freezing point</b>	Not available	<b>Evaporation Rate</b>	30 - 45 % (vol)
<b>Boiling Point Range</b>	Not available	<b>Flammability (solid, gas)</b>	Not available
<b>Autoignition</b>	Not available	<b>Flash Point</b>	Not available
<b>Lower Explosive Limit</b>	Not available	<b>Decomposition</b>	Not available
<b>Upper Explosive Limit</b>	Not available	<b>Vapor Pressure</b>	<1 mmHg
<b>Vapor Density (air=1)</b>	Not available	<b>Specific Gravity (water=1)</b>	Not available
<b>Water Solubility</b>	souble	<b>Partition coefficient: n-octanol/water</b>	Not available
<b>Viscosity</b>	Not available	<b>Solubility (Other)</b>	Not available
<b>Density</b>	1.031	<b>VOC</b>	<20 g/L (less water)

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**Section 10 - STABILITY AND REACTIVITY**

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**Reactivity**

No reactivity hazard is expected.

**Chemical Stability**

Stable under normal conditions of use.

**Possibility of Hazardous Reactions**

Will not polymerize.

**Conditions to Avoid**

## Safety Data Sheet

**Material Name: Barriseal-R**

**Product #:304921**

Avoid heat, flames, sparks and other sources of ignition. Avoid extreme heat for extended periods of time. Avoid contact with incompatible materials.

**Incompatible Materials**

Strong acids, Strong oxidizer

**Hazardous decomposition products**

Carbon monoxide, carbon dioxide, hydrocarbons, acrid odor fumes

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### Section 11 - TOXICOLOGICAL INFORMATION

---

**Information on Likely Routes of Exposure**

**Inhalation**

No information on significant adverse effects.

**Skin Contact**

Hot asphalt may cause thermal burns. May cause smarting of the skin with first degree burns upon short exposure.

**Eye Contact**

Vapors may cause slight smarting of the eyes.

**Ingestion**

No information on significant adverse effects.

**Acute and Chronic Toxicity**

**Component Analysis - LD50/LC50**

The components of this material have been reviewed in various sources and the following selected endpoints are published:

Asphalt (8052-42-4)

Oral LD50 Rat >5000 mg/kg

Dermal LD50 Rabbit >2000 mg/kg

Acrylic polymer mixture (Mixture)

Oral LD50 Rat >5000 mg/kg

Dermal LD50 Rat >5000 mg/kg

Quartz (14808-60-7)

Oral LD50 Rat 500 mg/kg

**Immediate Effects**

No information on significant adverse effects.

**Delayed Effects**

May damage fertility or the unborn child.

**Irritation/Corrosivity Data**

Vapors may cause slight smarting of the eyes.

**Respiratory Sensitization**

No information available for the product.

**Dermal Sensitization**

No information available for the product.

## Safety Data Sheet

**Material Name: Barriseal-R**

**Product #:304921**

### Component Carcinogenicity

<b>Asphalt</b>	8052-42-4
ACGIH:	A4 - Not Classifiable as a Human Carcinogen (fume, coal tar-free)
IARC:	Monograph 103 [2013]; Supplement 7 [1987] (extracts of steam-refined and air-refined); Monograph 35 [1985] (Group 2B (possibly carcinogenic to humans))
NTP:	Reasonably Anticipated To Be A Human Carcinogen (related to Polycyclic aromatic hydrocarbons)
DFG:	Category 2 (considered to be carcinogenic for man, aerosol and vapor)
OSHA:	Present
<b>Acrylic polymer mixture</b>	Mixture
ACGIH:	A4 - Not Classifiable as a Human Carcinogen
<b>Quartz</b>	14808-60-7
ACGIH:	A2 - Suspected Human Carcinogen
IARC:	Monograph 100C [2012]; Monograph 68 [1997] (Group 1 (carcinogenic to humans))
NTP:	Known Human Carcinogen (respirable size)
DFG:	Category 1 (causes cancer in man, alveola fraction)
OSHA:	Present (respirable size)

### Germ Cell Mutagenicity

No information available for the product.

### Tumorigenic Data

No information available for the product.

### Reproductive Toxicity

May damage fertility or the unborn child.

### Specific Target Organ Toxicity - Single Exposure

No target organs identified.

### Specific Target Organ Toxicity - Repeated Exposure

No target organs identified.

### Aspiration hazard

No information available for the product.

### Medical Conditions Aggravated by Exposure

## Safety Data Sheet

**Material Name:** Barriseal-R

**Product #:**304921

No data available.

### Additional Data

This product contains crystalline silica, which is a known carcinogen. However, this component is bound by the polymer portion of the sealant. The only way this component would be released is through incineration. Therefore, this product is not considered a carcinogen.

---

## Section 12 - ECOLOGICAL INFORMATION

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### Component Analysis - Aquatic Toxicity

Acrylic polymer mixture	Mixture
Fish:	LC50 96 h Oncorhynchus mykiss 41000 mg/L; LC50 96 h Oncorhynchus mykiss 14 - 18 mL/L [static]; LC50 96 h Lepomis macrochirus 27540 mg/L [static]; LC50 96 h Oncorhynchus mykiss 40761 mg/L [static]; LC50 96 h Pimephales promelas 40000 - 60000 mg/L [static]; LC50 96 h Poecilia reticulata 16000 mg/L [static]
Algae:	EC50 96 h Pseudokirchneriella subcapitata 6500 - 13000 mg/L IUCLID
Invertebrate:	EC50 48 h Daphnia magna 46300 mg/L IUCLID

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## Section 13 - DISPOSAL CONSIDERATIONS

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### Disposal Methods

Dispose of contents/container in accordance with local/regional/national/international regulations.

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## Section 14 - TRANSPORT INFORMATION

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### US DOT Information:

UN/NA #: Not regulated

### IATA Information:

UN#: Not regulated

### IMDG Information:

UN#: Not regulated

### TDG Information:

UN#: Not regulated

## Safety Data Sheet

Material Name: Barriseal-R

Product #:304921

### Section 15 - REGULATORY INFORMATION

#### U.S. Federal Regulations

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

Acrylic polymer mixture	Mixture
SARA 313:	1 % de minimis concentration
CERCLA:	5000 lb final RQ; 2270 kg final RQ

#### SARA Section 311/312 (40 CFR 370 Subparts B and C)

**Acute Health:** No **Chronic Health:** Yes **Fire:** No **Pressure:** No **Reactivity:** No

#### U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
Asphalt	8052-42-4	Yes	Yes	Yes	Yes	Yes
Acrylic polymer mixture	Mixture	Yes	Yes	Yes	Yes	Yes
Quartz	14808-60-7	No	Yes	Yes	Yes	Yes

#### The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer

Quartz	14808-60-7
Carc:	carcinogen , 10/1/1988 (airborne particles of respirable size)

#### Canadian WHMIS Ingredient Disclosure List (IDL)

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which meet WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL

Acrylic polymer mixture	Mixture
	1 %
Quartz	14808-60-7
	1 %

#### WHMIS Classification

D2A

#### Component Analysis - Inventory

## Safety Data Sheet

**Material Name: Barriseal-R**

**Product #:304921**

Asphalt (8052-42-4)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes

Acrylic polymer mixture (Mixture)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

Fuller's earth + Silica, crystalline (Trade Secret)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	No	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes

Quartz (14808-60-7)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

### Section 16 - OTHER INFORMATION

#### HMIS Rating

Health: 1\* Fire: 1 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe \* = Chronic hazard

#### NFPA Ratings

Health: 1 Fire: 1 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

#### Summary of Changes

New SDS: 5/20/2015

#### Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA -



## Safety Data Sheet

**Material Name: Barriseal-R**

**Product #:304921**

Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States.

### Other Information

#### Disclaimer:

The information contained herein is based upon data and information available to us, and reflects our best professional judgment. This product may be formulated in part with components purchased from other companies. In many instances, especially when proprietary or trade secret materials are used, CCWI Company must rely upon the hazard evaluation of such components submitted by that product's manufacturer or importer. No warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of such data or information. The results to be obtained from the use thereof, or that any such use does not infringe any patent, since the information contained herein may be applied under conditions of use beyond our control and with which we may be unfamiliar, we do not assume responsibility for the results of such application. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular use.

## Safety Data Sheet

Material Name: Barritech VP

Product #: 310647- 5 gal  
310648- 50 gal

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### Section 1 - PRODUCT AND COMPANY IDENTIFICATION

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**Material Name**

Barritech VP

**Synonyms**

Water-Based Vapor Permeable Membrane

**Chemical Family**

Membrane

**Product Use**

Fluid applied fire resistant vapor permeable air barrier

**Restrictions on Use**

For industrial use only.

**Manufacturer Information**

Carlisle Coatings and Waterproofing, Inc.  
900 Hensley Lane  
Wylie, TX 75098  
www.carlisleccw.com

**Phone Numbers:**

Medical Emergency  
CHEMTREC (USA): 800-424-9300

MSDS Assistance: 972-442-6545  
Technical Assistance: 888-229-2199  
Customer Service: 888-229-0199

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### Section 2 - HAZARDS IDENTIFICATION

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**Classification in accordance with paragraph (d) of 29 CFR 1910.1200.**

Reproductive Toxicity - Category 1B

Specific Target Organ Toxicity - Single Exposure - Category 1 ( body, central nervous system, systemic toxicity, eyes )

Specific Target Organ Toxicity - Single Exposure - Category 3

Specific Target Organ Toxicity - Repeated Exposure - Category 1 ( eyes,central nervous system )

**GHS Label Elements**

**Symbol(s)**



**Signal Word**

Danger

**Hazard Statement(s)**

May damage fertility or the unborn child

Causes damage to organs

## Safety Data Sheet

**Material Name: Barritech VP**

**Product #: 310647- 5 gal  
310648- 50 gal**

May cause respiratory irritation  
Causes damage to organs through prolonged or repeated exposure

### Precautionary Statement(s)

#### Prevention

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Use only outdoors or in a well-ventilated area  
Wear protective gloves/protective clothing/eye protection/face protection  
Do not breathe dust/fume/gas/mist/vapours/spray  
Wash thoroughly after handling  
Do not eat, drink or smoke when using this product

#### Response

If exposed: Call a POISON CENTER or doctor/physician  
IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing  
Call a POISON CENTER or doctor if you feel unwell  
Specific treatment (see label)

#### Storage

Store in a well-ventilated place. Keep container tightly closed  
Store locked up

#### Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations

#### Statement of Unknown Toxicity

63.7336% of the mixture consists of ingredient(s) of unknown acute toxicity.

#### Other Hazards

No additional information available.

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### Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

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CAS	Component Name	Percent
Mixture	Polymer, ethyl acrylate and methacrylic acid	1-5
Trade Secret	De-foaming agent	0.1-1
Trade Secret	Nonylphenol polyethylene glycol ether	0.1-1
Trade Secret	Chlorinated paraffins	5-10
107-21-1	Ethylene glycol	0.1-1
Mixture	Polymer, vinyl acetate and vinyl acetate-acrylic	15-40

## Safety Data Sheet

Material Name: Barritech VP

Product #: 310647- 5 gal  
310648- 50 gal

Trade Secret	Plasticizer	5-10
Trade Secret	Clay compound	0.1-1
1317-65-3	Limestone	15-40
Trade Secret	Silica, amorphous, fumed	0.1-1
67-56-1	Methanol	1-5
Mixture	4,4-Dimethyloxazolidine	0.1-1
Mixture	Carbamic acid mixture	0.1-1
Mixture	Polycarboxylate salt	0.1-1

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### Section 4 - FIRST AID MEASURES

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#### Description of Necessary Measures

If exposed: Call a POISON CENTER or doctor/physician.

#### Inhalation

Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell.

#### Skin

Wash exposed skin with soap and water. Remove contaminated clothing and wash it before reuse. If skin irritation or rash occurs, seek medical advice/attention.

#### Eyes

Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

#### Ingestion

Do NOT induce vomiting. If swallowed, get medical attention.

#### Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively.

#### Most Important Symptoms/Effects

##### Acute

Causes damage to central nervous system, body, eyes, systemic toxicity. May cause respiratory irritation.

##### Delayed

May damage fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure: eyes, central nervous system.

#### Note to Physicians

Contains: ethylene glycol, ammonia, methanol.

## Safety Data Sheet

Material Name: Barritech VP

Product #: 310647- 5 gal  
310648- 50 gal

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### Section 5 - FIRE FIGHTING MEASURES

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#### Extinguishing Media

##### Suitable Extinguishing Media

Use carbon dioxide, regular dry chemical, regular foam or water.

##### Unsuitable Extinguishing Media

None known.

#### Special Hazards Arising from the Chemical

Slight fire hazard. Sealed containers may rupture or explode if exposed to heat.

#### Hazardous Combustion Products

Oxides of carbon, oxides of nitrogen, hydrocarbons

#### Advice for firefighters

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

#### Fire Fighting Measures

Remove product from area of fire. Stay upwind and keep out of low areas.

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### Section 6 - ACCIDENTAL RELEASE MEASURES

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#### Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8.

#### Methods and Materials for Containment and Cleaning Up

Absorb with earth, sand or other non-combustible material and transfer to container. Dike for later disposal. Dispose in accordance with all applicable regulations.

#### Environmental Precautions

Avoid release to the environment.

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### Section 7 - HANDLING AND STORAGE

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#### Precautions for Safe Handling

This product contains crystalline silica, which is a known carcinogen: Do not grind or sand. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. KEEP OUT OF REACH OF CHILDREN.

## Safety Data Sheet

**Material Name: Barritech VP**

**Product #: 310647- 5 gal  
310648- 50 gal**

**Conditions for Safe Storage, Including any Incompatibilities**

Store in a well-ventilated place. Keep container tightly closed

Store locked up

Store above 0 C. Store below 45 C. Do not cut, puncture, or weld on or near this container. Avoid contact with incompatible materials.

**Incompatible Materials**

strong acids, strong oxidizing agents

### Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

**Component Exposure Limits**

<b>Ammonia</b>	7664-41-7	
ACGIH:	25 ppm TWA	35 ppm STEL
NIOSH:	25 ppm TWA; 18 mg/m3 TWA	35 ppm STEL; 27 mg/m3 STEL
	300 ppm IDLH	
Europe:	20 ppm TWA; 14 mg/m3 TWA	
	50 ppm STEL; 36 mg/m3 STEL	
OSHA (US):	50 ppm TWA; 35 mg/m3 TWA	
Mexico:	25 ppm TWA LMPE-PPT; 18 mg/m3 TWA LMPE-PPT	
	35 ppm STEL [LMPE-CT]; 27 mg/m3 STEL [LMPE-CT]	
<b>Monoethanolamine</b>	141-43-5	
ACGIH:	3 ppm TWA	6 ppm STEL
NIOSH:	3 ppm TWA; 8 mg/m3 TWA	6 ppm STEL; 15 mg/m3 STEL
	30 ppm IDLH	
Europe:	1 ppm TWA; 2.5 mg/m3 TWA	3 ppm STEL; 7.6 mg/m3 STEL
	Possibility of significant uptake through the skin	
OSHA (US):	3 ppm TWA; 6 mg/m3 TWA	
Mexico:	3 ppm TWA LMPE-PPT; 8 mg/m3 TWA LMPE-PPT	
	6 ppm STEL [LMPE-CT]; 15 mg/m3 STEL [LMPE-CT]	

## Safety Data Sheet

Material Name: Barritech VP

Product #: 310647- 5 gal  
310648- 50 gal

<b>Ethylene glycol</b>	107-21-1	
ACGIH:	100 mg/m3 Ceiling aerosol only	
Europe:	20 ppm TWA; 52 mg/m3 TWA	40 ppm STEL; 104 mg/m3 STEL
	Possibility of significant uptake through the skin	
Mexico:	100 mg/m3 Ceiling aerosol	
<b>Clay compound</b>	Trade Secret	
ACGIH:	0.025 mg/m3 TWA respirable fraction	
NIOSH:	0.05 mg/m3 TWA respirable dust	50 mg/m3 IDLH respirable dust
OSHA (US):	((30)/(%SiO <sub>2</sub> + 2) mg/m3 TWA) total dust; ((250)/(%SiO <sub>2</sub> + 5) mppcf TWA) respirable fraction; ((10)/(%SiO <sub>2</sub> + 2) mg/m3 TWA) respirable fraction	
Mexico:	0.1 mg/m3 TWA LMPE-PPT respirable fraction	
<b>Limestone</b>	1317-65-3	
NIOSH:	10 mg/m3 TWA total dust; 5 mg/m3 TWA respirable dust	
OSHA (US):	15 mg/m3 TWA total dust; 5 mg/m3 TWA respirable fraction	
Mexico:	10 mg/m3 TWA LMPE-PPT	20 mg/m3 STEL [LMPE-CT]
<b>Methanol</b>	67-56-1	
ACGIH:	200 ppm TWA	250 ppm STEL
	Skin - potential significant contribution to overall exposure by the cutaneous route	
NIOSH:	200 ppm TWA; 260 mg/m3 TWA	250 ppm STEL; 325 mg/m3 STEL
	Potential for dermal absorption	
	6000 ppm IDLH	
Europe:	200 ppm TWA; 260 mg/m3 TWA	
	Possibility of significant uptake through the skin	
OSHA (US):	200 ppm TWA; 260 mg/m3 TWA	

## Safety Data Sheet

**Material Name: Barritech VP**

**Product #: 310647- 5 gal  
310648- 50 gal**

Mexico:	200 ppm TWA LMPE-PPT; 260 mg/m3 TWA LMPE-PPT
	250 ppm STEL [LMPE-CT]; 310 mg/m3 STEL [LMPE-CT]
	Skin - potential for cutaneous absorption
<b>Phthalo blue</b>	Mixture
ACGIH:	2 mg/m3 TWA particulate matter containing no asbestos and <1% crystalline silica, respirable fraction
NIOSH:	2 mg/m3 TWA (containing no Asbestos and <1% Quartz) respirable dust
	1000 mg/m3 IDLH (containing no Asbestos and <1% Quartz)
OSHA (US):	20 mppcf TWA (if 1% Quartz or more, use Quartz limit)
Mexico:	2 mg/m3 TWA LMPE-PPT respirable fraction

### Biological limit value

There are no biological limit values for any of this product's components.

### Engineering Controls

Provide adequate ventilation. Ensure compliance with applicable exposure limits.

### Individual Protection Measures, such as Personal Protective Equipment

#### Eye/face protection

Wear safety glasses or safety goggles, with a faceshield, as appropriate. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

#### Skin Protection

Wear appropriate work clothing.

#### Respiratory Protection

A NIOSH approved respirator with a dust, mist, and fume filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits or when symptoms have been observed that are indicative of overexposure.

#### Glove Recommendations

Wear appropriate gloves. Recommended material: Hycron(R), neoprene, nitrile.

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## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

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<b>Appearance</b>	blue paste	<b>Physical State</b>	liquid
<b>Odor</b>	Slight, ammonia	<b>Color</b>	blue
<b>Odor Threshold</b>	Not available	<b>pH</b>	8 - 9
<b>Melting Point</b>	Not available	<b>Boiling Point</b>	212 °F



## Safety Data Sheet

Material Name: Barritech VP

Product #: 310647- 5 gal  
310648- 50 gal

<b>Freezing point</b>	Not available	<b>Evaporation Rate</b>	30 - 34 % volatile
<b>Boiling Point Range</b>	Not available	<b>Flammability (solid, gas)</b>	Not available
<b>Autoignition</b>	Not available	<b>Flash Point</b>	Not available
<b>Lower Explosive Limit</b>	Not available	<b>Decomposition</b>	Not available
<b>Upper Explosive Limit</b>	Not available	<b>Vapor Pressure</b>	17 mmHg (@ 20 °C)
<b>Vapor Density (air=1)</b>	<1	<b>Specific Gravity (water=1)</b>	Not available
<b>Water Solubility</b>	Soluble	<b>Partition coefficient: n-octanol/water</b>	Not available
<b>Viscosity</b>	>50 Kcps	<b>Solubility (Other)</b>	Not available
<b>Density</b>	1.35 (relative)	<b>VOC</b>	48 g/L (SCAQMD calculation method)

**Other Information**

No additional information available.

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**Section 10 - STABILITY AND REACTIVITY**

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**Reactivity**

No reactivity hazard is expected.

**Chemical Stability**

Stable under normal conditions of use.

**Possibility of Hazardous Reactions**

Hazardous polymerization will not occur.

**Conditions to Avoid**

Avoid heat, flames, sparks and other sources of ignition. Avoid contact with incompatible materials.

**Incompatible Materials**

Strong acids, strong oxidizing agents

**Hazardous decomposition products**

Oxides of carbon, oxides of nitrogen, hydrocarbons

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**Section 11 - TOXICOLOGICAL INFORMATION**

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**Information on Likely Routes of Exposure**

## Safety Data Sheet

**Material Name: Barritech VP**

**Product #: 310647- 5 gal  
310648- 50 gal**

### **Inhalation**

May cause respiratory irritation. May cause adverse effects on the central nervous system.

### **Skin Contact**

May cause mild skin irritation.

### **Eye Contact**

May cause mild eye irritation.

### **Ingestion**

Methanol can produce blindness with onset of symptoms being delayed for 18-24 hours.

### **Acute and Chronic Toxicity**

#### **Component Analysis - LD50/LC50**

The components of this material have been reviewed in various sources and the following selected endpoints are published:

Polymer, ethyl acrylate and methacrylic acid (Mixture)

Oral LD50 Rat >5000 mg/kg

Dermal LD50 Rabbit >5000 mg/kg

De-foaming agent (Trade Secret)

Oral LD50 >2000 mg/kg

Nonylphenol polyethylene glycol ether (Trade Secret)

Oral LD50 Rat 2780 mg/kg

Chlorinated paraffins (Trade Secret)

Oral LD50 Rat >4 g/kg

Ammonia (7664-41-7)

Oral LD50 Rat 350 mg/kg

Inhalation LC50 Rat 2000 ppm 4 h

Monoethanolamine (141-43-5)

Oral LD50 Rat 1515 mg/kg

Dermal LD50 Rabbit 2504 mg/kg

Inhalation LC50 Rat >1.3 mg/L 6 hr

Ethylene glycol (107-21-1)

Oral LD50 Rat 4700 mg/kg

Dermal LD50 Rat 10600 mg/kg

Inhalation LC50 Rat >200 mg/m<sup>3</sup> vapor 4 hr

Polymer, vinyl acetate and vinyl acetate-acrylic (Mixture)

Oral LD50 Rat >5000 mg/kg

Dermal LD50 Rat >2000 mg/kg

## Safety Data Sheet

**Material Name: Barritech VP**

**Product #: 310647- 5 gal  
310648- 50 gal**

**Plasticizer (Trade Secret)**

Oral LD50 Rat 20400 mg/kg  
Dermal LD50 Rat >10000 mg/kg  
Inhalation LC50 Rat >6.7 mg/L 4 h

**Clay compound (Trade Secret)**

Oral LD50 Rat 500 mg/kg

**Limestone (1317-65-3)**

Oral LD50 Rat 6450 mg/kg

**Silica, amorphous, fumed (Trade Secret)**

Oral LD50 Rat >5000 mg/kg  
Dermal LD50 Rabbit >5000 mg/kg  
Inhalation LC50 Rat >0.139 mg/L 4 hr

**Methanol (67-56-1)**

Oral LD50 Rat 6200 mg/kg  
Inhalation LC50 Rat 22500 ppm 8 h

**4,4-Dimethyloxazolidine (Mixture)**

Oral LD50 Rat 1037 mg/kg  
Dermal LD50 Rat >2000 mg/kg  
Inhalation LC50 Rat 1.1 mg/L 4 hr

**Carbamic acid mixture (Mixture)**

Oral LD50 Rat >2000 mg/kg  
Dermal LD50 Rabbit >2000 mg/kg  
Inhalation LC50 Rat >2.04 mg/L 4 hr

**Polycarboxylate salt (Mixture)**

Oral LD50 Rat >5000 mg/kg  
Dermal LD50 Rabbit >2000 mg/kg

**Decanedioic acid ester (Mixture)**

Oral LD50 Rat >2000 mg/kg

**Immediate Effects**

Causes damage to central nervous system, body, eyes, systemic toxicity. May cause respiratory irritation.

**Delayed Effects**

May damage fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure: eyes, central nervous system.

**Irritation/Corrosivity Data**

May cause respiratory irritation. May cause mild skin irritation. May cause mild eye irritation.

**Respiratory Sensitization**

No data available.

## Safety Data Sheet

**Material Name: Barritech VP**

**Product #: 310647- 5 gal  
310648- 50 gal**

### Dermal Sensitization

No data available.

### Component Carcinogenicity

<b>Chlorinated paraffins</b>	Trade Secret
IARC:	Monograph 48 [1990] (Group 2B (possibly carcinogenic to humans))
DFG:	Category 3B (could be carcinogenic for man)
OSHA:	Present
<b>Ethylene glycol</b>	107-21-1
ACGIH:	A4 - Not Classifiable as a Human Carcinogen
<b>Plasticizer</b>	Trade Secret
IARC:	Monograph 73 [1999]; Supplement 7 [1987] (Group 3 (not classifiable))
<b>Clay compound</b>	Trade Secret
ACGIH:	A2 - Suspected Human Carcinogen
IARC:	Monograph 100C [2012]; Monograph 68 [1997] (Group 1 (carcinogenic to humans))
NTP:	Known Human Carcinogen (respirable size)
DFG:	Category 1 (causes cancer in man, alveola fraction)
OSHA:	Present (respirable size)
<b>Silica, amorphous, fumed</b>	Trade Secret
IARC:	Monograph 68 [1997] (Group 3 (not classifiable))
<b>Phthalo blue</b>	Mixture
ACGIH:	A4 - Not Classifiable as a Human Carcinogen (containing no asbestos fibers)

## Safety Data Sheet

**Material Name: Barritech VP**

**Product #: 310647- 5 gal  
310648- 50 gal**

IARC:	Monograph 93 [2010] (inhaled); Supplement 7 [1987]; Monograph 42 [1987] (Group 3 (not classifiable))
DFG:	Category 3B (could be carcinogenic for man, free of asbestos fibers)

### Germ Cell Mutagenicity

No data available.

### Reproductive Toxicity

May damage fertility or the unborn child.

### Specific Target Organ Toxicity - Single Exposure

Central nervous system, body, systemic toxicity, eyes

### Specific Target Organ Toxicity - Repeated Exposure

Central nervous system, eyes

### Aspiration hazard

No data available.

### Medical Conditions Aggravated by Exposure

No data available.

### Additional Data

This product contains crystalline silica, which is a known carcinogen. However, this component is bound by the polymer portion of the sealant. The only way this component would be released is through incineration. Therefore, this product is not considered a carcinogen.

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## Section 12 - ECOLOGICAL INFORMATION

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### Ecotoxicity

Avoid release to the environment.

### Component Analysis - Aquatic Toxicity

<b>Polymer, ethyl acrylate and methacrylic acid</b>	Mixture
Fish:	LC50 96 hr Pimephales promelas >1000 mg/L
Invertebrate:	EC50 48 hr Daphnia magna >1000 mg/L
<b>Chlorinated paraffins</b>	Trade Secret
Fish:	LC50 96 h Lepomis macrochirus >300 mg/L [static]; LC50 96 h Oncorhynchus mykiss >0.0109 mg/L [flow-through]; LC50 96 h Oncorhynchus mykiss 94.5 - 271 mg/L [static]; LC50 96 h Lepomis macrochirus >0.1 mg/L [flow-through]; LC50 96 h Pimephales promelas >100 mg/L [static]

## Safety Data Sheet

**Material Name: Barritech VP**

**Product #: 310647- 5 gal  
310648- 50 gal**

Invertebrate:	EC50 48 hr Daphnia magna 0.0059 mg/L
<b>Ammonia</b>	7664-41-7
Fish:	LC50 96 h Cyprinus carpio 0.44 mg/L; LC50 96 h Lepomis macrochirus 0.26 - 4.6 mg/L; LC50 96 h Lepomis macrochirus 1.17 mg/L [flow-through]; LC50 96 h Pimephales promelas 0.73 - 2.35 mg/L; LC50 96 h Pimephales promelas 5.9 mg/L [static]; LC50 96 h Poecilia reticulata >1.5 mg/L; LC50 96 h Poecilia reticulata 1.19 mg/L [static]
Invertebrate:	LC50 48 h Daphnia magna 25.4 mg/L IUCLID
<b>Monoethanolamine</b>	141-43-5
Fish:	LC50 96 h Pimephales promelas 227 mg/L [flow-through]; LC50 96 h Brachydanio rerio 3684 mg/L [static]; LC50 96 h Lepomis macrochirus 300 - 1000 mg/L [static]; LC50 96 h Oncorhynchus mykiss 114 - 196 mg/L [static]; LC50 96 h Oncorhynchus mykiss >200 mg/L [flow-through]; LC50 96 hr Cyprinus carpio 349 mg/L; LC50 96 hr Carassius auratus 170 mg/L
Algae:	EC50 72 h Desmodesmus subspicatus 15 mg/L IUCLID
Invertebrate:	EC50 48 h Daphnia magna 65 mg/L IUCLID
<b>Ethylene glycol</b>	107-21-1
Fish:	LC50 96 h Oncorhynchus mykiss 41000 mg/L; LC50 96 h Oncorhynchus mykiss 14 - 18 mL/L [static]; LC50 96 h Lepomis macrochirus 27540 mg/L [static]; LC50 96 h Oncorhynchus mykiss 40761 mg/L [static]; LC50 96 h Pimephales promelas 40000 - 60000 mg/L [static]; LC50 96 h Poecilia reticulata 16000 mg/L [static]
Algae:	EC50 96 h Pseudokirchneriella subcapitata 6500 - 13000 mg/L IUCLID
Invertebrate:	EC50 48 h Daphnia magna 46300 mg/L IUCLID
<b>Polymer, vinyl acetate and vinyl acetate-acrylic</b>	Mixture

## Safety Data Sheet

**Material Name: Barritech VP**

**Product #: 310647- 5 gal  
310648- 50 gal**

Fish:	LC50 96 hr Oncorhynchis mykiss >1000 mg/L
Invertebrate:	EC50 48 hr Daphnia magna >100 mg/L
<b>Plasticizer</b>	Trade Secret
Fish:	LC50 96 h Oncorhynchus mykiss 1 - 10 mg/L [static]; LC50 96 h Oncorhynchus mykiss 0.82 mg/L [flow-through]; LC50 96 h Pimephales promelas 1.39 - 3.88 mg/L [flow-through]; LC50 96 h Pimephales promelas >0.78 mg/L [static]; LC50 96 h Lepomis macrochirus 1 - 10 mg/L [static]
Algae:	EC50 96 h Pseudokirchneriella subcapitata 0.02 - 0.25 mg/L EPA; EC50 72 h Pseudokirchneriella subcapitata 0.2 - 28.2 mg/L EPA
Invertebrate:	EC50 48 h Daphnia magna 0.9 - 1.1 mg/L [static] EPA; EC50 48 h Daphnia magna >0.76 mg/L [Flow through] EPA; EC50 48 h Daphnia magna 1.28 mg/L [semi-static] EPA; EC50 48 h Daphnia magna 0.97 mg/L IUCLID
<b>Silica, amorphous, fumed</b>	Trade Secret
Fish:	LC50 96 hr Danio rerio >10000 mg/L
Invertebrate:	EC50 24 hr Daphnia magna >10000 mg/L
<b>Methanol</b>	67-56-1
Fish:	LC50 96 h Pimephales promelas 28200 mg/L [flow-through]; LC50 96 h Pimephales promelas >100 mg/L [static]; LC50 96 h Oncorhynchus mykiss 19500 - 20700 mg/L [flow-through]; LC50 96 h Oncorhynchus mykiss 18 - 20 mL/L [static]; LC50 96 h Lepomis macrochirus 13500 - 17600 mg/L [flow-through]
<b>4,4-Dimethyloxazolidine</b>	Mixture
Fish:	LC50 96 hr Rainbow trout 95 mg/L [flow-through]
<b>Phthalo blue</b>	Mixture
Fish:	LC50 96 h Brachydanio rerio >100 g/L [semi-static]

## Safety Data Sheet

Material Name: Barritech VP

Product #: 310647- 5 gal  
310648- 50 gal

Decanedioic acid ester	Mixture
Fish:	LC50 96 h Lepomis macrochirus 0.97 mg/L [static]

### Persistence and Degradability

No information available for the product.

### Bioaccumulative Potential

No information available for the product.

### Mobility

No information available for the product.

### Other Toxicity

No additional information available.

---

## Section 13 - DISPOSAL CONSIDERATIONS

---

### Disposal Methods

Dispose of contents/container in accordance with local/regional/national/international regulations.

---

## Section 14 - TRANSPORT INFORMATION

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### US DOT Information:

UN/NA #: Not regulated

### IATA Information:

UN#: Not regulated

### IMDG Information:

UN#: Not regulated

### TDG Information:

UN#: Not regulated

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## Section 15 - REGULATORY INFORMATION

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### U.S. Federal Regulations

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.



## Safety Data Sheet

**Material Name: Barritech VP**

**Product #: 310647- 5 gal  
310648- 50 gal**

Ammonia	7664-41-7
SARA 302:	500 lb TPQ
SARA 313:	1 % de minimis concentration (includes anhydrous Ammonia and aqueous Ammonia from water dissociable Ammonium salts and other sources, 10% of total aqueous Ammonia is reportable under this listing)
CERCLA:	100 lb final RQ; 45.4 kg final RQ
OSHA (safety):	10000 lb TQ anhydrous); 15000 lb TQ solution, >44% Ammonia by weight)
SARA 304:	100 lb EPCRA RQ
Ethylene glycol	107-21-1
SARA 313:	1 % de minimis concentration
CERCLA:	5000 lb final RQ; 2270 kg final RQ
Plasticizer	Trade Secret
CERCLA:	100 lb final RQ; 45.4 kg final RQ
Methanol	67-56-1
SARA 313:	1 % de minimis concentration
CERCLA:	5000 lb final RQ; 2270 kg final RQ
Carbamic acid mixture	Mixture
CERCLA:	10 lb final RQ; 4.54 kg final RQ

**SARA Section 311/312 (40 CFR 370 Subparts B and C)**

**Acute Health:** Yes **Chronic Health:** Yes **Fire:** No **Pressure:** No **Reactivity:** No

**U.S. State Regulations**

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
Chlorinated paraffins	Trade Secret	No	Yes	No	No	No
Ammonia	7664-41-7	Yes	Yes	Yes	Yes	Yes
Monoethanolamine	141-43-5	Yes	Yes	Yes	Yes	Yes
Ethylene glycol	107-21-1	Yes	Yes	Yes	Yes	Yes
Plasticizer	Trade Secret	Yes	Yes	No	Yes	Yes

## Safety Data Sheet

**Material Name: Barritech VP**

**Product #: 310647- 5 gal  
310648- 50 gal**

Clay compound	Trade Secret	No	Yes	Yes	Yes	Yes
Limestone	1317-65-3	No	Yes	Yes	Yes	Yes
Methanol	67-56-1	Yes	Yes	Yes	Yes	Yes
Carbamic acid mixture	Mixture	No	No	No	Yes	No
Phthalo blue	Mixture	Yes	Yes	Yes	Yes	Yes

**The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):**

WARNING! This product contains a chemical known to the state of California to cause cancer

WARNING! This product contains a chemical known to the state of California to cause reproductive/developmental effects

Plasticizer	Trade Secret
Repro/Dev. Tox	developmental toxicity , 12/2/2005
Clay compound	Trade Secret
Carc:	carcinogen , 10/1/1988 (airborne particles of respirable size)
Methanol	67-56-1
Repro/Dev. Tox	developmental toxicity , 3/16/2012

**Canadian WHMIS Ingredient Disclosure List (IDL)**

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which meet WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL

Ammonia	7664-41-7
	1 %
Monoethanolamine	141-43-5
	1 %
Ethylene glycol	107-21-1
	1 %
Plasticizer	Trade Secret
	1 %
Clay compound	Trade Secret
	1 %

## Safety Data Sheet

**Material Name: Barritech VP**

**Product #: 310647- 5 gal  
310648- 50 gal**

Methanol	67-56-1
	1 %

### Component Analysis - Inventory

Polymer, ethyl acrylate and methacrylic acid (Mixture)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	No	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

Nonylphenol polyethylene glycol ether (Trade Secret)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	No	Yes	Yes	Yes	No	Yes	No	Yes	Yes	No

Chlorinated paraffins (Trade Secret)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

Ammonia (7664-41-7)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

Monoethanolamine (141-43-5)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

Ethylene glycol (107-21-1)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

## Safety Data Sheet

**Material Name: Barritech VP**

**Product #: 310647- 5 gal  
310648- 50 gal**

### Plasticizer (Trade Secret)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

### Clay compound (Trade Secret)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

### Limestone (1317-65-3)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	NSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

### Silica, amorphous, fumed (Trade Secret)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
No	DSL	No	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

### Methanol (67-56-1)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

### 4,4-Dimethyloxazolidine (Mixture)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes

### Carbamic acid mixture (Mixture)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes

## Safety Data Sheet

**Material Name: Barritech VP**

**Product #: 310647- 5 gal  
310648- 50 gal**

### Phthalo blue (Mixture)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

### Decanedioic acid ester (Mixture)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes

## Section 16 - OTHER INFORMATION

### HMIS Rating

Health: 2\* Fire: 0 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe \* = Chronic hazard

### NFPA Ratings

Health: 2 Fire: 0 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

### Summary of Changes

New SDS: April 15, 2015

### Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation,

## Safety Data Sheet

**Material Name: Barritech VP**

**Product #: 310647- 5 gal  
310648- 50 gal**

Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States.

### **Other Information**

#### **Disclaimer:**

The information contained herein is based upon data and information available to us, and reflects our best professional judgment. This product may be formulated in part with components purchased from other companies. In many instances, especially when proprietary or trade secret materials are used, CCWI Company must rely upon the hazard evaluation of such components submitted by that product's manufacturer or importer. No warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of such data or information. The results to be obtained from the use thereof, or that any such use does not infringe any patent, since the information contained herein may be applied under conditions of use beyond our control and with which we may be unfamiliar, we do not assume responsibility for the results of such application. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular use.

## Safety Data Sheet

**Material Name:** Barricoat-S

**Product #**304918

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### Section 1 - PRODUCT AND COMPANY IDENTIFICATION

---

**Material Name**

Barricoat-S

**Synonyms**

Modified Water Based Asphalt Emulsion

**Chemical Family**

waterproofing and vapor barrier membrane, spray application

**Product Use**

waterproofing and vapor barrier membrane, below-grade foundation wall assemblies

**Restrictions on Use**

For industrial use only.

**Manufacturer Information**

Carlisle Coatings and Waterproofing Incorporated  
900 Hensley Lane  
Wylie, TX 75098  
www.carlisle-ccw.com

**Phone Numbers:**

Medical Emergency  
CHEMTREC (USA): 800-424-9300

MSDS Assistance: 972-442-6545  
Technical Assistance: 888-229-2199  
Customer Service: 888-229-0199

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### Section 2 - HAZARDS IDENTIFICATION

---

**Classification in accordance with paragraph (d) of 29 CFR 1910.1200.**

None needed according to classification criteria

**GHS Label Elements**

**Symbol(s)**

None needed according to classification criteria

**Signal Word**

None needed according to classification criteria

**Hazard Statement(s)**

None needed according to classification criteria

**Precautionary Statement(s)**

**Prevention**

None needed according to classification criteria

**Response**

None needed according to classification criteria

**Storage**

None needed according to classification criteria

**Disposal**

Dispose of contents/container in accordance with local/regional/national/international regulations

## Safety Data Sheet

Material Name: Barricoat-S

Product #304918

**Other Hazards**

No additional information available.

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**Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS**

---

CAS	Component Name	Percent
Mixture	Asphalt emulsion	40-70
Mixture	Butanol polymer	10-30
Mixture	1,2-Benzisothiazolin-3-one mixture	0.1-1

---

**Section 4 - FIRST AID MEASURES**

---

**Description of Necessary Measures**

Get medical advice/attention if you feel unwell.

**Inhalation**

Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell.

**Skin**

Wash exposed skin with soap and water. Remove contaminated clothing and wash it before reuse. If skin irritation or rash occurs, seek medical advice/attention. Recommended material: Use protective skin cream before handling the product.

**Eyes**

Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

**Ingestion**

Get medical attention immediately. Do NOT induce vomiting.

**Indication of any immediate medical attention and special treatment needed**

Treat symptomatically and supportively.

**Most Important Symptoms/Effects****Acute**

May cause mild skin irritation. May cause mild eye irritation.

**Delayed**

No information on significant adverse effects.

**Note to Physicians**

Contains ASPHALT.



## Safety Data Sheet

Material Name: Barricoat-S

Product #304918

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### Section 5 - FIRE FIGHTING MEASURES

---

#### Extinguishing Media

##### Suitable Extinguishing Media

Use carbon dioxide, regular dry chemical, regular foam or water.

##### Unsuitable Extinguishing Media

None known.

#### Special Hazards Arising from the Chemical

Slight fire hazard. May explode if heated in closed container.

#### Hazardous Combustion Products

Oxides of carbon, hydrocarbons. Fumes may also be irritating.

#### Fire Fighting Measures

Avoid inhalation of material or combustion by-products.

#### Special Protective Equipment and Precautions for Firefighters

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

---

### Section 6 - ACCIDENTAL RELEASE MEASURES

---

#### Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8.

#### Methods and Materials for Containment and Cleaning Up

Remove all sources of ignition. Avoid inhalation of material or combustion by-products. Ventilate affected area. Absorb with earth, sand or other non-combustible material and transfer to container. Dispose in accordance with all applicable regulations.

#### Environmental Precautions

Avoid release to the environment.

---

### Section 7 - HANDLING AND STORAGE

---

#### Precautions for Safe Handling

Avoid contact with eyes, skin and clothing. Wear protective gloves. KEEP OUT OF REACH OF CHILDREN.

#### Conditions for Safe Storage, Including any Incompatibilities

None needed according to classification criteria

Store in a cool, dry place. When not in use, keep containers tightly closed. Avoid extreme heat and cold.

#### Incompatible Materials

Strong acids, strong oxidizing agents

## Safety Data Sheet

Material Name: Barricoat-S

Product #304918

### Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

#### Component Exposure Limits

<b>Asphalt emulsion</b>	Mixture	
ACGIH:	0.5 mg/m <sup>3</sup> TWA as benzene soluble aerosol fume, inhalable fraction	
NIOSH:	5 mg/m <sup>3</sup> Ceiling fume 15 min	
Mexico:	5 mg/m <sup>3</sup> TWA LMPE-PPT	10 mg/m <sup>3</sup> STEL [LMPE-CT]

#### Biological limit value

There are no biological limit values for any of this product's components.

#### Engineering Controls

Provide adequate ventilation. Ensure compliance with applicable exposure limits.

#### Individual Protection Measures, such as Personal Protective Equipment

##### Eye/face protection

Wear chemical safety goggles.

##### Skin Protection

Wear appropriate work clothing. Recommended material: protective skin cream.

##### Respiratory Protection

A NIOSH approved respirator with a dust, mist, and fume filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits or when symptoms have been observed that are indicative of overexposure.

##### Glove Recommendations

Wear protective gloves: rubber.

##### Protective Materials

Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

### Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	brown-black liquid	<b>Physical State</b>	liquid
<b>Odor</b>	ASPHALT	<b>Color</b>	brown-black
<b>Odor Threshold</b>	Not available	<b>pH</b>	10 - 11
<b>Melting Point</b>	Not available	<b>Boiling Point</b>	212 °F
<b>Freezing point</b>	Not available	<b>Evaporation Rate</b>	30 - 45 % volatile
<b>Boiling Point Range</b>	Not available	<b>Flammability (solid, gas)</b>	Not available

## Safety Data Sheet

Material Name: Barricoat-S

Product #304918

<b>Autoignition</b>	Not available	<b>Flash Point</b>	Not available
<b>Lower Explosive Limit</b>	Not available	<b>Decomposition</b>	Not available
<b>Upper Explosive Limit</b>	Not available	<b>Vapor Pressure</b>	<1 mmHg
<b>Vapor Density (air=1)</b>	>1	<b>Specific Gravity (water=1)</b>	Not available
<b>Water Solubility</b>	Soluble	<b>Partition coefficient: n-octanol/water</b>	Not available
<b>Viscosity</b>	Not available	<b>Solubility (Other)</b>	Not available
<b>Density</b>	1.031 (relative)	<b>VOC</b>	<20 g/L (less water)

### Other Information

No additional information available.

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## Section 10 - STABILITY AND REACTIVITY

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### Reactivity

No reactivity hazard is expected.

### Chemical Stability

Stable under normal conditions of use.

### Possibility of Hazardous Reactions

Hazardous polymerization will not occur.

### Conditions to Avoid

Avoid heat, flames, sparks and other sources of ignition. Avoid contact with incompatible materials.

### Incompatible Materials

Strong acids, strong oxidizing agents

### Hazardous decomposition products

Oxides of carbon, hydrocarbons. Fumes may cause irritation.

---

## Section 11 - TOXICOLOGICAL INFORMATION

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### Information on Likely Routes of Exposure

#### Inhalation

May cause respiratory irritation.

#### Skin Contact

May cause mild skin irritation. Hot asphalt may cause thermal burns.

#### Eye Contact

May cause mild eye irritation.

#### Ingestion

May cause gastrointestinal irritation.

## Safety Data Sheet

**Material Name: Barricoat-S**

**Product #304918**

### Acute and Chronic Toxicity

#### Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

Asphalt emulsion (Mixture)

Oral LD50 Rat 6135 mg/kg

Dermal LD50 Rabbit >2000 mg/kg

Butanol polymer (Mixture)

Oral LD50 Rat >2000 - 10000 mg/kg

Dermal LD50 >5000 mg/kg

Inhalation LC50 >5 mg/L mist 4 hr

1,2-Benzisothiazolin-3-one mixture (Mixture)

Oral LD50 Rat 2342 mg/kg

Dermal LD50 Rabbit >5000 mg/kg

Inhalation LC50 Rat 900 mg/m<sup>3</sup> 4 hr

Carbamic acid mixture (Mixture)

Oral LD50 Rat >2000 mg/kg

Dermal LD50 Rabbit >2000 mg/kg

Inhalation LC50 Rat >2.04 mg/L 4 hr

### Immediate Effects

May cause respiratory tract irritation, skin irritation, and eye irritation.

### Delayed Effects

No information on significant adverse effects.

### Irritation/Corrosivity Data

May cause respiratory tract irritation, skin irritation, and eye irritation.

### Respiratory Sensitization

No data available.

### Dermal Sensitization

No data available.

### Component Carcinogenicity

<b>Asphalt emulsion</b>	Mixture
ACGIH:	A4 - Not Classifiable as a Human Carcinogen (fume, coal tar-free)
IARC:	Monograph 103 [2013]; Supplement 7 [1987] (extracts of steam-refined and air-refined); Monograph 35 [1985] (Group 2B (possibly carcinogenic to humans))
DFG:	Category 2 (considered to be carcinogenic for man, aerosol and vapor)
OSHA:	Present

### Germ Cell Mutagenicity

No data available.

### Tumorigenic Data

No data available

## Safety Data Sheet

**Material Name: Barricoat-S**

**Product #304918**

**Reproductive Toxicity**

No data available.

**Specific Target Organ Toxicity - Single Exposure**

No data available.

**Specific Target Organ Toxicity - Repeated Exposure**

No data available.

**Aspiration hazard**

No data available.

**Medical Conditions Aggravated by Exposure**

No data available.

**Additional Data**

No additional information available.

---

### Section 12 - ECOLOGICAL INFORMATION

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**Ecotoxicity**

Avoid release to the environment.

**Component Analysis - Aquatic Toxicity**

<b>Asphalt emulsion</b>	Mixture
Fish:	LC50 96 hr Fish 1797 mg/L
<b>Butanol polymer</b>	Mixture
Fish:	LC50 96 hr Brachydanio rerio >100 mg/L [static]
Invertebrate:	EC50 48 hr Daphnia magna >100 mg/L [static]
<b>1,2-Benzisothiazolin-3-one mixture</b>	Mixture
Fish:	LC50 96 hr Rainbow trout 21 mg/L [flow-through]
Invertebrate:	EC50 48 hr Daphnia magna 26 mg/L

**Persistence and Degradability**

No information available for the product.

**Bioaccumulative Potential**

No information available for the product.

**Mobility**

No information available for the product.

**Other Toxicity**

No additional information available.

## Safety Data Sheet

Material Name: Barricoat-S

Product #304918

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### Section 13 - DISPOSAL CONSIDERATIONS

---

#### Disposal Methods

Dispose of contents/container in accordance with local/regional/national/international regulations.

---

### Section 14 - TRANSPORT INFORMATION

---

#### US DOT Information:

UN/NA #: Not regulated

#### IATA Information:

UN#: Not regulated

#### IMDG Information:

UN#: Not regulated

#### TDG Information:

UN#: Not regulated

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### Section 15 - REGULATORY INFORMATION

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#### U.S. Federal Regulations

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

Carbamic acid mixture	Mixture
CERCLA:	10 lb final RQ; 4.54 kg final RQ

#### SARA Section 311/312 (40 CFR 370 Subparts B and C)

**Acute Health:** Yes **Chronic Health:** No **Fire:** No **Pressure:** No **Reactivity:** No

#### U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
Asphalt emulsion	Mixture	Yes	Yes	Yes	Yes	Yes
Carbamic acid mixture	Mixture	No	No	No	Yes	No

#### Not listed under California Proposition 65

#### Canadian WHMIS Ingredient Disclosure List (IDL)

The components of this product are either not listed on the IDL or are present below the threshold limit listed on the IDL.

## Safety Data Sheet

**Material Name: Barricoat-S**

**Product #304918**

### Component Analysis - Inventory

Asphalt emulsion (Mixture)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes

1,2-Benzisothiazolin-3-one mixture (Mixture)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

Carbamic acid mixture (Mixture)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes

## Section 16 - OTHER INFORMATION

### HMIS Rating

Health: 1 Fire: 1 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe \* = Chronic hazard

### NFPA Ratings

Health: 1 Fire: 1 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

### Summary of Changes

New SDS: May 20, 2015

### Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute

## Safety Data Sheet

**Material Name: Barricoat-S**

**Product #304918**

for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States.

### **Other Information**

#### **Disclaimer:**

The information contained herein is based upon data and information available to us, and reflects our best professional judgment. This product may be formulated in part with components purchased from other companies. In many instances, especially when proprietary or trade secret materials are used, CCWI Company must rely upon the hazard evaluation of such components submitted by that product's manufacturer or importer. No warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of such data or information. The results to be obtained from the use thereof, or that any such use does not infringe any patent, since the information contained herein may be applied under conditions of use beyond our control and with which we may be unfamiliar, we do not assume responsibility for the results of such application. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular use.



## Safety Data Sheet

**Material Name:** Barricoat-R

**Product #:**304919

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### Section 1 - PRODUCT AND COMPANY IDENTIFICATION

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**Material Name**

Barricoat-R

**Synonyms**

Modified Water Based Asphalt Emulsion

**Product Use**

Water based non-permeable membrane for air and vapor barrier applications

**Restrictions on Use**

None known

**Phone Numbers:**

Medical Emergency  
CHEMTREC (USA): 800-424-9300

MSDS Assistance; 972-442-6545  
Technical Assistance: 888-229-2199  
Customer Service: 888-229-0199

**Manufacturer Information**

Carlisle Coatings and Waterproofing Incorporated  
900 Hensley Lane  
Wylie, TX 75098  
www.carlisle-ccw.com

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### Section 2 - HAZARDS IDENTIFICATION

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**Classification in accordance with paragraph (d) of 29 CFR 1910.1200.**

Reproductive Toxicity - Category 1B

**GHS Label Elements**

**Symbol(s)**



**Signal Word**

Danger

**Hazard Statement(s)**

May damage fertility or the unborn child

**Precautionary Statement(s)**

**Prevention**

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Wear protective gloves/protective clothing/eye protection/face protection

**Response**

IF exposed or concerned: Get medical advice/attention

## Safety Data Sheet

**Material Name:** Barricoat-R

**Product #:**304919

**Storage**

Store locked up

**Disposal**

Dispose of contents/container in accordance with local/regional/national/international regulations

**Other Hazards**

Repeated or prolonged skin contact may result in irritation or dermatitis.

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### Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

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CAS	Component Name	Percent
8052-42-4	Asphalt	30-60
Mixture	Acrylic polymer mixture	1-5
Trade Secret	Fuller's earth + Silica, crystalline	3-7
14808-60-7	Quartz	0.1-1

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### Section 4 - FIRST AID MEASURES

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**Description of Necessary Measures**

IF exposed or concerned: Get medical advice/attention.

**Inhalation**

Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell.

**Skin**

Wash with plenty of soap and water. Remove contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

**Eyes**

Flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately. If eye irritation persists: Get medical advice/attention.

**Ingestion**

If swallowed, do not induce vomiting. Get immediate medical attention.

**Indication of any immediate medical attention and special treatment needed**

Treat symptomatically and supportively.

**Most Important Symptoms/Effects**

**Acute**

No information on significant adverse effects.

**Delayed**

May damage fertility or the unborn child.

## Safety Data Sheet

Material Name: Barricoat-R

Product #:304919

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### Section 5 - FIRE FIGHTING MEASURES

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#### Extinguishing Media

##### Suitable Extinguishing Media

Use carbon dioxide, regular dry chemical, regular foam or water.

##### Unsuitable Extinguishing Media

None known

#### Special Hazards Arising from the Chemical

Slight fire hazard.

#### Hazardous Combustion Products

Carbon monoxide, carbon dioxide, hydrocarbons, acrid odor fumes

#### Advice for firefighters

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

#### Fire Fighting Measures

Do not scatter spilled material with high-pressure water streams. Move container from fire area if it can be done without risk. Dike for later disposal. Cool containers with water. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. ALWAYS stay away from tanks engulfed in fire.

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### Section 6 - ACCIDENTAL RELEASE MEASURES

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#### Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8.

#### Methods and Materials for Containment and Cleaning Up

Keep unauthorized personnel away. Wear personal protective clothing and equipment. Keep out of water supplies and sewers. Use dry sand or vermiculite. Collect spilled material in appropriate container. Do not touch or walk through spilled material. Avoid inhalation of material or combustion by-products.

#### Environmental Precautions

Avoid release to the environment.

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### Section 7 - HANDLING AND STORAGE

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#### Precautions for Safe Handling

Obtain instructions before use. Do not handle until all safety precautions have been read and understood. Avoid prolonged contact with skin. Wear protective gloves/protective clothing/eye protection/face protection. Avoid contact with skin and eyes.

#### Conditions for Safe Storage, Including any Incompatibilities

Store locked up

Store in a cool dry place. When not in use, keep containers tightly closed. Protect from freezing.

## Safety Data Sheet

**Material Name: Barricoat-R**

**Product #:304919**

**Incompatible Materials**

Strong acids, Strong oxidizer

### Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

**Component Exposure Limits**

Asphalt	8052-42-4		
ACGIH:	0.5 mg/m³ TWA as benzene soluble aerosol fume, inhalable fraction		
NIOSH:	5 mg/m³ Ceiling fume 15 min		
Mexico:	5 mg/m³ TWA LMPE-PPT	10 mg/m³ STEL [LMPE-CT]	
Acrylic polymer mixture	Mixture		
ACGIH:	100 mg/m³ Ceiling aerosol only		
Europe:	20 ppm TWA; 52 mg/m³ TWA	40 ppm STEL; 104 mg/m³ STEL	
	Possibility of significant uptake through the skin		
Mexico:	100 mg/m³ Ceiling aerosol		
Quartz	14808-60-7		
ACGIH:	0.025 mg/m³ TWA respirable fraction		
NIOSH:	0.05 mg/m³ TWA respirable dust	50 mg/m³ IDLH respirable dust	
OSHA (US):	((30)/(%SiO2 + 2) mg/m³ TWA) total dust; ((250)/(%SiO2 + 5) mppcf TWA) respirable fraction; ((10)/(%SiO2 + 2) mg/m³ TWA) respirable fraction		
Mexico:	0.1 mg/m³ TWA LMPE-PPT respirable fraction		

**Biological limit value**

There are no biological limit values for any of this product's components.

**Engineering Controls**

Provide adequate ventilation. Ensure compliance with applicable exposure limits.

**Individual Protection Measures, such as Personal Protective Equipment**

**Eye/face protection**

Wear chemical safety goggles. Contact lenses should not be worn.

**Skin Protection**

Wear appropriate chemical resistant clothing.

## Safety Data Sheet

Material Name: Barricoat-R

Product #:304919

**Respiratory Protection**

A NIOSH approved air-purifying respirator with an appropriate cartridge or canister may be appropriate under certain circumstances where airborne concentrations are expected to exceed exposure limits.

**Glove Recommendations**

Wear appropriate chemical resistant gloves.

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**Section 9 - PHYSICAL AND CHEMICAL PROPERTIES**

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<b>Appearance</b>	thick liquid	<b>Physical State</b>	liquid
<b>Odor</b>	ASPHALT	<b>Color</b>	brown-black
<b>Odor Threshold</b>	Not available	<b>pH</b>	10 - 11
<b>Melting Point</b>	Not available	<b>Boiling Point</b>	212 °F
<b>Freezing point</b>	Not available	<b>Evaporation Rate</b>	30 - 45 % (vol)
<b>Boiling Point Range</b>	Not available	<b>Flammability (solid, gas)</b>	Not available
<b>Autoignition</b>	Not available	<b>Flash Point</b>	Not available
<b>Lower Explosive Limit</b>	Not available	<b>Decomposition</b>	Not available
<b>Upper Explosive Limit</b>	Not available	<b>Vapor Pressure</b>	<1 mmHg
<b>Vapor Density (air=1)</b>	Not available	<b>Specific Gravity (water=1)</b>	Not available
<b>Water Solubility</b>	souble	<b>Partition coefficient: n-octanol/water</b>	Not available
<b>Viscosity</b>	Not available	<b>Solubility (Other)</b>	Not available
<b>Density</b>	1.031	<b>VOC</b>	<20 g/L (less water)

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**Section 10 - STABILITY AND REACTIVITY**

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**Reactivity**

No reactivity hazard is expected.

**Chemical Stability**

Stable under normal conditions of use.

**Possibility of Hazardous Reactions**

Will not polymerize.

**Conditions to Avoid**

Avoid heat, flames, sparks and other sources of ignition. Avoid extreme heat for extended periods of time. Avoid contact with incompatible materials.

## Safety Data Sheet

**Material Name: Barricoat-R**

**Product #:304919**

**Incompatible Materials**

Strong acids, Strong oxidizer

**Hazardous decomposition products**

Carbon monoxide, carbon dioxide, hydrocarbons, acrid odor fumes

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### Section 11 - TOXICOLOGICAL INFORMATION

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**Information on Likely Routes of Exposure**

**Inhalation**

No information on significant adverse effects.

**Skin Contact**

Hot asphalt may cause thermal burns. May cause smarting of the skin with first degree burns upon short exposure.

**Eye Contact**

Vapors may cause slight smarting of the eyes.

**Ingestion**

No information on significant adverse effects.

**Acute and Chronic Toxicity**

**Component Analysis - LD50/LC50**

The components of this material have been reviewed in various sources and the following selected endpoints are published:

Asphalt (8052-42-4)

Oral LD50 Rat >5000 mg/kg

Dermal LD50 Rabbit >2000 mg/kg

Acrylic polymer mixture (Mixture)

Oral LD50 Rat >5000 mg/kg

Dermal LD50 Rat >5000 mg/kg

Quartz (14808-60-7)

Oral LD50 Rat 500 mg/kg

**Immediate Effects**

No information on significant adverse effects.

**Delayed Effects**

May damage fertility or the unborn child.

**Irritation/Corrosivity Data**

Vapors may cause slight smarting of the eyes.

**Respiratory Sensitization**

No information available for the product.

**Dermal Sensitization**

No information available for the product.

**Component Carcinogenicity**

Asphalt	8052-42-4
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## Safety Data Sheet

**Material Name: Barricoat-R**

**Product #:304919**

ACGIH:	A4 - Not Classifiable as a Human Carcinogen (fume, coal tar-free)
IARC:	Monograph 103 [2013]; Supplement 7 [1987] (extracts of steam-refined and air-refined); Monograph 35 [1985] (Group 2B (possibly carcinogenic to humans))
NTP:	Reasonably Anticipated To Be A Human Carcinogen (related to Polycyclic aromatic hydrocarbons)
DFG:	Category 2 (considered to be carcinogenic for man, aerosol and vapor)
OSHA:	Present
<b>Acrylic polymer mixture</b>	Mixture
ACGIH:	A4 - Not Classifiable as a Human Carcinogen
<b>Quartz</b>	14808-60-7
ACGIH:	A2 - Suspected Human Carcinogen
IARC:	Monograph 100C [2012]; Monograph 68 [1997] (Group 1 (carcinogenic to humans))
NTP:	Known Human Carcinogen (respirable size)
DFG:	Category 1 (causes cancer in man, alveola fraction)
OSHA:	Present (respirable size)

### Germ Cell Mutagenicity

No information available for the product.

### Tumorigenic Data

No information available for the product.

### Reproductive Toxicity

May damage fertility or the unborn child.

### Specific Target Organ Toxicity - Single Exposure

No target organs identified.

### Specific Target Organ Toxicity - Repeated Exposure

No target organs identified.

### Aspiration hazard

No information available for the product.

### Medical Conditions Aggravated by Exposure

No data available.

## Safety Data Sheet

**Material Name:** Barricoat-R

**Product #:**304919

### Additional Data

This product contains crystalline silica, which is a known carcinogen. However, this component is bound by the polymer portion of the sealant. The only way this component would be released is through incineration. Therefore, this product is not considered a carcinogen.

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## Section 12 - ECOLOGICAL INFORMATION

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### Component Analysis - Aquatic Toxicity

<b>Acrylic polymer mixture</b>	Mixture
Fish:	LC50 96 h Oncorhynchus mykiss 41000 mg/L; LC50 96 h Oncorhynchus mykiss 14 - 18 mL/L [static]; LC50 96 h Lepomis macrochirus 27540 mg/L [static]; LC50 96 h Oncorhynchus mykiss 40761 mg/L [static]; LC50 96 h Pimephales promelas 40000 - 60000 mg/L [static]; LC50 96 h Poecilia reticulata 16000 mg/L [static]
Algae:	EC50 96 h Pseudokirchneriella subcapitata 6500 - 13000 mg/L IUCLID
Invertebrate:	EC50 48 h Daphnia magna 46300 mg/L IUCLID

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## Section 13 - DISPOSAL CONSIDERATIONS

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### Disposal Methods

Dispose of contents/container in accordance with local/regional/national/international regulations.

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## Section 14 - TRANSPORT INFORMATION

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### US DOT Information:

UN/NA #: Not regulated

### IATA Information:

UN#: Not regulated

### IMDG Information:

UN#: Not regulated

### TDG Information:

UN#: Not regulated



## Safety Data Sheet

Material Name: Barricoat-R

Product #:304919

### Section 15 - REGULATORY INFORMATION

#### U.S. Federal Regulations

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

Acrylic polymer mixture	Mixture
SARA 313:	1 % de minimis concentration
CERCLA:	5000 lb final RQ; 2270 kg final RQ

#### SARA Section 311/312 (40 CFR 370 Subparts B and C)

**Acute Health:** No **Chronic Health:** Yes **Fire:** No **Pressure:** No **Reactivity:** No

#### U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
Asphalt	8052-42-4	Yes	Yes	Yes	Yes	Yes
Acrylic polymer mixture	Mixture	Yes	Yes	Yes	Yes	Yes
Quartz	14808-60-7	No	Yes	Yes	Yes	Yes

#### The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer

Quartz	14808-60-7
Carc:	carcinogen , 10/1/1988 (airborne particles of respirable size)

#### Canadian WHMIS Ingredient Disclosure List (IDL)

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which meet WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL

Acrylic polymer mixture	Mixture
	1 %
Quartz	14808-60-7
	1 %

#### WHMIS Classification

D2A

## Safety Data Sheet

**Material Name: Barricoat-R**

**Product #:304919**

### Component Analysis - Inventory

Asphalt (8052-42-4)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes

Acrylic polymer mixture (Mixture)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

Fuller's earth + Silica, crystalline (Trade Secret)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	No	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes

Quartz (14808-60-7)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

## Section 16 - OTHER INFORMATION

### HMIS Rating

Health: 1\* Fire: 1 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe \* = Chronic hazard

### NFPA Ratings

Health: 1 Fire: 1 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

### Summary of Changes

New SDS: 7/20/2015

### Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EEC - European Economic

## Safety Data Sheet

**Material Name: Barricoat-R**

**Product #:304919**

Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States.

### Other Information

#### Disclaimer:

The information contained herein is based upon data and information available to us, and reflects our best professional judgment. This product may be formulated in part with components purchased from other companies. In many instances, especially when proprietary or trade secret materials are used, CCWI Company must rely upon the hazard evaluation of such components submitted by that product's manufacturer or importer. No warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of such data or information. The results to be obtained from the use thereof, or that any such use does not infringe any patent, since the information contained herein may be applied under conditions of use beyond our control and with which we may be unfamiliar, we do not assume responsibility for the results of such application. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular use.

## Safety Data Sheet

**Material Name:** LM-800XL

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### Section 1 - PRODUCT AND COMPANY IDENTIFICATION

---

**Material Name**

LM-800XL

**Synonyms**

Solvent-based mastic

**Chemical Family**

Mastic

**Product Use**

Mastic waterproofing sealant

**Restrictions on Use**

For industrial use only.

**Phone Numbers:**

Medical Emergency

CHEMTREC (USA): 800-424-9300

MSDS Assistance; 972-442-6545

Technical Assistance: 888-229-2199

Customer Service: 888-229-0199

**Details of the supplier of the safety data sheet**

Carlisle Coatings and Waterproofing Incorporated

900 Hensley Lane

Wylie, TX 75098

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### Section 2 - HAZARDS IDENTIFICATION

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**Classification in accordance with paragraph (d) of 29 CFR 1910.1200.**

Flammable Liquids - Category 2

Acute Toxicity - Oral - Category 4

Skin Corrosion/Irritation - Category 2

Serious Eye Damage/Eye Irritation - Category 2A

Reproductive Toxicity - Category 1A

Specific Target Organ Toxicity - Single Exposure - Category 1 ( respiratory system, central nervous system )

Specific Target Organ Toxicity - Single Exposure - Category 3

Specific Target Organ Toxicity - Repeated Exposure - Category 1 ( kidneys,respiratory system,lungs,central nervous system )

Specific Target Organ Toxicity - Repeated Exposure - Category 2

**GHS Label Elements**

**Symbol(s)**



**Signal Word**

Danger

**Hazard Statement(s)**

Highly flammable liquid and vapor

Harmful if swallowed

## Safety Data Sheet

### Material Name: LM-800XL

Causes skin irritation  
Causes serious eye irritation  
May damage fertility or the unborn child  
Causes damage to organs  
May cause respiratory irritation. May cause drowsiness or dizziness  
Causes damage to organs through prolonged or repeated exposure  
May cause damage to organs through prolonged or repeated exposure

### Precautionary Statement(s)

#### Prevention

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Keep container tightly closed  
Keep away from heat/sparks/open flame/hot surfaces - No smoking  
Ground/Bond container and receiving equipment  
Use explosion-proof electrical/ventilating/lighting equipment  
Take precautionary measures against static discharge  
Use only non-sparking tools  
Use only outdoors or in a well-ventilated area  
Wear protective gloves/protective clothing/eye protection/face protection  
Do not breathe dust/fume/gas/mist/vapours/spray  
Wash thoroughly after handling  
Do not eat, drink or smoke when using this product

#### Response

In case of fire: Use appropriate media to extinguish  
If exposed: Call a POISON CENTER or doctor/physician  
IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing  
Call a POISON CENTER or doctor if you feel unwell  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention  
IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower  
If skin irritation occurs: Get medical advice/attention  
Take off contaminated clothing and wash before reuse  
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
Rinse mouth  
Specific treatment (see label)

#### Storage

Store in a well-ventilated place. Keep container tightly closed  
Keep cool  
Store locked up

#### Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations

#### Statement of Unknown Toxicity

54% of the mixture consists of ingredient(s) of unknown acute toxicity.

#### Other Hazards

No additional information available.

## Safety Data Sheet

Material Name: LM-800XL

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### Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

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CAS	Component Name	Percent
14808-60-7	Quartz	8-10
108-88-3	Toluene	8-10
142-82-5	Heptane (n-)	15-30
68410-97-9	Distillates, petroleum, light distillate hydrotreating process, low-boiling	15-30
64742-46-7	Petroleum distillates, hydrotreated middle	2-3
64742-53-6	Petroleum distillates, hydrotreated light naphthenic	2-3
64742-52-5	Petroleum distillates, hydrotreated heavy naphthenic	2-3

---

### Section 4 - FIRST AID MEASURES

---

#### Description of Necessary Measures

If exposed or concerned: Call a POISON CENTER or doctor/physician.

#### Inhalation

Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

#### Skin

Rinse skin with water/shower. Remove/take off immediately all contaminated clothing. If skin irritation occurs, get medical advice/attention.

#### Eyes

Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

#### Ingestion

Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.

#### Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively.

#### Most Important Symptoms/Effects

##### Acute

## Safety Data Sheet

### Material Name: LM-800XL

Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. Causes damage to respiratory system, central nervous system. May cause respiratory irritation. May cause drowsiness or dizziness.

#### **Delayed**

May damage fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure: kidneys, respiratory system, lungs, central nervous system.

#### **Note to Physicians**

Contains organic solvents: toluene, heptane.

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## Section 5 - FIRE FIGHTING MEASURES

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### **Extinguishing Media**

#### **Suitable Extinguishing Media**

Dry chemical, foam or carbon dioxide. Use water spray to keep containers cool.

#### **Unsuitable Extinguishing Media**

Do not use high-pressure water streams. Water may be ineffective.

#### **Special Hazards Arising from the Chemical**

Highly flammable liquid and vapor. Vapors are heavier than air and may travel a considerable distance to a source of ignition and flashback.

#### **Hazardous Combustion Products**

Oxides of carbon, oxides of nitrogen

#### **Advice for firefighters**

Can burn and explode easily when exposed to open flames or high heat.

#### **Fire Fighting Measures**

Move container from fire area if it can be done without risk. Avoid inhalation of material or combustion by-products. Take precautionary measures against static discharge. Use only non-sparking tools.

#### **Special Protective Equipment and Precautions for Firefighters**

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

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## Section 6 - ACCIDENTAL RELEASE MEASURES

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### **Personal Precautions, Protective Equipment and Emergency Procedures**

Wear personal protective clothing and equipment, see Section 8.

#### **Methods and Materials for Containment and Cleaning Up**

Remove all sources of ignition. Avoid breathing vapors. Ventilate affected area. Absorb with earth, sand or other non-combustible material and transfer to container. Use only non-sparking tools. Dike for later disposal. Dispose in accordance with all applicable regulations.

#### **Environmental Precautions**

Avoid release to the environment.

## Safety Data Sheet

Material Name: LM-800XL

### Section 7 - HANDLING AND STORAGE

#### Precautions for Safe Handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep container tightly closed. Keep away from heat/sparks/open flame/hot surfaces - No smoking. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Take precautionary measures against static discharge. Use only non-sparking tools. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Avoid contact with eyes, skin and clothing. Take off contaminated clothing and wash it before reuse. Do not breathe vapor or mist. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. KEEP OUT OF REACH OF CHILDREN.

#### Conditions for Safe Storage, Including any Incompatibilities

Store in a well-ventilated place. Keep container tightly closed

Keep cool

Store locked up

Keep away from heat and ignition sources. Keep away from incompatible materials. Do not cut, puncture, or weld on or near this container.

#### Incompatible Materials

Acids, bases, strong oxidizing agents

### Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

#### Component Exposure Limits

<b>Quartz</b>	14808-60-7	
ACGIH:	0.025 mg/m <sup>3</sup> TWA respirable fraction	
NIOSH:	0.05 mg/m <sup>3</sup> TWA respirable dust	50 mg/m <sup>3</sup> IDLH respirable dust
OSHA (US):	((30)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA) total dust; ((250)/(%SiO <sub>2</sub> + 5) mppcf TWA) respirable fraction; ((10)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA) respirable fraction	
Mexico:	0.1 mg/m <sup>3</sup> TWA LMPE-PPT respirable fraction	
<b>Toluene</b>	108-88-3	
ACGIH:	20 ppm TWA	
NIOSH:	100 ppm TWA; 375 mg/m <sup>3</sup> TWA	150 ppm STEL; 560 mg/m <sup>3</sup> STEL
	500 ppm IDLH	
Europe:	50 ppm TWA; 192 mg/m <sup>3</sup> TWA	100 ppm STEL; 384 mg/m <sup>3</sup> STEL
	Possibility of significant uptake through the skin	
OSHA (US):	200 ppm TWA	300 ppm Ceiling



## Safety Data Sheet

**Material Name: LM-800XL**

Mexico:	50 ppm TWA LMPE-PPT; 188 mg/m <sup>3</sup> TWA LMPE-PPT	
	Skin - potential for cutaneous absorption	
<b>n-Heptane</b>	142-82-5	
ACGIH:	400 ppm TWA	500 ppm STEL
NIOSH:	85 ppm TWA; 350 mg/m <sup>3</sup> TWA	440 ppm Ceiling 15 min; 1800 mg/m <sup>3</sup> Ceiling 15 min
	750 ppm IDLH	
Europe:	500 ppm TWA; 2085 mg/m <sup>3</sup> TWA	
OSHA (US):	500 ppm TWA; 2000 mg/m <sup>3</sup> TWA	
Mexico:	400 ppm TWA LMPE-PPT; 1600 mg/m <sup>3</sup> TWA LMPE-PPT	
	500 ppm STEL [LMPE-CT]; 2000 mg/m <sup>3</sup> STEL [LMPE-CT]	
	Skin - potential for cutaneous absorption	

### Biological limit value

There are no biological limit values for any of this product's components.

### Engineering Controls

Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits.

### Individual Protection Measures, such as Personal Protective Equipment

#### Eye/face protection

Wear safety glasses.

#### Skin Protection

Wear protective clothing to minimize skin contact.

#### Respiratory Protection

In case of inadequate ventilation wear respiratory protection. Appropriate respirator selection should be made by a qualified professional as part of a comprehensive respiratory protection program as described in 29 CFR 1910.134.

#### Glove Recommendations

Wear appropriate chemical resistant gloves. Recommended material type: nitrile.

#### Protective Materials

Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

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## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

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<b>Appearance</b>	green paste	<b>Physical State</b>	liquid
<b>Odor</b>	hydrocarbon odor	<b>Color</b>	green
<b>Odor Threshold</b>	Not available	<b>pH</b>	Not available
<b>Melting Point</b>	Not available	<b>Boiling Point</b>	187 °F (86 °C)

## Safety Data Sheet

Material Name: LM-800XL

Freezing point	-90.5 °C	Evaporation Rate	3.7
Boiling Point Range	Not available	Flammability (solid, gas)	Not available
Autoignition	433 °F (223 °C)	Flash Point	18 °F (-8 °C)
Lower Explosive Limit	1 %	Decomposition	Not available
Upper Explosive Limit	7 %	Vapor Pressure	45 mmHg at 68 °F (20 °C)
Vapor Density (air=1)	Not available	Specific Gravity (water=1)	Not available
Water Solubility	Not available	Partition coefficient: n-octanol/water	Not available
Viscosity	250000 cps	Solubility (Other)	Not available
Density	6.72 - 7.56 (relative)	VOC	246.3 g/L

### Other Information

No additional information available.

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## Section 10 - STABILITY AND REACTIVITY

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### Reactivity

No reactivity hazard is expected.

### Chemical Stability

Stable under normal conditions of use.

### Possibility of Hazardous Reactions

Hazardous polymerization will not occur.

### Conditions to Avoid

Avoid heat, flames, sparks and other sources of ignition. Avoid contact with incompatible materials.

### Incompatible Materials

Acids, bases, strong oxidizing agents

### Hazardous decomposition products

Oxides of carbon, oxides of nitrogen

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## Section 11 - TOXICOLOGICAL INFORMATION

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### Information on Likely Routes of Exposure

#### Inhalation

May cause respiratory irritation. May cause drowsiness or dizziness.

#### Skin Contact

Causes skin irritation.

## Safety Data Sheet

**Material Name: LM-800XL**

### Eye Contact

Causes serious eye irritation.

### Ingestion

Harmful if swallowed. May cause gastrointestinal irritation.

### Acute and Chronic Toxicity

#### Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

Quartz (14808-60-7)

Oral LD50 Rat 500 mg/kg

Toluene (108-88-3)

Oral LD50 Rat 2600 mg/kg

Dermal LD50 Rabbit 12000 mg/kg

Inhalation LC50 Rat 12.5 mg/L 4 h

n-Heptane (142-82-5)

Oral LD50 Mouse 5000 mg/kg

Dermal LD50 Rabbit 3000 mg/kg

Inhalation LC50 Rat 103 g/m<sup>3</sup> 4 h

Petroleum distillates, hydrotreated light (64742-47-8)

Oral LD50 Rat >5000 mg/kg

Dermal LD50 Rabbit >2000 mg/kg

Inhalation LC50 Rat >5.2 mg/L 4 h

Distillates, petroleum, hydrotreated middle (64742-46-7)

Oral LD50 Rat 7400 mg/kg

Dermal LD50 Rabbit >2000 mg/kg

Inhalation LC50 Rat 4.6 mg/L 4 h

### Immediate Effects

Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. Causes damage to respiratory system, central nervous system. May cause respiratory irritation. May cause drowsiness or dizziness.

### Delayed Effects

May damage fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure: kidneys, respiratory system, lungs, central nervous system.

### Irritation/Corrosivity Data

Cause skin irritation. Causes serious eye irritation. May cause respiratory irritation.

### Respiratory Sensitization

No data available.

### Dermal Sensitization

No data available.

### Component Carcinogenicity

Quartz	14808-60-7
ACGIH:	A2 - Suspected Human Carcinogen
IARC:	Monograph 100C [2012]; Monograph 68 [1997] (Group 1 (carcinogenic to humans))

## Safety Data Sheet

**Material Name: LM-800XL**

	NTP:	Known Human Carcinogen (respirable size)
	DFG:	Category 1 (causes cancer in man, alveola fraction)
	OSHA:	Present (respirable size)
<b>Toluene</b>		108-88-3
	ACGIH:	A4 - Not Classifiable as a Human Carcinogen
	IARC:	Monograph 71 [1999]; Monograph 47 [1989] (Group 3 (not classifiable))
<b>Styrene-butadiene copolymer</b>		9003-55-8
	IARC:	Supplement 7 [1987]; Monograph 19 [1979] (Group 3 (not classifiable))
<b>Petroleum distillates, hydrotreated light</b>		64742-47-8
	DFG:	Category 3B (could be carcinogenic for man, isomers in technical mixtures)

### **Germ Cell Mutagenicity**

No data available.

### **Tumorigenic Data**

No data available

### **Reproductive Toxicity**

May damage fertility or the unborn child.

### **Specific Target Organ Toxicity - Single Exposure**

Respiratory system, central nervous system

### **Specific Target Organ Toxicity - Repeated Exposure**

Respiratory system, kidneys, lungs, central nervous system

### **Aspiration hazard**

No data available.

### **Medical Conditions Aggravated by Exposure**

No data available.

### **Additional Data**

This product contains crystalline silica, which is a known carcinogen. However, this component is bound by the polymer portion of the sealant. The only way this component would be released is through incineration. Therefore, this product is not considered a carcinogen.

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## **Section 12 - ECOLOGICAL INFORMATION**

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### **Ecotoxicity**

Avoid release to the environment.

## Safety Data Sheet

**Material Name: LM-800XL**

### Component Analysis - Aquatic Toxicity

<b>Toluene</b>	108-88-3
Fish:	LC50 96 h Pimephales promelas 15.22 - 19.05 mg/L [flow-through] (1 day old); LC50 96 h Pimephales promelas 12.6 mg/L [static]; LC50 96 h Oncorhynchus mykiss 5.89 - 7.81 mg/L [flow-through]; LC50 96 h Oncorhynchus mykiss 14.1 - 17.16 mg/L [static]; LC50 96 h Oncorhynchus mykiss 5.8 mg/L [semi-static]; LC50 96 h Lepomis macrochirus 11 - 15 mg/L [static]; LC50 96 h Oryzias latipes 54 mg/L [static]; LC50 96 h Poecilia reticulata 28.2 mg/L [semi-static]; LC50 96 h Poecilia reticulata 50.87 - 70.34 mg/L [static]
Algae:	EC50 96 h Pseudokirchneriella subcapitata >433 mg/L IUCLID; EC50 72 h Pseudokirchneriella subcapitata 12.5 mg/L [static] EPA
Invertebrate:	EC50 48 h Daphnia magna 5.46 - 9.83 mg/L [static] EPA; EC50 48 h Daphnia magna 11.5 mg/L IUCLID
<b>n-Heptane</b>	142-82-5
Fish:	LC50 96 h Cichlid fish 375 mg/L
<b>Petroleum distillates, hydrotreated light</b>	64742-47-8
Fish:	LC50 96 h Pimephales promelas 45 mg/L [flow-through]; LC50 96 h Lepomis macrochirus 2.2 mg/L [static]; LC50 96 h Oncorhynchus mykiss 2.4 mg/L [static]
<b>Distillates, petroleum, hydrotreated middle</b>	64742-46-7
Fish:	LC50 96 h Pimephales promelas 35 mg/L [flow-through]; LC50 96 h Pimephales promelas >10000 mg/L [static]
<b>Distillates, petroleum, hydrotreated light naphthenic</b>	64742-53-6
Fish:	LC50 96 h Oncorhynchus mykiss >5000 mg/L
Invertebrate:	EC50 48 h Daphnia magna >1000 mg/L IUCLID

## Safety Data Sheet

**Material Name: LM-800XL**

<b>Distillates, petroleum, hydrotreated heavy naphthenic</b>	64742-52-5
Fish:	LC50 96 h Oncorhynchus mykiss >5000 mg/L
Invertebrate:	EC50 48 h Daphnia magna >1000 mg/L IUCLID

### **Persistence and Degradability**

No information available for the product.

### **Bioaccumulative Potential**

No information available for the product.

### **Mobility**

No information available for the product.

### **Other Toxicity**

No additional information available.

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## **Section 13 - DISPOSAL CONSIDERATIONS**

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### **Disposal Methods**

Dispose of contents/container in accordance with local/regional/national/international regulations.

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## **Section 14 - TRANSPORT INFORMATION**

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### **US DOT Information:**

**Shipping Name:** Resin solution, flammable

**Hazard Class:** 3

**UN/NA #:** UN1866

**Packing Group:** II

**Required Label(s):** 3

### **IATA Information:**

**Shipping Name:** Resin solution, flammable

**Hazard Class:** 3

**UN#:** UN1866

**Packing Group:** II

**Required Label(s):** 3

### **IMDG Information:**

**Shipping Name:** Resin solution, flammable

**Hazard Class:** 3

**UN#:** UN1866

**Packing Group:** II

**Required Label(s):** 3

## Safety Data Sheet

**Material Name:** LM-800XL

**TDG Information:**

**Shipping Name:** Resin solution, flammable

**Hazard Class:** 3

**UN#:** UN1866

**Packing Group:** II

**Required Label(s):** 3

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### Section 15 - REGULATORY INFORMATION

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#### U.S. Federal Regulations

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

Toluene	108-88-3
SARA 313:	1 % de minimis concentration
CERCLA:	1000 lb final RQ; 454 kg final RQ

#### SARA Section 311/312 (40 CFR 370 Subparts B and C)

**Acute Health:** Yes **Chronic Health:** Yes **Fire:** Yes **Pressure:** No **Reactivity:** No

#### U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
Quartz	14808-60-7	No	Yes	Yes	Yes	Yes
Toluene	108-88-3	Yes	Yes	Yes	Yes	Yes
n-Heptane	142-82-5	Yes	Yes	Yes	Yes	Yes
Distillates, petroleum, hydrotreated light naphthenic	64742-53-6	No	Yes	No	No	No

#### The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer

WARNING! This product contains a chemical known to the state of California to cause reproductive/developmental effects

Quartz	14808-60-7
Carc:	carcinogen , 10/1/1988 (airborne particles of respirable size)
Toluene	108-88-3
Repro/Dev. Tox	developmental toxicity , 1/1/1991

#### Canadian WHMIS Ingredient Disclosure List (IDL)

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in

## Safety Data Sheet

### Material Name: LM-800XL

products which meet WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL

Quartz	14808-60-7
	1 %
Toluene	108-88-3
	1 %
n-Heptane	142-82-5
	1 %

### Component Analysis - Inventory

Distillates (petroleum), C3-6, piperylene-rich, polymers with isobutylene (152698-66-3)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX	TW
No	DSL	No	Yes	No	No	No	Yes	No	Yes	Yes	No	Yes

Benzene, ethenyl-, polymer with 2-methyl-1,3-butadiene (25038-32-8)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX	TW
Yes	DSL	No	Yes	Yes	Yes	No	Yes	No	Yes	Yes	No	Yes

Quartz (14808-60-7)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes

Toluene (108-88-3)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes

1-Propanamine, 3-(isodecyloxy)-, acetate (28701-67-9)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	No	No	No	No	Yes	Yes	No	Yes



## Safety Data Sheet

**Material Name: LM-800XL**

Styrene-butadiene copolymer (9003-55-8)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX	TW
Yes	DSL	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes

n-Heptane (142-82-5)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes

Distillates, petroleum, light distillate hydrotreating process, low-boiling (68410-97-9)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	No	Yes

Petroleum distillates, hydrotreated light (64742-47-8)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes	Yes

Distillates, petroleum, hydrotreated middle (64742-46-7)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes	Yes

Distillates, petroleum, hydrotreated light naphthenic (64742-53-6)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	No	Yes

Distillates, petroleum, hydrotreated heavy naphthenic (64742-52-5)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes	Yes

## Safety Data Sheet

Material Name: LM-800XL

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### Section 16 - OTHER INFORMATION

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#### HMIS Rating

Health: 2\* Fire: 3 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe \* = Chronic hazard

#### NFPA Ratings

Health: 2 Fire: 3 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

#### Summary of Changes

New SDS: July 7, 2015

#### Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States.

#### Other Information

##### Disclaimer:

The information contained herein is based upon data and information available to us, and reflects our best professional judgment. This product may be formulated in part with components purchased from other companies. In many instances, especially when proprietary or trade secret materials are used, CCWI Company must rely upon the hazard evaluation of such components submitted by that product's manufacturer or importer. No warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of such data or information. The results to be obtained from the use thereof, or that any such use does not infringe any patent, since the information contained herein may be applied under conditions of use beyond our control and with which we may be unfamiliar, we do not assume responsibility for the results of such application. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular use.

## Safety Data Sheet

Material Name: CCW MiraDRI 860

Product #:305145

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### Section 1 - PRODUCT AND COMPANY IDENTIFICATION

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**Material Name**

CCW MiraDRI 860

**Synonyms**

Self-Adhering Rubberized Asphalt Membrane

**Chemical Family**

Rubber Asphalt products

**Product Use**

Waterproofing membrane

**Restrictions on Use**

For industrial use only.

**Manufacturer Information**

Carlisle Coatings and Waterproofing, Inc  
900 Hensley Lane  
Wylie, TX 75098  
www.carlisleccw.com

**Phone Numbers:**

Medical Emergency  
CHEMTREC (USA): 800-424-9300

MSDS Assistance; 972-442-6545  
Technical Assistance: 888-229-2199  
Customer Service: 888-229-0199

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### Section 2 - HAZARDS IDENTIFICATION

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**Classification in accordance with paragraph (d) of 29 CFR 1910.1200.**

Skin Corrosion/Irritation - Category 2

Reproductive Toxicity - Category 1B

Specific Target Organ Toxicity - Single Exposure - Category 2 ( liver, kidneys, thymus )

**GHS Label Elements**

**Symbol(s)**



**Signal Word**

Danger

**Hazard Statement(s)**

Causes skin irritation

May damage fertility or the unborn child

May cause damage to organs

**Precautionary Statement(s)**

**Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Wear protective gloves/protective clothing/eye protection/face protection

## Safety Data Sheet

**Material Name: CCW MiraDRI 860**

**Product #:305145**

Do not breathe dust/fume/gas/mist/vapours/spray  
Wash thoroughly after handling  
Do not eat, drink or smoke when using this product

### Response

If exposed or concerned: Call a POISON CENTER or doctor/physician  
IF ON SKIN: Wash with plenty of soap and water  
If skin irritation occurs: Get medical advice/attention  
Take off contaminated clothing and wash before reuse  
Specific treatment (see label)

### Storage

Store locked up

### Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations

### Other Hazards

No additional information available.

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## Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

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CAS	Component Name	Percent
64742-52-5	Distillates, petroleum, hydrotreated heavy naphthenic	5-10
8052-42-4	Asphalt	0-75
64742-93-4	Asphalt, oxidized	0-75
68955-27-1	Distillates, petroleum, petroleum residues vacuum	0-75
64741-56-6	Residues, petroleum, vacuum	0-75
Mixture	Fatty acids, tall-oil, low-boiling	0.8

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## Section 4 - FIRST AID MEASURES

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### Description of Necessary Measures

If exposed or concerned: Call a POISON CENTER or doctor/physician.

### Inhalation

Inhalation unlikely due to physical form. Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

### Skin

Wash exposed skin with soap and water. Take off contaminated clothing and wash before reuse. If skin irritation occurs, get medical advice/attention.

## Safety Data Sheet

**Material Name: CCW MiraDRI 860**

**Product #:305145**

**Eyes**

Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

**Ingestion**

Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.

**Indication of any immediate medical attention and special treatment needed**

Treat symptomatically and supportively.

**Most Important Symptoms/Effects**

**Acute**

Causes skin irritation. May cause damage to the kidneys, liver, thymus.

**Delayed**

May damage fertility or the unborn child.

**Note to Physicians**

Contains ASPHALT.

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### Section 5 - FIRE FIGHTING MEASURES

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**Extinguishing Media**

**Suitable Extinguishing Media**

Use carbon dioxide, regular dry chemical, regular foam or water.

**Unsuitable Extinguishing Media**

None known.

**Special Hazards Arising from the Chemical**

Slight fire hazard.

**Hazardous Combustion Products**

Oxides of carbon, hydrocarbons

**Special Protective Equipment and Precautions for Firefighters**

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

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### Section 6 - ACCIDENTAL RELEASE MEASURES

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**Personal Precautions, Protective Equipment and Emergency Procedures**

Wear personal protective clothing and equipment, see Section 8.

**Methods and Materials for Containment and Cleaning Up**

Remove all sources of ignition. Avoid inhalation of material or combustion by-products. Ventilate affected area. Absorb with earth, sand or other non-combustible material and transfer to container. Dispose in accordance with all applicable regulations.

**Environmental Precautions**

Avoid release to the environment.

## Safety Data Sheet

Material Name: CCW MiraDRI 860

Product #:305145

### Section 7 - HANDLING AND STORAGE

#### Precautions for Safe Handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with eyes, skin and clothing. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/fume/gas/mist/vapours/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. KEEP OUT OF REACH OF CHILDREN.

#### Conditions for Safe Storage, Including any Incompatibilities

Store locked up

Store in a cool, dry place. Keep container tightly closed and in a well-ventilated place. Keep away from heat and ignition sources. Keep away from incompatible materials. Do not cut, puncture, or weld on or near this container.

#### Incompatible Materials

Strong acids, strong oxidizing agents

### Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

#### Component Exposure Limits

<b>Asphalt</b>	8052-42-4	
ACGIH:	0.5 mg/m <sup>3</sup> TWA as benzene soluble aerosol fume, inhalable fraction	
NIOSH:	5 mg/m <sup>3</sup> Ceiling fume 15 min	
Mexico:	5 mg/m <sup>3</sup> TWA LMPE-PPT	10 mg/m <sup>3</sup> STEL [LMPE-CT]
<b>Hydrogen sulfide</b>	7783-06-4	
ACGIH:	1 ppm TWA	5 ppm STEL
NIOSH:	10 ppm Ceiling 10 min; 15 mg/m <sup>3</sup> Ceiling 10 min	
	100 ppm IDLH	
Europe:	5 ppm TWA; 7 mg/m <sup>3</sup> TWA	10 ppm STEL; 14 mg/m <sup>3</sup> STEL
OSHA (US):	20 ppm Ceiling	
Mexico:	10 ppm TWA LMPE-PPT; 14 mg/m <sup>3</sup> TWA LMPE-PPT	
	15 ppm STEL [LMPE-CT]; 21 mg/m <sup>3</sup> STEL [LMPE-CT]	

#### Biological limit value

There are no biological limit values for any of this product's components.

#### Engineering Controls

Provide adequate ventilation. Ensure compliance with applicable exposure limits.

## Safety Data Sheet

Material Name: CCW MiraDRI 860

Product #:305145

**Individual Protection Measures, such as Personal Protective Equipment****Eye/face protection**

Wear safety glasses or safety goggles, with a faceshield, as appropriate. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

**Skin Protection**

Wear chemical resistant clothing and rubber boots when potential for contact with the material exists. Recommended material: protective skin cream.

**Respiratory Protection**

A NIOSH approved air-purifying respirator with an appropriate cartridge or canister may be appropriate under certain circumstances where airborne concentrations are expected to exceed exposure limits.

**Glove Recommendations**

Wear appropriate chemical resistant gloves.

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**Section 9 - PHYSICAL AND CHEMICAL PROPERTIES**

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<b>Appearance</b>	Black rubberized asphalt	<b>Physical State</b>	solid
<b>Odor</b>	Slight,petroleum	<b>Color</b>	black
<b>Odor Threshold</b>	Not available	<b>pH</b>	Not available
<b>Melting Point</b>	Not available	<b>Boiling Point</b>	Not available
<b>Freezing point</b>	Not available	<b>Evaporation Rate</b>	<0.01
<b>Boiling Point Range</b>	Not available	<b>Flammability (solid, gas)</b>	Not available
<b>Autoignition</b>	Not available	<b>Flash Point</b>	232°C (>450 °F)
<b>Lower Explosive Limit</b>	Not available	<b>Decomposition</b>	Not available
<b>Upper Explosive Limit</b>	Not available	<b>Vapor Pressure</b>	Not available
<b>Vapor Density (air=1)</b>	Not available	<b>Specific Gravity (water=1)</b>	Not available
<b>Water Solubility</b>	Negligible	<b>Partition coefficient: n-octanol/water</b>	Not available
<b>Viscosity</b>	Not available	<b>Solubility (Other)</b>	Not available
<b>Density</b>	1 - 1.2 (relative)		

**Other Information**

No additional information available.

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**Section 10 - STABILITY AND REACTIVITY**

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**Reactivity**

No reactivity hazard is expected.

## Safety Data Sheet

**Material Name: CCW MiraDRI 860**

**Product #:305145**

**Chemical Stability**

Stable under normal conditions of use.

**Possibility of Hazardous Reactions**

Hazardous polymerization will not occur.

**Conditions to Avoid**

Avoid heat, flames, sparks and other sources of ignition. Avoid contact with incompatible materials.

**Incompatible Materials**

Strong acids, strong oxidizing agents

**Hazardous decomposition products**

Oxides of carbon, hydrocarbons

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### Section 11 - TOXICOLOGICAL INFORMATION

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**Information on Likely Routes of Exposure**

**Inhalation**

Not a likely route of exposure.

**Skin Contact**

Causes skin irritation.

**Eye Contact**

May cause mild eye irritation.

**Ingestion**

May cause gastrointestinal irritation.

**Acute and Chronic Toxicity**

**Component Analysis - LD50/LC50**

The components of this material have been reviewed in various sources and the following selected endpoints are published:

Asphalt (8052-42-4)

Oral LD50 Rat >5000 mg/kg

Dermal LD50 Rabbit >2000 mg/kg

Asphalt, oxidized (64742-93-4)

Oral LD50 Rat >5000 mg/kg

Dermal LD50 Rabbit >2000 mg/kg

Distillates, petroleum, petroleum residues vacuum (68955-27-1)

Oral LD50 Rat 4320 mg/kg

Dermal LD50 Rabbit >2000 mg/kg

Residues, petroleum, vacuum (64741-56-6)

Oral LD50 Rat 4320 mg/kg

Dermal LD50 Rabbit >2000 mg/kg

Hydrogen sulfide (7783-06-4)

Inhalation LC50 Rat 0.99 mg/L 1 h

Fatty acids, tall-oil, low-boiling (Mixture)

Oral LD50 Rat >2000 mg/kg

Dermal LD50 Rat >2000 mg/kg

**Immediate Effects**

Causes skin irritation. May cause damage to the kidneys, liver, thymus.



## Safety Data Sheet

**Material Name: CCW MiraDRI 860**

**Product #:305145**

**Delayed Effects**

May damage fertility or the unborn child.

**Irritation/Corrosivity Data**

May cause mild skin irritation. May cause mild eye irritation. May cause respiratory irritation.

**Respiratory Sensitization**

No data available.

**Dermal Sensitization**

No data available.

**Component Carcinogenicity**

<b>Asphalt</b>	8052-42-4
ACGIH:	A4 - Not Classifiable as a Human Carcinogen (fume, coal tar-free)
IARC:	Monograph 103 [2013]; Supplement 7 [1987] (extracts of steam-refined and air-refined); Monograph 35 [1985] (Group 2B (possibly carcinogenic to humans))
DFG:	Category 2 (considered to be carcinogenic for man, aerosol and vapor)
OSHA:	Present
<b>Asphalt, oxidized</b>	64742-93-4
IARC:	Monograph 103 [2013] (and their emissions during roofing) (Group 2A (probably carcinogenic to humans))
OSHA:	Present
<b>Residues, petroleum, vacuum</b>	64741-56-6
IARC:	Monograph 103 [2013] (Group 2B (possibly carcinogenic to humans))
OSHA:	Present
<b>Polycyclic aromatic hydrocarbons</b>	130498-29-2
NTP:	Reasonably Anticipated To Be A Human Carcinogen
OSHA:	Present

**Germ Cell Mutagenicity**

No data available.

**Tumorigenic Data**

No data available

**Reproductive Toxicity**

## Safety Data Sheet

**Material Name: CCW MiraDRI 860**

**Product #:305145**

May damage fertility or the unborn child.

**Specific Target Organ Toxicity - Single Exposure**

kidneys, liver, thymus

**Specific Target Organ Toxicity - Repeated Exposure**

No target organs identified.

**Aspiration hazard**

No data available.

**Medical Conditions Aggravated by Exposure**

No data available.

**Additional Data**

No additional information available.

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### Section 12 - ECOLOGICAL INFORMATION

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**Ecotoxicity**

Avoid release to the environment.

**Component Analysis - Aquatic Toxicity**

<b>Distillates, petroleum, hydrotreated heavy naphthenic</b>	64742-52-5
Fish:	LC50 96 h Oncorhynchus mykiss >5000 mg/L
Invertebrate:	EC50 48 h Daphnia magna >1000 mg/L IUCLID
<b>Asphalt, oxidized</b>	64742-93-4
Algae:	EC50 72 h Pseudokirchneriella subcapitata 56 mg/L IUCLID
<b>Distillates, petroleum, petroleum residues vacuum</b>	68955-27-1
Fish:	LC50 96 h Brachydanio rerio 48 mg/L [semi-static]
<b>Residues, petroleum, vacuum</b>	64741-56-6
Fish:	LC50 96 h Brachydanio rerio 48 mg/L [semi-static]
<b>Hydrogen sulfide</b>	7783-06-4
Fish:	LC50 96 h Lepomis macrochirus 0.0448 mg/L [flow-through]; LC50 96 h Pimephales promelas 0.016 mg/L [flow-through]
Fatty acids, tall-oil, low-boiling	Mixture

## Safety Data Sheet

**Material Name: CCW MiraDRI 860****Product #:305145**

Fish:	LC50 96 h Brachydanio rerio 50 - 100 mg/L [semi-static]
Algae:	EC50 72 h Pseudokirchneriella subcapitata >10 mg/L IUCLID
Invertebrate:	EC50 48 h Daphnia magna 70 mg/L IUCLID

**Persistence and Degradability**

No information available for the product.

**Bioaccumulative Potential**

No information available for the product.

**Mobility**

No information available for the product.

**Other Toxicity**

No additional information available.

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### Section 13 - DISPOSAL CONSIDERATIONS

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**Disposal Methods**

Dispose of contents/container in accordance with local/regional/national/international regulations.

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### Section 14 - TRANSPORT INFORMATION

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**US DOT Information:**

UN/NA #: Not regulated

**IATA Information:**

UN#: Not regulated

**IMDG Information:**

UN#: Not regulated

**TDG Information:**

UN#: Not regulated

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### Section 15 - REGULATORY INFORMATION

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**U.S. Federal Regulations**

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

Hydrogen sulfide	7783-06-4
SARA 302:	500 lb TPQ

## Safety Data Sheet

**Material Name: CCW MiraDRI 860**

**Product #:305145**

SARA 313:	1 % de minimis concentration
CERCLA:	100 lb final RQ; 45.4 kg final RQ
OSHA (safety):	1500 lb TQ
SARA 304:	100 lb EPCRA RQ

**SARA Section 311/312 (40 CFR 370 Subparts B and C)**

**Acute Health:** Yes **Chronic Health:** Yes **Fire:** Yes **Pressure:** No **Reactivity:** No

**U.S. State Regulations**

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
Asphalt	8052-42-4	Yes	Yes	Yes	Yes	Yes
Asphalt, oxidized	64742-93-4	No	No	No	Yes	No
Hydrogen sulfide	7783-06-4	Yes	Yes	Yes	Yes	Yes
Polycyclic aromatic hydrocarbons	130498-29-2	No	No	Yes	Yes	Yes

**Not listed under California Proposition 65**

**Canadian WHMIS Ingredient Disclosure List (IDL)**

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which meet WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL

Hydrogen sulfide	7783-06-4
	1 %

**Component Analysis - Inventory**

Distillates, petroleum, hydrotreated heavy naphthenic (64742-52-5)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes

Asphalt (8052-42-4)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes

Asphalt, oxidized (64742-93-4)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX

## Safety Data Sheet

**Material Name: CCW MiraDRI 860**

**Product #:305145**

Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	No
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Distillates, petroleum, petroleum residues vacuum (68955-27-1)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	No	No	No	Yes	No	Yes	No	No

Residues, petroleum, vacuum (64741-56-6)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes

Hydrogen sulfide (7783-06-4)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

Polycyclic aromatic hydrocarbons (130498-29-2)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
No	No	No	No	No	No	No	No	No	No	No	Yes

Fatty acids, tall-oil, low-boiling (Mixture)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	No	No	No	Yes	No	Yes	Yes	No

### Section 16 - OTHER INFORMATION

#### HMIS Rating

Health: 2\* Fire: 1 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe \* = Chronic hazard

#### NFPA Ratings

Health: 2 Fire: 1 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

#### Summary of Changes

New SDS: May 18, 2015

## Safety Data Sheet

**Material Name: CCW MiraDRI 860**

**Product #:305145**

### Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States.

### Other Information

#### Disclaimer:

The information contained herein is based upon data and information available to us, and reflects our best professional judgment. This product may be formulated in part with components purchased from other companies. In many instances, especially when proprietary or trade secret materials are used, CCWI Company must rely upon the hazard evaluation of such components submitted by that product's manufacturer or importer. No warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of such data or information. The results to be obtained from the use thereof, or that any such use does not infringe any patent, since the information contained herein may be applied under conditions of use beyond our control and with which we may be unfamiliar, we do not assume responsibility for the results of such application. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular use



Safety Data Sheet  
Graco TSL  
Revision Date: 4/21/15  
SDS Number: 307765

Prepared according to Global Harmonized System (GHS) standards

## SECTION 1 CHEMICAL PRODUCT IDENTIFICATION

Graco Inc.  
88 11th Avenue Northeast  
Minneapolis, Minnesota 55413  
Tel: 612-623-6000  
[customerservice@graco.com](mailto:customerservice@graco.com)

**Product Trade Name:** Graco TSL

**CAS Number:** Not Determined.

**Synonyms/Other:** Not Applicable.

**Part Number(s):** 238049, 206994, 206995, 206996, 206997, 206998, 24C822, 24C823, CAN994, 17C436

**Recommended Use:** Specialty Lubricant

**Restrictions on Use:** Not Determined.

**Created Date:** 8/19/2013

**Preparation/Revision Date:** 4/21/2015

**Emergency Phone Number:** 1-800-424-9300 (CHEMTREC)

## SECTION 2 HAZARD IDENTIFICATION

**Appearance:** Clear, Colorless Liquid

**Odor:** Mild, Sweet Odor

**Classification:** This material is not considered to be hazardous according to the Globally Harmonized System of Classification and Labelling Chemicals (GHS), Third Revised Edition.

**Target Organs:** Not applicable.

**Pictogram(s):** None required.

**Signal Word:** None required.

**Hazard Statement:** Not required.

**Other Hazards:** Not determined.

**Prevention:** None required.

**Response:** None required.

**Storage Procedures:** None required.

**Disposal:** None required.

**Other:** See section 11 for complete health hazard information.

## SECTION 3 COMPOSITION OF INGREDIENTS

Component	CAS Number	Percentage (by weight)
Phthalic Acid Esters	53306-54-0	80-100%

The balance of components do not contribute to the overall classification of the fluid, according to the GHS Standard.

## SECTION 4 FIRST AID MEASURES

**Eye Contact:** If irritation occurs, cautiously rinse eyes with lukewarm, gently flowing water for 5 minutes, while holding the eyelids open. If eye irritation persists: Get medical advice/attention.

**Skin Contact:** Call a doctor if you feel unwell.



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**Inhalation:** Get medical advice or attention if you feel unwell or are concerned.  
**Ingestion:** If you feel unwell or concerned; Get medical advice/attention, Rinse mouth. Do NOT induce vomiting. If vomiting occurs naturally, lie on your side, in the recovery position.  
**Other:** No additional information

## SECTION 5 FIRE FIGHTING MEASURES

**Flash Point:** 240°C by Cleveland Open Cup Tester.  
**Flammable limits:** Not determined.  
**Extinguishing media:** Use dry chemical, alcohol foam, all purpose AFFF or carbon dioxide to extinguish fire.  
**Special firefighting procedures:** DO NOT direct a solid stream of water or foam into hot, burning pools of liquid since this may cause frothing and increase fire intensity. Frothing can be violent and possibly endanger any firefighter standing too close to the burning liquid. Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning material with water used for cooling purposes. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA).  
**Unusual fire & explosion hazards:** Dense smoke may be generated while burning. Toxic fumes, gases or vapors may evolve on burning. High temperatures may create heavy flammable vapors that may settle along ground level and low spots to create an invisible fire hazard.  
**Byproducts of combustion:** Fires involving this product may release oxides of carbon, phosphorus, nitrogen and sulfur; reactive hydrocarbons and irritating vapors.  
**Autoignition temperature:** Not determined.  
**Explosion data:** Not determined. Care should always be exercised in dust/mist areas.  
**Other:** Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**Spill control procedures (land):** Immediately turn off or isolate any source of ignition (pilot lights, electrical equipment, flames, heaters, etc.). Evacuate area and ventilate. Personnel wearing proper protective equipment should contain spill immediately with inert materials (sand, earth, chemical spill pads of cotton) by forming dikes. Dikes should be placed to contain spill in a manner that will prevent material from entering sewers and waterways. Large spill, once contained, may be picked up using explosion proof, non-sparking vacuum pumps, shovels, or buckets, and disposed of in suitable containers for disposal. If a large spill occurs notify appropriate authorities. In case of road spill or accident contact Chem-Trec (800-424-9300).  
**Spill control procedures (water):** Try to contain large spills with floating booms to prevent spill from spreading. Remove from surface by skimming or with suitable adsorbents. If a large spill occurs notify appropriate authorities (normally the National Response Center or Coast Guard at 800-424-8802).  
**Waste disposal method:** Do not empty into drains. All disposals must comply with federal, state, and local regulations. The material, if spilled or discarded may be a regulated waste. Refer to state and local regulations. Department of Transportation (DOT) regulations may apply for transporting this material when spilled. See Section 14.  
**Other:** CAUTION - If spilled material is cleaned up using a regulated solvent, the resulting waste mixture will be regulated.





## SECTION 7

## HANDLING AND STORAGE

<b>Handling procedures:</b>	Keep containers closed when not in use. Do not transfer to unmarked containers. Empty containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld, or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse. Handling temperatures should not exceed 60°C (140°F) to minimize danger of burns. Open containers carefully in a well ventilated area or use appropriate respiratory protection. Wash thoroughly after handling.
<b>Storage procedures:</b>	Store containers away from heat, sparks, open flame, or oxidizing materials. Extended storage at excessive temperatures may produce odorous and toxic fumes from product decomposition.
<b>Additional information:</b>	No additional information.

## SECTION 8

## EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Personal protection:</b>	Applicable mainly to persons in repeated contact situations such as packaging of product, service/maintenance, and cleanup/spill control personnel.
<b>Respiratory protection:</b>	None required if ventilation is adequate. Otherwise a respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements must be followed. Where misting may occur, wear an MSHA/NIOSH approved (or equivalent) half-mask form dust/mist air purifying respirator.
<b>Eye protection:</b>	Eye protection is strongly recommended. Wear safety glasses with side shields or vented/splash proof goggles (ANSI Z87.1 or approved equivalent).
<b>Hand protection:</b>	Impervious, chemically resistant gloves such as neoprene or nitrile rubber to avoid skin sensitization and absorption.
<b>Other protection:</b>	Use of an apron and overboots of chemically impervious materials such as neoprene or nitrile rubber is recommended based on level of activity and exposure. If handling hot material use insulated protective equipment. Launder soiled clothes. Properly dispose of contaminated leather articles and other materials which cannot be decontaminated.
<b>Local control measures:</b>	Use adequate ventilation when working with material in an enclosed area. Mechanical methods such as fume hoods or area fans may be used to reduce localized vapor/mist areas. If vapor or mist is generated when the material handled, adequate ventilation in accordance with good engineering practice must be provided to maintain concentrations below the specified exposure. Eyewash stations and showers should be available in areas where this material is used and stored.
<b>Other:</b>	Consumption of food and drink should be avoided in work areas where product is present. Always wash hands and face with soap and water before eating, drinking or smoking.

## SECTION 9

## PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Clear, Colorless Liquid
<b>Odor:</b>	Mild, Sweet Odor
<b>Odor threshold:</b>	Not determined.
<b>pH:</b>	Not applicable.
<b>Melting/Freezing point:</b>	Not determined.
<b>Initial boiling point:</b>	260°C (500°F) @ 10.000 mmHg.
<b>Boiling range:</b>	Not determined.
<b>Flash point:</b>	240°C.
<b>Evaporation rate:</b>	Not determined.
<b>Flammability:</b>	Not determined.
<b>Upper flammable limit:</b>	Not determined.



Lower flammable limit:	Not determined.
Vapor pressure:	0.100 mmHg @ 155°C
Vapor density:	Not determined.
Relative density:	1.166 g/cm <sup>3</sup> @ 15.6°C
Solubility:	Slightly Soluble in Water.
Partition Coefficient:	Not determined.
Auto-ignition temperature:	Not determined.
Decomposition temperature:	Not determined.
Viscosity:	32 cSt at 40°C.
Other	Not applicable.

## SECTION 10

## STABILITY AND REACTIVITY

### Reactivity

Chemical stability:	Material is chemically stable at room temperatures and pressure.
Hazardous polymerization:	Will not occur.
Conditions to avoid:	Avoid high temperatures and product contamination.
Incompatibility with other materials:	Avoid contact with acids and strong oxidizing materials.
Decomposition products:	Smoke, carbon monoxide, carbon dioxide, and other aldehydes of incomplete combustion. Oxides of carbon, nitrogen, and sulfur; reactive hydrocarbons and irritating vapors.
Other:	Not applicable.

## SECTION 11

## TOXICOLOGICAL INFORMATION

### Acute toxicity (LD50) \*See note at the bottom of the section

Oral:	>5000 mg/kg
Dermal:	>5000 mg/kg
Inhalation:	>20.0 mg/l
Skin irritation:	Non-irritant
Eye irritation:	Non-irritant
Dermal sensitization:	Not expected to have a sensitizing effect.
Respiratory sensitization:	Not expected to have a sensitizing effect.
Aspiration Hazard:	Not applicable

### Chronic Toxicity

Mutagenicity:	Not suspected of causing genetic defects
Carcinogenicity:	Not suspected of causing cancer.
Reproductive toxicity:	Not expected to have adverse effects on reproduction.
STOT-single exposure:	Not expected to have adverse effects.
STOT-repeated exposure:	Not expected to have long term adverse effects.
Other:	*All data in this section is based off calculations from Part 3 of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) utilizing information from the constituent components.

## SECTION 12

## ECOLOGICAL INFORMATION

### Environmental toxicity

Fish:	> 100 mg/l.
Invertebrates:	> 100 mg/l.
Aquatic plants:	> 100 mg/l.
Microorganism:	> 100 mg/l.



<b>Persistence/Degradability:</b>	This product is not expected to be readily biodegradable.
<b>Bioaccumulation:</b>	Not determined.
<b>Mobility in soil:</b>	Not determined.
<b>Other:</b>	All classifications are based on calculations in Part 4 of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) utilizing information from the constituent components.

## SECTION 13

## DISPOSAL CONSIDERATIONS

<b>Waste disposal:</b>	This product unadulterated by other materials can be classified as a non-hazardous waste. Depending on use, used product may be regulated. Dispose of in a licensed facility. Do not discharge product in to sewer system. Dispose of containers by crushing or puncturing, so as to prevent unauthorized use of used containers. Waste management should be in full compliance with federal, state, and local laws.
<b>Other:</b>	The transportation, storage, treatment and disposal of RCRA waste material must be conducted in compliance with 40 CFR 262, 263, 264, 268 and 270. Chemical additions, processing or otherwise altering this material may make the waste management information presented in this SDS incomplete, inaccurate or otherwise inappropriate.

## SECTION 14

## TRANSPORT INFORMATION

<b>Land Transport (DOT):</b>	Not Regulated.
<b>Proper Shipping Name:</b>	Not applicable.
<b>Land Transport (TDG):</b>	Not Regulated.
<b>Proper Shipping Name:</b>	Not applicable.
<b>Sea Transport (IMDG):</b>	Not Regulated.
<b>Proper Shipping Name:</b>	Not applicable.
<b>Air Transport (IATA):</b>	Not Regulated.
<b>Proper Shipping Name:</b>	Not applicable.
<b>Other:</b>	Marine Pollutant: No.

## SECTION 15

## REGULATORY INFORMATION

<b>WHMIS:</b>	Not Controlled. This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the (M)SDS contains all the information required by the Controlled Products Regulations.										
<b><u>Federal Regulation</u></b>											
<b>Clean water act/oil:</b>	Not Determined.										
<b>TSCA:</b>	All components of this material are listed in the U.S. TSCA Inventory.										
<b>Other TSCA:</b>	Not applicable.										
<b>SARA title III:</b>	Section 302/304 extremely hazardous substances: None. Section 311, 312 hazard categorization: <table><tr><td>Acute (immediate health effects):</td><td>NO</td></tr><tr><td>Chronic (delayed health effects):</td><td>NO</td></tr><tr><td>Fire (hazard):</td><td>NO</td></tr><tr><td>Reactivity (hazard):</td><td>NO</td></tr><tr><td>Pressure ( sudden release hazard):</td><td>NO</td></tr></table>	Acute (immediate health effects):	NO	Chronic (delayed health effects):	NO	Fire (hazard):	NO	Reactivity (hazard):	NO	Pressure ( sudden release hazard):	NO
Acute (immediate health effects):	NO										
Chronic (delayed health effects):	NO										
Fire (hazard):	NO										
Reactivity (hazard):	NO										
Pressure ( sudden release hazard):	NO										



Safety Data Sheet  
Graco TSL  
Revision Date: 4/21/15  
SDS Number: 307765

**CERCLA:**

**State Regulations**

**Right-to-know**

**Other:**

Section 313 toxic chemicals:

No components present are at or greater than the de minimis (minimum reportable) concentration requirements for reporting.

For stationary/moving sources – reportable quantity (due to): Not hazardous due to the petroleum exclusion.

Not determined.

A release of this product, as supplied, is exempt from reporting under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). However, releases may be reportable to the Nation Response Center under the Clean Water Act, 33 U.S.C. 1321(b)(3) and (5) - see head of Section 15. Failure to report may result in substantial civil and criminal penalties.

Recommend contacting the local authorities in the event of any type of spill to determine local reporting requirements and also to aid in the cleanup.

**SECTION 16**

**OTHER INFORMATION**

	NFPA 704	NPCHA-HMIS	KEY
HEALTH:	2	2	0 = Minimal
FIRE:	1	1	1 = Slight
REACTIVITY:	0	0	2 = Moderate
SPECIFIC HAZARD:	None	N/A	3 = Serious
PROTECTION INDEX:	N/A	B	4 = Severe

Version: VI

This Safety Data Sheet and the information it contains is offered to you in good faith as accurate. We have reviewed any information contained in this Data Sheet which we have received from sources outside our company. We believe that information to be correct, but cannot guarantee its accuracy or completeness. Health and safety precautions in this Data Sheet may not be adequate for all individuals and/or situations. It is the users' obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. No statement made in this Data Sheet shall be construed as a permission or recommendation for the use of any product in a manner that might infringe existing patents. No warranty is made, either express or implied.

**NOTES:** NA = Not Applicable; NE = Not Established; UN = Unavailable

*All written and visual data contained in this document reflects the latest product information available at the time of publication.  
Graco reserves the right to make changes at any time without notice.*

**Headquarters:** Minneapolis

**International Offices:** Belgium, Korea, Hong Kong, Japan

**GRACO INC. P.O. BOX 1441 MINNEAPOLIS, MN 55440-1441**

**www.graco.com**

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**Revisions / Comments:**

Added exception in Section 14, updated Section 16: 12/13/2013.

Updated Section 14, reviewed entire document: 09/11/2014.

Added customer part number, updated SDS number, added email address to contact information, updated footer of last page per customer request: 09/23/2014

Added marine pollutant statement per customer request: 10/10/2014.

Added WHMIS information to Section 15, reviewed entire document: 04/21/2015.

**W. R. GRACE**  
MATERIAL SAFETY DATA SHEET

Product Name: Perm-A-Barrier Liquid, Part A

MSDS ID Number: M-85797

MSDS Date: 02/04/2008

**SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**Product Name:** Perm-A-Barrier Liquid, Part A  
**MSDS Number:** M-85797  
**Cancelled MSDS Number:** M-85782  
**MSDS Date:** 02/04/2008  
**Chemical Family Name:** Fluid Applied Barrier made of Napthenic Oils and Inorganic filler.  
**Product Use:** Waterproofing  
**Chemical Formula:** Mixture-NA  
**CAS # (Chemical Abstracts Service Number):** Mixture-NA

**Manufactured by:**

W.R.Grace & Co.-Conn.  
62 Whittemore Avenue  
Cambridge, MA 02140

Grace Canada, Inc.  
294 Clements Road West  
Ajax, Ontario L1S 3C6

**In Case of Emergency Call:**

In USA: (617) 876-1400 In Canada: (905) 683-8561

**SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS**

<b>Ingredient</b>	<b>CAS#</b>	<b>Percent (max)</b>
Calcium oxide	001305-78-8	25-50
Castor oil based ester	NJ801415063P	1-10
Chromium (III) oxide	001308-38-9	< 1
Distillates, petroleum, hydrotreated heavy naphthenic	064742-52-5	50-100
Quartz	014808-60-7	1-10
Titanium dioxide	013463-67-7	1-10
Zinc oxide	001314-13-2	1-10

**SECTION 3 - HAZARDS IDENTIFICATION**

**Emergency Overview:**

**Caution!**

Causes eye irritation.

Causes skin irritation.

Causes digestive tract irritation if ingested.

Product reacts with other component and also with water. Reaction is exothermic, releasing heat and fumes.

Mixed product contained in the pail may reach temperatures of 291°F.

Contact with hot material will cause burns.

Do not seal containers once mixed with other components or contaminated with water. Sealed containers explode due to pressure from reaction.

**HMIS Rating:**

Health: 2\*  
Flammability: 1  
Reactivity: 1  
Personal Protective Equipment: B, G (See section 8)

**Potential Health Effects:**

**Inhalation:** Not expected to be harmful. However, if mixed material is allowed to set in the container, temperatures up to 291°F can be reached liberating water vapor, carbon disulfide and other hydrocarbons. Inhalation of these materials can cause irritation.

Prolonged inhalation can cause lung damage.

Overexposure is not likely to occur unless specific use generates dust, vapors or mist.

Effects include: Flu-like symptoms (metal fume fever).

**Eye Contact:** Eye contact causes irritation.

**Skin Contact:** Skin contact causes irritation.

Contact with hot material will result in burns.

**Skin Absorption:** Not expected to be harmful if absorbed through the skin.

**Ingestion:** Due to the physical nature of this product, ingestion is not likely.

If ingested, causes irritation to the linings of the mouth, esophagus and stomach.

Effects include: Nausea, vomiting, sneezing, coughing, labored breathing and burns.

**W. R. GRACE**  
**MATERIAL SAFETY DATA SHEET**

Product Name: Perm-A-Barrier Liquid, Part A  
MSDS ID Number: M-85797

MSDS Date: 02/04/2008

**SECTION 4 - FIRST AID MEASURES:**

**Skin Contact:** In case of skin contact, clean fingernails and wash skin with soap and water. If residue remains, clean with waterless handcream or abrasive soap. Never use solvents.

If discomfort or irritation persists, consult a physician.

Remove contaminated clothing and wash before reuse.

**Eye Contact:** Flush eyes with water for at least 15 minutes while holding eyelids open.

If discomfort or irritation persists, consult a physician.

**Ingestion:** Do not induce vomiting.

Never give anything by mouth to an unconscious person.

If discomfort or irritation persists, consult a physician.

**Inhalation:** If symptoms develop, get fresh air. If symptoms persist, consult a physician.

If breathing has stopped, give artificial respiration then oxygen if needed.

**SECTION 5 - FIRE AND EXPLOSION HAZARD DATA**

**Flash Point:** Not Determined

**Flash Point Method:** Not Applicable

**Lower Explosion Limit:** Not Available

**Upper Explosion Limit:** Not Available

**Auto-Ignition Temperature:** Not Available

**NFPA Rating:**

**Health:** 1

**Flammability:** 1

**Reactivity:** 1

**Extinguishing Media:** In case of fire, use water spray, dry chemical, Carbon dioxide or foam.

**Special Fire Fighting Procedures:** Wear self-contained breathing apparatus and complete personal protective equipment when potential for exposure to vapors or products of combustion exist. Water may be used to cool containers to prevent pressure build-up and possible auto-ignition or explosion. Avoid breathing hazardous vapors or products of combustion, keep upwind. Isolate area and keep unnecessary people away. Prevent run-off from fire control or dilution from entering streams or drinking water supplies.

**Unusual Fire and Explosion Hazards:** None unless noted below.

**SECTION 6 - ACCIDENTAL RELEASE MEASURES:**

**Spills/Leaks:** Use proper personal protective equipment. Do not flush to sewer or allow to enter waterways. Keep unnecessary people away.

Oil spills released directly to waterways may be subject to National Response Center (1-800-424-8802) reporting.

Immediately contact your company's environmental coordinator or the Grace Environmental Health and Safety Department.

**SECTION 7 - HANDLING AND STORAGE**

**Precautionary Measures:**

Use all product within 30-60 minutes of mixing to avoid an exothermic reaction (release of heat and fumes) Reaction times may vary depending upon temperature and mixing conditions.

Avoid contact with eyes, skin and clothing.

Do not take internally.

Practice good personal hygiene to avoid ingestion.

Promptly cleanse hands after handling.

Use only with adequate ventilation.

Wear respiratory protection during spray applications.

Contact with hot material will result in burns.

Reaction releases heat and fumes if unused mixed product is allowed to sit in pail.

FOR PROFESSIONAL USE ONLY. KEEP OUT OF CHILDREN'S REACH.

**SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT**

**EXPOSURE GUIDELINES (US)**

Ingredient	ACGIH TLV			OSHA PEL			Other
	TWA	STEL	Ceiling	TWA	STEL	Ceiling	
Calcium oxide	2 mg/m3 TWA	-	-	5 mg/m3 TWA (not in effect as a result of reconsideration)	-		-
Castor oil based ester	-	-	-	-	-		-
Distillates, petroleum, hydrotreated heavy naphthenic		-	-	-	-		-

**W. R. GRACE**  
**MATERIAL SAFETY DATA SHEET**

Product Name: Perm-A-Barrier Liquid, Part A  
MSDS ID Number: M-85797

MSDS Date: 02/04/2008

Quartz	0.025 mg/m3 TWA (respirable fraction)	-	-	((250)/(%SiO <sub>2</sub> + 5) mppcf TWA (respirable)); ((10)/(%SiO <sub>2</sub> + 2) mg/m3 TWA (respirable)); ((30)/(%SiO <sub>2</sub> + 2) mg/m3 TWA (total dust))	-	-	
Titanium dioxide	10 mg/m3 TWA		-	10 mg/m3 TWA (total dust)			-
Zinc oxide	5 mg/m3 TWA (fume); 10 mg/m3 TWA (dust)	10 mg/m3 STEL (fume)	-	5 mg/m3 TWA (fume); 10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)	10 mg/m3 STEL (fume)		

Respirable Quartz (Crystalline Silica) can result in lung disease (i.e. silicosis and/or lung cancer). However, due to the physical nature of this product (liquid) exposures are not expected unless after product dries it is abraded and airborne dust is created.

**EXPOSURE GUIDELINES (CANADA)**

Employers should consult local Provincial regulatory limits for exposure guidelines which may vary locally.

**Engineering Controls:** Provide local exhaust ventilation to prevent vapor build up during application. This is particularly important in enclosed or confirmed areas where natural ventilation may not be adequate. Provide enough ventilation to maintain exposure levels below regulatory limits.

**Personal Protective Equipment:**

**Respiratory Protection:** Respiratory protection may not be required in well ventilated areas. However, indoors or where ventilation is inadequate, the use of respirators equipped with organic vapor cartridges is required. During spray applications, the use of a dust/mist respirator such as a 3M Type P-95 with organic vapor (OV) protection (or equivalent) is required, but the specific respirator(s) may not adequately protect against actual working conditions which must be assessed periodically as work progresses. (See Work/Hygienic Practices.)

**Skin Protection:** Impervious (PVC, latex or nitrile) gloves should be worn any time direct contact is possible.

**Eye Protection:** At minimum, safety glasses with side shields should be worn where exposure to excessive dust or spray is likely.

**Work/Hygienic Practices:** Use good personal hygiene practices.

Carbon disulfide and other potentially harmful gases, vapors and fumes may evolve as a result of exothermic reactions ("hot product") when components are mixed. Carbon disulfide may be detected by odor at about 1 ppm, but the ability to smell fatigues (diminishes) rapidly, therefore, odor does not serve as a good warning property. If eye or respiratory irritation occurs, or if a foul odor is detected, you may be experiencing exposure to Carbon disulfide and other organics. Leave the area immediately and seek fresh air.

Quartz (Crystalline silica) is a naturally-occurring mineral that is commonly contained in materials that are mined from the earth's surface such as sand, limestone, clay and gypsum (Calcium sulfate). Total quartz is a value usually representing the combined fractions of large, nonrespirable sized particles and of respirable sized particles (less than ten microns in aerodynamic diameter). It is only the respirable fraction of total quartz that is recognized as hazardous by professionals in the field of Occupational Health and by most regulatory agencies.

This product contains compounds subject to exposure guidelines and/or identified as carcinogens. (See Sections 8 and 11). However, due to the physical nature of this product, these compounds are unlikely to reach exposure limits unless airborne dust or spray mist is created.

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical State:</b>	Liquid
<b>Appearance/Odor:</b>	Greenish Semi-viscous Liquid
<b>Odor Threshold:</b> (ppm)	Not Determined
<b>pH:</b>	Not Available
<b>Vapor Pressure:</b> (Mm Hg)	Unknown
<b>Vapor Density:</b> (Air = 1)	Unknown
<b>Solubility In Water:</b>	Unknown
<b>Specific Gravity:</b> (Water = 1)	1.245 – 1.285
<b>Evaporation Rate:</b> (Butyl Acetate = 1)	Unknown
<b>Boiling Point:</b>	Not Determined
<b>Viscosity:</b>	Unknown
<b>Bulk Density:</b> (Pounds/Cubic Foot)(Pcf)	~83
<b>% Volatiles (gr/L):</b> (70°F) (21°C)	75 g/l

**W. R. GRACE**  
**MATERIAL SAFETY DATA SHEET**

Product Name: Perm-A-Barrier Liquid, Part A  
MSDS ID Number: M-85797

MSDS Date: 02/04/2008

**SECTION 10 - STABILITY AND REACTIVITY**

**Chemical Stability:** Stable  
**Conditions To Avoid:** Heat, Strong acids, Organic materials, Water, phosphorous pentoxide, magnesium, rubber, linseed oil, hydrogen flouride, boric acid and the reaction process will cause a pressure build up in unvented containers and could result in an explosive release of pressure. Therefore, containers must not be sealed once the reaction has begun. Once the reaction is complete and the product is cured, this material is no longer sensitive to contact with water.  
**Hazardous Polymerization:** Will not polymerize.  
**Hazardous Decomposition Products:** Carbon dioxide and toxic fumes of zinc oxide.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

<u><b>Ingredient(No data unless listed.)</b></u>	<u><b>CAS Number</b></u>	<u><b>LD50 and LC50</b></u>
Zinc oxide	001314-13-2	Inhalation LC50 Mouse: 2500 mg/m3; Oral LD50 Mouse: 7950 mg/kg

**Carcinogenicity:**

Ingredient	IARC Group 1	IARC Group 2A	IARC Group 2B	NTP Known	NTP Suspect	OSHA
Calcium oxide	No	No	No	No	No	No
Castor oil based ester	No	No	No	No	No	No
Chromium (III) oxide	No	No	No	No	No	Yes
Distillates, petroleum, hydrotreated heavy naphthenic	No	No	No	No	No	No
Quartz	Yes	No	No	Yes	No	Yes
Titanium dioxide	No	No	No	No	No	No
Zinc oxide	No	No	No	No	No	No

Product contains less than 5% Quartz. Prolonged and repeated exposure to respirable Quartz (Crystalline silica) can decrease lung function and create risk of lung disease (i.e. silicosis and/or lung cancer). However, Quartz is not expected to be bio-available during routine use and application.

**Mutagenicity:** Not applicable.  
**Teratogenicity:** Not applicable.  
**Reproductive Toxicity:** Not applicable.

**SECTION 12 - ECOLOGICAL INFORMATION**

**Environmental Fate:** No data available for product.  
**Ecotoxicity:** No data available for product.

**SECTION 13 - DISPOSAL CONSIDERATIONS**

**Waste Disposal Procedures:** Consult all regulations (federal, state, provincial, local) or a qualified waste disposal firm when characterizing waste for disposal. According to EPA (40 CFR § 261), waste of this product is not defined as hazardous. Dispose of waste in accordance with all applicable regulations.

**SECTION 14 - TRANSPORTATION INFORMATION**

**Proper Shipping Name:** Not Applicable  
**UN/NA Number:** Not Applicable  
**Domestic Hazard Class:** Nonhazardous  
**Surface Freight Classification:** Adhesive Cements N.O.I.  
**Label/Placard Required:** Not Applicable

**SECTION 15 - REGULATORY INFORMATION**

**REGULATORY CHEMICAL LISTS:**

**CERCLA (Comprehensive Response Compensation and Liability Act):**  
**(None present unless listed below)**

<u><b>Chemical Name</b></u>	<u><b>CAS #</b></u>	<u><b>Wt %</b></u>	<u><b>CERCLA RQ</b></u>
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**SARA Title III (Superfund Amendments and Reauthorization Act)**

**SARA Section 312/Tier I & II Hazard Categories:**

Health Immediate (acute)	Yes
Health Delayed (chronic)	Yes
Flammable	No
Reactive	No
Pressure	No



**W. R. GRACE**  
**MATERIAL SAFETY DATA SHEET**

Product Name: Perm-A-Barrier Liquid, Part A  
MSDS ID Number: M-85797

MSDS Date: 02/04/2008

**302 Reportable Ingredients (Identification Threshold 1%):**

<u>Chemical Name</u>	<u>CAS #</u>	<u>Wt %</u>	<u>SARA 302 TPQ</u>
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**313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):**

<u>Chemical Name</u>	<u>CAS #</u>	<u>Wt %</u>
Zinc compounds	RR-00578-7	3.10831
Chromium Compounds	RR-00634-8	0.65

**National Volatile Organic Compound Emission Standards For Architectural Coatings:**

**Volatile Organic Content:** (gr/L) 75 g/l (as applied)

**WHMIS Classification(s):** D2 B

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR). This MSDS contains all the information required by the CPR.

**State Regulatory Information:**

**California Proposition 65:** WARNING! This product contains substances known to the state of California to cause cancer, birth defects or other reproductive harm.

**Massachusetts Hazardous Substance List(Identification threshold 0.001%(1ppm)):**

<u>Chemical Name</u>	<u>CAS #</u>	<u>Wt %</u>
Chromium (III) oxide	001308-38-9	.65
Quartz	014808-60-7	<5.0

**New Jersey Hazardous Substance List(Identification threshold (0.1%)):**

<u>Chemical Name</u>	<u>CAS #</u>	<u>Wt %</u>
Chromium compounds	RR-00634-8	.65
Zinc compounds	RR-00578-7	3.10831

**Pennsylvania Hazardous Substance List(Identification threshold 0.01%):**

<u>Chemical Name</u>	<u>CAS #</u>	<u>Wt %</u>
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**CHEMICAL INVENTORY STATUS:**

All chemicals in this product are listed or exempt from listing in the following countries:

US	CANADA		EUROPE	AUSTRALIA	JAPAN	KOREA	PHILIPPINES
TSCA	DSL	NDSL	EINECS/ELINCS	AICS	ENCS	ECL	PICCS
Yes	No	Yes	Yes	Yes	Not Determined	Not Determined	Not Determined

**SECTION 16 - OTHER INFORMATION**

**Non-Hazardous Ingredient Disclosure:**

<u>Chemical Name</u>	<u>CAS Number</u>
Prepared by:	EH&S Department
Approved by:	EH&S Department
Approved Date:	02/04/2008

**Disclaimer:**

"The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection."

**W. R. GRACE**  
**MATERIAL SAFETY DATA SHEET**

Product Name: Perm-A-Barrier Liquid, Part B

MSDS ID Number: M-85817

MSDS Date: 01/20/2009

**SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**Product Name:** Perm-A-Barrier Liquid, Part B  
**MSDS Number:** M-85817  
**Cancelled MSDS Number:** M-85722  
**MSDS Date:** 01/13/2004  
**Chemical Family Name:** Fluid applied made of Synthetic rubber latex.  
**Product Use:** Waterproofing  
**Chemical Formula:** Mixture-NA  
**CAS # (Chemical Abstracts Service Number):** Mixture-NA

**Manufactured by:**

W.R.Grace & Co.-Conn.  
62 Whittemore Avenue  
Cambridge, MA 02140

Grace Canada, Inc.  
294 Clements Road West  
Ajax, Ontario L1S 3C6

**In Case of Emergency Call:**

In USA: (617) 876-1400 In Canada: (905) 683-8561

**SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS**

<b>Ingredient</b>	<b>CAS#</b>	<b>Percent (max)</b>
Styrene-Butadiene block copolymer	009003-55-8	50-100

**SECTION 3 - HAZARDS IDENTIFICATION**

**Emergency Overview:**

**Caution!**

Causes eye irritation.  
Causes skin irritation.  
Product reacts with other component.  
Reaction is exothermic, releasing heat and fumes.  
Mixed product contained in pail may reach temperatures of 291°F.  
Contact with hot material will result in burns.  
Do not seal containers once mixed with other component.  
Sealed container explode due to pressure from reaction.

**HMIS Rating:**

Health: 1  
Flammability: 0  
Reactivity: 0  
Personal Protective Equipment: B, G (See Section 8)

**Potential Health Effects:**

**Inhalation:** Not expected to be harmful. However, if mixed material is allowed to set in the container. Temperature up to 291°F can be reached, liberating water vapor, Carbon Disulfide and other Hydrocarbons. Inhalation of those materials can cause irritation. Prolonged inhalation can cause lung damage.

Effects include: Flu-like symptoms (metal fume fever).

**Eye Contact:** Eye contact causes irritation.

**Skin Contact:** Skin contact causes irritation.

**Skin Absorption:** Not expected to be harmful if absorbed through the skin.

**Ingestion:** Due to the physical nature of this product, ingestion of this product is not likely. If ingested, causes irritation to the linings of the mouth, esophagus and stomach. Effects include the following: Nausea, vomiting, sneezing, coughing, labored breathing and burns.

**SECTION 4 - FIRST AID MEASURES:**

**Skin Contact:** In case of skin contact, clean fingernails and wash skin with soap and water. If residue remains, clean with waterless handcream or abrasive soap. Never use solvents.  
If discomfort or irritation persists, consult a physician.

**W. R. GRACE**  
**MATERIAL SAFETY DATA SHEET**

Product Name: Perm-A-Barrier Liquid, Part B

MSDS ID Number: M-85817

MSDS Date: 01/20/2009

Remove contaminated clothing and wash before reuse.

**Eye Contact:** Flush eyes with water for at least 15 minutes while holding eyelids open.

If discomfort or irritation persists, consult a physician.

**Ingestion:** Do not induce vomiting.

Never give anything by mouth to an unconscious person.

If discomfort or irritation persists, consult a physician.

**Inhalation:** If symptoms develop, get fresh air. If symptoms persist, consult a physician.

If breathing has stopped, give artificial respiration then oxygen if needed.

**SECTION 5 - FIRE AND EXPLOSION HAZARD DATA**

**Flash Point:** >300°F

**Flash Point Method:** Estimated

**Lower Explosion Limit:** Not Available

**Upper Explosion Limit:** Not Available

**Auto-Ignition Temperature:** Not Available

**NFPA Rating:**

**Health:** 1

**Flammability:** 1

**Reactivity:** 0

**Extinguishing Media:** In case of fire, use water spray, dry chemical, Carbon dioxide or foam.

**Special Fire Fighting Procedures:** Wear self-contained breathing apparatus and complete personal protective equipment when potential for exposure to vapors or products of combustion exist. Water may be used to cool containers to prevent pressure build-up and possible auto-ignition or explosion. Avoid breathing hazardous vapors or products of combustion, keep upwind. Isolate area and keep unnecessary people away. Prevent run-off from fire control or dilution from entering streams or drinking water supplies.

**Unusual Fire and Explosion Hazards:** None unless noted below.

**SECTION 6 - ACCIDENTAL RELEASE MEASURES:**

**Spills/Leaks:** Use proper personal protective equipment. Do not flush to sewer or allow to enter waterways. Keep unnecessary people away.

Oil spills released directly to waterways may be subject to National Response Center (1-800-424-8802) reporting. Immediately contact your company's environmental coordinator or the Grace Environmental Health and Safety Department.

**SECTION 7 - HANDLING AND STORAGE**

**Precautionary Measures:** Avoid contact with eyes, skin and clothing.

Do not take internally.

Practice good personal hygiene to avoid ingestion.

Use only with adequate ventilation.

Wash clothing before reuse.

Wear respiratory protection during spray applications.

Reaction releases heat and fumes if unused mixed product is allowed to sit in pail. Contact with hot material will result in burns.

Use all product within 30-60 minutes of mixing to avoid an exothermic reaction (release of heat and fumes). Reaction times may vary depending upon temperature and mixing conditions.

Promptly cleanse hands after handling.

FOR PROFESSIONAL USE ONLY. KEEP OUT OF CHILDREN'S REACH.

**SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT**

**EXPOSURE GUIDELINES (US)**

Ingredient	ACGIH TLV			OSHA PEL			Other
	TWA	STEL	Ceiling	TWA	STEL	Ceiling	
Styrene-Butadiene block copolymer	-	-	-	-	-	-	-

**W. R. GRACE**  
**MATERIAL SAFETY DATA SHEET**

Product Name: Perm-A-Barrier Liquid, Part B

MSDS ID Number: M-85817

MSDS Date: 01/20/2009

**EXPOSURE GUIDELINES (CANADA)**

Employers should consult local Provincial regulatory limits for exposure guidelines which may vary locally.

**Engineering Controls:** Not generally required.

**Personal Protective Equipment:**

**Respiratory Protection:** Respiratory protection may not be required in well ventilated areas. However, indoors or where ventilation is inadequate, the use of respirators equipped with organic vapor cartridges is required. During spray applications, the use of a dust/mist respirator such as a 3M Type P-95 with organic vapor (OV) protection (or equivalent) is required, but the specific respirator(s) may not adequately protect against actual working conditions which must be assessed periodically as work progresses. (See Work/Hygienic Practices.)

**Skin Protection:** Impervious (PVC, latex or nitrile) gloves should be worn any time direct contact is possible.

**Eye Protection:** At minimum, safety glasses with side shields should be worn where exposure to excessive dust or spray is likely.

**Work/Hygienic Practices:** Use good personal hygiene practices.

Carbon disulfide and other potentially harmful gases, vapors and fumes may evolve as a result of exothermic reactions ("hot product") when components are mixed. Carbon disulfide may be detected by odor at about 1 ppm, but the ability to smell fatigues (diminishes) rapidly, therefore, odor does not serve as a good warning property. If eye or respiratory irritation occurs, or if a foul odor is detected, you may be experiencing exposure to Carbon disulfide and other organics.

Leave the area immediately and seek fresh air.

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical State:</b>	Liquid
<b>Appearance/Odor:</b>	A milky white aqueous dispersion with mild aromatic odor.
<b>Odor Threshold: (ppm)</b>	Not Determined
<b>pH:</b>	9-12
<b>Vapor Pressure: (Mm Hg)</b>	Unknown
<b>Vapor Density: (Air = 1)</b>	Unknown
<b>Solubility In Water:</b>	Miscible
<b>Specific Gravity: (Water = 1)</b>	1.0
<b>Evaporation Rate: (Butyl Acetate = 1)</b>	Unknown
<b>Boiling Point:</b>	>212°F/100°C
<b>Viscosity:</b>	Unknown
<b>Bulk Density: (Pounds/Cubic Foot)(Pcf)</b>	~60
<b>% Volatiles (gr/L): (70°F) (21°C)</b>	Not Available

**SECTION 10 - STABILITY AND REACTIVITY**

<b>Chemical Stability:</b>	Stable
<b>Conditions To Avoid:</b>	Strong oxidizers.
<b>Hazardous Polymerization:</b>	Will not polymerize.
<b>Hazardous Decomposition Products:</b>	Carbon dioxide and Carbon monoxide.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

**Ingredient(No data unless listed.)**                      **CAS Number**                      **LD50 and LC50**

**Carcinogenicity:**

Ingredient	IARC Group 1	IARC Group 2A	IARC Group 2B	NTP Known	NTP Suspect	OSHA
Styrene-Butadiene block copolymer	No	No	No	No	No	No

<b>Mutagenicity:</b>	Not applicable.
<b>Teratogenicity:</b>	Not applicable.
<b>Reproductive Toxicity:</b>	Not applicable.

**W. R. GRACE**  
**MATERIAL SAFETY DATA SHEET**

Product Name: Perm-A-Barrier Liquid, Part B  
MSDS ID Number: M-85817

MSDS Date: 01/20/2009

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**SECTION 12 - ECOLOGICAL INFORMATION**

**Environmental Fate:** No data available for product.  
**Ecotoxicity:** No data available for product.

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**SECTION 13 - DISPOSAL CONSIDERATIONS**

**Waste Disposal Procedures:** Consult all regulations (federal, state, provincial, local) or a qualified waste disposal firm when characterizing waste for disposal. According to EPA (40 CFR § 261), waste of this product is not defined as hazardous. Dispose of waste in accordance with all applicable regulations.

---

**SECTION 14 - TRANSPORTATION INFORMATION**

**Proper Shipping Name:** Not Applicable  
**UN/NA Number:** Not Applicable  
**Domestic Hazard Class:** Nonhazardous  
**Surface Freight Classification:** Adhesive Cement N.O.I.  
**Label/Placard Required:** Not Applicable

---

**SECTION 15 - REGULATORY INFORMATION**

**REGULATORY CHEMICAL LISTS:**

**CERCLA (Comprehensive Response Compensation and Liability Act):**  
**(None present unless listed below)**

<u>Chemical Name</u>	<u>CAS #</u>	<u>Wt %</u>	<u>CERCLA RQ</u>
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**SARA Title III (Superfund Amendments and Reauthorization Act)**

**SARA Section 312/Tier I & II Hazard Categories:**

Health Immediate (acute)	Yes
Health Delayed (chronic)	No
Flammable	No
Reactive	No
Pressure	No

**302 Reportable Ingredients (Identification Threshold 1%.):**

<u>Chemical Name</u>	<u>CAS #</u>	<u>Wt %</u>	<u>SARA 302 TPQ</u>
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**313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):**

<u>Chemical Name</u>	<u>CAS #</u>	<u>Wt %</u>
1,3-Butadiene	000106-99-0	.005
Styrene	000100-42-5	.02

**National Volatile Organic Compound Emission Standards For Architectural Coatings:**

**Volatile Organic Content:** 75 g/l (as applied)

**WHMIS Classification(s):** D2 B

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR). This MSDS contains all the information required by the CPR.

**State Regulatory Information:**

**California Proposition 65:** WARNING! This product contains substances known to the state of California to cause cancer, birth defects or other reproductive harm.

**Massachusetts Hazardous Substance List(Identification threshold 0.001%(1ppm)):**

<u>Chemical Name</u>	<u>CAS #</u>	<u>Wt %</u>
1,3-Butadiene	000106-99-0	.005
Styrene	000100-42-5	.02

**New Jersey Hazardous Substance List(Identification threshold (0.1%)):**

<u>Chemical Name</u>	<u>CAS #</u>	<u>Wt %</u>
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**W. R. GRACE**  
**MATERIAL SAFETY DATA SHEET**

Product Name: Perm-A-Barrier Liquid, Part B

MSDS ID Number: M-85817

MSDS Date: 01/20/2009

**Pennsylvania Hazardous Substance List(Identification threshold 0.01%):**

**Chemical Name**

**CAS #**

**Wt %**

**CHEMICAL INVENTORY STATUS:**

**All chemicals in this product are listed or exempt from listing in the following countries:**

US	CANADA		EUROPE	AUSTRALIA	JAPAN	KOREA	PHILIPPINES
TSCA	DSL	NDSL	EINECS/ELINCS	AICS	ENCS	ECL	PICCS
Yes	Yes	No	Yes	Yes	Yes	Yes	Yes

**SECTION 16 - OTHER INFORMATION**

**Non-Hazardous Ingredient Disclosure:**

**Chemical Name**

**CAS Number**

Water

007732-18-5

**Prepared by:**

EH&S Department

**Approved by:**

EH&S Department

**Approved Date:**

01/20/2009

**Disclaimer:**

"The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection."

**W. R. GRACE**  
**MATERIAL SAFETY DATA SHEET**

Product Name: Procor Flushing Oil

MSDS ID Number: M-85825

MSDS Date: 02/24/2009

**SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**Product Name:** Procor Flushing Oil  
**MSDS Number:** M-85825  
**Cancelled MSDS Number:** M-85730  
**MSDS Date:** 02/24/2009  
**Chemical Family Name:** Light Naphthenic Petroleum Oil  
**Product Use:** Line Cleaning / Flushing Oil  
**Chemical Formula:** Mixture-NA  
**CAS # (Chemical Abstracts Service Number):** Mixture-NA

**Manufactured by:**

W.R.Grace & Co.-Conn.	Grace Canada, Inc.
62 Whittemore Avenue	294 Clements Road West
Cambridge, MA 02140	Ajax, Ontario L1S 3C6

**In Case of Emergency Call:**

In USA: (617) 876-1400 In Canada: (905) 683-8561

**SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS**

Ingredient	CAS#	Percent (max)
Distillates, petroleum, hydrotreated heavy naphthenic	064742-52-5	50-100

**SECTION 3 - HAZARDS IDENTIFICATION**

**Emergency Overview:**

**Caution!**

Causes eye irritation.  
Causes skin irritation.  
Causes respiratory tract irritation.

**HMIS Rating:**

Health:	1
Flammability:	1
Reactivity:	0
Personal Protective Equipment:	H (See Section 8)

**Potential Health Effects:**

**Inhalation:** Causes respiratory tract irritation.  
**Eye Contact:** Eye contact causes irritation.  
Symptoms may persist for several days.  
**Skin Contact:** Skin contact causes irritation.  
**Skin Absorption:** Not expected to be harmful if absorbed through the skin.  
**Ingestion:** Ingestion is not a likely route of exposure.  
If ingested, may cause nausea and vomiting.

**SECTION 4 - FIRST AID MEASURES:**

**Skin Contact:** In case of skin contact, wash skin with soap and water.  
If discomfort or irritation persists, consult a physician.  
Remove contaminated clothing and wash before reuse.  
**Eye Contact:** Flush eyes with water for at least 15 minutes while holding eyelids open.  
If discomfort or irritation persists, consult a physician.  
**Ingestion:** Do not induce vomiting.  
Never give anything by mouth to an unconscious person.  
If discomfort or irritation persists, consult a physician.  
**Inhalation:** If symptoms develop, get fresh air. If symptoms persist, consult a physician.  
If breathing has stopped, give artificial respiration then oxygen if needed.

**W. R. GRACE**  
**MATERIAL SAFETY DATA SHEET**

Product Name: Procor Flushing Oil

MSDS ID Number: M-85825

MSDS Date: 02/24/2009

**SECTION 5 - FIRE AND EXPLOSION HAZARD DATA**

**Flash Point:** 321°F  
**Flash Point Method:** Pensky-Martin Closed Cup  
**Lower Explosion Limit:** Not Available  
**Upper Explosion Limit:** Not Available  
**Auto-Ignition Temperature:** Not Available

**NFPA Rating:**

**Health:** 0  
**Flammability:** 1  
**Reactivity:** 0

**Extinguishing Media:** In case of fire, dry chemical, Carbon dioxide or foam.  
Water is not recommended, burning material will float.

**Special Fire Fighting Procedures:** Firefighters should be equipped with Self-contained Breathing Apparatus (SCBA) to prevent inhalation of hazardous decomposition products. (See Section 10.)  
Do not scatter spilled material with high pressure water stream. Fog nozzles are preferred if water is used.

**Unusual Fire and Explosion Hazards:** Closed containers may rupture (due to build up of pressure) when exposed to extreme heat.

**SECTION 6 - ACCIDENTAL RELEASE MEASURES:**

**Spills/Leaks:** Use proper personal protective equipment. Do not flush to sewer or allow to enter waterways. Keep unnecessary people away.  
Oil spills released directly to waterways may be subject to National Response Center (1-800-424-8802) reporting. Immediately contact your company's environmental coordinator or the Grace Environmental Health and Safety Department.

**SECTION 7 - HANDLING AND STORAGE**

**Precautionary Measures:** Avoid contact with eyes, skin and clothing.  
Do not take internally.  
Practice good personal hygiene to avoid ingestion.  
Use only with adequate ventilation.  
Wash clothing before reuse.  
FOR PROFESSIONAL USE ONLY. KEEP OUT OF CHILDREN'S REACH.

**SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT**

**EXPOSURE GUIDELINES (US)**

Ingredient	ACGIH TLV			OSHA PEL			Other
	TWA	STEL	Ceiling	TWA	STEL	Ceiling	
Distillates, petroleum, hydrotreated heavy naphthenic	-	-	-	-	-	-	-
Oil mist, Mineral	5mg/cm			5mg/cm			

**EXPOSURE GUIDELINES (CANADA)**

Employers should consult local Provincial regulatory limits for exposure guidelines which may vary locally.

**Engineering Controls:** Not generally required.

**Personal Protective Equipment:**

**Respiratory Protection:** Respiratory protection is not normally required. If use creates a vapor or spray mist, the use of a N-95 particulate respirator should be considered when ventilation is inadequate.

**Skin Protection:** PVA supported polyvinyl alcohol, nitrile or viton gloves are recommended. Natural rubber or butyl rubber gloves should not be worn.

**Eye Protection:** At minimum, safety glasses with side shields should be worn where exposure to excessive dust or spray is likely.

**Work/Hygienic Practices:** Use good personal hygiene practices.  
None beyond those noted above.



**W. R. GRACE**  
**MATERIAL SAFETY DATA SHEET**

Product Name: Procor Flushing Oil  
MSDS ID Number: M-85825

MSDS Date: 02/24/2009

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical State:</b>	Liquid
<b>Appearance/Odor:</b>	Dark Fluid, little odor
<b>Odor Threshold: (ppm)</b>	Not Determined
<b>pH:</b>	Not Applicable
<b>Vapor Pressure: (Mm Hg)</b>	<1.0 mm Hg @ 20°C
<b>Vapor Density: (Air = 1)</b>	Not Available
<b>Solubility In Water:</b>	Negligible
<b>Specific Gravity: (Water = 1)</b>	0.91
<b>Evaporation Rate: (Butyl Acetate = 1)</b>	Not Available
<b>Boiling Point:</b>	> 550 °F
<b>Viscosity:</b>	Unknown
<b>Bulk Density: (Pounds/Cubic Foot)(Pcf)</b>	Not Applicable
<b>% Volatiles (gr/L): (70°F) (21°C)</b>	4.2

**SECTION 10 - STABILITY AND REACTIVITY**

<b>Chemical Stability:</b>	Stable
<b>Conditions To Avoid:</b>	Strong oxidizers.
<b>Hazardous Polymerization:</b>	Will not polymerize.
<b>Hazardous Decomposition Products:</b>	Carbon dioxide.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

**Ingredient(No data unless listed.)**

**CAS Number**

**LD50 and LC50**

**Carcinogenicity:**

Ingredient	IARC Group 1	IARC Group 2A	IARC Group 2B	NTP Known	NTP Suspect	OSHA
Distillates, petroleum, hydrotreated heavy naphthenic	No	No	No	No	No	No

<b>Mutagenicity:</b>	Not applicable.
<b>Teratogenicity:</b>	Not applicable.
<b>Reproductive Toxicity:</b>	Not applicable.

**SECTION 12 - ECOLOGICAL INFORMATION**

<b>Environmental Fate:</b>	No data available for product.
<b>Ecotoxicity:</b>	No data available for product.

**SECTION 13 - DISPOSAL CONSIDERATIONS**

**Waste Disposal Procedures:** Consult all regulations (federal, state, provincial, local) or a qualified waste disposal firm when characterizing waste for disposal. According to EPA (40 CFR § 261), waste of this product is not defined as hazardous. Dispose of waste in accordance with all applicable regulations.

**SECTION 14 - TRANSPORTATION INFORMATION**

<b>Proper Shipping Name:</b>	Not Applicable
<b>UN/NA Number:</b>	Not Applicable
<b>Domestic Hazard Class:</b>	Nonhazardous
<b>Surface Freight Classification:</b>	Petroleum Lubricating Oil. N.O.I.
<b>Label/Placard Required:</b>	Not Applicable

**SECTION 15 - REGULATORY INFORMATION**

**REGULATORY CHEMICAL LISTS:**

**CERCLA (Comprehensive Response Compensation and Liability Act):**

**(None present unless listed below)**

<b><u>Chemical Name</u></b>	<b><u>CAS #</u></b>	<b><u>Wt %</u></b>	<b><u>CERCLA RQ</u></b>
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**W. R. GRACE**  
**MATERIAL SAFETY DATA SHEET**

Product Name: Procor Flushing Oil  
MSDS ID Number: M-85825

MSDS Date: 02/24/2009

**SARA Title III (Superfund Amendments and Reauthorization Act)**

**SARA Section 312/Tier I & II Hazard Categories:**

Health Immediate (acute)	Yes
Health Delayed (chronic)	Yes
Flammable	No
Reactive	No
Pressure	No

**302 Reportable Ingredients (Identification Threshold 1%):**

<b><u>Chemical Name</u></b>	<b><u>CAS #</u></b>	<b><u>Wt %</u></b>	<b><u>SARA 302 TPQ</u></b>
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**313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):**

<b><u>Chemical Name</u></b>	<b><u>CAS #</u></b>	<b><u>Wt %</u></b>
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**National Volatile Organic Compound Emission Standards For Architectural Coatings:**

**Volatile Organic Content:** (gr/L) <1.0 G/L

**WHMIS Classification(s):** D2 B

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR).  
This MSDS contains all the information required by the CPR.

**State Regulatory Information:**

**California Proposition 65:** This product does not contain substances known to the state of California to cause cancer, birth defects or other reproductive harm.

**Massachusetts Hazardous Substance List(Identification threshold 0.001%(1ppm)):**

<b><u>Chemical Name</u></b>	<b><u>CAS #</u></b>	<b><u>Wt %</u></b>
-----------------------------	---------------------	--------------------

**New Jersey Hazardous Substance List(Identification threshold (0.1%)):**

<b><u>Chemical Name</u></b>	<b><u>CAS #</u></b>	<b><u>Wt %</u></b>
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**Pennsylvania Hazardous Substance List(Identification threshold 0.01%):**

<b><u>Chemical Name</u></b>	<b><u>CAS #</u></b>	<b><u>Wt %</u></b>
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**CHEMICAL INVENTORY STATUS:**

All chemicals in this product are listed or exempt from listing in the following countries:

US	CANADA		EUROPE	AUSTRALIA	JAPAN	KOREA	PHILIPPINES
TSCA	DSL	NDSL	EINECS/ELINCS	AICS	ENCS	ECL	PICCS
Yes	Yes	No	Yes	Yes	Not Determined	Yes	No

**SECTION 16 - OTHER INFORMATION**

**Non-Hazardous Ingredient Disclosure:**

<b><u>Chemical Name</u></b>	<b><u>CAS Number</u></b>
Prepared by:	EH&S Department
Approved by:	EH&S Department
Approved Date:	02/24/2009

**Disclaimer:**

"The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection."

## Safety Data Sheet

Printing date 04/08/2015

Version Number 1.0

Reviewed on 04/08/2015

**1 Identification****Product identifier**Trade name: Perm-A-Barrier VPL & Perm-A-Barrier VPL LT Part A

SDS ID Number: 2253

**Relevant identified uses of the substance or mixture and uses advised against**  
Specialty construction product. Not intended for other uses**Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

W.R. Grace & Co. -Conn.  
62 Whittemore Avenue  
Cambridge, MA 02140 USA

Grace Canada, Inc.  
294 Clements Road W.  
Ajax, Ontario L1S 3C6 Canada

**Information department:**

Environmental Health & Safety  
USA: +1-617-876-1400 (24 hours)  
+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts  
CAN: 1-905-683-8561 (24 hours)

**Transport Emergency:** Chemtrec +1-800-424-9300 (24 hours)**2 Composition/information on ingredients****Chemical characterization: Mixtures****Description:** Mixture of the substances listed below with additional nonhazardous ingredients.**Hazardous components:**

	Proprietary Polymer - NJTS-50338	20-25%
	Proprietary Additive - NJTS-50573	1.0-2.0%
1336-21-6	Ammonium hydroxide	0.1-1.0%
108-05-4	vinyl acetate	0.1-1.0%

**Additional information:** For the wording of the listed risk phrases refer to section 16.**3 Hazard(s) identification****Classification of the substance or mixture**

Suspected of causing cancer.

Harmful if swallowed.

Causes skin irritation.

Causes serious eye irritation.

May cause respiratory irritation.

**GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

(Cont. on page 2)

USGHS

## Safety Data Sheet

Printing date 04/08/2015

Version Number 1.0

Reviewed on 04/08/2015

Trade name: *Perm-A-Barrier VPL & Perm-A-Barrier VPL LT Part A*

(Cont. from page 1)

## Hazard pictograms



GHS07 GHS08

## Warning

**Hazard-determining components of labeling:**

Proprietary Polymer - NJTS-50338

Proprietary Additive - NJTS-50573

**Precautionary statements**

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If on skin: Wash with plenty of water.

If eye irritation persists: Get medical advice/attention.

If swallowed: Call a poison center/doctor if you feel unwell.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

If skin irritation occurs: Get medical advice/attention.

**NFPA ratings (scale 0 - 4)**

Health = 2

Fire = 1

Reactivity = 0

**HMIS-ratings (scale 0 - 4)**

Health = \*2

Flammability = 1

Reactivity = 0

## \* 4 First-aid measures

**General information:** Get medical advice/attention if you feel unwell.

**After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

**After skin contact:**

Immediately wash contaminated skin with soap or mild detergent and water. If this chemical soaks clothing, immediately remove clothing and wash skin.

**After eye contact:**

Rinse opened eye for several minutes under running water.

Seek immediate medical advice.

**After swallowing:**

Wash out mouth with water

Do not induce vomiting; immediately call for medical help.

Never give anything by mouth to an unconscious person.

USGHS

(Cont. on page 3)

## Safety Data Sheet

Printing date 04/08/2015

Version Number 1.0

Reviewed on 04/08/2015

Trade name: *Perm-A-Barrier VPL & Perm-A-Barrier VPL LT Part A*

(Cont. from page 2)

**5 Fire-fighting measures****Special hazards arising from the substance or mixture** No further relevant information available.**Additional information** Collect contaminated fire fighting water separately. It must not enter the sewage system.**6 Accidental release measures****Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

**Methods and material for containment and cleaning up:**

Contain and/or absorb spill with inert material (i.e. sand, vermiculite) then place in a suitable container.

Sweep up spilled product into receptacles.

Dispose contaminated material as waste according to section 13 of the SDS.

**Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

**7 Handling and storage****Handling:****Precautions for safe handling**

Open and handle receptacle with care.

Prevent formation of aerosols.

Avoid contact with skin.

Avoid contact with eyes.

**Information about protection against explosions and fires:** Keep respiratory protective device available.**Storage:****Information about storage in one common storage facility:** Keep respiratory protective device available.**Further information about storage conditions:** Keep receptacle tightly sealed.**Specific end use(s)** No further relevant information available.**8 Exposure controls/personal protection****Additional information about design of technical systems:** No further data; see item 7.**Components with limit values that require monitoring at the workplace:****108-05-4 vinyl acetate**REL (USA) Ceiling limit value: 15\* mg/m<sup>3</sup>, 4\* ppm  
\*15-minTLV (USA) Short-term value: 53 mg/m<sup>3</sup>, 15 ppm  
Long-term value: 35 mg/m<sup>3</sup>, 10 ppm

(Cont. on page 4)

USGHS

## Safety Data Sheet

Printing date 04/08/2015

Version Number 1.0

Reviewed on 04/08/2015

Trade name: *Perm-A-Barrier VPL & Perm-A-Barrier VPL LT Part A*

(Cont. from page 3)

**Additional information:** The lists that were valid during the creation were used as basis.

**Personal protective equipment:**

**General protective and hygienic measures:**

Avoid contact with the eyes and skin.

The usual precautionary measures for handling chemicals should be followed.

Store protective clothing separately.

**Breathing equipment:**

Respiratory protection is not normally required. If a vapor or mist is created, use an approved dust/mist respirator (NIOSH N95).

**Protection of hands:**

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

**Material of gloves**

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

**Eye protection:**



Safety glasses with side shield protection.

Safety glasses with side shields should be worn to prevent contact due to splashing. Under high vapor mist concentrations, tightly sealed goggles should be worn.



A face shield should also be worn if there is potential exposure to splash or spray.

**Body protection:**

Protective work clothing

Use personal protective equipment as required.

Take off contaminated clothing and wash before reuse.

\*

## 9 Physical and chemical properties

### General Information

**Appearance:**

**Form:**

Liquid

**Color:**

According to product specification

**Odor:**

Characteristic

**Odour threshold:**

Not determined.

**pH-value (~) at 20 °C (68 °F):**

4

### Change in condition

**Melting point/Melting range:**

Undetermined.

**Boiling point/Boiling range:**

Undetermined.

**Flash point:**

>200 °C (>392 °F)

**Flammability (solid, gaseous):**

Not applicable.

**Decomposition temperature:**

Not determined.

(Cont. on page 5)

USGHS

## Safety Data Sheet

Printing date 04/08/2015

Version Number 1.0

Reviewed on 04/08/2015

Trade name: *Perm-A-Barrier VPL & Perm-A-Barrier VPL LT Part A*

(Cont. from page 4)

**Auto igniting:** Product is not selfigniting.  
**Danger of explosion:** Product does not present an explosion hazard.

**Explosion limits:**  
**Lower:** Not determined.  
**Upper:** Not determined.  
**VOC Content (max):** Not determined.

**Vapor pressure:** Not determined.  
**Density: (~) at 20 °C (68 °F)** 1.4 g/cm<sup>3</sup> (11.683 lbs/gal)  
**Relative density** Not determined.  
**Vapour density** Not determined.  
**Evaporation rate** Not determined.

**Solubility in / Miscibility with Water:** Not miscible or difficult to mix.

**Partition coefficient (n-octanol/water):** Not determined.

**Viscosity:**  
**Dynamic:** Not determined.  
**Kinematic:** Not determined.  
**Molecular weight** Not applicable.

**Other information** No further relevant information available.

## 10 Stability and reactivity

**Thermal decomposition:** No decomposition if used according to specifications.

**Incompatible materials:** No further relevant information available.

**Hazardous decomposition products:** Carbon monoxide and carbon dioxide

**Additional information:** See section 7 for information on handling, storage and conditions to be avoided.

## 11 Toxicological information

### Acute toxicity:

#### LD/LC50 values relevant for classification:

#### 1336-21-6 Ammonium hydroxide

Dermal	LD50	350 mg/kg (rat)
--------	------	-----------------

#### 108-05-4 vinyl acetate

Dermal	LD50	2920 mg/kg (rat)
		2335 mg/kg (rabbit)

### Primary irritant effect:

**on the skin:** Causes skin irritation.

**on the eye:** Causes serious eye irritation.

**inhalation:** May cause respiratory irritation.

**Ingestion:** Harmful if swallowed.

**Sensitization:** Sensitization possible through skin contact.

(Cont. on page 6)

USGHS

## Safety Data Sheet

Printing date 04/08/2015

Version Number 1.0

Reviewed on 04/08/2015

Trade name: *Perm-A-Barrier VPL & Perm-A-Barrier VPL LT Part A*

(Cont. from page 5)

**Additional toxicological information:** Carcinogenic.**Carcinogenic categories****IARC (International Agency for Research on Cancer) Human Carcinogenicity:**  
Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable

13463-67-7 Titanium dioxide

2B

108-05-4 vinyl acetate

2B

**NTP (National Toxicology Program)****K–Known to be carcinogenic, R–May reasonably be anticipated to be carcinogenic**

None of the ingredients is listed.

**OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

**12 Ecological information****Aquatic toxicity:** No further relevant information available.**Persistence and degradability** No further relevant information available.**Behavior in environmental systems:****Bioaccumulative potential** No further relevant information available.**Additional ecological information:****General notes:** Not known to be hazardous to water.**13 Disposal considerations****Waste treatment methods** Comply with Federal, State and local regulations.**Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packagings:****Recommendation:** Disposal must be made according to official regulations.**14 Transport information****UN-Number**

DOT, ADR, ADN, IMDG, IATA

Not applicable.

**UN proper shipping name**

DOT, ADR, ADN, IMDG, IATA

Not applicable.

**Transport hazard class(es)**

DOT, ADR, ADN, IMDG, IATA

Class

Not applicable.

(Cont. on page 7)

USGHS



## Safety Data Sheet

Printing date 04/08/2015

Version Number 1.0

Reviewed on 04/08/2015

Trade name: *Perm-A-Barrier VPL & Perm-A-Barrier VPL LT Part A*

(Cont. from page 6)

**Packing group**

DOT, ADR, IMDG, IATA

Not applicable.

**Environmental hazards:**

Marine pollutant:

No

**Special precautions for user**

Not applicable.

**Transport/Additional information:** Not classified as a dangerous good for transport by road, rail or air.**DOT**

Remarks:

Not Regulated.

**UN "Model Regulation":**

-

**15 Regulatory information****SARA (Superfund Amendments and Reauthorization Act)****Section 302/304 (extremely hazardous substances):**

108-05-4 | vinyl acetate

**Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):**

None of the ingredients is listed.

**SARA Section 312/Tier I & II Hazard Categories:**

Health Immediate (acute)	Yes
Health Delayed (chronic)	No
Flammable	No
Reactive	No
Pressure	No

**North America Chemical Inventory Status****TSCA (Toxic Substances Control Act - United States):**

All ingredients are listed or exempt from listing unless otherwise noted below.

**CEPA (Canadian DSL):**

All ingredients are listed or exempt from listing unless otherwise noted below.

**Right to Know Ingredient Disclosure**

21645-51-2 | Aluminium hydroxide

1302-78-9 | Sodium bentonite

13463-67-7 | Titanium dioxide

9004-62-0 | Hydroxyéthylcellulose

7732-18-5 | Water

**California Proposition 65****Chemicals known to cause cancer:**

Titanium dioxide

**Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

**Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

**Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

(Cont. on page 8)

USGHS

## Safety Data Sheet

Printing date 04/08/2015

Version Number 1.0

Reviewed on 04/08/2015

Trade name: *Perm-A-Barrier VPL & Perm-A-Barrier VPL LT Part A*

(Cont. from page 7)

**Carcinogenicity Categories****EPA (Environmental Protection Agency)**

None of the ingredients is listed.

**TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)****Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable**

Titanium dioxide

A4

**NIOSH-Cancer (National Institute for Occupational Safety and Health)**

13463-67-7 | Titanium dioxide

**Volatile Organic Compounds (VOC) reported per the Emission Standards.** <30 g/l**Information about limitation of use:**

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation.  
 Exceptions can be made by the authorities in certain cases.

**16 Other information**

"The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection."

**Date of preparation / last revision** 04/08/2015 / -**The first date of preparation** 08/15/2014**Number of revision times and the latest revision date** 1.0 / 04/08/2015

USGHS

## Material Safety Data Sheet

Printing date 02/27/2014

Version Number 1.5

Reviewed on 02/27/2014

**1 Identification of the substance/mixture and of the company/undertaking****Product identifier****Trade name:** Waterproofing Membrane**MSDS ID Number:** M-85937**Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

W.R. Grace & Co. -Conn.  
62 Whittemore Avenue  
Cambridge, MA 02140 USA

Grace Canada, Inc.  
294 Clements Road W.  
Ajax, Ontario L1S 3C6 Canada

**Other Country Contact Information:**

For products distributed beyond the country Manufacturer/Supplier identified above  
Consult Section 16 for additional emergency contact information.

**Information department:**

Environmental Health & Safety  
USA: +1-617-876-1400 (24 hours)  
+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts  
In Canada: +1-905-683-8561

**Transport Emergency:** Chemtrec +1-800-424-9300 (24 hours)**2 Composition/information on ingredients****Chemical characterization: Mixtures****Description:** Mixture of the substances listed below with nonhazardous additions.**Hazardous components:**

8052-42-4	Asphalt	50-100%
64742-04-7	Extracts (petroleum), heavy paraffinic distillate solvent	20-25%

**3 Hazards identification****Information concerning hazards for human and environment:**

May cause cancer.

**Safety phrases:**

Avoid exposure - obtain special instructions before use.

When using do not eat or drink.

Wear suitable protective clothing.

In case of accident or if you feel unwell, seek medical advice immediately.

(Cont. on page 2)

USA

## Material Safety Data Sheet

Printing date 02/27/2014

Version Number 1.5

Reviewed on 02/27/2014

Trade name: *Waterproofing Membrane*

(Cont. from page 1)

See Section 13 for disposal information.

**Hazard description:** Harmful**Eye Contact:** Causes eye irritation.**Skin Contact:**

Causes skin irritation.

Skin absorption of residue from adhesive may be harmful and may produce local skin tumors.

**Skin Absorption:** Harmful if absorbed through the skin.**NFPA ratings (scale 0 - 4)**

Health = 2

Fire = 1

Reactivity = 0

**HMIS-ratings (scale 0 - 4)**

Health = \*2

Flammability = 1

Reactivity = 0

**Other hazards** Contact with residue from adhesive may cause eye and skin irritation.

\*

**4 First aid measures****After inhalation:**

Adverse effects are not likely. If symptoms develop, get fresh air. If symptoms persist, consult a physician. If breathing has stopped, give artificial respiration then oxygen if needed.

**After skin contact:**

If skin irritation continues, consult a doctor.

If residue remains, clean with waterless handcream or abrasive soap. Never use solvents.

**After eye contact:**

If contact with residue causes eye irritation, flush eyes with water for at least 15 minutes while holding eyelids open.

Seek immediate medical advice.

**After swallowing:** Due to physical nature of this product, ingestion is not likely.

\*

**5 Firefighting measures****Suitable extinguishing agents:**CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fire with alcohol resistant foam.**Special hazards arising from the substance or mixture** No further relevant information available.**Additional information** Collect contaminated fire fighting water separately. It must not enter the sewage system.USA  
(Cont. on page 3)

## Material Safety Data Sheet

Printing date 02/27/2014

Version Number 1.5

Reviewed on 02/27/2014

**Trade name:** *Waterproofing Membrane*

(Cont. from page 2)

**6 Accidental release measures****Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

**Methods and material for containment and cleaning up:**

Pick up mechanically.

Dispose contaminated material as waste according to section 13 of the MSDS.

**Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

**7 Handling and storage****Handling:****Precautions for safe handling**

Membrane is slippery when wet or covered with frost.

Avoid eye and skin contact with residue from adhesive.

Release liners are slippery. Remove from work area immediately after membrane application.

To avoid skin contact, use gloves. Clean hands after contact with adhesive residue.

Release liners may cause slip and trip hazards.

FOR PROFESSIONAL USE ONLY. KEEP OUT OF CHILDREN'S REACH.

**Information about protection against explosions and fires:**

Removal of release liner may generate a static electrical discharge (spark).

**Storage:**

**Further information about storage conditions:**

**Specific end use(s)** No further relevant information available.

**8 Exposure controls/personal protection**

**Additional information about design of technical systems:** No further data; see item 7.

**Components with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

**Additional information:** The lists that were valid during the creation were used as basis.

(Cont. on page 4)

USA

## Material Safety Data Sheet

Printing date 02/27/2014

Version Number 1.5

Reviewed on 02/27/2014

Trade name: *Waterproofing Membrane*

(Cont. from page 3)

**Personal protective equipment:****General protective and hygienic measures:** Avoid contact with the eyes and skin.**Breathing equipment:**

Respiratory protection is not normally required. If exposures exceed PELs use a NIOSH approved organic vapor respirator.

**Protection of hands:**

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

**Material of gloves**

Gloves should be impermeable and resistant to the product. Selection of material should be considered before use.

**Eye protection:** Not required.**Body protection:** Protective work clothing**9 Physical and chemical properties****General Information****Appearance:****Form:**

Solid

**Color:**

According to product specification

**Odor:**

Characteristic

**Odour threshold:**

Not determined.

**pH-value:**

Not applicable.

**Change in condition****Melting point/Melting range:**

Undetermined.

**Flash point:**

Not applicable.

**Flammability (solid, gaseous):**

Not determined.

**Decomposition temperature:**

Not determined.

**Auto igniting:**

Product is not selfigniting.

**Danger of explosion:**

Product does not present an explosion hazard.

**Explosion limits:****Lower:**

Not determined.

**Upper:**

Not determined.

**VOC Content (max):**

Not determined.

**Vapor pressure:**

Not applicable.

**Density at 20°C (68 °F):**

~1.1 LBS/CF

**Vapour density**

Not applicable.

**Evaporation rate**

Not applicable.

**Solubility in / Miscibility with****Water:**

Insoluble.

(Cont. on page 5)

USA

## Material Safety Data Sheet

Printing date 02/27/2014

Version Number 1.5

Reviewed on 02/27/2014

Trade name: *Waterproofing Membrane*

(Cont. from page 4)

**Segregation coefficient (n-octanol/water):** Not determined.**Viscosity:****Dynamic:**

Not applicable.

**Kinematic:**

Not applicable.

**Other information**

No further relevant information available.

\* **10 Stability and reactivity****Thermal decomposition:** No decomposition if used according to specifications.**Incompatible materials:** No further relevant information available.**Hazardous decomposition products:**

Carbon monoxide and carbon dioxide

Hydrogen sulfide

**Additional information:** See section 7 for information on handling, storage and conditions to be avoided.\* **11 Toxicological information****Additional toxicological information:** Carcinogenic.\* **12 Ecological information****Aquatic toxicity:** No further relevant information available.**Persistence and degradability** No further relevant information available.**Behavior in environmental systems:****Bioaccumulative potential** No further relevant information available.**Additional ecological information:****General notes:** Slightly hazardous for water\* **13 Disposal considerations****Waste treatment methods** Comply with Federal, State and local regulations.

(Cont. on page 6)

USA

## Material Safety Data Sheet

Printing date 02/27/2014

Version Number 1.5

Reviewed on 02/27/2014

Trade name: *Waterproofing Membrane*

(Cont. from page 5)

**Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packagings:****Recommendation:** Disposal must be made according to official regulations.

\*

**14 Transport information****UN-Number**

DOT, ADR, ADN, IMDG, IATA

Not applicable.

**UN proper shipping name**

DOT, ADR, ADN, IMDG, IATA

Not applicable.

**Transport hazard class(es)**DOT, ADR, ADN, IMDG, IATA  
Class

Not applicable.

**Packing group**

DOT, ADR, IMDG, IATA

Not applicable.

**Environmental hazards:**

Marine pollutant:

No

**Special precautions for user**

Not applicable.

**Transport in bulk according to Annex II of  
MARPOL73/78 and the IBC Code**

Not applicable.

**Transport/Additional information:****DOT**

Remarks:

Not Regulated.

**ADR**

Remarks:

Not Regulated.

**ADN**

Remarks:

Not regulated

**IATA**

Remarks:

Not Regulated.

USA

(Cont. on page 7)



## Material Safety Data Sheet

Printing date 02/27/2014

Version Number 1.5

Reviewed on 02/27/2014

Trade name: *Waterproofing Membrane*

(Cont. from page 6)

**15 Regulatory information****SARA (Superfund Amendments and Reauthorization Act)****Section 302/304 (extremely hazardous substances):**

None of the ingredients is listed.

**Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):**

None of the ingredients is listed.

**SARA Section 312/Tier I & II Hazard Categories:**

Health Delayed (chronic)	Yes
Health Immediate (acute)	Yes
Flammable	No
Reactive	No
Pressure	No

**North America Chemical Inventory Status****TSCA (Toxic Substances Control Act - United States):**

All ingredients are listed or exempt from listing unless otherwise noted below.

**CEPA (Canadian DSL):**

All ingredients are listed or exempt from listing unless otherwise noted below.

**California Proposition 65****Chemicals known to cause cancer:**

64742-04-7	Extracts (petroleum), heavy paraffinic distillate solvent
130498-29-2	Polycyclic Aromatic Hydrocarbons

**Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

**Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

**Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

**WHMIS Classification(s):**

D2A - Very toxic material causing other toxic effects

**Carcinogenicity Categories****EPA (Environmental Protection Agency)**

None of the ingredients is listed.

**IARC (International Agency for Research on Cancer) Human Carcinogenicity:****Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable**

8052-42-4	Asphalt	3
64742-04-7	Extracts (petroleum), heavy paraffinic distillate solvent	1
9003-55-8	Styrene-butadiene rubber	3

(Cont. on page 8)

USA

## Material Safety Data Sheet

Printing date 02/27/2014

Version Number 1.5

Reviewed on 02/27/2014

Trade name: *Waterproofing Membrane*

(Cont. from page 7)

14807-96-6 Talc

3

**NTP (National Toxicology Program)****K–Known to be carcinogenic, R–May reasonably be anticipated to be carcinogenic**

None of the ingredients is listed.

**TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)****Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable**

8052-42-4 Asphalt

A4

14807-96-6 Talc

A4

**NIOSH-Cancer (National Institute for Occupational Safety and Health)**

8052-42-4 Asphalt

**OSHA-Cancer (Occupational Safety & Health Administration)**

None of the ingredients is listed.

**Volatile Organic Compounds (VOC) reported per the Emission Standards for Architectural Coatings:**

If no g/L value is provided this product is not subject to above standard.

**International Chemical Inventory Status****European EINECS**

All ingredients are listed.

**Philippines Inventory of Chemicals and Chemical Substances PICCS**

All ingredients are listed.

**Inventory of Existing Chemical Substances manufactured or imported in China IECSC**

All ingredients are listed.

**Australian Inventory of Chemical Substances AICS**

All ingredients are listed.

**Japan Existing and New Chemical Substance List ENCS**

All ingredients are listed.

**Korean Existing Chemical Inventory**

All ingredients are listed.

**National regulations:****Information about limitation of use:**

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation.

Exceptions can be made by the authorities in certain cases.

**Non-hazardous Ingredients**

9003-55-8 Styrene-butadiene rubber

\*

**16 Other information**

"The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection."

(Cont. on page 9)

USA

## Material Safety Data Sheet

Printing date 02/27/2014

Version Number 1.5

Reviewed on 02/27/2014

**Trade name:** *Waterproofing Membrane*

(Cont. from page 8)

**Department issuing MSDS:****Other Information:**

BITUTHENE® LOW TEMPERATURE WATERPROOFING MEMBRANE, MEMBRANE STRIPS  
BITUTHENE® SYSTEM 4000 WATERPROOFING MEMBRANE, MEMBRANE STRIPS  
PERM-A-BARRIER WALL FLASHING, PERM-A-BARRIER WALL MEMBRANE,  
PERM-A-BARRIER® LOW TEMPERATURE MEMBRANE, PERM-A-BARRIER  
DETAIL MEMBRANE, GRACE ICE & WATER SHIELD®,  
GRACE ROOF DETAIL MEMBRANE, PITWRAP CW, GRACE SELECT, VYCOR V40 WEATHER  
BARRIER STRIPS, GRACE VYCOR PLUS TAPES, GRACE® BASIK™, GRACE VYCOR DECK  
PROTECTOR,  
GRACE VYCOR ALL PURPOSE FLASHING, GRACE VYCOR ALUMINUM FLASHING,  
PREPRUFE DETAIL TAPE HC GRADE, GENERIC 40-MIL FLASHING LOG, PERM-A-BARRIER ALUMINUM  
FLASHING,  
PERM-A-BARRIER ALUMINUM MEMBRANE, PERM-A-BARRIER ALUMINUM MEMBRANE LOWTEMP,  
ICE and WATER SHIELD HT

USA

## Safety Data Sheet

Printing date 03/31/2015

Version Number 1.1

Reviewed on 03/31/2015

**1 Identification****Product identifier****Trade name:** *Bituthene Mastic***SDS ID Number:** 60026**Relevant identified uses of the substance or mixture and uses advised against**  
Specialty construction product. Not intended for other uses**Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

W.R. Grace & Co. -Conn.  
62 Whittemore Avenue  
Cambridge, MA 02140 USA

Grace Canada, Inc.  
294 Clements Road W.  
Ajax, Ontario L1S 3C6 Canada

**Information department:**

Environmental Health & Safety  
USA: +1-617-876-1400 (24 hours)  
+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts  
CAN: 1-905-683-8561 (24 hours)

**Transport Emergency:** Chemtrec +1-800-424-9300 (24 hours)**2 Composition/information on ingredients****Chemical characterization: Mixtures****Description:** Mixture of the substances listed below with additional nonhazardous ingredients.**Hazardous components:**

8052-42-4	Asphalt	25-30%
64742-95-6	Solvent naphtha (petroleum), light aromatic	10-20%
95-63-6	1,2,4-trimethylbenzene	10-20%
64742-52-5	Distillates (petroleum), hydrotreated heavy naphthenic	1.0-2.0%
98-82-8	Isopropylbenzene	0.1-1.0%

**Additional information:** For the wording of the listed risk phrases refer to section 16.**3 Hazard(s) identification****Classification of the substance or mixture**

Suspected of causing cancer.

Harmful if inhaled.

Causes skin irritation.

Causes serious eye irritation.

Combustible liquid.

(Cont. on page 2)

USGHS

## Safety Data Sheet

Printing date 03/31/2015

Version Number 1.1

Reviewed on 03/31/2015

Trade name: *Bituthene Mastic*

(Cont. from page 1)

**GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).**Hazard pictograms**

GHS07 GHS08

**Warning****Hazard-determining components of labeling:**

1,2,4-trimethylbenzene

Asphalt

Distillates (petroleum), hydrotreated heavy naphthenic

**Precautionary statements**

Keep away from flames and hot surfaces. – No smoking.

Wear protective gloves / eye protection / face protection.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If on skin: Wash with plenty of water.

If eye irritation persists: Get medical advice/attention.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**Hazard description:** Flammable**NFPA ratings (scale 0 - 4)**

Health = 2

Fire = 2

Reactivity = 0

**HMIS-ratings (scale 0 - 4)**

Health = \*2

Flammability = 2

Reactivity = 0

**4 First-aid measures****General information:** Get medical advice/attention if you feel unwell.**After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

**After skin contact:**

Immediately wash contaminated skin with soap or mild detergent and water. If this chemical soaks clothing, immediately remove clothing and wash skin.

**After eye contact:** Rinse cautiously with water for several minutes.**After swallowing:** Rinse mouth.**5 Fire-fighting measures****Suitable extinguishing agents:** CO<sub>2</sub>, sand, extinguishing powder. Do not use water.

(Cont. on page 3)

USGHS

## Safety Data Sheet

Printing date 03/31/2015

Version Number 1.1

Reviewed on 03/31/2015

**Trade name:** *Bituthene Mastic*

(Cont. from page 2)

**Special hazards arising from the substance or mixture** No further relevant information available.**Additional information** Collect contaminated fire fighting water separately. It must not enter the sewage system.

## 6 Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

### Methods and material for containment and cleaning up:

Contain and/or absorb spill with inert material (i.e. sand, vermiculite) then place in a suitable container.

Sweep up spilled product into receptacles.

Dispose contaminated material as waste according to section 13 of the SDS.

### Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## 7 Handling and storage

### Handling:

#### Precautions for safe handling

Prevent formation of aerosols.

Flammable mixtures with air can be formed in emptied containers. Do not puncture, cut, drill, heat or weld uncleaned drums.

Avoid contact with skin.

#### Information about protection against explosions and fires:



Keep ignition sources away - Do not smoke.

Use only in explosion protected area.

Protect against electrostatic charges.

Use explosion-proof apparatus / fittings and spark-proof tools.

Empty containers may retain hazardous residue, both liquid and vapor.

### Storage:

**Further information about storage conditions:** Keep receptacle tightly sealed.

**Specific end use(s)** No further relevant information available.

USGHS

(Cont. on page 4)

## Safety Data Sheet

Printing date 03/31/2015

Version Number 1.1

Reviewed on 03/31/2015

Trade name: *Bituthene Mastic*

(Cont. from page 3)

**8 Exposure controls/personal protection****Additional information about design of technical systems:** No further data; see item 7.**Components with limit values that require monitoring at the workplace:****8052-42-4 Asphalt**

REL (USA)	Ceiling limit value: 5* mg/m <sup>3</sup> *15-min; See Pocket Guide App. A
TLV (USA)	Long-term value: 0.5* mg/m <sup>3</sup> *inh. fraction; as benzene-soluble aerosol; BEIp

**95-63-6 1,2,4-trimethylbenzene**

REL (USA)	Long-term value: 125 mg/m <sup>3</sup> , 25 ppm
TLV (USA)	Long-term value: 123 mg/m <sup>3</sup> , 25 ppm

**Ingredients with biological limit values:****8052-42-4 Asphalt**

BEI (USA)	- Medium: urine Time: end of shift at end of workweek Parameter: 1-Hydroxypyrene with hydrolysis (nonquantitative)
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**Additional information:** The lists that were valid during the creation were used as basis.**Personal protective equipment:****General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

**Breathing equipment:**

Respiratory protection is not normally required. If exposures exceed PELs use a NIOSH approved organic vapor respirator.

**Protection of hands:**

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

**Material of gloves**

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

**Eye protection:**

Safety glasses with side shield protection.

Safety glasses with side shields should be worn to prevent contact due to splashing. Under high vapor mist concentrations, tightly sealed goggles should be worn.



A face shield should also be worn if there is potential exposure to splash or spray.

**Body protection:**

Use personal protective equipment as required.

Take off contaminated clothing and wash before reuse.

USGHS

(Cont. on page 5)

## Safety Data Sheet

Printing date 03/31/2015

Version Number 1.1

Reviewed on 03/31/2015

Trade name: *Bituthene Mastic*

(Cont. from page 4)

## \* 9 Physical and chemical properties

**General Information****Appearance:**

<b>Form:</b>	Liquid
<b>Color:</b>	According to product specification
<b>Odor:</b>	Characteristic
<b>Odour threshold:</b>	Not determined.

**pH-value (~):** Not determined.

**Change in condition**

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	162 °C (324 °F)
<b>Flash point:</b>	41 °C (106 °F)

**Flammability (solid, gaseous):** Not applicable.

**Decomposition temperature:** Not determined.

**Auto igniting:** Product is not selfigniting.

**Danger of explosion:** In use, may form flammable/explosive vapor-air mixture.

**Explosion limits:**

<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
<b>VOC Content (max):</b>	Not determined.

**Vapor pressure:** Not determined.

**Density: (~) at 20 °C (68 °F)** 1.3 g/cm<sup>3</sup> (10.849 lbs/gal)

**Relative density** Not determined.

**Vapour density** Not determined.

**Evaporation rate** Not determined.

**Solubility in / Miscibility with**

**Water:** Not miscible or difficult to mix.

**Partition coefficient (n-octanol/water):** Not determined.

**Viscosity:**

**Dynamic:** Not determined.

**Kinematic:** Not determined.

**Molecular weight** Not applicable.

**Other information**

No further relevant information available.

## 10 Stability and reactivity

**Thermal decomposition:** No decomposition if used according to specifications.

**Incompatible materials:** No further relevant information available.

**Hazardous decomposition products:**

Carbon monoxide and carbon dioxide

Other potentially hazardous products may also be formed.

**Additional information:** See section 7 for information on handling, storage and conditions to be avoided.

USGHS

(Cont. on page 6)



## Safety Data Sheet

Printing date 03/31/2015

Version Number 1.1

Reviewed on 03/31/2015

Trade name: *Bituthene Mastic*

(Cont. from page 5)

**11 Toxicological information****Acute toxicity:****LD/LC50 values relevant for classification:****64742-95-6 Solvent naphtha (petroleum), light aromatic**

Oral	LD50	>6800 mg/kg (rat)
Dermal	LD50	>3400 mg/kg (rabbit)
Inhalative	LC50, 4h	>10.2 mg/l (rat)

**95-63-6 1,2,4-trimethylbenzene**

Dermal	LD50	3160 mg/kg (rabbit) >3500 mg/kg (rat)
Inhalative	LC50, 4h	18 mg/l (rat)

**98-82-8 Isopropylbenzene**

Dermal	LD50	1400 mg/kg (rat) 12300 mg/kg (rabbit)
Inhalative	LC50, 4h	24.7 mg/l (mus)

**Primary irritant effect:****on the skin:** Causes skin irritation.**on the eye:** Irritating to eyes.**Additional toxicological information:**

Over exposure by inhalation or ingestion may be fatal. Chemicals contained in this product can affect the skin, heart, brain, liver, kidneys, lungs and spleen. Some harmful effects are also possible through skin absorption.

**Carcinogenic categories****IARC (International Agency for Research on Cancer) Human Carcinogenicity:  
Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable**

8052-42-4	Asphalt	2B
9003-55-8	Styrene-butadiene rubber	3
98-82-8	Isopropylbenzene	2B
1330-20-7	Xylene	3

**NTP (National Toxicology Program)****K-Known to be carcinogenic, R-May reasonably be anticipated to be carcinogenic**

98-82-8	Isopropylbenzene	R
---------	------------------	---

**OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

**12 Ecological information****Aquatic toxicity:** No further relevant information available.**Persistence and degradability** No further relevant information available.**Behavior in environmental systems:****Bioaccumulative potential** No further relevant information available.**Ecotoxicological effects:****Remark:** Toxic for fish

(Cont. on page 7)

USGHS

## Safety Data Sheet

Printing date 03/31/2015

Version Number 1.1

Reviewed on 03/31/2015

Trade name: *Bituthene Mastic*

(Cont. from page 6)

**Additional ecological information:****General notes:**

Danger to drinking water if even small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

**13 Disposal considerations****Waste treatment methods** Comply with Federal, State and local regulations.**Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packagings:****Recommendation:** Disposal must be made according to official regulations.**14 Transport information****UN-Number**

DOT, ADR, ADN, IMDG, IATA Not applicable.

**UN proper shipping name**

DOT, ADR, ADN, IMDG, IATA Not applicable.

**Transport hazard class(es)**DOT, ADR, ADN, IMDG, IATA  
Class Not applicable.**Packing group**

DOT, ADR, IMDG, IATA Not applicable.

**Environmental hazards:****Marine pollutant:** No**Special precautions for user**

Not applicable.

**Transport/Additional information:** Note: this transportation classification is for over the roadshipments. Shipments by other modes need to be evaluated.**DOT****Remarks:** Not Regulated.**UN "Model Regulation":**

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## Safety Data Sheet

Printing date 03/31/2015

Version Number 1.1

Reviewed on 03/31/2015

Trade name: *Bituthene Mastic*

(Cont. from page 7)

## \* 15 Regulatory information

## SARA (Superfund Amendments and Reauthorization Act)

## Section 302/304 (extremely hazardous substances):

None of the ingredients is listed.

## Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):

95-63-6	1,2,4-trimethylbenzene	12.9%
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## SARA Section 312/Tier I &amp; II Hazard Categories:

Health Delayed (chronic)	Yes
Health Immediate (acute)	Yes
Flammable	No
Reactive	No
Pressure	No

## North America Chemical Inventory Status

## TSCA (Toxic Substances Control Act - United States):

All ingredients are listed or exempt from listing unless otherwise noted below.

## CEPA (Canadian DSL):

All ingredients are listed or exempt from listing unless otherwise noted below.

## Right to Know Ingredient Disclosure

1332-58-7	Natural aluminosilicate (Kaolin)
112945-52-5	Amorphous Silica Dioxide
9003-55-8	Styrene-butadiene rubber

## California Proposition 65

## Chemicals known to cause cancer:

Isopropylbenzene

## Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

## Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

## Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

## Carcinogenicity Categories

## EPA (Environmental Protection Agency)

98-82-8	Isopropylbenzene	D, CBD
1330-20-7	Xylene	I

TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)  
Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable

Natural aluminosilicate (Kaolin)	A4
Asphalt	A4

## NIOSH-Cancer (National Institute for Occupational Safety and Health)

8052-42-4 Asphalt

Volatile Organic Compounds (VOC) reported per the Emission Standards. 244 g/L

## 16 Other information

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## Safety Data Sheet

Printing date 03/31/2015

Version Number 1.1

Reviewed on 03/31/2015

**Trade name:** *Bituthene Mastic*

(Cont. from page 8)

"The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection."

**Date of preparation / last revision** 03/31/2015 / 1.0**The first date of preparation** 03/03/2015**Number of revision times and the latest revision date** 1.1 / 03/31/2015

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## Safety Data Sheet

Printing date 04/09/2015

Version Number 1.0

Reviewed on 04/09/2015

**1 Identification****Product identifier**Trade name: **PERM-A-BARRIER PRIMER PLUS**

SDS ID Number: 12732

**Relevant identified uses of the substance or mixture and uses advised against**

Waterproofing.

Specialty construction product. Not intended for other uses

**Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

W.R. Grace & Co. -Conn.  
62 Whittemore Avenue  
Cambridge, MA 02140 USA

Grace Canada, Inc.  
294 Clements Road W.  
Ajax, Ontario L1S 3C6 Canada

**Information department:**

Environmental Health &amp; Safety

USA: +1-617-876-1400 (24 hours)

+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts

CAN: 1-905-683-8561 (24 hours)

**Transport Emergency:** Chemtrec +1-800-424-9300 (24 hours)**2 Composition/information on ingredients****Chemical characterization: Mixtures****Hazardous components:** Not applicable.**3 Hazard(s) identification****Classification of the substance or mixture**

The product is not classified according to the Globally Harmonized System (GHS).

**GHS label elements** Not applicable.**Hazard pictograms** Not applicable.

Not applicable.

**NFPA ratings (scale 0 - 4)**

Health = 1  
Fire = 1  
Reactivity = 0

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## Safety Data Sheet

Printing date 04/09/2015

Version Number 1.0

Reviewed on 04/09/2015

Trade name: **PERM-A-BARRIER PRIMER PLUS**

## HMIS-ratings (scale 0 - 4)

(Cont. from page 1)

HEALTH	1	Health = 1
FIRE	1	Flammability = 1
REACTIVITY	0	Reactivity = 0

## \* 4 First-aid measures

**General information:** Get medical advice/attention if you feel unwell.**After inhalation:** No special measures required.**After skin contact:**

Immediately wash contaminated skin with soap or mild detergent and water. If this chemical soaks clothing, immediately remove clothing and wash skin.

Wash with plenty of soap and water.

**After eye contact:** Rinse cautiously with water for several minutes.**After swallowing:** Rinse mouth.

## 5 Fire-fighting measures

**Suitable extinguishing agents:** CO2, extinguishing powder or water spray. Fight larger fires with water spray.**Special hazards arising from the substance or mixture** No further relevant information available.**Protective equipment:** Wear self-contained respiratory protective device.**Additional information** Collect contaminated fire fighting water separately. It must not enter the sewage system.

## \* 6 Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation

Wear protective equipment. Keep unprotected persons away.

**Environmental precautions:**

Inform respective authorities in case of seepage into water course or sewage system.

**Methods and material for containment and cleaning up:**

Contain and/or absorb spill with inert material (i.e. sand, vermiculite) then place in a suitable container.

**Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

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## Safety Data Sheet

Printing date 04/09/2015

Version Number 1.0

Reviewed on 04/09/2015

Trade name: **PERM-A-BARRIER PRIMER PLUS**

(Cont. from page 2)

**7 Handling and storage****Handling:****Precautions for safe handling**

Do not eat, drink or smoke when using this product.

Keep only in original container.

Use only outdoors or in a well-ventilated area.

**Information about protection against explosions and fires:** No special measures required.**Storage:****Information about storage in one common storage facility:** No special measures required.**Further information about storage conditions:**

Protect from frost.

Store in a dry place.

Keep cool.

**Specific end use(s)** No further relevant information available.**8 Exposure controls/personal protection****Additional information about design of technical systems:** No further data; see item 7.**Components with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

**Additional information:** The lists that were valid during the creation were used as basis.**Personal protective equipment:****General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

**Breathing equipment:**

Respiratory protection is not normally required. If a vapor or mist is created, use an approved dust/mist respirator (NIOSH N95).

**Protection of hands:**

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

**Material of gloves**

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

**Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection:**

Safety glasses with side shield protection.

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## Safety Data Sheet

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Reviewed on 04/09/2015

Trade name: **PERM-A-BARRIER PRIMER PLUS**

(Cont. from page 3)

Safety glasses with side shields should be worn to prevent contact due to splashing. Under high vapor mist concentrations, tightly sealed goggles should be worn.



A face shield should also be worn if there is potential exposure to splash or spray.

**Body protection:**

Use personal protective equipment as required.

Take off contaminated clothing and wash before reuse.

## 9 Physical and chemical properties

**General Information****Appearance:**

<b>Form:</b>	Liquid
<b>Color:</b>	Milky white
<b>Odor:</b>	Acrylate
<b>Odour threshold:</b>	Not determined.

**pH-value (~) at 20 °C (68 °F):** 4

**Change in condition**

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	Undetermined.
<b>Flash point:</b>	Not applicable.

**Flammability (solid, gaseous):** Not applicable.

**Decomposition temperature:** Not determined.

**Auto igniting:** Product is not selfigniting.

**Danger of explosion:** Product does not present an explosion hazard.

**Explosion limits:**

<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
<b>VOC Content (max):</b>	Not determined.

**Vapor pressure:** Not determined.

**Density: (~)** Not determined.

**Relative density** Not determined.

**Vapour density** Not determined.

**Evaporation rate** Not determined.

**Solubility in / Miscibility with**

**Water:** Not miscible or difficult to mix.

**Partition coefficient (n-octanol/water):** Not determined.

**Viscosity:**

<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.

**Molecular weight** Not applicable.

**Other information** No further relevant information available.

USGHS

(Cont. on page 5)



## Safety Data Sheet

Printing date 04/09/2015

Version Number 1.0

Reviewed on 04/09/2015

Trade name: **PERM-A-BARRIER PRIMER PLUS**

(Cont. from page 4)

**10 Stability and reactivity****Thermal decomposition:** No decomposition if used according to specifications.**Possibility of hazardous reactions** No dangerous reactions known.**Incompatible materials:** No further relevant information available.**Hazardous decomposition products:** Carbon monoxide and carbon dioxide**Additional information:** See section 7 for information on handling, storage and conditions to be avoided.**11 Toxicological information****Acute toxicity:****Primary irritant effect:****on the skin:** No irritating effect expected**on the eye:** No irritating effect expected**Additional toxicological information:**

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

**Carcinogenic categories****IARC (International Agency for Research on Cancer) Human Carcinogenicity:**  
**Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable**

None of the ingredients is listed.

**NTP (National Toxicology Program)****K-Known to be carcinogenic, R-May reasonably be anticipated to be carcinogenic**

None of the ingredients is listed.

**OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

**12 Ecological information****Aquatic toxicity:** No further relevant information available.**Persistence and degradability** No further relevant information available.**Behavior in environmental systems:****Bioaccumulative potential** No further relevant information available.**Additional ecological information:****General notes:** Not known to be hazardous to water.**13 Disposal considerations****Waste treatment methods** Comply with Federal, State and local regulations.

(Cont. on page 6)

USGHS

## Safety Data Sheet

Printing date 04/09/2015

Version Number 1.0

Reviewed on 04/09/2015

Trade name: **PERM-A-BARRIER PRIMER PLUS**

(Cont. from page 5)

**Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packagings:****Recommendation:** Disposal must be made according to official regulations.\* **14 Transport information****UN-Number**

DOT, ADR, ADN, IMDG, IATA Not applicable.

**UN proper shipping name**

DOT, ADR, ADN, IMDG, IATA Not applicable.

**Transport hazard class(es)**DOT, ADR, ADN, IMDG, IATA  
Class Not applicable.**Packing group**

DOT, ADR, IMDG, IATA Not applicable.

**Environmental hazards:**

Marine pollutant: No

**Special precautions for user**

Not applicable.

**Transport/Additional information:** Not classified as a dangerous good for transport by road, rail or air.**DOT****Remarks:** Not Regulated.\* **15 Regulatory information****SARA (Superfund Amendments and Reauthorization Act)****Section 302/304 (extremely hazardous substances):**

None of the ingredients is listed.

**Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):**

None of the ingredients is listed.

**SARA Section 312/Tier I & II Hazard Categories:**

Health Immediate (acute)	Yes
Health Delayed (chronic)	No
Flammable	No
Reactive	No
Pressure	No

**North America Chemical Inventory Status****TSCA (Toxic Substances Control Act - United States):**

All ingredients are listed or exempt from listing unless otherwise noted below.

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## Safety Data Sheet

Printing date 04/09/2015

Version Number 1.0

Reviewed on 04/09/2015

Trade name: **PERM-A-BARRIER PRIMER PLUS**

(Cont. from page 6)

**CEPA (Canadian DSL):**

All ingredients are listed or exempt from listing unless otherwise noted below.

**Right to Know Ingredient Disclosure**

Proprietary - Acrylate polymer - NJTSR 801416070

7732-18-5 Water

**California Proposition 65****Chemicals known to cause cancer:**

None of the ingredients is listed.

**Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

**Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

**Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

**Carcinogenicity Categories****EPA (Environmental Protection Agency)**

None of the ingredients is listed.

**TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)  
Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable**

None of the ingredients is listed.

**NIOSH-Cancer (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

**Volatile Organic Compounds (VOC) reported per the Emission Standards.**

If no g/L value is provided this product is not subject to above standard.

**16 Other information**

"The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection."

**Department issuing SDS:**

Product Stewardship Department - GRACE, 580-581 Ipswich Road, Slough, Berkshire, SL1 4EQ

Tel: ++44 (0)1753 490 000, Fax: ++44 (0)1753 490 051

**Date of preparation / last revision** 04/09/2015 / -**The first date of preparation** 03/06/2015**Number of revision times and the latest revision date** 1.0 / 04/09/2015

USGHS

## Safety Data Sheet

Printing date 03/31/2015

Version Number 1.1

Reviewed on 03/31/2015

**1 Identification****Product identifier****Trade name:** PERM-A-BARRIER WB Primer**SDS ID Number:** 60142**Relevant identified uses of the substance or mixture and uses advised against**  
Specialty construction product. Not intended for other uses**Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

W.R. Grace & Co. -Conn.  
62 Whittemore Avenue  
Cambridge, MA 02140 USA

Grace Canada, Inc.  
294 Clements Road W.  
Ajax, Ontario L1S 3C6 Canada

**Information department:**

Environmental Health & Safety  
USA: +1-617-876-1400 (24 hours)  
+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts  
CAN: 1-905-683-8561 (24 hours)

**Transport Emergency:** Chemtrec +1-800-424-9300 (24 hours)**2 Composition/information on ingredients****Chemical characterization: Mixtures****Description:** Mixture of the substances listed below with additional nonhazardous ingredients.**Hazardous components:**

108-05-4   vinyl acetate	0.1-1.0%
--------------------------	----------

**Additional information:** For the wording of the listed risk phrases refer to section 16.**3 Hazard(s) identification****Classification of the substance or mixture**

May cause cancer.

**GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).**Hazard pictograms**

GHS08

Danger

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USGHS

## Safety Data Sheet

Printing date 03/31/2015

Version Number 1.1

Reviewed on 03/31/2015

Trade name: **PERM-A-BARRIER WB Primer**

(Cont. from page 1)

**Hazard-determining components of labeling:**

vinyl acetate

**Precautionary statements**

Wear protective gloves.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

IF exposed or concerned: Get medical advice/attention.

Dispose of contents/container in accordance with local/regional/national/international regulations.

**NFPA ratings (scale 0 - 4)**

Health = 2

Fire = 1

Reactivity = 0

**HMIS-ratings (scale 0 - 4)**

Health = \*2

Flammability = 1

Reactivity = 0

**4 First-aid measures****General information:** Get medical advice/attention if you feel unwell.**After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

**After skin contact:**

Immediately wash contaminated skin with soap or mild detergent and water. If this chemical soaks clothing, immediately remove clothing and wash skin.

**After eye contact:**

Rinse opened eye for several minutes under running water.

Rinse cautiously with water for several minutes.

Seek immediate medical advice.

**After swallowing:**

Wash out mouth with water

Do not induce vomiting; immediately call for medical help.

Never give anything by mouth to an unconscious person.

**5 Fire-fighting measures****Special hazards arising from the substance or mixture** No further relevant information available.**Additional information** Collect contaminated fire fighting water separately. It must not enter the sewage system.

USGHS

(Cont. on page 3)

## Safety Data Sheet

Printing date 03/31/2015

Version Number 1.1

Reviewed on 03/31/2015

Trade name: **PERM-A-BARRIER WB Primer**

(Cont. from page 2)

**6 Accidental release measures****Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

**Methods and material for containment and cleaning up:**

Contain and/or absorb spill with inert material (i.e. sand, vermiculite) then place in a suitable container.

Sweep up spilled product into receptacles.

Dispose contaminated material as waste according to section 13 of the SDS.

**Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

**7 Handling and storage****Handling:****Precautions for safe handling**

Open and handle receptacle with care.

Prevent formation of aerosols.

Avoid contact with eyes, skin and clothing.

Do not take internally.

Practice good personal hygiene to avoid ingestion.

Use only with adequate ventilation.

Wash clothing before reuse.

FOR PROFESSIONAL USE ONLY. KEEP OUT OF CHILDREN'S REACH.

**Information about protection against explosions and fires:** Keep respiratory protective device available.

**Storage:**

**Information about storage in one common storage facility:** Keep respiratory protective device available.

**Further information about storage conditions:** Keep receptacle tightly sealed.

**Specific end use(s)** No further relevant information available.

**8 Exposure controls/personal protection**

**Additional information about design of technical systems:** No further data; see item 7.

**Components with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

**Additional information:** The lists that were valid during the creation were used as basis.

**Personal protective equipment:****General protective and hygienic measures:**

Avoid contact with the eyes and skin.

The usual precautionary measures for handling chemicals should be followed.

(Cont. on page 4)

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## Safety Data Sheet

Printing date 03/31/2015

Version Number 1.1

Reviewed on 03/31/2015

Trade name: **PERM-A-BARRIER WB Primer**

(Cont. from page 3)

Store protective clothing separately.

**Breathing equipment:**

Respiratory protection is not normally required. However, a chemical cartridge respirator with organic vapor cartridge and a prefilter for dusts/mists is required at or above the applicable exposure limits (consult exposure guidelines). If no limits exist, use an approved respirator whenever a vapor or mist is generated or if respiratory irritation occurs. Supplied air respirator (SCBA) is required at exposure levels above the capabilities of a chemical cartridge respirator.

**Protection of hands:**

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product. Rubber or other impervious gloves should be worn to prevent skin contact.

**Material of gloves**

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

**Eye protection:**

Safety glasses with side shield protection.

Safety glasses with side shields should be worn to prevent contact due to splashing. Under high vapor mist concentrations, tightly sealed goggles should be worn.



A face shield should also be worn if there is potential exposure to splash or spray.

**Body protection:**

Protective work clothing

Use personal protective equipment as required.

Take off contaminated clothing and wash before reuse.

## 9 Physical and chemical properties

**General Information****Appearance:**

<b>Form:</b>	Liquid
<b>Color:</b>	According to product specification
<b>Odor:</b>	Characteristic
<b>Odour threshold:</b>	Not determined.

**pH-value (~) at 20 °C (68 °F):** 5

**Change in condition**

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	Undetermined.
<b>Flash point:</b>	>200 °C (>392 °F)

**Flammability (solid, gaseous):** Not applicable.

**Decomposition temperature:** Not determined.

**Auto igniting:** Product is not selfigniting.

**Danger of explosion:** Product does not present an explosion hazard.

(Cont. on page 5)

USGHS

## Safety Data Sheet

Printing date 03/31/2015

Version Number 1.1

Reviewed on 03/31/2015

Trade name: **PERM-A-BARRIER WB Primer**

(Cont. from page 4)

**Explosion limits:**

**Lower:** Not determined.  
**Upper:** Not determined.  
**VOC Content (max):** Not determined.

**Vapor pressure:**

Not determined.

**Density: (~) at 20 °C (68 °F)**1.0 g/cm<sup>3</sup> (8.345 lbs/gal)**Relative density**

Not determined.

**Vapour density**

Not determined.

**Evaporation rate**

Not determined.

**Solubility in / Miscibility with****Water:** Not miscible or difficult to mix.**Partition coefficient (n-octanol/water):** Not determined.**Viscosity:****Dynamic:** Not determined.**Kinematic:** Not determined.**Molecular weight**

Not applicable.

**Other information**

No further relevant information available.

**10 Stability and reactivity****Thermal decomposition:** No decomposition if used according to specifications.**Incompatible materials:** No further relevant information available.**Hazardous decomposition products:** Carbon monoxide and carbon dioxide**Additional information:** See section 7 for information on handling, storage and conditions to be avoided.**11 Toxicological information****Acute toxicity:****LD/LC50 values relevant for classification:****108-05-4 vinyl acetate**

Dermal	LD50	2920 mg/kg (rat)
		2335 mg/kg (rabbit)

**Primary irritant effect:****on the skin:** No irritant effect.**on the eye:** No irritating effect.**Sensitization:** Sensitization possible through skin contact.**Additional toxicological information:** Carcinogenic.**Carcinogenic categories****IARC (International Agency for Research on Cancer) Human Carcinogenicity:****Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable**

108-05-4 vinyl acetate

2B

(Cont. on page 6)

USGHS



## Safety Data Sheet

Printing date 03/31/2015

Version Number 1.1

Reviewed on 03/31/2015

Trade name: **PERM-A-BARRIER WB Primer**

(Cont. from page 5)

**NTP (National Toxicology Program)****K–Known to be carcinogenic, R–May reasonably be anticipated to be carcinogenic**

None of the ingredients is listed.

**OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

**12 Ecological information****Aquatic toxicity:** No further relevant information available.**Persistence and degradability** No further relevant information available.**Behavior in environmental systems:****Bioaccumulative potential** No further relevant information available.**Additional ecological information:****General notes:** Not known to be hazardous to water.**13 Disposal considerations****Waste treatment methods** Comply with Federal, State and local regulations.**Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packagings:****Recommendation:** Disposal must be made according to official regulations.**14 Transport information****UN-Number****DOT, ADR, ADN, IMDG, IATA** Not applicable.**UN proper shipping name****DOT, ADR, ADN, IMDG, IATA** Not applicable.**Transport hazard class(es)****DOT, ADR, ADN, IMDG, IATA****Class** Not applicable.**Packing group****DOT, ADR, IMDG, IATA** Not applicable.**Environmental hazards:****Marine pollutant:** No**Special precautions for user** Not applicable.

(Cont. on page 7)

USGHS

## Safety Data Sheet

Printing date 03/31/2015

Version Number 1.1

Reviewed on 03/31/2015

Trade name: **PERM-A-BARRIER WB Primer**

(Cont. from page 6)

**Transport/Additional information:****DOT****Remarks:** Not Regulated.**UN "Model Regulation":** -**15 Regulatory information****SARA (Superfund Amendments and Reauthorization Act)****Section 302/304 (extremely hazardous substances):**

108-05-4 | vinyl acetate

**Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):**

None of the ingredients is listed.

**SARA Section 312/Tier I & II Hazard Categories:**

Health Delayed (chronic)	Yes
Health Immediate (acute)	Yes
Flammable	No
Reactive	No
Pressure	No

**North America Chemical Inventory Status****TSCA (Toxic Substances Control Act - United States):**

All ingredients are listed or exempt from listing unless otherwise noted below.

**CEPA (Canadian DSL):**

All ingredients are listed or exempt from listing unless otherwise noted below.

**Right to Know Ingredient Disclosure**

25280-35-7 | Acetic acid ethenyl ester

7732-18-5 | Water

**California Proposition 65****Chemicals known to cause cancer:**

None of the ingredients is listed.

**Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

**Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

**Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

**Carcinogenicity Categories****EPA (Environmental Protection Agency)**

None of the ingredients is listed.

**TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)****Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable**

None of the ingredients is listed.

**NIOSH-Cancer (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

**Volatile Organic Compounds (VOC) reported per the Emission Standards.** 10g/l (as applied)

(Cont. on page 8)

USGHS

## Safety Data Sheet

Printing date 03/31/2015

Version Number 1.1

Reviewed on 03/31/2015

**Trade name:** *PERM-A-BARRIER WB Primer*

(Cont. from page 7)

**Information about limitation of use:**

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation.  
Exceptions can be made by the authorities in certain cases.

**16 Other information**

"The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection."

**Date of preparation / last revision** 03/31/2015 / 1.0**The first date of preparation** 11/08/2012**Number of revision times and the latest revision date** 1.1 / 03/31/2015

USGHS

**W. R. GRACE**  
**MATERIAL SAFETY DATA SHEET**

Product Name: Bituthene Adhesive Primer B2 LVC

MSDS ID Number: M-85883

MSDS Date: 08/23/2011

**SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**Product Name:** Bituthene Adhesive Primer B2 LVC  
**MSDS Number:** M-85883  
**Cancelled MSDS Number:** M-85829  
**MSDS Date:** 08/23/2011  
**Chemical Family Name:** Petroleum Resin  
**Product Use:** Horizontal and Vertical Grade Primer  
**Chemical Formula:** Mixture-NA  
**CAS # (Chemical Abstracts Service Number):** Mixture-NA

**Manufactured by:**

W.R.Grace & Co.-Conn.  
62 Whittemore Avenue  
Cambridge, MA 02140

Grace Canada, Inc.  
294 Clements Road West  
Ajax, Ontario L1S 3C6

**In Case of Emergency Call:**

In USA: (617) 876-1400 In Canada: (905) 683-8561

**SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS**

<b>Ingredient</b>	<b>CAS#</b>	<b>Percent (max)</b>
Distillates, petroleum, steam cracked, polymers with light steam cracked petroleum naphtha	068410-16-2	50-100
Stoddard solvent	008052-41-3	10-25
tert-Butyl acetate	000540-88-5	10-25
Xylenes (o-, m-, p- isomers)	001330-20-7	10-25
Ethylbenzene	100-41-4	1-10

**SECTION 3 - HAZARDS IDENTIFICATION**

**Emergency Overview:**

**Caution!**

Flammable liquid. Vapors may ignite explosively.  
Vapors are heavier than air and may travel to distant sources of ignition and flash back.  
Causes severe eye irritation.  
Causes severe skin irritation.  
Causes respiratory tract irritation.  
May be harmful if ingested.  
Causes digestive tract irritation if ingested.  
Harmful if absorbed through skin.  
May be harmful if inhaled. Inhalation of high vapor concentrations can cause CNS depression, unconsciousness or death.  
May cause kidney, lung and liver tumors.

**HMIS Rating:**

Health: 3\*  
Flammability: 3  
Reactivity: 0  
Personal Protective Equipment: B, G (See section 8)

**Potential Health Effects:**

**Inhalation:** Spray applications of this material may create aerosols which may be irritating to the upper respiratory tract, nose, and throat.  
Inhalation may result in effects similar to those under ingestion.  
Effects include: Nausea, CNS depression, vomiting, coma, headache, loss of consciousness, death, coughing, anemia, narcotic effects, labored breathing, chest pain. Xylene contained in this product has

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been shown to affect the liver, kidney, lungs, spleen, heart and adrenals based on high exposure animal studies.

Ethylbenzene contained in this product has been shown to produce kidney, lung and liver tumors based on animal inhalation studies.

**Eye Contact:** Spray applications of this material may create aerosols which may be irritating to the eyes.

Prolonged eye contact can result in tissue damage.

**Skin Contact:** Skin contact can cause severe irritation.

Prolonged skin contact can result in irritation causing redness and itching.

May defat skin.

May cause dermatitis.

**Skin Absorption:** Harmful if absorbed through the skin.

May cause effects similar to those defined under inhalation.

**Ingestion:** Harmful if ingested.

If ingested, causes irritation to the linings of the mouth, esophagus and stomach.

Effects include: Drowsiness, nausea, fatigue, pulmonary edema (from aspiration into the lungs from vomiting), CNS depression, vomiting, diarrhea, headache, dizziness, loss of consciousness, death, shortness of breath, anemia and narcotic effects.

Aspiration into the lungs may occur during ingestion or vomiting resulting in lung injury. Stoddard Solvent contained in this product has been associated with central nervous system complication and blood changes. Liver and kidney damage has also been reported in animal studies.

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**SECTION 4 - FIRST AID MEASURES:**

**Skin Contact:** Wash with soap and water. If residue remains, clean with waterless hand-cream or abrasive soap.

Never use solvents.

If discomfort or irritation persists, consult a physician.

Remove contaminated clothing and wash before reuse.

**Eye Contact:** Flush eyes with water for at least 15 minutes while holding eyelids open.

Get immediate medical attention.

**Ingestion:** Do not induce vomiting.

Never give anything by mouth to an unconscious person.

Call a physician or poison control center immediately.

**Inhalation:** If symptoms develop, get fresh air. If symptoms persist, consult a physician.

If breathing has stopped, give artificial respiration then oxygen if needed.

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**SECTION 5 - FIRE AND EXPLOSION HAZARD DATA**

**Flash Point:** 80°F

**Flash Point Method:** Unknown

**Lower Explosion Limit:** 2.6%

**Upper Explosion Limit:** Not Available

**Auto-Ignition Temperature:** Not Available

**NFPA Rating:**

**Health:** 2

**Flammability:** 3

**Reactivity:** 0

**Extinguishing Media:** In case of fire, use water spray, dry chemical, Carbon dioxide or foam.

**Special Fire Fighting Procedures:** Wear self-contained breathing apparatus and complete personal protective equipment when potential for exposure to vapors or products of combustion exist. Isolate area and keep unnecessary people away.

Water spray may be ineffective when extinguishing fire. Water may be used to cool closed containers. Do not scatter spilled material with high pressure water stream. Fog nozzles are preferred if water is used.

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**Unusual Fire and Explosion Hazards:** Keep away from heat, electrical equipment, sparks, and open flame. Extinguish all sources of ignition. Vapors are heavier than air and may travel along ground to ignition sources such as electrical equipment, smoking materials, welding equipment, and pilot lights. Flammable liquid. Keep containers closed except when in use. Keep away from heat, electrical equipment, sparks and open flame.

**SECTION 6 - ACCIDENTAL RELEASE MEASURES:**

**Spills/Leaks:** Use proper personal protective equipment.  
Prevent spills from entering drinking water supplies, streams, or sewers.  
Collect material with an inert, noncombustible material and remove for disposal.  
Do not use metal shovels or other tools which could create sparks.

**SECTION 7 - HANDLING AND STORAGE**

**Precautionary Measures:** Avoid contact with eyes, skin and clothing.  
Use only with adequate ventilation.  
Forced ventilation is required in pits and other confined areas.  
Spray application requires use of respiratory protection.  
Do not take internally.  
Practice good personal hygiene to avoid ingestion.  
Wash clothing before reuse.  
When working around heating and air conditioning systems, block intake vents to prevent vapor from traveling into buildings.  
Keep away from heat, sparks and flame.  
Enforce no smoking policy for all trades present on job site.  
Keep container closed tightly when not in use to avoid unnecessary release of vapors and to prevent spills.  
Do not reuse empty containers.  
FOR PROFESSIONAL USE ONLY. KEEP OUT OF CHILDREN'S REACH.

**SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT**

**EXPOSURE GUIDELINES (US)**

Ingredient	ACGIH TLV			OSHA PEL			Other
	TWA	STEL	Ceiling	TWA	STEL	Ceiling	
Distillates, petroleum, steam-cracked, polymers with light	-	-	-	-	-	-	-
Stoddard solvent	100 ppm TWA	-	-	100 ppm TWA; 525 mg/m3 TWA	-	-	-
tert-Butyl acetate	200 ppm TWA	-	-	200 ppm TWA; 950 mg/m3 TWA	-	-	-
Xylenes (o-, m-, p- isomers)	100 ppm TWA	150 ppm STEL	-	100 ppm TWA; 435 mg/m3 TWA	150 ppm STEL; 655 mg/m3 STEL	-	-
Ethyl benzene	100 ppm TWA	125 ppm STEL	-	100 ppm TWA; 435 mg/m3 TWA	125 ppm STEL; 545 mg/m3 STEL	-	-

**EXPOSURE GUIDELINES (CANADA)**

Employers should consult local Provincial regulatory limits for exposure guidelines which may vary locally.

**Engineering Controls:** Explosion-proof portable ventilation is required to prevent vapor build-up during application in enclosed or depressed areas. Vapors are heavier than air and will build-up in confined spaces without ventilation. Vapor build-up can be life threatening. Portable equipment such as a Coppus Vano portable blower/exhauster should be used in accordance with the manufacturer's instructions.

**Personal Protective Equipment:**

**Respiratory Protection:** A chemical cartridge respirator with organic vapor cartridges is required. A dust mist cartridge or prefilter in addition may be needed to control exposure to mist. Supplied air respirator (SCBA) is required at exposure levels above the capabilities of chemical cartridge respirator.

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**Skin Protection:** PVA supported polyvinyl alcohol, nitrile or viton gloves are recommended. Natural rubber or butyl rubber gloves should not be worn.

**Eye Protection:** At minimum, safety glasses with side shields should be worn where exposure to excessive dust or spray is likely. Wear goggles to prevent exposure to high vapor concentrations.

**Work/Hygienic Practices:** Use good personal hygiene practices.

You and your personnel must completely understand the fire and explosion hazards before using flammable liquid based products. To avoid skin contact, wear recommended gloves (see skin protection recommendation) and wash with soap and water after handling. Promptly cleanse with waterless hand cleaner, clean fingernails and wash with soap and water after handling. All employees working with this product must exercise good and prudent personal hygiene practices.

Avoid rubbing eyes while handling.

### **SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical State:</b>	Liquid
<b>Appearance/Odor:</b>	Liquid with aromatic solvent odor.
<b>Odor Threshold:</b> (ppm)	Xylene 1.1 PPM
<b>pH:</b>	Not Available
<b>Vapor Pressure:</b> (Mm Hg)	143 mmHg @ 68°F
<b>Vapor Density:</b> (Air = 1)	Heavier than air
<b>Solubility In Water:</b>	Unknown
<b>Specific Gravity:</b> (Water = 1)	Not Available
<b>Evaporation Rate:</b> (Butyl Acetate = 1)	Unknown
<b>Boiling Point:</b>	308°F – 335°F
<b>Viscosity:</b>	Unknown
<b>Bulk Density:</b> (Pounds/Cubic Foot)(Pcf)	Not Applicable
<b>% Volatiles:</b> (70°F) (21°C)	Not Available

### **SECTION 10 - STABILITY AND REACTIVITY**

<b>Chemical Stability:</b>	Stable
<b>Conditions To Avoid:</b>	Heat, Sparks, Open flames, Oxidizing materials, Strong acids, rubber and plastics.
<b>Hazardous Polymerization:</b>	Will not polymerize.
<b>Hazardous Decomposition Products:</b>	Carbon dioxide and Carbon monoxide.

### **SECTION 11 - TOXICOLOGICAL INFORMATION**

**Ingredient(No data unless listed.)**                      **CAS Number**                      **LD50 and LC50**

**Carcinogenicity:**

Ethyl benzene	000100-41-4	Oral LD50 Rat : 3500 mg/kg Dermal LD50 Rabbit : 17800 uL/kg
Xylenes (o-, m-, p- isomers)	001330-20-7	Inhalation LC50 Rat : 5000 ppm/4H Oral LD50 Rat : 4300 mg/kg;

Ingredient	IARC Group 1	IARC Group 2A	IARC Group 2B	NTP Known	NTP Suspect	OSHA
Distillates, petroleum, steam-cracked, polymers with light	No	No	No	No	No	No
Stoddard solvent	No	No	No	No	No	No
tert-Butyl acetate	No	No	No	No	No	No
Xylenes (o-, m-, p- isomers)	No	No	No	No	No	No
Ethyl benzene	No	No	Yes	No	No	No

**Mutagenicity:** Ethyl benzene contained in this product has produced mutagenic effects based on animal studies.

**Teratogenicity:** Not applicable.

**Reproductive Toxicity:** Not applicable.

### **SECTION 12 - ECOLOGICAL INFORMATION**

**Environmental Fate:** No data available for product.

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**Ecotoxicity:**

No data available for product.



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**SECTION 13 - DISPOSAL CONSIDERATIONS**

**Waste Disposal Procedures:** Consult all regulations (federal, state, provincial, local) or a qualified waste disposal firm when characterizing waste for disposal. Waste/rejected product consisting of unused liquid product in sealed containers is a EPA Hazardous Waste #D001 (due to its ignitability). Dispose of all waste at a disposal facility as permitted by applicable government regulations. Dried waste and waste absorbed in a noncombustible media would not be hazardous if no longer combustible. Because of the Xylene content (CAS# 1330-20-7) this product is considered a hazardous substance under the U.S. EPA Clean Water Act. Spills of this product must be reported to the national Response Center at 1-800-424-8802. Spill reporting requirements and reportable quantities vary by region. In case of any spill or release, consult all applicable state and local regulations. Observing all precautions noted above, absorb spilled product with an inert noncombustible material and remove for disposal. Remove all sources of ignition. Do not use metal shovels or other tools which could create sparks.

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**SECTION 14 - TRANSPORTATION INFORMATION**

<b>Proper Shipping Name:</b>	Hydrocarbon liquid; NOS (Xylene, Stoddard Solvent)
<b>UN/NA Number:</b>	3295
<b>Domestic Hazard Class:</b>	3
<b>Surface Freight Classification:</b>	Not Applicable
<b>Label/Placard Required:</b>	Flammable Liquid

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**SECTION 15 - REGULATORY INFORMATION**

**REGULATORY CHEMICAL LISTS:**

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**CERCLA (Comprehensive Response Compensation and Liability Act):**  
**(None present unless listed below)**

<b><u>Chemical Name</u></b>	<b><u>CAS #</u></b>	<b><u>Wt %</u></b>	<b><u>CERCLA RQ</u></b>
tert-Butyl acetate	000540-88-5	25%	5000 lb final RQ (Listed under 'Butyl acetate'); 2270 kg final RQ (Listed under 'Butyl acetate')
Xylenes (o-, m-, p- isomers)	001330-20-7	12	100 lb final RQ; 45.4 kg final RQ
Ethyl benzene	000100-41-4	3	Final RQ = 100 pounds (45.4 kg)

**SARA Title III (Superfund Amendments and Reauthorization Act)**

**SARA Section 312/Tier I & II Hazard Categories:**

Health Immediate (acute)	Yes
Health Delayed (chronic)	Yes
Flammable	Yes
Reactive	No
Pressure	No

**302 Reportable Ingredients (Identification Threshold 1%):**

<b><u>Chemical Name</u></b>	<b><u>CAS #</u></b>	<b><u>Wt %</u></b>	<b><u>SARA 302 TPQ</u></b>
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**313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):**

<b><u>Chemical Name</u></b>	<b><u>CAS #</u></b>	<b><u>Wt %</u></b>
tert-Butyl alcohol	000075-65-0	.25
Xylenes (o-, m-, p- isomers)	001330-20-7	12
Ethyl benzene	000100-41-4	3

**National Volatile Organic Compound Emission Standards For Architectural Coatings:**

**Volatile Organic Content:** (gr/L) 192 gr/L

**WHMIS Classification(s):** D2 A

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR). This MSDS contains all the information required by the CPR.

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Product Name: Bituthene Adhesive Primer B2 LVC

MSDS ID Number: M-85883

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**State Regulatory Information:**

**California Proposition 65:** WARNING! This product contains substances known to the state of California to cause cancer, birth defects or other reproductive harm.

**Massachusetts Hazardous Substance List(Identification threshold 0.0001%(1ppm)):**

<b><u>Chemical Name</u></b>	<b><u>CAS #</u></b>	<b><u>Wt %</u></b>
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**New Jersey Hazardous Substance List(Identification threshold (0.1%)):**

<b><u>Chemical Name</u></b>	<b><u>CAS #</u></b>	<b><u>Wt %</u></b>
tert-Butyl alcohol	000075-65-0	.25
Xylenes (o-, m-, p- isomers)	001330-20-7	12
Ethyl benzene	000100-41-4	3

**Pennsylvania Hazardous Substance List(Identification threshold 0.01%):**

<b><u>Chemical Name</u></b>	<b><u>CAS #</u></b>	<b><u>Wt %</u></b>
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**CHEMICAL INVENTORY STATUS:**

All chemicals in this product are listed or exempt from listing in the following countries:

US	CANADA		EUROPE	AUSTRALIA	JAPAN	KOREA	PHILIPPINES
TSCA	DSL	NDSL	EINECS/ELINCS	AICS	ENCS	ECL	PICCS
Yes	Yes	No	No	Yes	No	Yes	Yes

**SECTION 16 - OTHER INFORMATION**

**Non-Hazardous Ingredient Disclosure:**

<b><u>Chemical Name</u></b>	<b><u>CAS Number</u></b>
Prepared by:	EH&S Department
Approved by:	EH&S Department
Approved Date:	08/23/2011

**Disclaimer:**

"The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection."

## Safety Data Sheet

Printing date 03/25/2015

Version Number 1.0

Reviewed on 03/25/2015

**1 Identification****Product identifier****Trade name:** *Bituthene Liquid Membrane Part A***SDS ID Number:** 60025**Relevant identified uses of the substance or mixture and uses advised against**  
Specialty construction product. Not intended for other uses**Details of the supplier of the safety data sheet****Manufacturer/Supplier:**W.R. Grace & Co. -Conn.  
62 Whittemore Avenue  
Cambridge, MA 02140 USAGrace Canada, Inc.  
294 Clements Road W.  
Ajax, Ontario L1S 3C6 Canada**Information department:**Environmental Health & Safety  
USA: +1-617-876-1400 (24 hours)  
+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts  
CAN: 1-905-683-8561 (24 hours)**Transport Emergency:** Chemtrec +1-800-424-9300 (24 hours)**2 Composition/information on ingredients****Chemical characterization: Mixtures****Description:** Mixture of the substances listed below with additional nonhazardous ingredients.**Hazardous components:**

8052-42-4	Asphalt	20-25%
64742-04-7	Extracts (petroleum), heavy paraffinic distillate solvent	10-20%
	Polycyclic Aromatic Hydrocarbons	0.1-1.0%

**Additional information:** For the wording of the listed risk phrases refer to section 16.**3 Hazard(s) identification****Classification of the substance or mixture**

May cause cancer.

**GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).**Hazard pictograms**

GHS08

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## Safety Data Sheet

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Trade name: *Bituthene Liquid Membrane Part A*

(Cont. from page 1)

Danger

**Hazard-determining components of labeling:**

Asphalt

Extracts (petroleum), heavy paraffinic distillate solvent

Polycyclic Aromatic Hydrocarbons

**Precautionary statements**

Wear protective gloves/protective clothing/eye protection/face protection.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

IF exposed or concerned: Get medical advice/attention.

Dispose of contents/container in accordance with local/regional/national/international regulations.

**Additional information:** Avoid breathing dust.**Hazard description:** Harmful**NFPA ratings (scale 0 - 4)**

Health = 2

Fire = 1

Reactivity = 1

**HMIS-ratings (scale 0 - 4)**

Health = \*2

Flammability = 1

Reactivity = 1

**Other hazards** Contact with residue from adhesive may cause eye and skin irritation.**4 First-aid measures****General information:** Get medical advice/attention if you feel unwell.**After inhalation:**

If symptoms develop, supply fresh air. If required, provide artificial respiration and seek immediate medical treatment.

**After skin contact:**

Immediately wash contaminated skin with soap or mild detergent and water. If this chemical soaks clothing, immediately remove clothing and wash skin.

If residue remains, clean with waterless handcream or abrasive soap. Never use solvents.

**After eye contact:**

If contact with residue causes eye irritation, flush eyes with water for at least 15 minutes while holding eyelids open.

Rinse cautiously with water for several minutes.

**After swallowing:** Do not induce vomiting; immediately call for medical help.**5 Fire-fighting measures****Suitable extinguishing agents:**CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fire with alcohol resistant foam.**Special hazards arising from the substance or mixture** No further relevant information available.

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Trade name: *Bituthene Liquid Membrane Part A*

(Cont. from page 2)

**Additional information**

Cool endangered receptacles with water spray.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

**6 Accidental release measures****Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

**Environmental precautions:** Do not allow product to reach sewage system or any water course.**Methods and material for containment and cleaning up:**

Contain and/or absorb spill with inert material (i.e. sand, vermiculite) then place in a suitable container.

Sweep up spilled product into receptacles.

Pick up mechanically.

Dispose contaminated material as waste according to section 13 of the SDS.

**Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

**7 Handling and storage****Handling:****Precautions for safe handling**

Prevent formation of aerosols.

Avoid eye and skin contact with residue from adhesive.

To avoid skin contact, use gloves. Clean hands after contact with adhesive residue.

**Information about protection against explosions and fires:** Keep respiratory protective device available.**Storage:****Information about storage in one common storage facility:** Keep respiratory protective device available.**Further information about storage conditions:**

-

**Specific end use(s)** No further relevant information available.**8 Exposure controls/personal protection****Additional information about design of technical systems:** No further data; see item 7.**Components with limit values that require monitoring at the workplace:****69012-64-2 Silica, fume**

TLV (USA) | TLV withdrawn

(Cont. on page 4)

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Trade name: *Bituthene Liquid Membrane Part A*

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**8052-42-4 Asphalt**

REL (USA)	Ceiling limit value: 5* mg/m <sup>3</sup> *15-min; See Pocket Guide App. A
TLV (USA)	Long-term value: 0.5* mg/m <sup>3</sup> *inh. fraction; as benzene-soluble aerosol; BEIp

**Ingredients with biological limit values:****8052-42-4 Asphalt**

BEI (USA)	- Medium: urine Time: end of shift at end of workweek Parameter: 1-Hydroxypyrene with hydrolysis (nonquantitative)
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**Polycyclic Aromatic Hydrocarbons**

BEI (USA)	Medium: urine Time: end of shift at end of workweek Parameter: 1-Hydroxypyrene with hydrolysis (nonquantitative)
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**Additional information:** The lists that were valid during the creation were used as basis.

**Personal protective equipment:****General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

Store protective clothing separately.

**Breathing equipment:**

A chemical cartridge respirator with organic vapor cartridge is required. A dust/mist cartridge or prefilter may be needed in addition to control exposure to mist. Supplied air respirator (SCBA) is required at exposure levels above the capabilities of a chemical cartridge respirator.

Respiratory protection is not normally required. If exposures exceed PELs use a NIOSH approved organic vapor respirator.

**Protection of hands:**

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

**Material of gloves**

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

**Eye protection:**

Safety glasses with side shield protection.



A face shield should also be worn if there is potential exposure to splash or spray.

**Body protection:**

Use personal protective equipment as required.

Take off contaminated clothing and wash before reuse.

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(Cont. on page 5)

## Safety Data Sheet

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Reviewed on 03/25/2015

Trade name: *Bituthene Liquid Membrane Part A*

(Cont. from page 4)

## \* 9 Physical and chemical properties

**General Information****Appearance:**

<b>Form:</b>	Liquid
<b>Color:</b>	According to product specification
<b>Odor:</b>	Characteristic
<b>Odour threshold:</b>	Not determined.

**pH-value (~):** Not determined.

**Change in condition**

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	Undetermined.
<b>Flash point:</b>	200 °C (392 °F)

**Flammability (solid, gaseous):** Not applicable.

**Decomposition temperature:** Not determined.

**Auto igniting:** Product is not selfigniting.

**Danger of explosion:** Product does not present an explosion hazard.

**Explosion limits:**

<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
<b>VOC Content (max):</b>	Not determined.

**Vapor pressure:** Not determined.

**Density: (~) at 20 °C (68 °F)** 1.1 g/cm<sup>3</sup> (9.18 lbs/gal)

**Relative density** Not determined.

**Vapour density** Not determined.

**Evaporation rate** Not determined.

**Solubility in / Miscibility with**

<b>Water:</b>	Not miscible or difficult to mix. Not miscible or difficult to mix.
---------------	--

**Partition coefficient (n-octanol/water):** Not determined.

**Viscosity:**

<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.

**Molecular weight** Not applicable.

**Other information**

No further relevant information available.

## 10 Stability and reactivity

**Thermal decomposition:** No decomposition if used according to specifications.

**Incompatible materials:** No further relevant information available.

**Hazardous decomposition products:**

Carbon monoxide and carbon dioxide

Other potentially hazardous products may also be formed.

**Additional information:** See section 7 for information on handling, storage and conditions to be avoided.

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(Cont. on page 6)

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Trade name: *Bituthene Liquid Membrane Part A*

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**11 Toxicological information****Acute toxicity:****Primary irritant effect:****on the skin:** No irritant effect.**on the eye:** No irritating effect.**Additional toxicological information:** Carcinogenic.**Carcinogenic categories****IARC (International Agency for Research on Cancer) Human Carcinogenicity:**  
**Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable**

69012-64-2	Silica, fume	3
8052-42-4	Asphalt	2B
64742-04-7	Extracts (petroleum), heavy paraffinic distillate solvent	1
	Polycyclic Aromatic Hydrocarbons	2A

**NTP (National Toxicology Program)****K–Known to be carcinogenic, R–May reasonably be anticipated to be carcinogenic**

None of the ingredients is listed.

**OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

**12 Ecological information****Aquatic toxicity:****64742-04-7 Extracts (petroleum), heavy paraffinic distillate solvent**

LC/EC/IC50 (static) 18.8 mg/l (algae) (OECD guideline 201)

**Persistence and degradability** No further relevant information available.**Behavior in environmental systems:****Bioaccumulative potential** No further relevant information available.**Additional ecological information:****General notes:** Not known to be hazardous to water.**13 Disposal considerations****Waste treatment methods** Comply with Federal, State and local regulations.**Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

(Cont. on page 7)

USGHS



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Trade name: *Bituthene Liquid Membrane Part A*

(Cont. from page 6)

**Uncleaned packagings:****Recommendation:** Disposal must be made according to official regulations.**14 Transport information****UN-Number**

DOT, ADR, ADN, IMDG, IATA Not applicable.

**UN proper shipping name**

DOT, ADR, ADN, IMDG, IATA Not applicable.

**Transport hazard class(es)**

DOT, ADR, ADN, IMDG, IATA

Class Not applicable.

**Packing group**

DOT, ADR, IMDG, IATA Not applicable.

**Environmental hazards:**

Marine pollutant: No

**Special precautions for user** Not applicable.**Transport/Additional information:****DOT****Remarks:** Not Regulated.**UN "Model Regulation":** -**15 Regulatory information****SARA (Superfund Amendments and Reauthorization Act)****Section 302/304 (extremely hazardous substances):**

None of the ingredients is listed.

**Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):**

None of the ingredients is listed.

**SARA Section 312/Tier I & II Hazard Categories:**

Health Immediate (acute)	Yes
Health Delayed (chronic)	Yes
Flammable	No
Reactive	No
Pressure	No

**North America Chemical Inventory Status****TSCA (Toxic Substances Control Act - United States):**

All ingredients are listed or exempt from listing unless otherwise noted below.

**CEPA (Canadian DSL):**

All ingredients are listed or exempt from listing unless otherwise noted below.

**Right to Know Ingredient Disclosure**

69012-64-2	Silica, fume
69102-90-5	1,3-Butadiene, homopolymer, hydroxy-terminated
25791-96-2	Poly[oxy(methyl-1,2-ethanediyl)], .alpha.,.alpha.',.alpha."-1,2,3-propanetriyltris[.omega.-hydroxy-

(Cont. on page 8)

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## Safety Data Sheet

Printing date 03/25/2015

Version Number 1.0

Reviewed on 03/25/2015

Trade name: *Bituthene Liquid Membrane Part A*

(Cont. from page 7)

8001-78-3 Castor oil, hydrogenated

1332-58-7 Natural aluminosilicate (Kaolin)

**California Proposition 65****Chemicals known to cause cancer:**

Extracts (petroleum), heavy paraffinic distillate solvent

Polycyclic Aromatic Hydrocarbons

Quartz (SiO<sub>2</sub>)

4-vinylcyclohexene

1,3-Butadiene

**Chemicals known to cause reproductive toxicity for females:**

100-40-3 4-vinylcyclohexene

106-99-0 1,3-Butadiene

**Chemicals known to cause reproductive toxicity for males:**

106-99-0 1,3-Butadiene

**Chemicals known to cause developmental toxicity:**

106-99-0 1,3-Butadiene

**Carcinogenicity Categories****EPA (Environmental Protection Agency)**

None of the ingredients is listed.

**TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)****Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable**

Asphalt

A4

Natural aluminosilicate (Kaolin)

A4

**NIOSH-Cancer (National Institute for Occupational Safety and Health)**

8052-42-4 Asphalt

**Volatile Organic Compounds (VOC) reported per the Emission Standards.** (gr/L) 10 gr/L (as applied)**Information about limitation of use:**

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation.

Exceptions can be made by the authorities in certain cases.

**16 Other information**

"The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection."

**Department issuing SDS:****Other Information:**

There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis. Therefore preventing the onset of silicosis will also reduce the cancer risk.

**Date of preparation / last revision** 03/25/2015 / -**The first date of preparation** 03/03/2015**Number of revision times and the latest revision date** 1.0 / 03/25/2015

USGHS

## Safety Data Sheet

Printing date 03/09/2015

Version Number 1.2

Reviewed on 03/09/2015

**1 Identification****Product identifier**Trade name: *Bituthene Liquid Membrane & Deck Prep Part B*

SDS ID Number: 583

Relevant identified uses of the substance or mixture and uses advised against  
Specialty construction product. Not intended for other uses**Details of the supplier of the safety data sheet****Manufacturer/Supplier:**W.R. Grace & Co. -Conn.  
62 Whittemore Avenue  
Cambridge, MA 02140 USAGrace Canada, Inc.  
294 Clements Road W.  
Ajax, Ontario L1S 3C6 Canada**Information department:**Environmental Health & Safety  
USA: +1-617-876-1400 (24 hours)  
+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts  
CAN: 1-905-683-8561 (24 hours)**Transport Emergency:** Chemtrec +1-800-424-9300 (24 hours)**2 Composition/information on ingredients****Chemical characterization: Mixtures****Description:** Mixture of the substances listed below with additional nonhazardous ingredients.**Hazardous components:**

26447-40-5	Methylenediphenyl diisocyanate, mixture of isomers	30-50%
101-68-8	Diphenylmethane-4,4'-di-isocyanate	30-50%
61788-32-7	Terphenyl plasticiser, hydrogenated	10-20%
78-40-0	Triethylphosphate	1.0-2.0%

**Additional information:** For the wording of the listed risk phrases refer to section 16.**3 Hazard(s) identification****Classification of the substance or mixture**

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause damage to organs through prolonged or repeated exposure.

Harmful if inhaled.

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

May cause respiratory irritation.

(Cont. on page 2)

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## Safety Data Sheet

Printing date 03/09/2015

Version Number 1.2

Reviewed on 03/09/2015

Trade name: *Bituthene Liquid Membrane & Deck Prep Part B*

(Cont. from page 1)

**GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).**Hazard pictograms**

GHS07 GHS08

Danger

**Hazard-determining components of labeling:**

Methylenediphenyl diisocyanate, mixture of isomers

Diphenylmethane-4,4'-di-isocyanate

**Precautionary statements**

Wear respiratory protection.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If on skin: Wash with plenty of water.

If eye irritation persists: Get medical advice/attention.

If skin irritation or rash occurs: Get medical advice/attention.

If experiencing respiratory symptoms: Call a poison center/doctor.

**NFPA ratings (scale 0 - 4)**

Health = 1

Fire = 1

Reactivity = 1

**HMIS-ratings (scale 0 - 4)**

Health = \*2

Flammability = 1

Reactivity = 1

**4 First-aid measures****General information:** Get medical advice/attention if you feel unwell.**After skin contact:**

Immediately wash contaminated skin with soap or mild detergent and water. If this chemical soaks clothing, immediately remove clothing and wash skin.

**After eye contact:**

Rinse opened eye for several minutes under running water.

Rinse cautiously with water for several minutes.

Seek immediate medical advice.

**After swallowing:**

Wash out mouth with water

Rinse mouth.

Do not induce vomiting; immediately call for medical help.

(Cont. on page 3)

USGHS

## Safety Data Sheet

Printing date 03/09/2015

Version Number 1.2

Reviewed on 03/09/2015

Trade name: *Bituthene Liquid Membrane & Deck Prep Part B*

(Cont. from page 2)

Never give anything by mouth to an unconscious person.

**5 Fire-fighting measures****Special hazards arising from the substance or mixture** No further relevant information available.**Protective equipment:**

Wear self-contained breathing apparatus and complete personal protective equipment when potential for exposure to vapors or products of combustion exist. Water may be used to cool containers to prevent pressure build-up and possible auto-ignition or explosion. Avoid breathing hazardous vapors or products of combustion, keep upwind. Isolate area and keep unnecessary people away. Prevent run-off from fire control or dilution from entering streams or drinking water supplies.

**Additional information**

Cool endangered receptacles with water spray.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

**6 Accidental release measures****Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

**Methods and material for containment and cleaning up:**

Contain and/or absorb spill with inert material (i.e. sand, vermiculite) then place in a suitable container.

Sweep up spilled product into receptacles.

Dispose contaminated material as waste according to section 13 of the SDS.

**Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

**7 Handling and storage****Handling:****Precautions for safe handling**

Open and handle receptacle with care.

Prevent formation of aerosols.

Avoid contact with skin.

Avoid contact with eyes.

**Information about protection against explosions and fires:** No special measures required.**Storage:****Information about storage in one common storage facility:** No special measures required.**Further information about storage conditions:** Keep receptacle tightly sealed.

(Cont. on page 4)

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## Safety Data Sheet

Printing date 03/09/2015

Version Number 1.2

Reviewed on 03/09/2015

Trade name: *Bituthene Liquid Membrane & Deck Prep Part B*

(Cont. from page 3)

Specific end use(s) No further relevant information available.

**8 Exposure controls/personal protection****Additional information about design of technical systems:** No further data; see item 7.**Components with limit values that require monitoring at the workplace:****101-68-8 Diphenylmethane-4,4'-di-isocyanate**

PEL (USA)	Ceiling limit value: 0.2 mg/m <sup>3</sup> , 0.02 ppm
REL (USA)	Long-term value: 0.05 mg/m <sup>3</sup> , 0.005 ppm Ceiling limit value: 0.2* mg/m <sup>3</sup> , 0.02* ppm *10-min
TLV (USA)	Long-term value: 0.051 mg/m <sup>3</sup> , 0.005 ppm

**61788-32-7 Terphenyl plasticiser, hydrogenated**

REL (USA)	Long-term value: 5 mg/m <sup>3</sup> , 0.5 ppm
TLV (USA)	Long-term value: 4.9 mg/m <sup>3</sup> , 0.5 ppm nonirradiated

**78-40-0 Triethylphosphate**

WEEL (USA)	Long-term value: 7.45 mg/m <sup>3</sup>
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**Additional information:** The lists that were valid during the creation were used as basis.**Personal protective equipment:****General protective and hygienic measures:**

Avoid contact with the eyes and skin.

The usual precautionary measures for handling chemicals should be followed.

**Breathing equipment:**

MDI contained in mixed A and B components, has a very low vapor pressure and is not likely to exceed the permissible exposure limit (PEL) in unconfined spaces. Therefore, respiratory protection is not normally required in well ventilated areas except for individuals who are hypersensitive to isocyanates. It should also be noted that although chemical cartridge respirators may provide protection against isocyanate exposure, they are not approved for such use by NIOSH. This is because MDI has poor warning properties. (The level at which it can be detected by odor is significantly above the PEL.) In confined areas, indoors or where there is inadequate ventilation, supplied air (NIOSH Type TC-19C-XXX) or self-contained breathing apparatus (NIOSH Type TC-13F-XXX) may be required. A chemical cartridge respirator with organic vapor cartridge is required. A dust/mist cartridge or prefilter may be needed in addition to control exposure to mist. Supplied air respirator (SCBA) is required at exposure levels above the capabilities of a chemical cartridge respirator.

**Protection of hands:**

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

**Material of gloves**

The following glove materials are acceptable: Nitrile or Butyl rubber gloves should be worn to protect against MDI and oils contained in the mixed A and B components.

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

**Eye protection:**

Safety glasses with side shield protection.

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## Safety Data Sheet

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Reviewed on 03/09/2015

Trade name: *Bituthene Liquid Membrane & Deck Prep Part B*

(Cont. from page 4)

Safety glasses with side shields should be worn to prevent contact due to splashing. Under high vapor mist concentrations, tightly sealed goggles should be worn.



A face shield should also be worn if there is potential exposure to splash or spray.

**Body protection:**

Protective work clothing

Use personal protective equipment as required.

Take off contaminated clothing and wash before reuse.

## 9 Physical and chemical properties

**General Information****Appearance:**

<b>Form:</b>	Liquid
<b>Color:</b>	According to product specification
<b>Odor:</b>	Characteristic
<b>Odour threshold:</b>	Not determined.

**pH-value (~):** Not determined.

**Change in condition**

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	Not determined.
<b>Flash point:</b>	212 °C (414 °F)

**Flammability (solid, gaseous):** Not applicable.

**Decomposition temperature:** Not determined.

**Auto igniting:** Product is not selfigniting.

**Danger of explosion:** Product does not present an explosion hazard.

**Explosion limits:**

<b>Lower:</b>	0.4 Vol %
<b>Upper:</b>	Not determined.
<b>VOC Content (max):</b>	Not determined.

**Vapor pressure:** Not determined.

**Density: (~)** Not determined.

**Relative density** Not determined.

**Vapour density** Not determined.

**Evaporation rate** Not determined.

**Solubility in / Miscibility with**

<b>Water:</b>	Not miscible or difficult to mix. Not miscible or difficult to mix.
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**Partition coefficient (n-octanol/water):** Not determined.

**Viscosity:**

**Dynamic:** Not determined.

**Kinematic:** Not determined.

**Molecular weight** Not applicable.

(Cont. on page 6)

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## Safety Data Sheet

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Trade name: *Bituthene Liquid Membrane & Deck Prep Part B*

(Cont. from page 5)

## Other information

These are typical values and do not constitute a specification.

## \* 10 Stability and reactivity

**Thermal decomposition:** No decomposition if used according to specifications.**Incompatible materials:** Water and bases.**Hazardous decomposition products:**

Carbon monoxide and carbon dioxide

(possible HCN)

Other potentially hazardous products may also be formed.

**Additional information:** See section 7 for information on handling, storage and conditions to be avoided.

## \* 11 Toxicological information

**Acute toxicity:****LD/LC50 values relevant for classification:****101-68-8 Diphenylmethane-4,4'-di-isocyanate**

Oral	LD50	> 10000 mg/kg (rat)
Dermal	LD50	> 9400 mg/kg (rabbit)
Inhalative	LC50, 4h	0.49 mg/l (rat)

**Primary irritant effect:****on the skin:** Causes skin irritation.**on the eye:** Causes serious eye irritation.**inhalation:** May cause respiratory irritation.**Sensitization:**

Sensitization possible through inhalation.

Sensitization possible through skin contact.

**Additional toxicological information:****Carcinogenic categories****IARC (International Agency for Research on Cancer) Human Carcinogenicity:****Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable**

101-68-8 | Diphenylmethane-4,4'-di-isocyanate

3

**NTP (National Toxicology Program)****K–Known to be carcinogenic, R–May reasonably be anticipated to be carcinogenic**

None of the ingredients is listed.

**OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

## \* 12 Ecological information

**Aquatic toxicity:** No further relevant information available.

(Cont. on page 7)

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## Safety Data Sheet

Printing date 03/09/2015

Version Number 1.2

Reviewed on 03/09/2015

Trade name: *Bituthene Liquid Membrane & Deck Prep Part B*

(Cont. from page 6)

**Persistence and degradability** No further relevant information available.**Behavior in environmental systems:****Bioaccumulative potential** No further relevant information available.**Additional ecological information:****General notes:**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

**13 Disposal considerations****Waste treatment methods** Comply with Federal, State and local regulations.**Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packagings:****Recommendation:** Disposal must be made according to official regulations.**14 Transport information****UN-Number**

DOT, ADR, ADN, IMDG, IATA Not applicable.

**UN proper shipping name**

DOT, ADR, ADN, IMDG, IATA Not applicable.

**Transport hazard class(es)**

DOT, ADR, IMDG, IATA

Class Not applicable.

ADN

ADN/R Class: Not applicable.

**Packing group**

DOT, ADR, IMDG, IATA Not applicable.

**Environmental hazards:**

Marine pollutant: No

**Special precautions for user** Not applicable.**Transport/Additional information:**

DOT

Remarks: Not Regulated.

(Cont. on page 8)

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## Safety Data Sheet

Printing date 03/09/2015

Version Number 1.2

Reviewed on 03/09/2015

Trade name: *Bituthene Liquid Membrane & Deck Prep Part B*

(Cont. from page 7)

UN "Model Regulation": -

## \* 15 Regulatory information

## SARA (Superfund Amendments and Reauthorization Act)

## Section 302/304 (extremely hazardous substances):

None of the ingredients is listed.

## Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):

101-68-8	Diphenylmethane-4,4'-di-isocyanate	30.9%
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## SARA Section 312/Tier I &amp; II Hazard Categories:

Health Immediate (acute)	Yes
Health Delayed (chronic)	Yes
Flammable	No
Reactive	No
Pressure	No

## North America Chemical Inventory Status

## TSCA (Toxic Substances Control Act - United States):

All ingredients are listed or exempt from listing unless otherwise noted below.

## CEPA (Canadian DSL):

All ingredients are listed or exempt from listing unless otherwise noted below.

## Right to Know Ingredient Disclosure

26447-40-5	Methylenediphenyl diisocyanate, mixture of isomers
101-68-8	Diphenylmethane-4,4'-di-isocyanate
61788-32-7	Terphenyl plasticiser, hydrogenated
39310-05-9	Methylenebis(isocyanatobenzene) polymer
68956-74-1	Quaterphenyls

## California Proposition 65

## Chemicals known to cause cancer:

None of the ingredients is listed.

## Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

## Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

## Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

## Carcinogenicity Categories

## EPA (Environmental Protection Agency)

101-68-8	Diphenylmethane-4,4'-di-isocyanate	D, CBD
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## TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)

## Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable

None of the ingredients is listed.

## NIOSH-Cancer (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

(Cont. on page 9)

USGHS

## Safety Data Sheet

Printing date 03/09/2015

Version Number 1.2

Reviewed on 03/09/2015

**Trade name: *Bituthene Liquid Membrane & Deck Prep Part B***

(Cont. from page 8)

**Volatile Organic Compounds (VOC) reported per the Emission Standards for Architectural Coatings:**  
(gr/L) 10 gr/L (as applied)

\*

**16 Other information**

"The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection."

**Date of preparation / last revision** 03/09/2015 / 1.1**The first date of preparation** 08/03/2006**Number of revision times and the latest revision date** 1.2 / 03/09/2015

USGHS

**W. R. GRACE**  
**MATERIAL SAFETY DATA SHEET**

Product Name: Bituthene Deck Prep Part A

MSDS ID Number: M-85823

MSDS Date: 03/03/2009

**SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**Product Name:** Bituthene Deck Prep Part A  
**MSDS Number:** M-85823  
**Cancelled MSDS Number:** M-85794  
**MSDS Date:** 03/03/2009  
**Chemical Family Name:** Rubberized Asphalt/Aromatic Isocyanate Polyol Liquid  
Waterproofing Membrane  
**Product Use:** Waterproofing Products  
**Chemical Formula:** Mixture-NA  
**CAS # (Chemical Abstracts Service Number):** Mixture-NA

**Manufactured by:**

W.R.Grace & Co.-Conn.  
62 Whittemore Avenue  
Cambridge, MA 02140

Grace Canada, Inc.  
294 Clements Road West  
Ajax, Ontario L1S 3C6

**In Case of Emergency Call:**

In USA: (617) 876-1400 In Canada: (905) 683-8561

**SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS**

<b>Ingredient</b>	<b>CAS#</b>	<b>Percent (max)</b>
1,3-Butadiene, homopolymer, hydroxy-terminated	069102-90-5	10-25
Castor Oil, hydrogenated	008001-78-3	1-10
Heavy Paraffinic Distillate Solvent Extract	064742-04-7	10-25
Petroleum Asphalt	008052-42-4	10-25
Poly(oxypropylene) triol	025791-96-2	1-10

**SECTION 3 - HAZARDS IDENTIFICATION**

**Emergency Overview:**

**Warning!**

Causes severe eye irritation.  
Causes skin irritation.  
May cause severe respiratory tract irritation.  
Causes digestive tract irritation if ingested.  
May be harmful if absorbed through skin.  
May cause liver damage and blood effects, based on animal studies.  
May cause teratogenic effects.  
May produce local skin tumors.  
Mixed A and B components contain MDI which is respiratory and skin sensitizer.

**HMIS Rating:**

Health: 2\*  
Flammability: 1  
Reactivity: 1  
Personal Protective Equipment: B (See section 8)

**Potential Health Effects:**

**Inhalation:** May cause respiratory tract irritation.  
Prolonged inhalation may cause sensitization.  
Effects include: Nausea, headache, dizziness, irritation bronchitis, pulmonary edema (fluid in the lungs) and reduced lung function.  
**Eye Contact:** Eye contact can cause severe irritation.  
Prolonged eye contact can result in redness and itching.  
**Skin Contact:** Skin contact causes irritation.  
Prolonged skin contact can result in irritation causing redness and itching.

**W. R. GRACE**  
**MATERIAL SAFETY DATA SHEET**

Product Name: Bituthene Deck Prep Part A

MSDS ID Number: M-85823

MSDS Date: 03/03/2009

Petroleum oils in this product, have caused serious toxic effects including skin cancer, liver damage, blood effects and effects on the unborn based on tests with laboratory animals. These effects are not likely to occur in humans if good personal hygiene practices are used.

Effects include: redness, swelling, rash scaling or blistering.

**Skin Absorption:** Product can be absorbed through skin upon prolonged contact resulting in systemic effects such as nausea, headache, and general discomfort.

**Ingestion:** Single dose oral toxicity is believed to be low.

If ingested, causes irritation to the linings of the mouth, esophagus and stomach.

Effects include: Nausea, vomiting, diarrhea, sneezing coughing, labored breathing and burns.

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**SECTION 4 - FIRST AID MEASURES:**

**Skin Contact:** In case of skin contact, clean fingernails and wash skin with soap and water. If residue remains, clean with waterless handcream or abrasive soap. Never use solvents.

If discomfort or irritation persists, consult a physician.

Remove contaminated clothing and wash before reuse.

**Eye Contact:** Flush eyes with water for at least 15 minutes while holding eyelids open.

Get immediate medical attention.

**Ingestion:** Do not induce vomiting.

Never give anything by mouth to an unconscious person.

If discomfort or irritation persists, consult a physician.

**Inhalation:** If symptoms develop, get fresh air. If symptoms persist, consult a physician.

If breathing has stopped, give artificial respiration then oxygen if needed.

---

**SECTION 5 - FIRE AND EXPLOSION HAZARD DATA**

**Flash Point:** 200°C/392°F (Estimated)

**Flash Point Method:** Cleveland Open Cup

**Lower Explosion Limit:** Not Available

**Upper Explosion Limit:** Not Available

**Auto-Ignition Temperature:** Not Available

**NFPA Rating:**

**Health:** 2

**Flammability:** 1

**Reactivity:** 1

**Extinguishing Media:** In case of fire, use water spray, dry chemical, Carbon dioxide or foam.

**Special Fire Fighting Procedures:** Wear self-contained breathing apparatus and complete personal protective equipment when potential for exposure to vapors or products of combustion exist. Water may be used to cool containers to prevent pressure build-up and possible auto-ignition or explosion. Avoid breathing hazardous vapors or products of combustion, keep upwind. Isolate area and keep unnecessary people away. Prevent run-off from fire control or dilution from entering streams or drinking water supplies.

**Unusual Fire and Explosion Hazards:** None unless noted below.

---

**SECTION 6 - ACCIDENTAL RELEASE MEASURES:**

**Spills/Leaks:** Use proper personal protective equipment. Do not flush to sewer or allow to enter waterways. Keep unnecessary people away.

Oil spills released directly to waterways may be subject to National Response Center (1-800-424-8802) reporting. Immediately contact your company's environmental coordinator or the Grace Health and safety Department.

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**SECTION 7 - HANDLING AND STORAGE**

**Precautionary Measures:** Avoid contact with eyes, skin and clothing.

Do not take internally.

Practice good personal hygiene to avoid ingestion.

Use only with adequate ventilation.

Wash clothing before reuse.

Do not apply where odors may penetrate living areas.

**W. R. GRACE**  
**MATERIAL SAFETY DATA SHEET**

Product Name: Bituthene Deck Prep Part A

MSDS ID Number: M-85823

MSDS Date: 03/03/2009

To avoid skin contact, use gloves or barrier creams.

Wear work clothes with long sleeves if skin contact is possible.

Promptly cleanse hands with waterless hand cleaner, clean fingernails and wash with soap and water after handling.

Do not use solvents to clean skin.

FOR PROFESSIONAL USE ONLY. KEEP OUT OF CHILDREN'S REACH.

**SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT**

**EXPOSURE GUIDELINES (US)**

Ingredient	ACGIH TLV			OSHA PEL			
	TWA	STEL	Ceiling	TWA	STEL	Ceiling	Substance Specific and Mineral Dust PELs
1,3-Butadiene, homopolymer, hydroxy-terminated	-	-	-	-	-	-	-
Castor Oil, hydrogenated	-	-	-	-	-	-	-
Heavy Paraffinic Distillate Solvent Extract	-	-	-	-	-	-	-
Petroleum Asphalt	0.5 mg/m3 TWA (fume, inhalable fraction, as benzene soluble aerosol)	-	-	-	-	-	-
Poly(oxypropylene) triol	-	-	-	-	-	-	-

**EXPOSURE GUIDELINES (CANADA)**

Employers should consult local Provincial regulatory limits for exposure guidelines which may vary locally.

**Engineering Controls:** Portable ventilation should be used to prevent vapor build up during application in enclosed or depressed areas where natural ventilation may not be adequate. Portable equipment such as a Coppus Vano] portable blower/exhauster should be used in accordance with the manufacturer's instructions.

**Personal Protective Equipment:**

**Respiratory Protection:** MDI contained in mixed A and B components, has a very low vapor pressure and is not likely to exceed the permissible exposure limit (PEL) in unconfined spaces. Therefore, respiratory protection is not normally required in well ventilated areas except for individuals who are hypersensitive to isocyanates.

It should also be noted that although chemical cartridge respirators may provide protection against isocyanate exposure, they are not approved for such use by NIOSH. This is because MDI has poor warning properties. (The level at which it can be detected by odor is significantly above the PEL.)

In confined areas, indoors or where there is inadequate ventilation, supplied air (NIOSH Type TC-19C-XXX) or self-contained breathing apparatus (NIOSH Type TC-13-XXX) may be required.

**Skin Protection:** The following glove materials are acceptable: Nitrile or Butyl rubber gloves should be worn to protect against MDI and oils contained in the mixed A and B components.

**Eye Protection:** At minimum, safety glasses with side shields should be worn where exposure to splashing and high vapor concentrations are likely.

**Work/Hygienic Practices:** Use good personal hygiene practices.

To avoid skin contact, wear recommended gloves (see skin protection recommendation) and wash with soap and water after handling. Intermittent or occasional skin contact with petroleum asphalt is not expected to have serious health effects as long as good personal hygiene measures are taken. Promptly cleanse with waterless hand cleaner, clean fingernails and wash with soap and water after handling. All employees working with this product must exercise good and prudent personal hygiene practices.

**W. R. GRACE**  
**MATERIAL SAFETY DATA SHEET**

Product Name: Bituthene Deck Prep Part A  
MSDS ID Number: M-85823

MSDS Date: 03/03/2009

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical State:</b>	Liquid
<b>Appearance/Odor:</b>	Thick, dark mixture with odor of rubber or petroleum.
<b>Odor Threshold:</b> (ppm)	Methylene Bisphenyl Isocyanate (MDI) = well above PEL
<b>pH:</b>	Unknown
<b>Vapor Pressure:</b> (Mm Hg)	.05
<b>Vapor Density:</b> (Air = 1)	Unknown
<b>Solubility In Water:</b>	Unknown
<b>Specific Gravity:</b> (Water = 1)	~1.1
<b>Evaporation Rate:</b> (Butyl Acetate = 1)	Unknown
<b>Boiling Point:</b>	150°C/302F° (Estimated)
<b>Viscosity:</b>	Unknown
<b>Bulk Density:</b> (Pounds/Cubic Foot)(Pcf)	Not Applicable
<b>% Volatiles (gr/L):</b> (70°F)(21°C)	Negligible

**SECTION 10 - STABILITY AND REACTIVITY**

<b>Chemical Stability:</b>	Stable
<b>Conditions To Avoid:</b>	Heat, Oxidizing materials, strong oxidizers, Strong acids, Organic materials, Water, isocyanates, phosphorus pentoxide, hydrogen fluoride and boric acid.
<b>Hazardous Polymerization:</b>	Will not polymerize.
<b>Hazardous Decomposition Products:</b>	Carbon dioxide, Carbon monoxide, Sulfur oxides and Low molecular weight hydrocarbons.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

<b><u>Ingredient(No data unless listed.)</u></b>	<b><u>CAS Number</u></b>	<b><u>LD50 and LC50</u></b>
Castor oil, hydrogenated	008001-738-3	Oral LD50 Rat: >10 g/kg
Poly(oxypropylene) triol	025791-96-2	Oral LD50 Rat: >64 ml/kg; Dermal LD50 Rabbit: >20 mL/kg

**Carcinogenicity:**

Ingredient	IARC Group 1	IARC Group 2A	IARC Group 2B	NTP Known	NTP Suspect	OSHA
1,3-Butadiene, homopolymer, hydroxy-terminated	No	No	No	No	No	No
Castor oil, hydrogenated	No	No	No	No	No	No
Heavy Paraffinic Distillate Solvent Extract	No	No	No	No	No	No
Petroleum Asphalt	No	No	No	No	No	No
Poly(oxypropylene) triol	No	No	No	No	No	No

Animal tests indicate that prolonged and repeated skin contact with the asphalt in this product may produce local skin tumors.

<b>Mutagenicity:</b>	Not applicable.
<b>Teratogenicity:</b>	Petroleum oils in this product have caused effects on the unborn based on tests with laboratory animals.
<b>Reproductive Toxicity:</b>	Not applicable.

**SECTION 12 - ECOLOGICAL INFORMATION**

<b>Environmental Fate:</b>	No data available for product.
<b>Ecotoxicity:</b>	No data available for product.

**SECTION 13 - DISPOSAL CONSIDERATIONS**

**Waste Disposal Procedures:** Consult all regulations (federal, state, provincial, local) or a qualified waste disposal firm when characterizing waste for disposal. According to EPA (40 CFR § 261), waste of this product is not defined as hazardous. Dispose of waste in accordance with all applicable regulations.

**W. R. GRACE**  
**MATERIAL SAFETY DATA SHEET**

Product Name: Bituthene Deck Prep Part A

MSDS ID Number: M-85823

MSDS Date: 03/03/2009

**SECTION 14 - TRANSPORTATION INFORMATION**

Proper Shipping Name:	Not Applicable
UN/NA Number:	Not Applicable
Domestic Hazard Class:	Nonhazardous
Surface Freight Classification:	Adhesive Cements N.O.I.
Label/Placard Required:	Not Applicable

**SECTION 15 - REGULATORY INFORMATION**

**REGULATORY CHEMICAL LISTS:**

**CERCLA (Comprehensive Response Compensation and Liability Act):**

**(None present unless listed below)**

<u>Chemical Name</u>	<u>CAS #</u>	<u>Wt %</u>	<u>CERCLA RQ</u>
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**SARA Title III (Superfund Amendments and Reauthorization Act)**

**SARA Section 312/Tier I & II Hazard Categories:**

Health Immediate (acute)	Yes
Health Delayed (chronic)	Yes
Flammable	No
Reactive	No
Pressure	No

**302 Reportable Ingredients (Identification Threshold 1%):**

<u>Chemical Name</u>	<u>CAS #</u>	<u>Wt %</u>	<u>SARA 302 TPQ</u>
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**313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):**

<u>Chemical Name</u>	<u>CAS #</u>	<u>Wt %</u>
1,3-Butadiene	000106-99-0	.00011

**National Volatile Organic Compound Emission Standards For Architectural Coatings:**

**Volatile Organic Content:** (gr/L) 10 gr/L (as applied)

**WHMIS Classification(s):** D2 A

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR). This MSDS contains all the information required by the CPR.

**State Regulatory Information:**

**California Proposition 65:** WARNING! This product contains substances known to the state of California to cause cancer, birth defects or other reproductive harm.

**Massachusetts Hazardous Substance List(Identification threshold 0.0001%(1ppm)):**

<u>Chemical Name</u>	<u>CAS #</u>	<u>Wt %</u>
1,3-Butadiene	000106-99-0	.00011
Aromatic Oil	064742-10-5	.6265
Heavy Paraffinic distillate Solvent Extract	064742-04-7	12.53

**New Jersey Hazardous Substance List(Identification threshold (0.1%)):**

<u>Chemical Name</u>	<u>CAS #</u>	<u>Wt %</u>
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**Pennsylvania Hazardous Substance List(Identification threshold 0.01%):**

<u>Chemical Name</u>	<u>CAS #</u>	<u>Wt %</u>
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**CHEMICAL INVENTORY STATUS:**

**All chemicals in this product are listed or exempt from listing in the following countries:**

US	CANADA		EUROPE	AUSTRALIA	JAPAN	KOREA	PHILIPPINES
TSCA	DSL	NDSL	EINECS/ELINCS	AICS	ENCS	ECL	PICCS
Yes	Yes	No	Yes	No	No	No	No



**W. R. GRACE**  
MATERIAL SAFETY DATA SHEET

Product Name: Bituthene Deck Prep Part A

MSDS ID Number: M-85823

MSDS Date: 03/03/2009

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**SECTION 16 - OTHER INFORMATION**

**Non-Hazardous Ingredient Disclosure:**

<b><u>Chemical Name</u></b>	<b><u>CAS Number</u></b>
<b>Prepared by:</b>	EH&S Department
<b>Approved by:</b>	EH&S Department
<b>Approved Date:</b>	03/04/2009

**Disclaimer:**

"The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection."

## Safety Data Sheet

Printing date 03/09/2015

Version Number 1.2

Reviewed on 03/09/2015

**1 Identification****Product identifier**Trade name: *Bituthene Liquid Membrane & Deck Prep Part B*

SDS ID Number: 583

Relevant identified uses of the substance or mixture and uses advised against  
Specialty construction product. Not intended for other uses**Details of the supplier of the safety data sheet****Manufacturer/Supplier:**W.R. Grace & Co. -Conn.  
62 Whittemore Avenue  
Cambridge, MA 02140 USAGrace Canada, Inc.  
294 Clements Road W.  
Ajax, Ontario L1S 3C6 Canada**Information department:**Environmental Health & Safety  
USA: +1-617-876-1400 (24 hours)  
+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts  
CAN: 1-905-683-8561 (24 hours)**Transport Emergency:** Chemtrec +1-800-424-9300 (24 hours)**2 Composition/information on ingredients****Chemical characterization: Mixtures****Description:** Mixture of the substances listed below with additional nonhazardous ingredients.**Hazardous components:**

26447-40-5	Methylenediphenyl diisocyanate, mixture of isomers	30-50%
101-68-8	Diphenylmethane-4,4'-di-isocyanate	30-50%
61788-32-7	Terphenyl plasticiser, hydrogenated	10-20%
78-40-0	Triethylphosphate	1.0-2.0%

**Additional information:** For the wording of the listed risk phrases refer to section 16.**3 Hazard(s) identification****Classification of the substance or mixture**

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause damage to organs through prolonged or repeated exposure.

Harmful if inhaled.

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

May cause respiratory irritation.

(Cont. on page 2)

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Trade name: *Bituthene Liquid Membrane & Deck Prep Part B*

(Cont. from page 1)

**GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).**Hazard pictograms**

GHS07 GHS08

Danger

**Hazard-determining components of labeling:**

Methylenediphenyl diisocyanate, mixture of isomers

Diphenylmethane-4,4'-di-isocyanate

**Precautionary statements**

Wear respiratory protection.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If on skin: Wash with plenty of water.

If eye irritation persists: Get medical advice/attention.

If skin irritation or rash occurs: Get medical advice/attention.

If experiencing respiratory symptoms: Call a poison center/doctor.

**NFPA ratings (scale 0 - 4)**

Health = 1

Fire = 1

Reactivity = 1

**HMIS-ratings (scale 0 - 4)**

Health = \*2

Flammability = 1

Reactivity = 1

**4 First-aid measures****General information:** Get medical advice/attention if you feel unwell.**After skin contact:**

Immediately wash contaminated skin with soap or mild detergent and water. If this chemical soaks clothing, immediately remove clothing and wash skin.

**After eye contact:**

Rinse opened eye for several minutes under running water.

Rinse cautiously with water for several minutes.

Seek immediate medical advice.

**After swallowing:**

Wash out mouth with water

Rinse mouth.

Do not induce vomiting; immediately call for medical help.

(Cont. on page 3)

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## Safety Data Sheet

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Reviewed on 03/09/2015

**Trade name: Bituthene Liquid Membrane & Deck Prep Part B**

(Cont. from page 2)

Never give anything by mouth to an unconscious person.

## 5 Fire-fighting measures

**Special hazards arising from the substance or mixture** No further relevant information available.

**Protective equipment:**

Wear self-contained breathing apparatus and complete personal protective equipment when potential for exposure to vapors or products of combustion exist. Water may be used to cool containers to prevent pressure build-up and possible auto-ignition or explosion. Avoid breathing hazardous vapors or products of combustion, keep upwind. Isolate area and keep unnecessary people away. Prevent run-off from fire control or dilution from entering streams or drinking water supplies.

**Additional information**

Cool endangered receptacles with water spray.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

## 6 Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

**Methods and material for containment and cleaning up:**

Contain and/or absorb spill with inert material (i.e. sand, vermiculite) then place in a suitable container.

Sweep up spilled product into receptacles.

Dispose contaminated material as waste according to section 13 of the SDS.

**Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## 7 Handling and storage

**Handling:**

**Precautions for safe handling**

Open and handle receptacle with care.

Prevent formation of aerosols.

Avoid contact with skin.

Avoid contact with eyes.

**Information about protection against explosions and fires:** No special measures required.

**Storage:**

**Information about storage in one common storage facility:** No special measures required.

**Further information about storage conditions:** Keep receptacle tightly sealed.

(Cont. on page 4)

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Trade name: *Bituthene Liquid Membrane & Deck Prep Part B*

(Cont. from page 3)

Specific end use(s) No further relevant information available.

## \* 8 Exposure controls/personal protection

Additional information about design of technical systems: No further data; see item 7.

## Components with limit values that require monitoring at the workplace:

## 101-68-8 Diphenylmethane-4,4'-di-isocyanate

PEL (USA)	Ceiling limit value: 0.2 mg/m <sup>3</sup> , 0.02 ppm
REL (USA)	Long-term value: 0.05 mg/m <sup>3</sup> , 0.005 ppm Ceiling limit value: 0.2* mg/m <sup>3</sup> , 0.02* ppm *10-min
TLV (USA)	Long-term value: 0.051 mg/m <sup>3</sup> , 0.005 ppm

## 61788-32-7 Terphenyl plasticiser, hydrogenated

REL (USA)	Long-term value: 5 mg/m <sup>3</sup> , 0.5 ppm
TLV (USA)	Long-term value: 4.9 mg/m <sup>3</sup> , 0.5 ppm nonirradiated

## 78-40-0 Triethylphosphate

WEEL (USA)	Long-term value: 7.45 mg/m <sup>3</sup>
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Additional information: The lists that were valid during the creation were used as basis.

## Personal protective equipment:

## General protective and hygienic measures:

Avoid contact with the eyes and skin.

The usual precautionary measures for handling chemicals should be followed.

## Breathing equipment:

MDI contained in mixed A and B components, has a very low vapor pressure and is not likely to exceed the permissible exposure limit (PEL) in unconfined spaces. Therefore, respiratory protection is not normally required in well ventilated areas except for individuals who are hypersensitive to isocyanates. It should also be noted that although chemical cartridge respirators may provide protection against isocyanate exposure, they are not approved for such use by NIOSH. This is because MDI has poor warning properties. (The level at which it can be detected by odor is significantly above the PEL.) In confined areas, indoors or where there is inadequate ventilation, supplied air (NIOSH Type TC-19C-XXX) or self-contained breathing apparatus (NIOSH Type TC-13F-XXX) may be required. A chemical cartridge respirator with organic vapor cartridge is required. A dust/mist cartridge or prefilter may be needed in addition to control exposure to mist. Supplied air respirator (SCBA) is required at exposure levels above the capabilities of a chemical cartridge respirator.

## Protection of hands:

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

## Material of gloves

The following glove materials are acceptable: Nitrile or Butyl rubber gloves should be worn to protect against MDI and oils contained in the mixed A and B components.

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

## Eye protection:



Safety glasses with side shield protection.

(Cont. on page 5)

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## Safety Data Sheet

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Reviewed on 03/09/2015

Trade name: *Bituthene Liquid Membrane & Deck Prep Part B*

(Cont. from page 4)

Safety glasses with side shields should be worn to prevent contact due to splashing. Under high vapor mist concentrations, tightly sealed goggles should be worn.



A face shield should also be worn if there is potential exposure to splash or spray.

**Body protection:**

Protective work clothing

Use personal protective equipment as required.

Take off contaminated clothing and wash before reuse.

## 9 Physical and chemical properties

**General Information****Appearance:**

<b>Form:</b>	Liquid
<b>Color:</b>	According to product specification
<b>Odor:</b>	Characteristic
<b>Odour threshold:</b>	Not determined.

**pH-value (~):** Not determined.

**Change in condition**

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	Not determined.
<b>Flash point:</b>	212 °C (414 °F)

**Flammability (solid, gaseous):** Not applicable.

**Decomposition temperature:** Not determined.

**Auto igniting:** Product is not selfigniting.

**Danger of explosion:** Product does not present an explosion hazard.

**Explosion limits:**

<b>Lower:</b>	0.4 Vol %
<b>Upper:</b>	Not determined.
<b>VOC Content (max):</b>	Not determined.

**Vapor pressure:** Not determined.

**Density: (~)** Not determined.

**Relative density** Not determined.

**Vapour density** Not determined.

**Evaporation rate** Not determined.

**Solubility in / Miscibility with**

<b>Water:</b>	Not miscible or difficult to mix.
	Not miscible or difficult to mix.

**Partition coefficient (n-octanol/water):** Not determined.

**Viscosity:**

**Dynamic:** Not determined.

**Kinematic:** Not determined.

**Molecular weight** Not applicable.

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Trade name: *Bituthene Liquid Membrane & Deck Prep Part B*

(Cont. from page 5)

## Other information

These are typical values and do not constitute a specification.

## \* 10 Stability and reactivity

**Thermal decomposition:** No decomposition if used according to specifications.**Incompatible materials:** Water and bases.**Hazardous decomposition products:**

Carbon monoxide and carbon dioxide

(possible HCN)

Other potentially hazardous products may also be formed.

**Additional information:** See section 7 for information on handling, storage and conditions to be avoided.

## \* 11 Toxicological information

**Acute toxicity:****LD/LC50 values relevant for classification:****101-68-8 Diphenylmethane-4,4'-di-isocyanate**

Oral	LD50	> 10000 mg/kg (rat)
Dermal	LD50	> 9400 mg/kg (rabbit)
Inhalative	LC50, 4h	0.49 mg/l (rat)

**Primary irritant effect:****on the skin:** Causes skin irritation.**on the eye:** Causes serious eye irritation.**inhalation:** May cause respiratory irritation.**Sensitization:**

Sensitization possible through inhalation.

Sensitization possible through skin contact.

**Additional toxicological information:****Carcinogenic categories****IARC (International Agency for Research on Cancer) Human Carcinogenicity:****Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable**

101-68-8 | Diphenylmethane-4,4'-di-isocyanate

3

**NTP (National Toxicology Program)****K–Known to be carcinogenic, R–May reasonably be anticipated to be carcinogenic**

None of the ingredients is listed.

**OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

## \* 12 Ecological information

**Aquatic toxicity:** No further relevant information available.

(Cont. on page 7)

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## Safety Data Sheet

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Reviewed on 03/09/2015

Trade name: *Bituthene Liquid Membrane & Deck Prep Part B*

(Cont. from page 6)

**Persistence and degradability** No further relevant information available.**Behavior in environmental systems:****Bioaccumulative potential** No further relevant information available.**Additional ecological information:****General notes:**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

**13 Disposal considerations****Waste treatment methods** Comply with Federal, State and local regulations.**Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packagings:****Recommendation:** Disposal must be made according to official regulations.**14 Transport information****UN-Number**

DOT, ADR, ADN, IMDG, IATA Not applicable.

**UN proper shipping name**

DOT, ADR, ADN, IMDG, IATA Not applicable.

**Transport hazard class(es)**

DOT, ADR, IMDG, IATA

Class Not applicable.

ADN

ADN/R Class: Not applicable.

**Packing group**

DOT, ADR, IMDG, IATA Not applicable.

**Environmental hazards:**

Marine pollutant: No

**Special precautions for user** Not applicable.**Transport/Additional information:**

DOT

Remarks: Not Regulated.

(Cont. on page 8)

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## Safety Data Sheet

Printing date 03/09/2015

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Trade name: *Bituthene Liquid Membrane & Deck Prep Part B*

(Cont. from page 7)

UN "Model Regulation": -

## \* 15 Regulatory information

## SARA (Superfund Amendments and Reauthorization Act)

## Section 302/304 (extremely hazardous substances):

None of the ingredients is listed.

## Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):

101-68-8	Diphenylmethane-4,4'-di-isocyanate	30.9%
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## SARA Section 312/Tier I &amp; II Hazard Categories:

Health Immediate (acute)	Yes
Health Delayed (chronic)	Yes
Flammable	No
Reactive	No
Pressure	No

## North America Chemical Inventory Status

## TSCA (Toxic Substances Control Act - United States):

All ingredients are listed or exempt from listing unless otherwise noted below.

## CEPA (Canadian DSL):

All ingredients are listed or exempt from listing unless otherwise noted below.

## Right to Know Ingredient Disclosure

26447-40-5	Methylenediphenyl diisocyanate, mixture of isomers
101-68-8	Diphenylmethane-4,4'-di-isocyanate
61788-32-7	Terphenyl plasticiser, hydrogenated
39310-05-9	Methylenebis(isocyanatobenzene) polymer
68956-74-1	Quaterphenyls

## California Proposition 65

## Chemicals known to cause cancer:

None of the ingredients is listed.

## Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

## Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

## Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

## Carcinogenicity Categories

## EPA (Environmental Protection Agency)

101-68-8	Diphenylmethane-4,4'-di-isocyanate	D, CBD
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## TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)

## Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable

None of the ingredients is listed.

## NIOSH-Cancer (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

(Cont. on page 9)

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## Safety Data Sheet

Printing date 03/09/2015

Version Number 1.2

Reviewed on 03/09/2015

**Trade name: *Bituthene Liquid Membrane & Deck Prep Part B***

(Cont. from page 8)

**Volatile Organic Compounds (VOC) reported per the Emission Standards for Architectural Coatings:**  
(gr/L) 10 gr/L (as applied)

\*

**16 Other information**

"The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection."

**Date of preparation / last revision** 03/09/2015 / 1.1**The first date of preparation** 08/03/2006**Number of revision times and the latest revision date** 1.2 / 03/09/2015

USGHS

## Safety Data Sheet

Printing date 11/11/2013

Version Number 1.0

Reviewed on 11/11/2013

## \* 1 Identification

**Product identifier**Trade name: Grace S100 Sealant

MSDS ID Number: 1975

**Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

W.R. Grace & Co. -Conn.  
62 Whittemore Avenue  
Cambridge, MA 02140 USA

Grace Canada, Inc.  
294 Clements Road W.  
Ajax, Ontario L1S 3C6 Canada








**Information department:**

Environmental Health & Safety  
USA: +1-617-876-1400 (24 hours)  
+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts  
CAN: 1-905-683-8561 (24 hours)

**Transport Emergency:** Chemtrec +1-800-424-9300 (24 hours)

## \* 2 Composition/information on ingredients

**Chemical characterization: Mixtures****Description:** Mixture of the substances listed below with nonhazardous additions.**Hazardous components:**

34036-80-1	Phenyl Oximino Silane	 STOT RE 2, H373  Skin Sens. 1, H317  Aquatic Chronic 3, H412	5.0-10.0%
8052-41-3	Stoddard solvent	 Flam. Liq. 3, H226  Carc. 1B, H350; Asp. Tox. 1, H304	2.0-5.0%
14808-60-7	Quartz (SiO2)	 STOT RE 1, H372  Acute Tox. 4, H332	0.0-0.1%

## \* 3 Hazard(s) identification

**Classification of the substance or mixture**

Skin Sens. 1 H317 May cause an allergic skin reaction.

H316 Causes mild skin irritation.

Eye Irrit. 2B H320 Causes eye irritation.

**GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

(Cont. on page 2)

USGLO

## Safety Data Sheet

Printing date 11/11/2013

Version Number 1.0

Reviewed on 11/11/2013

Trade name: *Grace S100 Sealant*

(Cont. from page 1)

## Hazard pictograms



GHS07

## Warning

**Hazard-determining components of labeling:**

Phenyl Oximino Silane

**Hazard statements**

Causes mild skin irritation.

Causes eye irritation.

May cause an allergic skin reaction.

**Precautionary statements**

Wear protective gloves/protective clothing/eye protection/face protection.

Wash thoroughly after handling.

Do not breathe vapours.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Wash contaminated clothing before reuse.

If skin irritation or rash occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

IF ON SKIN: Wash with plenty of soap and water.

Dispose of contents/container in accordance with local/regional/national/international regulations.

**Additional information:** Quartz is not expected to be available for exposure unless product dries and is abraded.

\*

**4 First-aid measures****General information:** No special measures required.**After inhalation:**

If symptoms develop, supply fresh air. If required, provide artificial respiration and seek immediate medical treatment.

**After skin contact:**

Immediately wash contaminated skin with soap or mild detergent and water. If this chemical soaks clothing, immediately remove clothing and wash skin.

**After eye contact:**

Rinse opened eye for several minutes under running water.

Seek immediate medical advice.

**After swallowing:**

Wash out mouth with water

Do not induce vomiting; immediately call for medical help.

Never give anything by mouth to an unconscious person.

**5 Fire-fighting measures****Special hazards arising from the substance or mixture** No further relevant information available.

(Cont. on page 3)

USGLO

## Safety Data Sheet

Printing date 11/11/2013

Version Number 1.0

Reviewed on 11/11/2013

Trade name: *Grace S100 Sealant*

(Cont. from page 2)

**Additional information** Collect contaminated fire fighting water separately. It must not enter the sewage system.**6 Accidental release measures****Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

**Methods and material for containment and cleaning up:**

Contain and/or absorb spill with inert material (i.e. sand, vermiculite) then place in a suitable container.

Sweep up spilled product into receptacles.

Dispose contaminated material as waste according to section 13 of the MSDS.

**Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

**7 Handling and storage****Precautions for safe handling**

Open and handle receptacle with care.

Prevent formation of aerosols.

**Information about protection against explosions and fires:**

Keep respiratory protective device available.

Empty containers may retain hazardous residue, both liquid and vapor.

**Storage:****Information about storage in one common storage facility:** Keep respiratory protective device available.**Further information about storage conditions:** Keep receptacle tightly sealed.**Specific end use(s)** No further relevant information available.**8 Exposure controls/personal protection****Additional information about design of technical systems:** No further data; see item 7.**Components with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

**Additional information:** The lists that were valid during the creation were used as basis.**Personal protective equipment:****General protective and hygienic measures:**

Avoid contact with the eyes and skin.

Store protective clothing separately.

**Breathing equipment:** In case of brief exposure or low pollution use respiratory filter device.

(Cont. on page 4)

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Trade name: *Grace S100 Sealant*

(Cont. from page 3)

**Protection of hands:**

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

**Material of gloves**

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

**Eye protection:**

Safety glasses with side shield protection.

Safety glasses with side shields should be worn to prevent contact due to splashing. Under high vapor mist concentrations, tightly sealed goggles should be worn.

**Body protection:** Protective work clothing\* **9 Physical and chemical properties****General Information****Appearance:**

<b>Form:</b>	Paste
<b>Color:</b>	According to product specification
<b>Odor:</b>	Characteristic
<b>Odour threshold:</b>	Not determined.

**pH-value (~):** Not determined.**Change in condition**

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	Undetermined.
<b>Flash point:</b>	> 140 °C (> 284 °F)

**Flammability (solid, gaseous):** Not applicable.**Decomposition temperature:** Not determined.**Auto igniting:** Product is not selfigniting.**Danger of explosion:** Product does not present an explosion hazard.**Explosion limits:**

<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
<b>VOC Content (max):</b>	Not determined.

**Vapor pressure:** Not determined.**Density: (~) at 20 °C (68 °F)** 1.2 g/cm<sup>3</sup> (10.014 lbs/gal)**Relative density** Not determined.**Vapour density** Not determined.**Evaporation rate** Not determined.**Solubility in / Miscibility with****Water:** Not miscible or difficult to mix.**Partition coefficient (n-octanol/water):** Not determined.**Viscosity:****Dynamic:** Not determined.**Kinematic:** Not determined.**Molecular weight** not applicable.

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Trade name: *Grace S100 Sealant*

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**Other information**

No further relevant information available.

**10 Stability and reactivity****Thermal decomposition:** No decomposition if used according to specifications.**Incompatible materials:** No further relevant information available.**Hazardous decomposition products:** Carbon monoxide and carbon dioxide**Additional information:** See section 7 for information on handling, storage and conditions to be avoided.**11 Toxicological information****Acute toxicity:****Primary irritant effect:****on the skin:** Irritating to skin.**on the eye:** Irritating effect.**Sensitization:** Sensitization possible through skin contact.**Additional toxicological information:****Carcinogenic categories****IARC (International Agency for Research on Cancer) Human Carcinogenicity:**  
**Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable**14808-60-7 | Quartz (SiO<sub>2</sub>)

1

**NTP (National Toxicology Program)****K-Known to be carcinogenic, R-May reasonably be anticipated to be carcinogenic**14808-60-7 | Quartz (SiO<sub>2</sub>)

K

**12 Ecological information****Aquatic toxicity:** No further relevant information available.**Persistence and degradability** No further relevant information available.**Bioaccumulative potential** No further relevant information available.**Ecotoxicological effects:****Remark:** Harmful to fish**Additional ecological information:****General notes:**

Water hazard class 3 (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

Harmful to aquatic organisms

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Trade name: *Grace S100 Sealant*

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**13 Disposal considerations****Waste treatment methods** Comply with Federal, State and local regulations.**Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packagings:****Recommendation:** Disposal must be made according to official regulations.**14 Transport information****UN-Number**

ADR, ADN, IMDG, IATA

Not applicable.

**UN proper shipping name**

ADR, ADN, IMDG, IATA

Not applicable.

**Transport hazard class(es)**

ADR, ADN, IMDG, IATA

Class

Not applicable.

**Packing group**

ADR, IMDG, IATA

Not applicable.

**Environmental hazards:**

Marine pollutant:

No

**Special precautions for user**

Not applicable.

**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

**UN "Model Regulation":**

-

**15 Regulatory information****SARA (Superfund Amendments and Reauthorization Act)****Section 302/304 (extremely hazardous substances):**

None of the ingredients is listed.

**Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):**

None of the ingredients is listed.

**SARA Section 312/Tier I & II Hazard Categories:**

Health Delayed (chronic) Yes

Health Immediate (acute) Yes

Flammable No

Reactive No

Pressure No

(Cont. on page 7)

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Trade name: *Grace S100 Sealant*

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## North America Chemical Inventory Status

**TSCA (Toxic Substances Control Act - United States):**

All ingredients are listed or exempt from listing unless otherwise noted below.

**CEPA (Canadian DSL):**

All ingredients are listed or exempt from listing unless otherwise noted below.

## California Proposition 65

**Chemicals known to cause cancer:**14808-60-7 | Quartz (SiO<sub>2</sub>)**Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

**Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

**Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

**WHMIS Classification(s):**

D2B - Toxic material causing other toxic effects



## Carcinogenicity Categories

**EPA (Environmental Protection Agency)**

None of the ingredients is listed.

**TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)****Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable**

None of the ingredients is listed.

**NIOSH-Cancer (National Institute for Occupational Safety and Health)**14808-60-7 | Quartz (SiO<sub>2</sub>)**OSHA-Cancer (Occupational Safety & Health Administration)**

None of the ingredients is listed.

**Volatile Organic Compounds (VOC) reported per the Emission Standards for Architectural Coatings: <100 g/L****European EINECS**

All ingredients are listed.

**Philippines Inventory of Chemicals and Chemical Substances PICCS**

Inventory listing could not be confirmed for one or more substances.

**Inventory of Existing Chemical Substances manufactured or imported in China IECSC**

Inventory listing could not be confirmed for one or more substances.

**Australian Inventory of Chemical Substances AICS**

Inventory listing could not be confirmed for one or more substances.

**Japan Existing and New Chemical Substance List ENCS**

Inventory listing could not be confirmed for one or more substances.

**Korean Existing Chemical Inventory**

Inventory listing could not be confirmed for one or more substances.

**Non-hazardous Ingredients**

70131-67-8 | Dimethyl siloxane, hydroxy-terminated

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**Trade name:** *Grace S100 Sealant*

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1317-65-3	Calcium carbonate
112945-52-5	Amorphous Silica Dioxide

**16 Other information**

"The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection."

**The first date of preparation** 10/31/2013**Number of revision times and the latest revision date** 1.0 / 11/11/2013

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## Field Safety Data Sheet Index

### **Miscellaneous**

1. Hilti Lead Free Safety Boosters (.22 .25 & .27)
2. Hilti GC22 (Aersol Propellant for GX 120 Tool)
3. Hilti HIT-HY 20 Adhesive
4. Hilti HIT-HY 150 MAX Adhesive
5. Hilti CF 812 Insulating Foam-W&D
6. Hilti CFR-1 Cleaner
7. Hilti 506 Acoustical Caulk
8. 3m Super 77 Adhesive
9. 3m #850 red Polyester Tape
10. 3M Blue Scotch Tape
11. 3M Spray-Bond Adhesive
12. 3M Duct Tape
13. 3M Masking Tapes
14. 3M Sanding Sponges
15. 3M Sanding Sheets
16. 3M Corner Bead Spray Adhesive 61
17. Seymour Clear Line Saver
18. Seymour Cold Galvanized Paint
19. Franklin Titebond FRP Adhesive
20. Franklin Titebond Drywall Adhesive
21. Norton Sanding Sponges

## Field Material Safety Data Sheet Index - continued

### **Miscellaneous**

- 22. Norton Sanding Sheets
- 23. Trim-Tex 847 Spray Adhesive
- 24. Keson Red & Blue Chaulk
- 25. ZRC Cold Galvanized Paint
- 26. ESAB Sureweld Electrodes
- 27. DSA-20 Miracle Adhesive
- 28. RPP Lead Soft-Sheets
- 29. Gasoline
- 30. Propane
- 31. WD-40
- 32. Gardz
- 33. Hilti Hit-Ice Resin & Hardener
- 34. Hilti CF 128-DW Insulating Foam
- 35. Hilti Lithium-Ion Batteries
- 36. EB Solvent
- 37. EB Solvent 2
- 38. Bleach
- 39. Foremost 1817 Citri-Kote
- 40. Pro-Twist Screws
- 41. Powers Anchors
- 42. Hardie Panel Medium Density

## **Field Material Safety Data Sheet Index — continued**

### **Miscellaneous**

- 43. Hardie Panel Low Density
- 44. Marlite Fiberglass Panels
- 45. Seismic Colorseal Control Joint
- 46. 3M Smoke & Sound Sealant
- 47. Pecora AC 20 Caulking
- 48. ABC Fire Extinguisher
- 49. Safestrip Solvent
- 50. Dricon Treated Wood

## MATERIAL SAFETY DATA SHEET

**Product name:** Safety Boosters; Lead-Free  
**Description:** Also called shots, loads, powerloads, safety cartridges, and blanks (27 caliber short)  
**Supplier:** Hilti, Inc. P.O. Box 21148, Tulsa, OK 74121  
**Emergency # (Chem-Trec.):** 1 800 424 9300 (USA, PR, Virgin Islands, Canada); 001 703 527 3887 (other countries)

## INGREDIENTS AND EXPOSURE LIMITS

Ingredients:	CAS Number:	TLV:	PEL:	STEL:
Nitroglycerin	00055-63-0	0.46 mg/m <sup>3</sup> (S)	NE	0.1 mg/m <sup>3</sup> (S)
Nitrocellulose	09004-70-0	NE	NE	NE
Glass	NE	NE	NE	NE
Diazodinitrophenol	00087-31-0	NE	NE	NE
Strontium Nitrate	10042-76-9	NE	NE	NE
Tetracene	00109-27-3	NE	NE	NE
Brass	NE	NE	NE	NE

**Abbreviations:** PEL = OSHA Permissible Exposure Limit. TLV = ACGIH Threshold Limit Value. STEL = Short Term Exposure Limit. NE = None Established. NA = Not Applicable. (S) indicates exposure should be controlled for the cutaneous routes including the mucous membranes, eyes, and skin. Airborne exposures as well as direct contact must be considered.

## PHYSICAL DATA

<b>Appearance:</b>	Blank brass cartridges.	<b>Odor:</b>	None.
<b>Vapor Density: (air = 1)</b>	Not applicable.	<b>Vapor Pressure:</b>	Not applicable.
<b>Boiling Point:</b>	Not applicable.	<b>VOC Content:</b>	Not applicable.
<b>Evaporation Rate:</b>	Not applicable.	<b>Solubility in Water:</b>	Not applicable.
<b>Specific Gravity:</b>	Not applicable.	<b>pH:</b>	Not applicable.

## FIRE AND EXPLOSION HAZARD DATA

<b>Flash Point:</b>	Not applicable.	<b>Flammable Limits:</b>	Not applicable.
<b>Extinguishing Media:</b>	Water.		
<b>Special Fire Fighting Procedures:</b>	Flood area with water or keep cartridges cool with water spray.		
<b>Unusual Fire and Explosion Hazards:</b>	Cartridges can blast if exposed to temperatures > 160°C. Mass detonation is not a potential hazard.		

## REACTIVITY DATA

<b>Hazardous Polymerization:</b>	Will not occur.	<b>Stability:</b>	Stable.
<b>Incompatibility:</b>	Strong acids and oxidizing materials.		
<b>Decomposition Products:</b>	Oxides of nitrogen and acid fumes.		
<b>Conditions to Avoid:</b>	Acids, excess heat, crushing, and electrical currents.		

## HEALTH HAZARD DATA

<b>Known Hazards:</b>	None expected. Possible irritation from gases and dusts under certain conditions such as excessive firing with little air movement.
<b>Signs and Symptoms of Exposure:</b>	Adverse health effects are not expected from inhalation of dusts or gasses or from contact with the skin; however, adequate ventilation and good personal hygiene practices are recommended to keep exposure to a minimum.
<b>Routes of Exposure:</b>	None anticipated.
<b>Carcinogenicity:</b>	No ingredients are classified as a carcinogen by IARC, NTP or OSHA.

**Medical Conditions  
Aggravated by Exposure:**

None anticipated.

**EMERGENCY AND FIRST AID PROCEDURES**

<b>Eyes:</b>	If irritation occurs, flush with plenty of water. Call a physician if symptoms occur.
<b>Skin:</b>	Practice good hygiene by washing with soap and water after using and before meals.
<b>Inhalation:</b>	Move victim to fresh air. Get medical attention if breathing is difficult.
<b>Ingestion:</b>	Get immediate medical attention.
<b>Other:</b>	Seek prompt medical attention if physical injury occurs from pins, rivets, debris, etc. For bleeding wounds, place a clean cloth or similar absorbent material on the wound and apply firm pressure. Elevate the wound and transport immediately to a medical facility.

**CONTROL MEASURES AND PERSONAL PROTECTIVE EQUIPMENT**

<b>Ventilation:</b>	General (natural or mechanically induced fresh air movements).
<b>Eye Protection:</b>	As a minimum, safety glasses with side-shields; safety goggles recommended.
<b>Skin Protection:</b>	None normally required; gloves (cotton) are recommended.
<b>Hearing Protection:</b>	Muffs or aural inserts. Refer to the applicable OSHA regulation 29 CFR 1910.95 or 1926.101.
<b>Respiratory Protection:</b>	None normally required.

**PRECAUTIONS FOR SAFE HANDLING AND USE**

<b>Handling and Storing Precautions:</b>	Store in a cool dry place. Do not crush or drop. Keep away from excessive heat (such as extremely hot surfaces and flames), electrical current, strong acids and oxidizers. NFPA 495 requires 15 feet separation (or 1-hour firewall) from flammable liquids, flammable solids, and oxidizers. For industrial use only. Keep out of reach of children. Use with adequate ventilation. Practice good hygiene; i.e. wash after using and before eating or smoking.
<b>Other Precautions:</b>	Use only in powder actuated tools designed to handle these boosters. Construction industry employees must be properly trained as prescribed by OSHA regulations 29 CFR 1926.302 (e). All employees should be familiar with the safe operating procedures requirements for powder operated tools as described in ANSI A10.3 and OSHA 29 CFR 1910.243 (d).

**REGULATORY INFORMATION**

<b>Hazard Communication:</b>	This MSDS has been prepared in accordance with the federal OSHA Hazard Communication Standard 29 CFR 1910.1200.
<b>HMIS Codes:</b>	Health 1, Flammability 1, Reactivity 3, PPE C Goggles.
<b>DOT Shipping Name:</b>	Consumer commodity, ORM-D.
<b>ICAO / IATA Shipping Name:</b>	Cartridges. Power device, Class 1.4S, UN 0323
<b>TSCA Inventory Status:</b>	Chemical components listed on TSCA inventory.
<b>SARA Title III, Section 313:</b>	This product contains 5-11% nitroglycerin (CAS No. 55-63-0) which is subject to reporting under section 313 of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.
<b>Waste Disposal Methods:</b>	Misfires should be stored in a closed container until disposal or as otherwise required by local, state, and federal safety, health and environmental regulations. The recommended disposal method is in a burner specifically designed to destroy ammunition.
<b>EPA Waste Code(s):</b>	D003

**CONTACTS**

<b>Customer Service:</b>	1 800 879 8000	<b>Technical Service:</b>	1 800 879 8000
<b>Health / Safety:</b>	1 800 879 6000	Jerry Metcalf	(x6704)
<b>Emergency # (Chem-Trec):</b>	1 800 424 9300 (USA, PR, Virgin Islands, Canada); 001 703 527 3887 (Other countries)		

The information and recommendations contained herein are based upon data believed to be correct; however, no guarantee or warranty of any kind expressed or implied is made with respect to the information provided.



MSDS No.: 314  
Revision No.: 003  
Revision Date: 05/17/12  
Page: 1 of 2

## MATERIAL SAFETY DATA SHEET

**Product name:** GC22  
**Description:** Aerosol propellant for use with Hilti GX 120 fastening tool  
**Supplier:** Hilti, Inc. P.O. Box 21148, Tulsa, OK 74121  
**Emergency # (Chem-Trec.):** 1 800 424 9300 (USA, PR, Virgin Islands, Canada); 703 527 3887 (Other countries)

## INGREDIENTS AND EXPOSURE LIMITS

Ingredients:	CAS Number:	TLV:	PEL:	STEL:
Isobutane	75-28-5	1000 ppm	NE	NE
Propylene	115-07-1	860 mg/m <sup>3</sup>	NE	NE
Propane*	74-98-6	1000 ppm	1800 mg/m <sup>3</sup>	NE

\* Propane remains in the can and is not released.

**Abbreviations:** PEL = OSHA Permissible Exposure Limit. TLV = ACGIH Threshold Limit Value. STEL = Short Term Exposure Limit. NE = None Established. ppm = Parts per million.

## PHYSICAL DATA

<b>Appearance:</b>	Colorless aerosol.	<b>Odor:</b>	Sweet petroleum odor.
<b>Vapor Density: (air = 1)</b>	Not determined.	<b>Vapor Pressure:</b>	4793 mm Hg @ 68 F.
<b>Boiling Point:</b>	Not determined.	<b>VOC Content:</b>	Not determined.
<b>Evaporation Rate:</b>	Not determined.	<b>Solubility in Water:</b>	Negligible.
<b>Density:</b>	1.28 g/cm <sup>3</sup> @ 68 F.	<b>pH:</b>	Not applicable.

## FIRE AND EXPLOSION HAZARD DATA

<b>Flash Point:</b>	Not applicable.	<b>Flammable Limits:</b>	LEL = 1.3% UEL = 11.1%
<b>Extinguishing Media:</b>	Carbon Dioxide, Dry Chemical, Foam, Water		
<b>Special Fire Fighting Procedures:</b>	Extremely flammable aerosols. Cool with water spray to prevent ignition.		
<b>Unusual Fire and Explosion Hazards:</b>	Extremely flammable. Contents under pressure. Containers exposed to fire can burst or be propelled through the air.		

## REACTIVITY DATA

<b>Stability:</b>	Stable.	<b>Hazardous Polymerization:</b>	Will not occur.
<b>Incompatibility:</b>	Strong oxidizing agents.		
<b>Decomposition Products:</b>	Thermal decomposition can yield CO and NO <sub>x</sub> .		
<b>Conditions to Avoid:</b>	Potential ignition sources such as extremely hot surfaces, flames, sparks, static discharges, etc.		

## HEALTH HAZARD DATA

<b>Known Hazards:</b>	Irritation. Direct contact with contents can cause irritation or frostbite.
<b>Signs and Symptoms of Exposure:</b>	<b>Contact:</b> No effects expected from normal use. Direct contact with liquefied gas (e.g. from a leaking can) can cause irritation and possibly burns (i.e. frostbite). <b>Inhalation:</b> No ill effects expected from normal use. Contains asphyxiant gases. Direct inhalation of gases can cause narcotic effects. <b>Ingestion:</b> Not a likely route of exposure.
<b>Routes of Exposure:</b>	Dermal. Inhalation.
<b>Carcinogenicity:</b>	No ingredients are classified as a carcinogen by IARC, NTP or OSHA.
<b>Medical Conditions Aggravated by Exposure:</b>	Eye, skin, and respiratory conditions.



## EMERGENCY AND FIRST AID PROCEDURES

<b>Eyes:</b>	For contact with liquefied gas, flush immediately with plenty of water and seek medical attention.
<b>Skin:</b>	If contact with liquefied (cold) gases occurs, rinse affected area thoroughly with warm running water. Do not use hot water. Do not rub the skin. Contact a Physician if symptoms occur.
<b>Inhalation:</b>	Move victim to fresh air. Call a physician if symptoms persist.
<b>Ingestion:</b>	Not a likely route of exposure.
<b>Other:</b>	Referral to a physician is recommended if there is any question about the seriousness of the injury / exposure.

## CONTROL MEASURES AND PERSONAL PROTECTIVE EQUIPMENT

<b>Ventilation:</b>	General (natural or mechanically induced fresh air movements).
<b>Eye Protection:</b>	Safety glasses with side shields.
<b>Skin Protection:</b>	Leather or heavy cloth gloves are recommended.
<b>Respiratory Protection:</b>	None normally required. Where ventilation is inadequate to control vapors, use NIOSH-approved respirator with organic vapor cartridges.

## PRECAUTIONS FOR SAFE HANDLING AND USE

<b>Handling and Storing Precautions:</b>	Store in a cool dry area preferably between 41 and 77° F. Do not store in direct sunlight. Do not store with DX cartridges (Boosters). Extremely flammable gas under pressure. Keep away from excessive heat, sparks, flames and any other potential ignition sources. Do not allow liquefied gases to come in contact with the skin. Use with adequate ventilation. For industrial use only. Keep out of reach of children. Follow label / use instructions.
<b>Spill Procedures:</b>	Immediately remove any ignition sources. Wear appropriate personal protective equipment. Provide adequate ventilation to disperse gases.

## REGULATORY INFORMATION

<b>Hazard Communication:</b>	This MSDS has been prepared in accordance with the federal OSHA Hazard Communication Standard 29 CFR 1910.1200.
<b>HMIS Codes:</b>	Health 1, Flammability 4, Reactivity 0, PPE B
<b>DOT –Ground Shipping Name:</b>	Limited Quantity - LQ
<b>IATA (air) Shipping Name:</b>	Devices, small, hydrocarbon gas powered <i>with release device</i> , Class 2.1, UN3150
<b>TSCA Inventory Status:</b>	Chemical components listed on TSCA inventory.
<b>SARA Title III, Section 313:</b>	This product contains up to 20% Propylene (CAS #115-07-1) which is subject to reporting under Section 313 of SARA Title III (40 CFR Part 372).
<b>EPA Waste Code(s):</b>	D001
<b>Waste Disposal Methods:</b>	Consult with regulatory agencies or your corporate personnel for disposal methods that comply with local, state, and federal safety, health and environmental regulations.

## CONTACTS

<b>Customer Service:</b>	1 800 879 8000
<b>Technical Service:</b>	1 800 879 8000
<b>Health / Safety:</b>	1 800 879 6000      Jerry Metcalf      (x1003704)
<b>Emergency # (Chem-Trec):</b>	1 800 424 9300 (USA, PR, Virgin Islands, Canada); 703 527 3887 (Other countries)

The information and recommendations contained herein are based upon data believed to be correct; however, no guarantee or warranty of any kind expressed or implied is made with respect to the information provided.

## 1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** Hilti HIT-HY 200-R
- **Container size:** 330 ml, 500 ml
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use** Building and construction work
- **Application of the substance / the preparation** Adhesive anchoring system for rebar and anchor fastenings in concrete.
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Hilti, Inc.  
5400 South 122nd East Ave.  
US-Tulsa, OK 74146  
Phone: (800) 879-8000  
Fax: (800) 879-7000  
Español: (800) 879-5000
- **Information department:** see section 16
- **Emergency telephone number:**  
Chem-Trec  
Tel.: 1 800 424 9300

## 2 Hazards identification

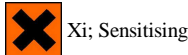
- **Classification of the substance or mixture**



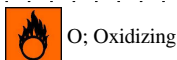
H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



R43: May cause sensitization by skin contact.



R7: May cause fire.

- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

- **Classification system:**

The classification was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.

- **Label elements**

- **GHS label elements** The product is classified and labelled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



- **Signal word** Warning

- **Hazard-determining components of labelling:**

methacrylic acid, monoester with propane-1,2-diol  
dibenzoyl peroxide

- **Hazard statements**

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

- **Precautionary statements**

P262 Do not get in eyes, on skin, or on clothing.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

(Contd. on page 2)

USA



# Material Safety Data Sheet

acc. to ISO 11014

Printing date 10/12/2012

Version number 2

Reviewed on 10/12/2012

Trade name: Hilti HIT-HY 200-R

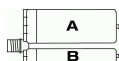
(Contd. of page 1)

- Classification system
- NFPA ratings (scale 0-4)



Health = 2  
Fire = 1  
Reactivity = 1

- Other hazards
- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.
- Additional information:



Hilti HIT

- Information pertaining to particular dangers for man and environment: A  
H317 May cause an allergic skin reaction.
- Information pertaining to particular dangers for man and environment: B  
H319 Causes serious eye irritation.  
H317 May cause an allergic skin reaction.

## 3 Composition/information on ingredients

- Chemical characterization: Mixtures

### Description:

2-Component-Foilpack, contains:

Component A: Urethane methacrylate resin, inorganic filler

Component B: Dibenzoylperoxide, phlegmatized

Mixture of the substances listed below with nonhazardous additions.

### Dangerous components:

94-36-0	dibenzoyl peroxide	Xi R36; Xi R43; E R3; O R7 Org. Perox. B, H241; Eye Irrit. 2, H319; Skin Sens. 1, H317	10-15%
27813-02-1	methacrylic acid, monoester with propane-1,2-diol	Xi R36; Xi R43 H319; Skin Sens. 1, H317	5-10%

### Dangerous components A:

27813-02-1	methacrylic acid, monoester with propane-1,2-diol	Xi R36; Xi R43 H319; Skin Sens. 1, H317
------------	---	--

### Dangerous components B:

94-36-0	dibenzoyl peroxide	Xi R36; Xi R43; E R3; O R7 Org. Perox. B, H241; Eye Irrit. 2, H319; Skin Sens. 1, H317
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### Non Dangerous components:

14808-60-7	Quartz (SiO <sub>2</sub> )	25-50%
1344-28-1	aluminium oxide	2.5-10%
7631-86-9	silicon dioxide, chemically prepared	<2.5%

- SVHC None

- Additional information For the wording of the listed risk phrases refer to section 16.

## 4 First aid measures

### Description of first aid measures

- General information Immediately remove any clothing soiled by the product.
- After inhalation Take affected persons into fresh air and keep quiet.
- After skin contact Immediately wash with water and soap and rinse thoroughly.
- After eye contact  
Rinse opened eye for several minutes under running water. Then consult a doctor.  
Protect unharmed eye.
- After swallowing  
Rinse out mouth and then drink plenty of water.  
Seek immediate medical advice.

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- **Information for doctor**
- **Most important symptoms and effects, both acute and delayed** Allergic reactions
- **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

## 5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.  
Sand
- **For safety reasons unsuitable extinguishing agents** Water with full jet.
- **Special hazards arising from the substance or mixture**  
In case of fire, the following can be released:  
Carbon monoxide (CO)  
Carbondioxide (CO<sub>2</sub>)  
Nitrogen oxides (NO<sub>x</sub>)  
In certain fire conditions, traces of other toxic gases cannot be excluded.
- **Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective clothing.  
Ensure adequate ventilation
- **Environmental precautions:** Do not allow to penetrate the ground/soil.
- **Methods and material for containment and cleaning up:**  
Pick up mechanically.  
Clean the affected area carefully; suitable cleaners are:  
organic solvent  
Ensure adequate ventilation.  
Dispose contaminated material as waste according to item 13.
- **Reference to other sections**  
See Section 7 for information on safe handling  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

## 7 Handling and storage

- **Handling**
- **Precautions for safe handling**  
Check the expiry date: see imprint on manifold (month/year). Do not use expired mortar!  
The usual precautionary measures for handling chemicals should be followed.
- **Information about protection against explosions and fires:**  
No special measures required.  
Keep ignition sources away - Do not smoke.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** Keep in a cool, dry and dark place; 41 °F / 5 °C to 77 °F / 25 °C.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:** Protect from heat and direct sunlight.
- **Storage class**  
As per VCI (1991) storage classification concept.  
11
- **Specific end use(s)** Adhesive anchoring system for rebar and anchor fastenings in concrete.

## 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.  
The product has a pasty consistency. Exposure limit values for respirable dusts are not relevant for this product.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**  
The usual precautionary measures for handling chemicals should be followed.  
Do not eat, drink, smoke or sniff while working.  
Keep away from foodstuffs, beverages and feed.

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- Wash hands before breaks and at the end of work.  
 Avoid contact with the eyes and skin.
- **Breathing equipment:** Not required.
  - **Protection of hands:**  
 Protective gloves.  
 EN 374 / EN 388  
 Avoid direct contact with the chemical/ the product/ the preparation by organizational measures.  
 The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
  - **Material of gloves** Nitrile rubber, NBR
  - **Penetration time of glove material**  
 The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
  - **Not suitable are gloves made of the following materials:**  
 Natural rubber, NR  
 Leather gloves  
 Strong gloves
  - **Eye protection:**  
 Tightly sealed goggles.  
 EN 166 / EN 170
  - **Body protection:** Protective work clothing.

## 9 Physical and chemical properties

### · Information on basic physical and chemical properties

#### · General Information

##### · Appearance:

- Form:** Pasty  
**Color:** Component A: grey  
 Component B: white

##### · Odor:

Ester-like

##### · Odour threshold:

Not determined

##### · pH-value:

Componente A: not applicable

Componente B: ~ 7

##### · Change in condition

**Melting point/Melting range:** Not determined.

**Boiling point/Boiling range:** undetermined

##### · Flash point:

Component A: &gt; 109 °C (DIN 53213)

Component B: not applicable

##### · Flammability (solid, gaseous)

Not determined

##### · Ignition temperature:

355°C (671 °F)

##### · Decomposition temperature:

Component A: not relevant

Component B: SADT 65°C UN test H4

##### · Auto igniting:

Product is not selfigniting.

##### · Danger of explosion:

Product does not present an explosion hazard.

##### · Explosion limits:

**Lower:** Not determined

**Upper:** Not determined

##### · Vapor pressure at 20°C (68 °F):

&lt; 0.1 hPa (&lt; 0 mm Hg)

##### · Density at 20°C (68 °F):

1.8 g/cm³ (15.021 lbs/gal) (DIN 51757)

##### · Relative density

Not determined

##### · Vapour density

Not determined

##### · Evaporation rate

Not determined

##### · Solubility in / Miscibility with

**Water:** Not miscible or difficult to mix

##### · Partition coefficient (n-octanol/water):

Not determined

##### · Viscosity:

**dynamic at 20°C (68 °F):** 50 Pa.s (DIN 53788)

**kinematic at 20°C (68 °F):** > 20 s (DIN 53211/4)

##### · Solvent separation test

Not determined

##### · Solvent content:

**Organic solvents:** None

**Water:** Component B: ~ 20%

##### · Other information

No further relevant information available.

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## 10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
To avoid thermal decomposition do not overheat.  
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
  - **on the skin:** No irritant effect.
  - **on the eye:** Irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Irritant
- **Carcinogenic categories**

### · IARC (International Agency for Research on Cancer)

14808-60-7	Quartz (SiO <sub>2</sub> )	1
94-36-0	dibenzoyl peroxide	3
7631-86-9	silicon dioxide, chemically prepared	3

### · NTP (National Toxicology Program)

14808-60-7	Quartz (SiO <sub>2</sub> )	K
------------	----------------------------	---

## 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **According to the formulation contains the following heavy metals and compounds from the EU guideline NO. 2006/11/EC:** None
- **General notes:** The product does not contain organically bounded halogens (AOX-free).
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**  
After curing, the product can be disposed of with household waste.  
Full or only partially emptied cartridges must be disposed of as special waste in accordance with official regulations.

### · European waste catalogue:

08 00 00	WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS
08 04 00	wastes from MFSU of adhesives and sealants (including waterproofing products)
08 04 09*	waste adhesives and sealants containing organic solvents or other dangerous substances
20 00 00	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 01 00	separately collected fractions (except 15 01)
20 01 27*	paint, inks, adhesives and resins containing dangerous substances

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- **Uncleaned packagings:**

- **Recommendation:**

Empty packs: May be disposed via the local Green Dot collecting system or EAK waste material code 150102 (plastic packaging materials)

## 14 Transport information

- **UN-Number**

- DOT, ADR, ADN, IMDG, IATA

Void

- **UN proper shipping name**

- DOT, ADN, IMDG, IATA

Void

- **ADR**

Void

- **Transport hazard class(es)**

- DOT, ADR, ADN, IMDG, IATA

- **Class**

Void

- **Packing group**

- DOT, ADR, IMDG, IATA

Void

- **Environmental hazards:**

- **Marine pollutant:**

No

- **Special precautions for user**

Not applicable.

- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

- **Transport/Additional information:**

Not dangerous according to the above specifications.  
available oxygen content < 1 %

- **UN "Model Regulation":**

-

- **HS-Code:**

3214 10 10: Glaziers' putty, grafting putty, resin cements, caulking compounds and other mastics

## 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**

- **Sara**

- **Section 355 (Extremely hazardous substances):**

None of the ingredients is listed.

- **Section 313 (Specific toxic chemical listings):**

1344-28-1 aluminium oxide

94-36-0 dibenzoyl peroxide

- **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

- **Proposition 65:**

- **Chemicals known to cause cancer:**

None of the ingredients are listed.

- **Carcinogenicity categories**

- **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

- **TLV (Threshold Limit Value established by ACGIH)**

14808-60-7 Quartz (SiO<sub>2</sub>)

A2

1344-28-1 aluminium oxide

A4

94-36-0 dibenzoyl peroxide

A4

- **MAK (German Maximum Workplace Concentration)**

14808-60-7 Quartz (SiO<sub>2</sub>)

1

1344-28-1 aluminium oxide

2

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

14808-60-7 Quartz (SiO<sub>2</sub>)

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

- **National regulations** The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.

- **Information about limitation of use:** Employment restrictions concerning young persons must be observed.

- **Chemical safety assessment:** not required.

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## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

### · Relevant phrases

H241 Heating may cause a fire or explosion.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

R3 Extreme risk of explosion by shock, friction, fire or other sources of ignition.

R36 Irritating to eyes.

R43 May cause sensitization by skin contact.

R7 May cause fire.

### · Department issuing MSDS:

Hilti Entwicklungsgesellschaft mbH

Hiltistrasse 6

D-86916 Kaufering

Tel.: +49 8191 906310

Fax: +49 8191 90176310

e-mail: anchor.hse@hilti.com

### · Contact: Mechthild Krauter

### · Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organization

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

NFPA: National Fire Protection Association (USA)

### · \* Data compared to the previous version altered.





— USA —



## 1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** Hilti HIT-HY 150 MAX
- **Container size** 330 ml, 500 ml, 1400 ml
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use** Building and construction work
- **Application of the substance / the preparation** Adhesive mortar for anchor fastenings in concrete
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Hilti Svenska AB  
Testvägen 1  
232 22 Arlöv  
Sverige  
Telefon: 020-555 999  
Fax: 040-43 51 96  
E-mail: kundservice@hilti.com
- **Informing department:**  
anchor.hse@hilti.com  
see section 16
- **Emergency telephone number:**  
Schweizerisches Toxikologisches Informationszentrum - 24 h Service  
Tel.: 0041 / 44 251 51 51 (international)
- Giftinformationscentralen  
112 (24 h Service)  
08-331 231 (mon. - fri. 9:00 - 17:00)

## 2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**  
 Xi; Sensitising  
 R43: May cause sensitisation by skin contact.
-  O; Oxidising  
 R7: May cause fire.
- **Information concerning particular hazards for human and environment:**  
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- **Classification system:**  
The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.
- **Label elements**
- **Labelling according to EU guidelines:**  
Observe the normal safety regulations when handling chemicals.  
The product has been classified and labelled in accordance with EC Directives / Ordinance on Hazardous Materials (GefStoffV)
- **Code letter and hazard designation of product:**  


 Xi Irritant  
 O Oxidising
- **Hazard-determining components of labelling:**  
methacrylic acid, monoester with propane-1,2-diol  
dibenzoyl peroxide
- **Risk phrases:**  
7 May cause fire.  
43 May cause sensitisation by skin contact.
- **Safety phrases:**  
3 Keep in a cool place.  
24/25 Avoid contact with skin and eyes.  
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
28 After contact with skin, wash immediately with plenty of water and soap.  
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
- **Special labelling of certain preparations:**  
Only for trade users / technical specialists

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- Other hazards
- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.
- Additional information:



- Information pertaining to particular dangers for man and environment: A  
R 43 May cause sensitisation by skin contact
- Information pertaining to particular dangers for man and environment: B  
R 43 May cause sensitisation by skin contact  
R 7 May cause fire

### 3 Composition/information on ingredients

- Chemical characterization: Mixtures
- Description:  
2-Component-foilpack, contains:  
Component A: Urethane methacrylate resin, inorganic filler  
Component B: Dibenzoyl peroxide, phlegmatized

Mixture of the substances listed below with harmless additions.

· Dangerous components:		
CAS: 27813-02-1 EINECS: 248-666-3 Reg.nr.: 01-2119490226-37	methacrylic acid, monoester with propane-1,2-diol ☒ Xi R36; ☒ Xi R43 ☞ Eye Irrit. 2, H319; Skin Sens. 1, H317	5-10%
CAS: 94-36-0 EINECS: 202-327-6	dibenzoyl peroxide ☒ Xi R36; ☒ Xi R43; ☒ E R3; ☒ O R7 ☞ Org. Perox. B, H241; ☞ Eye Irrit. 2, H319; Skin Sens. 1, H317	5-10%
CAS: 3290-92-4 EINECS: 221-950-4	Trimethylolpropane trimethacrylate ☒ N R51/53 ☞ Aquatic Chronic 2, H411	<2,5%
CAS: 10043-35-3 EINECS: 233-139-2	boric acid ☒ T Repr. Cat. 2 R60-61 ☞ Repr. 1B, H360FD	<0,5%

· Dangerous components A:		
CAS: 27813-02-1 EINECS: 248-666-3 Reg.nr.: 01-2119490226-37	methacrylic acid, monoester with propane-1,2-diol ☒ Xi R36; ☒ Xi R43 ☞ Eye Irrit. 2, H319; Skin Sens. 1, H317	
CAS: 3290-92-4 EINECS: 221-950-4	Trimethylolpropane trimethacrylate ☒ N R51/53 ☞ Aquatic Chronic 2, H411	
CAS: 10043-35-3 EINECS: 233-139-2	boric acid ☒ T Repr. Cat. 2 R60-61 ☞ Repr. 1B, H360FD	

· Dangerous components B:		
CAS: 94-36-0 EINECS: 202-327-6	dibenzoyl peroxide ☒ Xi R36; ☒ Xi R43; ☒ E R3; ☒ O R7 ☞ Org. Perox. B, H241; ☞ Eye Irrit. 2, H319; Skin Sens. 1, H317	

· SVHC		
10043-35-3	boric acid	

- Additional information For the wording of the listed risk phrases refer to section 16.

### 4 First aid measures

- Description of first aid measures
- General information Instantly remove any clothing soiled by the product.
- After inhalation Take affected persons into the open air and position comfortably
- After skin contact Instantly wash with water and soap and rinse thoroughly. If skin irritation persist, call a physician.
- After eye contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
- After swallowing Seek immediate medical advice.
- Information for doctor
- Most important symptoms and effects, both acute and delayed No further relevant information available.

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- **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

## 5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents** Water spray, carbon dioxide (CO<sub>2</sub>), carbon dioxide blanket, foam, or dry powder.
- **For safety reasons unsuitable extinguishing agents** Water with full jet.
- **Special hazards arising from the substance or mixture**
  - Can be released in case of fire
  - Carbon monoxide (CO)
  - Nitrogen oxides (NO<sub>x</sub>)
  - Under certain fire conditions, traces of other toxic gases cannot be excluded.
- **Advice for firefighters**
- **Protective equipment:** In the event of fire, wear self contained breathing apparatus

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Wear protective clothing.
- **Environmental precautions:** Do not allow to enter the ground/soil.
- **Methods and material for containment and cleaning up:**
  - Collect mechanically.
  - Dispose of the material collected according to regulations.
- **Reference to other sections**
  - See Section 7 for information on safe handling
  - See Section 8 for information on personal protection equipment.
  - See Section 13 for information on disposal.

## 7 Handling and storage

- **Handling**
- **Precautions for safe handling** Check the expiry date: see imprint on manifold (month/year). Do not use expired mortar!
- **Information about protection against explosions and fires:**
  - No special measures required.
  - Keep ignition sources away - Do not smoke.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:** Keep in a cool, dry and dark place; +5 °C to +25 °C.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:**
  - Protect from heat and direct sunlight.
  - Store in a cool place.
- **Storage class**
  - As per VCI (1991) storage classification concept.
  - 11
- **Specific end use(s)** Adhesive mortar for anchor fastenings in concrete

## 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
  - The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
  - The product has a pasty consistency. Exposure limit values for respirable dusts are not relevant for this product.
- **Additional information:** The lists that were valid during the compilation were used as basis.
- **Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**
  - The usual precautionary measures should be adhered to general rules for handling chemicals.
  - Avoid contact with the eyes and skin.
  - Do not eat, drink or smoke while working.
  - Keep away from foodstuffs, beverages and food.
  - Be sure to clean skin thoroughly after work and before breaks.
- **Breathing equipment:** Not required.
- **Protection of hands:**
  - Protective gloves
  - EN 374 / EN 388
  - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
  - Avoid direct contact with the chemical/ the product/ the preparation by organizational measures.

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- **Material of gloves**  
Nitrile rubber, NBR  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Not suitable are gloves made of the following materials:**  
Leather gloves  
Strong gloves
- **Eye protection:**  
Tightly sealed safety glasses.  
EN 166 / EN 170
- **Body protection:** Protective work clothing.

## 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
  - Form: pasty
  - Colour: Grey
  - Odour: Ester-like
  - Odour threshold: Not determined
- **pH-value:**
  - Component A: not applicable
  - Component B: ~ 6
- **Change in condition**
  - Melting point/Melting range: Not determined
  - Boiling point/Boiling range: Not determined
- **Flash point:**
  - Component A: > 109 °C (DIN 53213)
  - Component B: not applicable
- **Ignition temperature:**
- **Decomposition temperature:**
  - Component A: not relevant
  - Component B: SADT 65°C UN test H4
- **Self-inflammability:** Product is not selfigniting.
- **Danger of explosion:** Product is not explosive.
- **Critical values for explosion:**
  - Lower: Not determined
  - Upper: Not determined
- **Vapour pressure at 20°C:** 0,01 kPa
- **Density**
  - Component A: 1,7 g/cm<sup>3</sup> (DIN 51757)
  - Component B: 2,0 g/cm<sup>3</sup> (DIN 51757)
- **Relative density** Not determined
- **Vapour density** Not determined
- **Evaporation rate** Not determined
- **Solubility in / Miscibility with Water:** Insoluble
- **Partition coefficient (n-octanol/water):** Not determined
- **Viscosity:**
  - dynamic at 20°C: ~ 70 Pa.s (DIN 53788)
  - kinematic at 20°C: > 20 s (DIN 53211/4)
- **Solvent content:**
  - Organic solvents: 0 %
  - Water: Component B: ~ 20%
- **Other information** No further relevant information available.

## 10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.

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· **Hazardous decomposition products:** No dangerous decomposition products known

## 11 Toxicological information

· **Information on toxicological effects**

· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

**10043-35-3 boric acid**

Oral LD50 2660 mg/kg (rango)

· **Primary irritant effect:**

· **on the skin:** No irritant effect.

· **on the eye:** No irritant effect.

· **Sensitization:** Sensitization possible by skin contact.

· **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:

Irritant

## 12 Ecological information

· **Toxicity**

· **Aquatic toxicity:**

**3290-92-4 Trimethylolpropane trimethacrylate**

EC50/96h 4,43 mg/l (Algae)

>9,22 mg/l (magna daphnia)

2 mg/l (fisch)

· **Persistence and degradability** No further relevant information available.

· **Behaviour in environmental systems:**

· **Bioaccumulative potential** No further relevant information available.

· **Mobility in soil** No further relevant information available.

· **Additional ecological information:**

· **According to recipe contains the following heavy metals and compounds according to EC guideline NO. 76/464 EC:** None

· **General notes:** The product does not contain organically bounded halogens (AOX-free).

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

· **Waste treatment methods**

· **Recommendation**

Hand over to disposers of hazardous waste.

Full or only partially emptied cartridges must be disposed of as special waste in accordance with official regulations.

· **European waste catalogue**

20 00 00 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS

20 01 00 separately collected fractions (except 15 01)

20 01 27\* paint, inks, adhesives and resins containing dangerous substances

08 00 00 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS

08 04 00 wastes from MFSU of adhesives and sealants (including waterproofing products)

08 04 09\* waste adhesives and sealants containing organic solvents or other dangerous substances

· **Uncleaned packagings:**

· **Recommendation:**

Empty packs: May be disposed via the local Green Dot collecting system (REPA) or EAK waste material code 150102 (plastic packaging materials)

Dispose of packaging according to regulations on the disposal of packagings.

## 14 Transport information

· **UN-Number**

· **ADR, ADN, IMDG, IATA**

Void

· **UN proper shipping name**

· **ADR, ADN, IMDG, IATA**

Void

(Contd. on page 6)



Trade name: Hilti HIT-HY 150 MAX

(Contd. of page 5)

· Transport hazard class(es)	
· ADR, ADN, IMDG, IATA	
· Class	Void
· Packing group	
· ADR, IMDG, IATA	Void
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications. available oxygen content < 1 %
· HS-Code:	3214 10 10: Glaziers' putty, grafting putty, resin cements, caulking compounds and other mastics

### 15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- National regulations
- PR-Nr. pending
- Information about limitation of use: Employment restrictions concerning young persons must be observed.
- Other regulations, limitations and prohibitive regulations

#### · Substances of very high concern (SVHC) according to REACH, Article 57

10043-35-3 | boric acid

- Chemical safety assessment: not required.

### 16 Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

#### · Relevant phrases

- H241 Heating may cause a fire or explosion.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H360FD May damage fertility. May damage the unborn child.
- H411 Toxic to aquatic life with long lasting effects.
- R3 Extreme risk of explosion by shock, friction, fire or other sources of ignition.
- R36 Irritating to eyes.
- R43 May cause sensitisation by skin contact.
- R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R60 May impair fertility.
- R61 May cause harm to the unborn child.
- R7 May cause fire.

#### · Department issuing data specification sheet:

Hilti Entwicklungsgesellschaft mbH  
Hiltistrasse 6  
D-86916 Kaufering  
Tel.: +49 8191 906310  
Fax: +49 8191 90176310  
e-mail: anchor.hse@hilti.com

- Contact: Mechthild Krauter

- \* Data compared to the previous version altered.

SE

## 1 Identification

· **Product identifier**

· **Trade name:** CF-AS CJP; CF ISO 765; CF ISO 500+; CF-I ECO +; CS-F JS; CF 812 CC; CF-F ECO; CF-I 50 ECO GV; CF 125-50; CF 125-5W50; CF 126-N; CF 126; CF ISO 750; CF-I 750 B2 (-SV); CF 116-45; CF F 600; CF 116; CF-JI; CF 812; CF 812 WD; CF-I 65 ECO

· **Relevant identified uses of the substance or mixture and uses advised against**

· **Sector of Use** Building and construction work

· **Application of the substance / the mixture**

Assembly foam

Construction chemicals

· **Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

Hilti, Inc.

5400 South 122nd East Ave.

US-Tulsa, OK 74146

Phone: (800) 879-8000

Fax: (800) 879-7000

Español: (800) 879-5000

· **Information department:**

see section 16

chemicals.hse@hilti.com

· **Emergency telephone number:**

Chem-Trec

Tel.: 1 800 424 9300

Tox Info Suisse - 24 h Service

Tel.: 0041 / 44 251 51 51 (international)

## 2 Hazard(s) identification

· **Classification of the substance or mixture**

Flam. Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurized container: May burst if heated.

Acute Tox. 4 H332 Harmful if inhaled.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Carc. 2 H351 Suspected of causing cancer.

STOT SE 3 H335 May cause respiratory irritation.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

· **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

Xn; Harmful

R20-40-48/20: Harmful by inhalation. Limited evidence of a carcinogenic effect. Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Xn; Sensitising

R42/43: May cause sensitization by inhalation and skin contact.

Xi; Irritant

R36/37/38: Irritating to eyes, respiratory system and skin.

F+; Extremely flammable

R12: Extremely flammable.

· **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Warning! Pressurized container.

· **Label elements**

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS02

GHS07

GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**

4,4'-diphenylmethanediisocyanate, isomers and homologues

· **Hazard statements**

H222-H229 Extremely flammable aerosol. Pressurized container: May burst if heated.

H332 Harmful if inhaled.

H315 Causes skin irritation.

(Contd. on page 2)



# Safety Data Sheet

acc. to ISO 11014

Printing date 05/19/2015

Version number 5

Reviewed on 05/19/2015

(Contd. of page 1)

- H319 Causes serious eye irritation.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H317 May cause an allergic skin reaction.
- H351 Suspected of causing cancer.
- H335 May cause respiratory irritation.
- H373 May cause damage to organs through prolonged or repeated exposure.

## Precautionary statements

- P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- P211 Do not spray on an open flame or other ignition source.
- P251 Pressurized container: Do not pierce or burn, even after use.
- P260 Do not breathe dust/fume/gas/mist/vapors/spray.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P302+P352 If on skin: Wash with plenty of water.
- P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

## Classification system

### NFPA ratings (scale 0-4)



Health = 1  
Fire = 4  
Reactivity = 1

### Other hazards

### Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

## 3 Composition/information on ingredients

### Chemical characterization: Mixtures

· **Description:** Mixture consisting of the following components.

### Dangerous components:

9016-87-9	4,4'-diphenylmethanediisocyanate, isomers and homologues	Xn R20-40-48/20; Xn R42/43; Xi R36/37/38	>25%
13674-84-5	Tris(1-chloro-2-propyl)phosphate	Xn R22 R52/53	10-25%
75-28-5	isobutane	F+ R12	5-15%
106-97-8	butane, pure	F+ R12	5-15%
115-10-6	dimethyl ether	F+ R12	5-15%
74-98-6	propane liquefied	F+ R12	5-15%

· **Additional information** For the wording of the listed risk phrases refer to section 16.

## 4 First-aid measures

### Description of first aid measures

### General information

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· **After inhalation** Supply fresh air; consult doctor in case of complaints.

· **After skin contact** Treat affected skin with cotton wool or cellulose. Then wash and rinse thoroughly with water and a mild cleaning agent.

· **After eye contact** Rinse opened eye for several minutes under running water. Then consult a doctor.

### After swallowing

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; immediately call for medical help.

### Information for doctor

· **Most important symptoms and effects, both acute and delayed** Allergic reactions

· **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

## 5 Fire-fighting measures

### Extinguishing media

· **Suitable extinguishing agents** CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **For safety reasons unsuitable extinguishing agents** Water with full jet.

### Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

Can form explosive gas-air mixtures.

### Advice for firefighters

### Protective equipment:

Wear self-contained respiratory protective device.

Mount respiratory protective device.

(Contd. on page 3)



(Contd. of page 2)

· **Additional information** Cool endangered receptacles with water spray.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
  - Wear protective clothing.
  - Ensure adequate ventilation
  - Keep away from ignition sources
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
  - Allow to solidify. Pick up mechanically.
  - Dispose contaminated material as waste according to item 13.
  - Do not flush with water or aqueous cleansing agents
- **Reference to other sections**
  - See Section 7 for information on safe handling
  - See Section 8 for information on personal protection equipment.
  - See Section 13 for disposal information.

## 7 Handling and storage

- **Handling**
- **Precautions for safe handling**
  - Keep receptacles tightly sealed.
  - Store in cool, dry place in tightly closed receptacles.
  - Keep away from heat and direct sunlight.
  - Ensure good ventilation/exhaustion at the workplace.
  - Open and handle receptacle with care.
- **Information about protection against explosions and fires:**
  - Don't spray on a naked flames or any incandescent material
  - Keep ignition sources away - Do not smoke.
  - Protect against electrostatic charges.
  - Contents under pressure. Do not store in direct sunlight. Do not store above 100°F. Do not open or burn even after use.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:**
  - Store in a cool location.
  - Observe official regulations on storing packagings with pressurized containers.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:**
  - Protect from heat and direct sunlight.
  - Store receptacle in a well ventilated area.
  - Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.
- **Storage class 2 B**
- **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

### 75-28-5 isobutane

TLV Short-term value: 2370 mg/m<sup>3</sup>, 1000 ppm

### 106-97-8 butane, pure

REL Long-term value: 1900 mg/m<sup>3</sup>, 800 ppm

TLV Short-term value: 2370 mg/m<sup>3</sup>, 1000 ppm

### 115-10-6 dimethyl ether

WEEL Long-term value: 1000 ppm

### 74-98-6 propane liquefied

PEL Long-term value: 1800 mg/m<sup>3</sup>, 1000 ppm

REL Long-term value: 1800 mg/m<sup>3</sup>, 1000 ppm

TLV refer to Appendix F: minimal oxygen content

- **Additional information:** The lists that were valid during the creation were used as basis.

- **Exposure controls**

- **Personal protective equipment**

- **General protective and hygienic measures**

Do not eat, drink, smoke or sniff while working.  
 Keep away from foodstuffs, beverages and feed.  
 Wash hands before breaks and at the end of work.  
 Avoid contact with the eyes and skin.  
 Immediately remove all soiled and contaminated clothing  
 Do not inhale gases / fumes / aerosols.

(Contd. on page 4)

(Contd. of page 3)

## Breathing equipment:

Not necessary if room is well-ventilated.  
Use suitable respiratory protective device in case of insufficient ventilation.

## Recommended filter device for short term use:

Filter AX  
EN 371

## Protection of hands:



Protective gloves.

EN 374

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

## Material of gloves Nitrile rubber, NBR

## Penetration time of glove material Value for the permeation: Level ≤ 60

## Eye protection:



Tightly sealed goggles.

EN 166 + EN 170

## Body protection:



Protective work clothing.

## 9 Physical and chemical properties

### Information on basic physical and chemical properties

#### General Information

#### Appearance:

**Form:** Aerosol  
**Color:** Different according to coloring  
**Odor:** Characteristic  
**Odour threshold:** Not determined.

**pH-value:** Not determined.

#### Change in condition

**Melting point/Melting range:** Not determined.  
**Boiling point/Boiling range:** <35 °C (<95 °F)

**Flash point:** <0 °C (<32 °F) (DIN 53213)

**Flammability (solid, gaseous)** Not applicable.

**Ignition temperature:** 235 °C (455 °F)

**Decomposition temperature:** Not determined.

**Auto igniting:** Product is not selfigniting.

**Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

#### Explosion limits:

**Lower:** 1.5 Vol %  
**Upper:** 11 Vol %

**Vapor pressure:** Not determined

**Density:** Not determined

**Relative density** Not determined.

**Vapour density** Not determined.

**Evaporation rate** Not applicable.

#### Solubility in / Miscibility with

**Water:** Not miscible or difficult to mix

**Partition coefficient (n-octanol/water):** Not determined.

#### Viscosity:

**dynamic:** Not determined.  
**kinematic:** Not determined.

(Contd. on page 5)

(Contd. of page 4)

## Other information

CF 116 - VOC Content: 2.1 g/l (EPA Method 24)  
CF 812 - VOC Content: 2.4 g/l (EPA Method 24)  
CF-AS CJP - VOC Content: 0.012 g/l (EPA Method 24)

## 10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions**  
Reacts with alcohols, amines, aqueous acids and alkalis  
Danger of bursting
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

### LD/LC50 values that are relevant for classification:

#### 9016-87-9 4,4'-diphenylmethanediisocyanate, isomeres and homologues

Oral	LD50	>5000 mg/kg (rat)
Inhalative	LC50/4h	0.49 mg/l (rat)

#### 13674-84-5 Tris(1-chloro-2-propyl)phosphate

Oral	LD50	1150 - 1750 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rat)
Inhalative	LC50/4h	>5 mg/l (rat)

#### 74-98-6 propane liquefied

Inhalative	LC50/4h	513 mg/l (rat)
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#### 115-10-6 dimethyl ether

Inhalative	LC50/4h	308 mg/l (rat)
------------	---------	----------------

#### 75-28-5 isobutane

Inhalative	LC50/4h	>50 mg/l (rat)
------------	---------	----------------

#### 106-97-8 butane, pure

Inhalative	LC50/4h	658 mg/l (rat)
------------	---------	----------------

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:**  
Sensitization possible through inhalation.  
Sensitization possible through skin contact.
- **Additional toxicological information:**  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Harmful  
Irritant

### IARC (International Agency for Research on Cancer)

9016-87-9	4,4'-diphenylmethanediisocyanate, isomeres and homologues	3
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### NTP (National Toxicology Program)

None of the ingredients is listed

### OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

## 12 Ecological information

### Toxicity

#### Aquatic toxicity:

#### 13674-84-5 Tris(1-chloro-2-propyl)phosphate

EC50/48h	65 - 335 mg/l (magna daphnia)
EC50/72h	45 mg/l (Algae)
EC50/96h	56.2 mg/l (fish)

#### 9016-87-9 4,4'-diphenylmethanediisocyanate, isomeres and homologues

EC50/96h	>1000 mg/l (fish)
----------	-------------------

#### 115-10-6 dimethyl ether

EC50/96h	>1000 mg/l (fish)
----------	-------------------

(Contd. on page 6)

(Contd. of page 5)

## 74-98-6 propane liquefied

EC50/96h >1000 mg/l (fish)

- **Persistence and degradability** Based on previous experience, this product is inert and non-degradable.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** Does not accumulate in organisms
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**  
After curing, the product can be disposed of with household waste.  
Full or only partially emptied cartridges must be disposed of as special waste in accordance with official regulations.

### · European waste catalogue:

08 04 09*	waste adhesives and sealants containing organic solvents or other dangerous substances
20 01 27*	paint, inks, adhesives and resins containing dangerous substances

- **Uncleaned packagings:**
- **Recommendation:**  
Dispose of packaging according to regulations on the disposal of packagings.  
Disposal must be made according to official regulations.

## 14 Transport information

- **UN-Number**
- **DOT, ADR, IMDG, IATA** UN1950
- **UN proper shipping name**
- **DOT** Aerosols, flammable
- **ADR** 1950 Aerosols
- **IMDG** AEROSOLS
- **IATA** AEROSOLS, flammable

### · Transport hazard class(es)

#### · DOT



- **Class** 2.1
- **Label** 2.1

#### · ADR



- **Class** 2 - 5F Gases
- **Label** 2.1

#### · IMDG, IATA



- **Class** 2.1
- **Label** 2.1

### · Packing group

- **DOT, ADR, IMDG, IATA** Void

### · Environmental hazards:

- **Marine pollutant:** No
- **Special marking (ADR):** None
- **Special marking (IATA):** None

(Contd. on page 7)

(Contd. of page 6)

· Special precautions for user	Warning: Gases
· Danger code (Kemler):	Void
· EMS Number:	F-D,S-U
· Segregation groups	None
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· IATA	
· Remarks:	Packing Instruction No. 203
· UN "Model Regulation":	UN1950, Aerosols, 2.1

## 15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara

### · Section 355 (Extremely hazardous substances):

None of the ingredients is listed.

### · Section 313 (Specific toxic chemical listings):

9016-87-9 | 4,4'-diphenylmethanediisocyanate, isomeres and homologues

### · TSCA (Toxic Substances Control Act):

All ingredients are listed.

### · Proposition 65:

#### · Chemicals known to cause cancer:

None of the ingredients are listed.

### · Cancerogenity categories

#### · EPA (Environmental Protection Agency)

9016-87-9 | 4,4'-diphenylmethanediisocyanate, isomeres and homologues

CBD

#### · TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

#### · MAK (German Maximum Workplace Concentration)

9016-87-9 | 4,4'-diphenylmethanediisocyanate, isomeres and homologues

4

#### · NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

#### · Chemical safety assessment: not required.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

### · Relevant phrases

- R12 Extremely flammable.
- R20 Harmful by inhalation.
- R22 Harmful if swallowed.
- R36/37/38 Irritating to eyes, respiratory system and skin.
- R40 Limited evidence of a carcinogenic effect.
- R42/43 May cause sensitization by inhalation and skin contact.
- R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
- R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

### · Department issuing SDS:

Hilti Corporation  
Business Unit Chemicals  
Quality/Safety/Environment  
FL-9494 Schaan / Liechtenstein

chemicals.hse@hilti.com

Tel.: +423 234 3004

FAX.: +423 234 3462

### · Date of preparation / last revision 05/19/2015 / 4

### · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
DOT: US Department of Transportation  
IATA: International Air Transport Association  
ACGIH: American Conference of Governmental Industrial Hygienists  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
NFPA: National Fire Protection Association (USA)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent

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# Safety Data Sheet

acc. to ISO 11014

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Flam. Aerosol 1: Flammable aerosols, Hazard Category 1  
Acute Tox. 4: Acute toxicity, Hazard Category 4  
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2  
Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A  
Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1  
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1  
Carc. 2: Carcinogenicity, Hazard Category 2  
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3  
STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2  
· \* **Data compared to the previous version altered.**

US



MSDS No.: 103  
Revision No.: 012  
Revision Date: 11/03/99  
Page: 1 of 2

## MATERIAL SAFETY DATA SHEET

**Product name:** CFR-1 Cleaner  
**Description:** Cleaning agent for Hilti CF 120-P2, CF 120-P3 and CF-DS1 foam dispensers  
**Supplier:** Hilti, Inc. P.O. Box 21148, Tulsa, OK 74121  
**Emergency # (Chem-Trec.):** 1 800 424 9300 (USA, PR, Virgin Islands, Canada); 001 703 527 3887 (other countries)

## INGREDIENTS AND EXPOSURE LIMITS

Ingredients:	CAS Number:	TLV:	PEL:	STEL:
Acetone	00067-64-1	750 ppm	750 ppm	1000 ppm
Isopropyl alcohol	00067-63-0	400 ppm	400 ppm	500 ppm
Butane	00106-97-8	800 ppm	800 ppm	NE
Propane	00074-98-6	NE	1000 ppm	NE

**Abbreviations:** PEL = OSHA Permissible Exposure Limit. TLV = ACGIH Threshold Limit Value. STEL = Short Term Exposure Limit. NE = None Established. NA = Not Applicable.

## PHYSICAL DATA

<b>Appearance:</b>	Clear aerosol.	<b>Odor:</b>	Sweet pungent odor.
<b>Vapor Density: (air = 1)</b>	~ 2 (air = 1)	<b>Vapor Pressure:</b>	Not determined.
<b>Boiling Point:</b>	Not determined.	<b>VOC Content:</b>	396 g/l
<b>Evaporation Rate:</b>	> 3.0	<b>Solubility in Water:</b>	Negligible.
<b>Specific Gravity:</b>	0.72	<b>pH:</b>	Not determined.

## FIRE AND EXPLOSION HAZARD DATA

<b>Flash Point:</b>	- 4° F (- 20° C)	<b>Flammable Limits:</b>	1.4 - 12.8%
<b>Extinguishing Media:</b>	Water, CO <sub>2</sub> , Dry Chemical, Foam.		
<b>Special Fire Fighting Procedures:</b>	Contents under pressure. Cool exposed containers with water spray. A self-contained breathing apparatus (SCBA) should be used in fires involving chemicals.		
<b>Unusual Fire and Explosion Hazards:</b>	Extremely flammable liquid and gas under pressure. Containers can explode or be propelled through the air when exposed to extreme heat such as fire. Vapors are heavier than air and can migrate to distant ignition sources where they can be ignited. Keep away from flames or sparking equipment.		

## REACTIVITY DATA

<b>Stability:</b>	Stable.	<b>Hazardous Polymerization:</b>	Will not occur.
<b>Incompatibility:</b>	Strong acids and oxidizing agents. Extreme heat / fire.		
<b>Decomposition Products:</b>	Thermal decomposition can yield CO and CO <sub>2</sub> .		
<b>Conditions to Avoid:</b>	Exposure to high temperatures, extremely hot surfaces, flames, sparks, etc. Storage above 120° F.		

## HEALTH HAZARD DATA

<b>Known Hazards:</b>	<b>Acute:</b> Skin irritation. Eye irritation and corneal burns. Central nervous system (CNS) depressant. <b>Chronic:</b> Dermatitis.
<b>Signs and Symptoms of Exposure:</b>	<b>Eyes:</b> Irritation and corneal burns can occur from direct contact with the eyes. <b>Skin:</b> Prolonged or repeated skin contact can cause irritation and defatting (drying) of the skin. <b>Inhalation:</b> Can be irritating to the respiratory tract if inhaled. Headaches and dizziness can occur from excessive exposure in poorly ventilated areas. <b>Ingestion:</b> Not a likely route of exposure. Considered to have a high acute oral toxicity based upon isopropyl alcohol content.
<b>Routes of Exposure:</b>	Dermal. Inhalation.
<b>Carcinogenicity:</b>	No ingredients are classified as a carcinogen by IARC, NTP or OSHA.
<b>Medical Conditions Aggravated by Exposure:</b>	Eye, skin, and respiratory conditions.

## EMERGENCY AND FIRST AID PROCEDURES

<b>Eyes:</b>	Flush <b>immediately</b> with large amounts of clean water for at least 15 minutes. Seek medical attention if any effects develop.
<b>Skin:</b>	Wash with soap and water. Seek medical attention if any effects persist.
<b>Inhalation:</b>	Move victim to fresh air. Call a physician if symptoms persist.
<b>Ingestion:</b>	If conscious, give plenty of water to drink. Do not induce vomiting unless large amounts are ingested. Never give anything by mouth to an unconscious person. Contact a physician immediately.
<b>Other:</b>	Referral to a physician is recommended if there is any question about the seriousness of the injury/exposure.

## CONTROL MEASURES AND PERSONAL PROTECTIVE EQUIPMENT

<b>Ventilation:</b>	General (natural or mechanically induced fresh air movements).
<b>Eye Protection:</b>	Splash-proof chemical goggles recommended. Safety glasses with side shields as a minimum.
<b>Skin Protection:</b>	Gloves recommended while cleaning tools (cloth or impermeable).
<b>Respiratory Protection:</b>	Not normally required.

## PRECAUTIONS FOR SAFE HANDLING AND USE

<b>Handling and Storing Precautions:</b>	Use with adequate ventilation. Extremely flammable liquid and gas under pressure. Vapors are heavier than air and can be ignited by distant ignition sources. Keep vapors and spray away from extremely hot surfaces, sparks and flame. Do not puncture or incinerate container. Do not expose to excessive heat or store at temperatures above 120° F (49° C). Avoid contact with eyes, skin and clothing. Practice good hygiene; i.e. wash after using and before eating or smoking. Store indoors out of direct sunlight. For industrial use only. Keep out of reach of children. Storage classifications: NFPA = Level 3; OSHA = Class 1A.
<b>Spill Procedures:</b>	Remove all sources of ignition. Take up with an absorbent material and place in a container for proper disposal in accordance with all applicable local, state, or federal requirements.

## REGULATORY INFORMATION

<b>Hazard Communication:</b>	This MSDS has been prepared in accordance with the federal OSHA Hazard Communication Standard 29 CFR 1910.1200.
<b>HMIS Codes:</b>	Health 1, Flammability 3, Reactivity 0, PPE A (Goggles)
<b>DOT Shipping Name:</b>	Consumer commodity, ORM-D
<b>IATA/ICAO Shipping Name:</b>	Aerosols, flammable, n.o.s. Class 2.1, UN 1950, Ltd. Qty.
<b>TSCA Inventory Status:</b>	Chemical components listed on TSCA inventory.
<b>SARA Title III, Section 313:</b>	This product does not contain any ingredients which are subject to reporting under Section 313 of SARA Title III (40 CFR Part 372).
<b>EPA Waste Code(s):</b>	D001
<b>Waste Disposal Methods:</b>	Consult with regulatory agencies or your corporate personnel for disposal methods that comply with local, state, and federal safety, health and environmental regulations.

## CONTACTS

<b>Customer Service:</b>	1 800 879 8000	<b>Technical Service:</b>	1 800 879 8000
<b>Health / Safety:</b>	1 800 879 6000	Jerry Metcalf	(x6704)
<b>Emergency # (Chem-Trec):</b>	1 800 424 9300 (USA, PR, Virgin Islands, Canada); 001 703 527 3887 (other countries)		

The information and recommendations contained herein are based upon data believed to be correct; however, no guarantee or warranty of any kind expressed or implied is made with respect to the information provided.





# Safety Data Sheet

acc. to ISO 11014

Printing date 05/18/2015

Version number 4

Reviewed on 03/06/2015

## 1 Identification

- **Product identifier**
- **Trade name:**  
**CS-ADH ACR 310**  
**CP 506**
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use** Building and construction work
- **Application of the substance / the mixture** Construction chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Hilti, Inc.  
5400 South 122nd East Ave.  
US-Tulsa, OK 74146  
Phone: (800) 879-8000  
Fax: (800) 879-7000  
Español: (800) 879-5000
- **Information department:**  
chemicals.hse@hilti.com  
see section 16
- **Emergency telephone number:**  
Tox Info Suisse - 24 h Service  
Tel.: 0041 / 44 251 51 51 (international)
- Chem-Trec  
Tel.: 1 800 424 9300

## 2 Hazard(s) identification

- **Classification of the substance or mixture** The product is not classified according to the Globally Harmonized System (GHS).

- **Label elements**
- **GHS label elements** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Classification system**
- **NFPA ratings (scale 0-4)**



- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

## 3 Composition/information on ingredients

- **Chemical characterization:** Mixtures
- **Description:**

Mixture of the substances listed below with nonhazardous additions.

· <b>Dangerous components:</b>	
56-81-5   glycerol	<2.5%

- **Additional information** For the wording of the listed risk phrases refer to section 16.

## 4 First-aid measures

- **Description of first aid measures**
- **General information** No special measures required.
- **After inhalation** Take affected persons into fresh air and keep quiet.
- **After skin contact**  
Immediately wash with water and soap and rinse thoroughly.  
If skin irritation continues, consult a doctor.
- **After eye contact** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing** Seek immediate medical advice.
- **Information for doctor**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

## 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents** CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Ensure adequate ventilation

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective clothing.  
Ensure adequate ventilation  
Particular danger of slipping on leaked/spilled product.
- **Environmental precautions:** Do not allow product to reach sewage system or any water course.
- **Methods and material for containment and cleaning up:** Pick up mechanically.
- **Reference to other sections**  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

## 7 Handling and storage

- **Handling**
- **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** keep containers securely closed and dry, store at 5 - 25 °C / 41 - 77 °F
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:**  
Store in cool, dry conditions in well sealed receptacles.  
Protect from heat and direct sunlight.
- **Storage class** 10
- **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**  
The usual precautionary measures for handling chemicals should be followed.  
Avoid contact with the eyes and skin.  
Keep away from foodstuffs, beverages and feed.  
Wash hands before breaks and at the end of work.
- **Breathing equipment:** Not necessary if room is well-ventilated.
- **Protection of hands:**



Protective gloves.

EN 374

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

- **Material of gloves** Nitrile rubber, NBR

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Tightly sealed goggles.

EN 166 + EN 170

## · Body protection:

(Contd. of page 2)



Protective work clothing.

## 9 Physical and chemical properties

## · Information on basic physical and chemical properties

## · General Information

## · Appearance:

Form:	Pasty
Color:	According to product specification
Odor:	Characteristic
Odour threshold:	Not determined

· pH-value: Not applicable

## · Change in condition

Melting point/Melting range:	Not determined.
Boiling point/Boiling range:	undetermined

· Flash point: Not applicable

· Flammability (solid, gaseous) Not determined

· Ignition temperature: Not applicable

· Auto igniting: Product is not selfigniting.

· Danger of explosion: Product does not present an explosion hazard.

## · Explosion limits:

Lower:	Not determined
Upper:	Not determined

· Vapor pressure: Not determined

· Density: Not determined

· Relative density Not determined

· Vapour density Not determined

· Evaporation rate Not determined

## · Solubility in / Miscibility with

Water:	Not miscible or difficult to mix
--------	----------------------------------

· Partition coefficient (n-octanol/water): Not determined

## · Viscosity:

dynamic:	Not determined
kinematic:	Not determined

· Other information VOC Content: 57 g/l (EPA Method 24)

## 10 Stability and reactivity

## · Reactivity

## · Chemical stability

· Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

· Possibility of hazardous reactions No dangerous reactions known

· Conditions to avoid No further relevant information available.

· Incompatible materials: No further relevant information available.

· Hazardous decomposition products: No dangerous decomposition products known

## 11 Toxicological information

## · Information on toxicological effects

## · Acute toxicity:

## · Primary irritant effect:

· on the skin: No irritant effect.

· on the eye: No irritating effect.

· Sensitization: No sensitizing effects known.

## · Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

## · IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

(Contd. on page 4)

(Contd. of page 3)

· **NTP (National Toxicology Program)**

None of the ingredients is listed

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

## 12 Ecological information

· **Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **Persistence and degradability** No further relevant information available.

· **Behavior in environmental systems:**

· **Bioaccumulative potential** No further relevant information available.

· **Mobility in soil** No further relevant information available.

· **Ecotoxicological effects:** Not determined

· **Additional ecological information:**

· **General notes:** Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

· **Waste treatment methods**

· **Recommendation** Smaller quantities can be disposed of with household waste.

· **Uncleaned packagings:**

· **Recommendation:**

Dispose of packaging according to regulations on the disposal of packagings.

Empty packs: May be disposed via the local Green Dot collecting system or EAK waste material code 150102 (plastic packaging materials)

## 14 Transport information

· **UN-Number**

· **DOT, ADR, ADN, IMDG, IATA**

Void

· **UN proper shipping name**

· **DOT, ADR, ADN, IMDG, IATA**

Void

· **Transport hazard class(es)**

· **DOT, ADR, ADN, IMDG, IATA**

· **Class**

Void

· **Packing group**

· **DOT, ADR, IMDG, IATA**

Void

· **Environmental hazards:**

· **Marine pollutant:**

No

· **Special precautions for user**

Not applicable.

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

· **Transport/Additional information:**

Not dangerous according to the above specifications.

· **UN "Model Regulation":**

-

## 15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **Sara**

· **Section 355 (Extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients are listed.

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Proposition 65:**

· **Chemicals known to cause cancer:**

28553-12-0 di-"isononyl" phthalate

(Contd. on page 5)

(Contd. of page 4)

· **Cancerogenity categories**· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

· **MAK (German Maximum Workplace Concentration)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **Chemical safety assessment:** not required.**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:**

Hilti Corporation

Business Unit Chemicals

Quality/Safety/Environment

FL-9494 Schaan / Liechtenstein

chemicals.hse@hilti.com

Tel.: +423 234 3004

FAX.: +423 234 3462

· **Date of preparation / last revision** 05/18/2015 / 3· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

· **\* Data compared to the previous version altered.**



## Safety Data Sheet

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**Document Group:** 22-4025-7  
**Issue Date:** 04/26/16

**Version Number:** 15.00  
**Supersedes Date:** 02/24/16

### SECTION 1: Identification

#### 1.1. Product identifier

3M™ Super 77™ Multipurpose Adhesive

#### Product Identification Numbers

LN-A100-0323-8, LN-A100-0323-9, LN-A100-0324-0, 44-0061-0114-9, 44-0061-0164-4, 62-4977-4030-8, 62-4977-4920-0, 62-4977-4926-7, 62-4977-4977-0, 70-0065-8412-5, 70-0065-9982-6, 70-0069-1448-8, 70-0069-1451-2, 70-0069-2063-4, 70-0069-3662-2, 70-0069-3663-0, 70-0069-4021-0, 70-0069-4139-0, 70-0069-4245-5, 70-0069-4840-3, 70-0069-5039-1, 70-0069-6344-4, 70-0714-1653-4, 70-0714-1654-2, 70-0714-1656-7, 70-0714-7444-2, 70-0714-7572-0, 70-0714-7640-5, 70-0714-7930-0, 70-0714-8259-3, 70-0714-8947-3

#### 1.2. Recommended use and restrictions on use

##### Recommended use

Adhesive aerosol, General Purpose Aerosol Adhesive

#### 1.3. Supplier's details

**MANUFACTURER:** 3M  
**DIVISION:** Construction and Home Improvement Markets  
**ADDRESS:** 3M Center, St. Paul, MN 55144-1000, USA  
**Telephone:** 1-888-3M HELPS (1-888-364-3577)

#### 1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

### SECTION 2: Hazard identification

The label elements below were prepared in accordance with OSHA Hazard Communication Standard, 29 CFR 1910.1200. This information may be different from the actual product label information for labels regulated by other agencies.

#### 2.1. Hazard classification

Flammable Aerosol: Category 1.  
Gas Under Pressure: Liquefied gas.  
Serious Eye Damage/Irritation: Category 2A.  
Reproductive Toxicity: Category 2.  
Simple Asphyxiant.  
Specific Target Organ Toxicity (single exposure): Category 1.  
Specific Target Organ Toxicity (central nervous system): Category 3.

## 2.2. Label elements

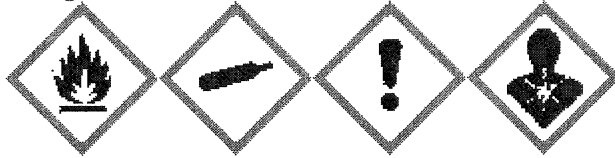
### Signal word

Danger

### Symbols

Flame | Gas cylinder | Exclamation mark | Health Hazard |

### Pictograms



### Hazard Statements

Extremely flammable aerosol.

Contains gas under pressure; may explode if heated.

Causes serious eye irritation.

May cause drowsiness or dizziness.

Suspected of damaging fertility or the unborn child.

May displace oxygen and cause rapid suffocation.

Causes damage to organs:

cardiovascular system |

### Precautionary Statements

#### General:

Keep out of reach of children.

#### Prevention:

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Do not spray on an open flame or other ignition source.

Pressurized container: Do not pierce or burn, even after use.

Do not breathe dust/fume/gas/mist/vapors/spray.

Use only outdoors or in a well-ventilated area.

Wear eye/face protection.

Wear protective gloves.

Do not eat, drink or smoke when using this product.

Wash thoroughly after handling.

#### Response:

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If eye irritation persists: Get medical advice/attention.

IF exposed or concerned: Get medical advice/attention.

Specific treatment (see Notes to Physician on this label).

#### Storage:

Protect from sunlight. Store in a well-ventilated place.

Protect from sunlight. Do not expose to temperatures exceeding 50C/122F.

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

**Disposal:**

Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

**Notes to Physician:**

Exposure may increase myocardial irritability. Do not administer sympathomimetic drugs unless absolutely necessary.

**2.3. Hazards not otherwise classified**

Intentional misuse by deliberately concentrating and inhaling contents can be harmful or fatal.

20% of the mixture consists of ingredients of unknown acute oral toxicity.

36% of the mixture consists of ingredients of unknown acute dermal toxicity.

### SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Acetone	67-64-1	20 - 30 Trade Secret *
Non-volatile components (N.J.T.S. Registry No. 04499600-6433P)	Trade Secret*	20 - 30 Trade Secret *
Propane	74-98-6	15 - 25 Trade Secret *
Cyclohexane	110-82-7	10 - 20 Trade Secret *
Petroleum Distillates	64742-49-0	10 - 20 Trade Secret *
Hexane	110-54-3	< 0.5 Trade Secret *

\*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

### SECTION 4: First aid measures

**4.1. Description of first aid measures**

**Inhalation:**

Remove person to fresh air. Get medical attention.

**Skin Contact:**

Wash with soap and water. If signs/symptoms develop, get medical attention.

**Eye Contact:**

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. Get medical attention.

**If Swallowed:**

Rinse mouth. If you feel unwell, get medical attention.

**4.2. Most important symptoms and effects, both acute and delayed**

See Section 11.1. Information on toxicological effects.

**4.3. Indication of any immediate medical attention and special treatment required**

Exposure may increase myocardial irritability. Do not administer sympathomimetic drugs unless absolutely necessary.

### SECTION 5: Fire-fighting measures

**5.1. Suitable extinguishing media**



Use a fire fighting agent suitable for the surrounding fire.

## 5.2. Special hazards arising from the substance or mixture

Closed containers exposed to heat from fire may build pressure and explode.

## Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Aldehydes	During Combustion
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion

## 5.3. Special protective actions for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture.

# SECTION 6: Accidental release measures

## 6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

## 6.2. Environmental precautions

Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

## 6.3. Methods and material for containment and cleaning up

If possible, seal leaking container. Place leaking containers in a well-ventilated area, preferably an operating exhaust hood, or if necessary outdoors on an impermeable surface until appropriate packaging for the leaking container or its contents is available. Contain spill. Cover spill area with a fire-extinguishing foam. An appropriate aqueous film forming foam (AFFF) is recommended. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and SDS. Seal the container. Dispose of collected material as soon as possible.

# SECTION 7: Handling and storage

## 7.1. Precautions for safe handling

Do not use in a confined area with minimal air exchange. Keep out of reach of children. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Use personal protective equipment (gloves, respirators, etc.) as required.

## 7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Protect from sunlight. Do not expose to temperatures exceeding 50C/122F. Protect from sunlight. Store in a well-ventilated place. Store away from heat. Store away from acids. Store away from oxidizing agents.

# SECTION 8: Exposure controls/personal protection

## 8.1. Control parameters

### Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
Hexane	110-54-3	ACGIH	TWA:50 ppm	Skin Notation
Hexane	110-54-3	OSHA	TWA:1800 mg/m3(500 ppm)	
Cyclohexane	110-82-7	ACGIH	TWA:100 ppm	
Cyclohexane	110-82-7	OSHA	TWA:1050 mg/m3(300 ppm)	
Petroleum Distillates	64742-49-0	CMRG	TWA:50 ppm	
Acetone	67-64-1	ACGIH	TWA:250 ppm;STEL:500 ppm	A4: Not class. as human carcin
Acetone	67-64-1	OSHA	TWA:2400 mg/m3(1000 ppm)	
Propane	74-98-6	ACGIH	Limit value not established:	
Propane	74-98-6	OSHA	TWA:1800 mg/m3(1000 ppm)	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

## 8.2. Exposure controls

### 8.2.1. Engineering controls

Do not remain in area where available oxygen may be reduced. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

### 8.2.2. Personal protective equipment (PPE)

#### Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Indirect Vented Goggles

#### Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing.

Gloves made from the following material(s) are recommended: Butyl Rubber

Nitrile Rubber

#### Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece supplied-air respirator

For questions about suitability for a specific application, consult with your respirator manufacturer.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

General Physical Form:	Liquid
Specific Physical Form:	Aerosol
Odor, Color, Grade:	Clear sweet fruity odor
Odor threshold	No Data Available
pH	No Data Available
Melting point	No Data Available
Boiling Point	Not Applicable
Flash Point	-42.00 °F [Test Method: Tagliabue Closed Cup]
Evaporation rate	1.9 [Ref Std: ETHER=1]
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	No Data Available
Flammable Limits(UEL)	No Data Available
Vapor Density	2.97 [Ref Std: AIR=1]
Density	0.726 g/ml
Specific Gravity	0.726 [Ref Std: WATER=1]
Solubility in Water	Nil
Solubility- non-water	No Data Available
Partition coefficient: n-octanol/ water	No Data Available
Autoignition temperature	No Data Available
Decomposition temperature	No Data Available
Viscosity	Not Applicable
Hazardous Air Pollutants	0.4 % weight [Test Method: Calculated]
Hazardous Air Pollutants	0.016 lb HAPS/lb solids [Test Method: Calculated]
Hazardous Air Pollutants	0.02 lb HAPS/gal [Test Method: Calculated]
Molecular weight	No Data Available
Volatile Organic Compounds	Approximately 51 % [Test Method: calculated SCAQMD rule 443.1]
Percent volatile	<=75 % weight
VOC Less H2O & Exempt Solvents	<=458 g/l [Test Method: calculated SCAQMD rule 443.1]

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

### 10.2. Chemical stability

Stable.

### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

### 10.4. Conditions to avoid

Heat

### 10.5. Incompatible materials

Strong oxidizing agents

### 10.6. Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
------------------	------------------

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

## SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

### 11.1. Information on Toxicological effects

#### Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

##### Inhalation:

Intentional concentration and inhalation may be harmful or fatal.

Simple Asphyxiation: Signs/symptoms may include increased heart rate, rapid respirations, drowsiness, headache, incoordination, altered judgement, nausea, vomiting, lethargy, seizures, coma, and may be fatal.

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May cause additional health effects (see below).

##### Skin Contact:

Dermal Defatting: Signs/symptoms may include localized redness, itching, drying and cracking of skin.

##### Eye Contact:

Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

##### Ingestion:

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

May cause additional health effects (see below).

#### Additional Health Effects:

##### Single exposure may cause target organ effects:

Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Cardiac Sensitization: Signs/symptoms may include irregular heartbeat (arrhythmia), faintness, chest pain, and may be fatal.

##### Reproductive/Developmental Toxicity:

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

#### Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

**Acute Toxicity**

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE > 5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE > 5,000 mg/kg
Propane	Inhalation-Gas (4 hours)	Rat	LC50 > 200,000 ppm
Acetone	Dermal	Rabbit	LD50 > 15,688 mg/kg
Acetone	Inhalation-Vapor (4 hours)	Rat	LC50 76 mg/l
Acetone	Ingestion	Rat	LD50 5,800 mg/kg
Cyclohexane	Dermal	Rat	LD50 > 2,000 mg/kg
Cyclohexane	Inhalation-Vapor (4 hours)	Rat	LC50 > 32.9 mg/l
Cyclohexane	Ingestion	Rat	LD50 6,200 mg/kg
Petroleum Distillates	Dermal	Rabbit	LD50 > 3,160 mg/kg
Petroleum Distillates	Inhalation-Vapor (4 hours)	Rat	LC50 > 14.7 mg/l
Petroleum Distillates	Ingestion	Rat	LD50 > 5,000 mg/kg
Non-volatile components (N.J.T.S. Registry No. 04499600-6433P)	Dermal		LD50 estimated to be > 5,000 mg/kg
Non-volatile components (N.J.T.S. Registry No. 04499600-6433P)	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Hexane	Dermal	Rabbit	LD50 > 2,000 mg/kg
Hexane	Inhalation-Vapor (4 hours)	Rat	LC50 170 mg/l
Hexane	Ingestion	Rat	LD50 > 28,700 mg/kg

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

Name	Species	Value
Propane	Rabbit	Minimal irritation
Acetone	Mouse	Minimal irritation
Cyclohexane	Rabbit	Mild irritant
Petroleum Distillates	Rabbit	Irritant
Non-volatile components (N.J.T.S. Registry No. 04499600-6433P)	Professional judgement	Minimal irritation
Hexane	Human and animal	Mild irritant

**Serious Eye Damage/Irritation**

Name	Species	Value
Propane	Rabbit	Mild irritant
Acetone	Rabbit	Severe irritant
Cyclohexane	Rabbit	Mild irritant
Petroleum Distillates	Rabbit	Mild irritant
Hexane	Rabbit	Mild irritant

**Skin Sensitization**

Name	Species	Value
Petroleum Distillates	Guinea pig	Not sensitizing
Hexane	Human	Not sensitizing

**Respiratory Sensitization**

For the component/components, either no data are currently available or the data are not sufficient for classification.

**Germ Cell Mutagenicity**

Name	Route	Value
Propane	In Vitro	Not mutagenic
Acetone	In vivo	Not mutagenic
Acetone	In Vitro	Some positive data exist, but the data are not sufficient for classification
Cyclohexane	In Vitro	Not mutagenic
Cyclohexane	In vivo	Some positive data exist, but the data are not sufficient for classification
Petroleum Distillates	In Vitro	Not mutagenic
Hexane	In Vitro	Not mutagenic
Hexane	In vivo	Not mutagenic

**Carcinogenicity**

Name	Route	Species	Value
Acetone	Not Specified	Multiple animal species	Not carcinogenic
Petroleum Distillates	Inhalation	Mouse	Some positive data exist, but the data are not sufficient for classification
Hexane	Dermal	Mouse	Not carcinogenic
Hexane	Inhalation	Mouse	Some positive data exist, but the data are not sufficient for classification

**Reproductive Toxicity****Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test Result	Exposure Duration
Acetone	Ingestion	Some positive male reproductive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,700 mg/kg/day	13 weeks
Acetone	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 5.2 mg/l	during organogenesis
Cyclohexane	Inhalation	Not toxic to female reproduction	Rat	NOAEL 24 mg/l	2 generation
Cyclohexane	Inhalation	Not toxic to male reproduction	Rat	NOAEL 24 mg/l	2 generation
Cyclohexane	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 6.9 mg/l	2 generation
Hexane	Ingestion	Not toxic to development	Mouse	NOAEL 2,200 mg/kg/day	during organogenesis
Hexane	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 0.7 mg/l	during gestation
Hexane	Ingestion	Toxic to male reproduction	Rat	NOAEL 1,140 mg/kg/day	90 days
Hexane	Inhalation	Toxic to male reproduction	Rat	LOAEL 3.52 mg/l	28 days

**Target Organ(s)****Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
------	-------	-----------------	-------	---------	-------------	-------------------

Propane	Inhalation	cardiac sensitization	Causes damage to organs	Human	NOAEL Not available	
Propane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Propane	Inhalation	respiratory irritation	All data are negative	Human	NOAEL Not available	
Acetone	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Acetone	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Acetone	Inhalation	immune system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL 1.19 mg/l	6 hours
Acetone	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Guinea pig	NOAEL Not available	
Acetone	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse
Cyclohexane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Cyclohexane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human and animal	NOAEL Not available	
Cyclohexane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
Petroleum Distillates	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Petroleum Distillates	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
Petroleum Distillates	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
Hexane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	not available
Hexane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Rabbit	NOAEL Not available	8 hours
Hexane	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 24.6 mg/l	8 hours

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Acetone	Dermal	eyes	Some positive data exist, but the data are not sufficient for classification	Guinea pig	NOAEL Not available	3 weeks
Acetone	Inhalation	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL 3 mg/l	6 weeks
Acetone	Inhalation	immune system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL 1.19 mg/l	6 days
Acetone	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Guinea pig	NOAEL 119 mg/l	not available
Acetone	Inhalation	heart   liver	All data are negative	Rat	NOAEL 45 mg/l	8 weeks
Acetone	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for	Rat	NOAEL 900 mg/kg/day	13 weeks

			classification			
Acetone	Ingestion	heart	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 2,500 mg/kg/day	13 weeks
Acetone	Ingestion	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 200 mg/kg/day	13 weeks
Acetone	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 3,896 mg/kg/day	14 days
Acetone	Ingestion	eyes	All data are negative	Rat	NOAEL 3,400 mg/kg/day	13 weeks
Acetone	Ingestion	respiratory system	All data are negative	Rat	NOAEL 2,500 mg/kg/day	13 weeks
Acetone	Ingestion	muscles	All data are negative	Rat	NOAEL 2,500 mg/kg	13 weeks
Acetone	Ingestion	skin   bone, teeth, nails, and/or hair	All data are negative	Mouse	NOAEL 11,298 mg/kg/day	13 weeks
Cyclohexane	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 24 mg/l	90 days
Cyclohexane	Inhalation	auditory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1.7 mg/l	90 days
Cyclohexane	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rabbit	NOAEL 2.7 mg/l	10 weeks
Cyclohexane	Inhalation	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 24 mg/l	14 weeks
Cyclohexane	Inhalation	peripheral nervous system	All data are negative	Rat	NOAEL 8.6 mg/l	30 weeks
Hexane	Inhalation	peripheral nervous system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Hexane	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Mouse	LOAEL 1.76 mg/l	13 weeks
Hexane	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL Not available	6 months
Hexane	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 1.76 mg/l	6 months
Hexane	Inhalation	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 35.2 mg/l	13 weeks
Hexane	Inhalation	auditory system   immune system   eyes	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Hexane	Inhalation	heart   skin   endocrine system	All data are negative	Rat	NOAEL 1.76 mg/l	6 months
Hexane	Ingestion	peripheral nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,140 mg/kg/day	90 days
Hexane	Ingestion	endocrine system   hematopoietic system   liver   immune system   kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL Not available	13 weeks

**Aspiration Hazard**

Name	Value
Cyclohexane	Aspiration hazard



Petroleum Distillates	Aspiration hazard
Hexane	Aspiration hazard

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

## SECTION 12: Ecological information

### Ecotoxicological information

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

### Chemical fate information

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Incinerate uncured product in a permitted waste incineration facility. Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. Facility must be capable of handling aerosol cans. If no other disposal options are available, waste product that has been completely cured or polymerized may be placed in a landfill properly designed for industrial waste. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

EPA Hazardous Waste Number (RCRA): D001 (Ignitable)

## SECTION 14: Transport Information

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

## SECTION 15: Regulatory information

### 15.1. US Federal Regulations

Contact 3M for more information.

#### 311/312 Hazard Categories:

Fire Hazard - Yes   Pressure Hazard - Yes   Reactivity Hazard - No   Immediate Hazard - Yes   Delayed Hazard - Yes

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

<u>Ingredient</u>	<u>C.A.S. No</u>	<u>% by Wt</u>
Cyclohexane	110-82-7	Trade Secret 10 - 20

### 15.2. State Regulations

Contact 3M for more information.

### 15.3. Chemical Inventories

The components of this product are in compliance with the chemical notification requirements of TSCA.

Contact 3M for more information.

### 15.4. International Regulations

This material contains one or more ingredients that may be regulated by the International Traffic in Arms Regulation (ITAR), an export control of US military technology and chemicals. Prior to export of this material or any product containing this material, determine whether a proper license from the Department of State must be obtained. See 22CFR 120-130 for any specific requirements.

Contact 3M for more information.

**This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.**

## SECTION 16: Other information

### NFPA Hazard Classification

**Health: 2 Flammability: 4 Instability: 0 Special Hazards: None**  
**Aerosol Storage Code: 3**

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

### HMIS Hazard Classification

**Health: \*2 Flammability: 4 Physical Hazard: 0 Personal Protection: X** - See PPE section.

Hazardous Material Identification System (HMIS® IV) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® IV ratings are to be used with a fully implemented HMIS® IV program. HMIS® is a registered mark of the American Coatings Association (ACA).

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## Material Safety Data Sheet

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This material safety data sheet (MSDS) is provided as a courtesy in response to a customer request. This product is not regulated under, and a MSDS is not required for this product by the OSHA Hazard Communication Standard (29 CFR 1910.1200) because, when used as recommended or under ordinary conditions, it should not present a health and safety hazard. However, use or processing of the product not in accordance with the product's recommendations or not under ordinary conditions may affect the performance of the product and may present potential health and safety hazards.

### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Edging and Reinforcement Tape 8411, 8412, Metalized Film Tape 8437, Polyester Tape 850 (various colors), 853, 856, 1614, 1675, 3614, YR36R87, Scotchgard™ Protective Films 1001, 1002 & 1004, Scotch® Fine Line Masking Tape 222

**MANUFACTURER:** 3M

**DIVISION:** Industrial Adhesives and Tapes Division

**ADDRESS:** 3M Center, St. Paul, MN 55144-1000

**EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)**

**Issue Date:** 01/16/13

**Supersedes Date:** 12/06/11

**Document Group:** 26-9794-4

#### Product Use:

Specific Use: Attachment/Reinforcement/Splicing  
Intended Use: Industrial use

3M™ Edging and Reinforcement Tape 8411 & 8412

3M™ Metalized Film Tape 8437

3M™ Polyester Film Tape 850 (Black, Gold, Silver, Clear, & White), 853, & 856

3M™ Scotchgard™ Protective Film 1001

3M™ Scotchgard™ Multi-Layer Protective Films for Glass 1002 & 1004

3M™ Polyester Protective Tape 1614, 1675 & YR36R87

3M™ Scotch® Fine Line Masking Tape 222

### SECTION 2: INGREDIENTS

#### Ingredient

Polyester Backing  
Acrylic Adhesive

#### C.A.S. No.

None  
Trade Secret

#### % by Wt

50 - 99  
1 - 49

## SECTION 3: HAZARDS IDENTIFICATION

### 3.1 EMERGENCY OVERVIEW

**Specific Physical Form:** Roll of Tape

**Odor, Color, Grade:** various colored polyester tape with acrylic adhesive

**General Physical Form:** Solid

**Immediate health, physical, and environmental hazards:** This product, when used under reasonable conditions and in accordance with the 3M directions for use, should not present a health hazard. However, use or processing of the product in a manner not in accordance with the product's directions for use may affect the performance of the product and may present potential health and safety hazards.

### 3.2 POTENTIAL HEALTH EFFECTS

**Eye Contact:**

No health effects are expected.

**Skin Contact:**

No health effects are expected.

**Inhalation:**

No health effects are expected.

**Ingestion:**

No health effects are expected.

## SECTION 4: FIRST AID MEASURES

### 4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

**Eye Contact:** No need for first aid is anticipated.

**Skin Contact:** No need for first aid is anticipated.

**Inhalation:** No need for first aid is anticipated.

**If Swallowed:** No need for first aid is anticipated.

## SECTION 5: FIRE FIGHTING MEASURES

### 5.1 FLAMMABLE PROPERTIES

Autoignition temperature

*Not Applicable*

Flash Point

*Not Applicable*

Flammable Limits(LEL)

*Not Applicable*

Flammable Limits(UEL)

*Not Applicable*

## 5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

## 5.3 PROTECTION OF FIRE FIGHTERS

**Special Fire Fighting Procedures:** Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

**Unusual Fire and Explosion Hazards:** Not applicable. No unusual fire or explosion hazards are anticipated.

**Note:** See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Not applicable.

### 6.2. Environmental precautions

Not applicable.

### Clean-up methods

Not applicable.

## SECTION 7: HANDLING AND STORAGE

### 7.1 HANDLING

Avoid prolonged or repeated skin contact. This product is considered to be an article which does not release or otherwise result in exposure to a hazardous chemical under normal use conditions.

### 7.2 STORAGE

Not applicable.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 ENGINEERING CONTROLS

Not applicable.

### 8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

#### 8.2.1 Eye/Face Protection

Avoid eye contact. Not applicable.

#### 8.2.2 Skin Protection

Not applicable. Avoid prolonged or repeated skin contact. Gloves not normally required.

#### 8.2.3 Respiratory Protection

Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection.

#### 8.2.4 Prevention of Swallowing

Not applicable. Not an expected route of exposure.

### 8.3 EXPOSURE GUIDELINES

None Established

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specific Physical Form:	Roll of Tape
Odor, Color, Grade:	various colored polyester tape with acrylic adhesive
General Physical Form:	Solid
Autoignition temperature	<i>Not Applicable</i>
Flash Point	<i>Not Applicable</i>
Flammable Limits(LEL)	<i>Not Applicable</i>
Flammable Limits(UEL)	<i>Not Applicable</i>
Boiling Point	<i>Not Applicable</i>
Density	<i>Not Applicable</i>
Vapor Density	<i>Not Applicable</i>
Vapor Pressure	<i>Not Applicable</i>
Specific Gravity	<i>Not Applicable</i>
pH	<i>Not Applicable</i>
Melting point	<i>Not Applicable</i>
Solubility in Water	Nil
Evaporation rate	<i>Not Applicable</i>
Volatile Organic Compounds	<i>Not Applicable</i>
Kow - Oct/Water partition coef	<i>Not Applicable</i>
Percent volatile	<i>Not Applicable</i>
VOC Less H2O & Exempt Solvents	<i>Not Applicable</i>
Viscosity	<i>Not Applicable</i>

## SECTION 10: STABILITY AND REACTIVITY

**Stability:** Stable.

#### Materials and Conditions to Avoid:

##### 10.1 Conditions to avoid

None known

##### 10.2 Materials to avoid

None known

**Hazardous Polymerization:** Hazardous polymerization will not occur.

#### Hazardous Decomposition or By-Products

**Substance**

Hydrocarbons  
Carbon monoxide  
Carbon dioxide

**Condition**

During Combustion  
During Combustion  
During Combustion

**Hazardous Decomposition:** Under recommended usage conditions, hazardous decomposition products are not expected. Hazardous decomposition products may occur as a result of oxidation, heating, or reaction with another material.

## SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

## SECTION 12: ECOLOGICAL INFORMATION

### ECOTOXICOLOGICAL INFORMATION

Not determined. Not applicable.

### CHEMICAL FATE INFORMATION

Not determined. Not applicable.

## SECTION 13: DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** Reclaim if feasible. If product can't be reclaimed, dispose of waste product in a sanitary landfill. Alternatively, incinerate the waste product in an industrial, commercial, or municipal incinerator. Dispose of waste product in a sanitary landfill. As a disposal alternative, incinerate in an industrial or commercial facility.

Since regulations vary, consult applicable regulations or authorities before disposal.

## SECTION 14: TRANSPORT INFORMATION

Not regulated per U.S. DOT, IATA or IMO.

*These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M transportation classifications are based on product formulation, packaging, 3M policies and 3M understanding of applicable current regulations. 3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and **not the packaging, labeling, or marking requirements**. The original 3M package is certified for U.S. ground shipment only. If you are shipping by air or ocean, the package may not meet applicable regulatory requirements.*

## SECTION 15: REGULATORY INFORMATION



## US FEDERAL REGULATIONS

Contact 3M for more information.

### 311/312 Hazard Categories:

Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - No Delayed Hazard - No

## STATE REGULATIONS

Contact 3M for more information.

## CHEMICAL INVENTORIES

This product is an article as defined by TSCA regulations, and is exempt from TSCA Inventory listing requirements.

Contact 3M for more information.

## INTERNATIONAL REGULATIONS

Contact 3M for more information.

**This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.**

## SECTION 16: OTHER INFORMATION

### NFPA Hazard Classification

**Health:** 0 **Flammability:** 1 **Reactivity:** 0 **Special Hazards:** None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

**Reason for Reissue:** The MSDS has been revised because 3M has adopted the 16-section ANSI/ISO format. The potential hazards of the product have not changed. We encourage you to reread the MSDS and review the information.

### Revision Changes:

Section 1: Product name was modified.

Page Heading: Product name was modified.

Section 2: Product identification comment was modified.

Copyright was modified.

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**MATERIAL SAFETY DATA SHEET** Edging and Reinforcement Tape 8411, 8412, Metalized Film Tape 8437, Polyester Tape 850 (various colors), 853, 856, 1614, 1675, 3614, YR36R87, Scotchgard™ Protective Films 1001, 1002 & 1004, Scotch® Fine Line Masking Tape 222 01/16/13

3M USA MSDSs are available at [www.3M.com](http://www.3M.com)



## Material Safety Data Sheet

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This material safety data sheet (MSDS) is provided as a courtesy in response to a customer request. This product is not regulated under, and a MSDS is not required for this product by the OSHA Hazard Communication Standard (29 CFR 1910.1200) because, when used as recommended or under ordinary conditions, it should not present a health and safety hazard. However, use or processing of the product not in accordance with the product's recommendations or not under ordinary conditions may affect the performance of the product and may present potential health and safety hazards.

### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Scotch(TM) brand No. 471 Plastic Film Tape in White, Yellow, Green, Blue, Black, Orange, Red, Brown and Purple.

**MANUFACTURER:** 3M

**DIVISION:** Industrial Tape And Specialties Division

**ADDRESS:** 3M Center  
St. Paul, MN 55144-1000

**EMERGENCY PHONE:** 1-800-364-3577 or (651) 737-6501 (24 hours)

**Issue Date:** 09/15/2006

**Supersedes Date:** 07/10/2000

**Document Group:** 06-7993-6

#### Product Use:

General Use: Excellent for lane and safety marking applications. Also, ideal for masking, wrapping, and sealing curved and irregular surfaces. Also, good for abrasion protection and splicing applications. The many available colors make this product ideal for color coding and decoration.

### SECTION 2: INGREDIENTS

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>% by Wt</u>
BACKING: POLY(VINYL CHLORIDE)	MIXTURE	75 - 90
ADHESIVE: SYNTHETIC RUBBER	MIXTURE	15 - 25
BACKING: PIGMENT	VARIOUS	2 - 9

### SECTION 3: HAZARDS IDENTIFICATION

#### 3.1 EMERGENCY OVERVIEW

**Specific Physical Form:** Roll of Tape

**Odor, Color, Grade:** Various Colors

**General Physical Form:** Solid

**Immediate health, physical, and environmental hazards:**

### 3.2 POTENTIAL HEALTH EFFECTS

**Eye Contact:**

No health effects are expected.

**Skin Contact:**

No health effects are expected.

**Inhalation:**

No health effects are expected.

**Ingestion:**

No health effects are expected.

## SECTION 4: FIRST AID MEASURES

### 4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

**Eye Contact:** No need for first aid is anticipated.

**Skin Contact:** No need for first aid is anticipated.

**Inhalation:** No need for first aid is anticipated.

**If Swallowed:** No need for first aid is anticipated.

## SECTION 5: FIRE FIGHTING MEASURES

### 5.1 FLAMMABLE PROPERTIES

**Autoignition temperature**

*No Data Available*

**Flash Point**

*Not Applicable*

**Flammable Limits - LEL**

*Not Applicable*

**Flammable Limits - UEL**

*Not Applicable*

### 5.2 EXTINGUISHING MEDIA

Non-combustible. Choose material suitable for surrounding fire.

### 5.3 PROTECTION OF FIRE FIGHTERS

**Special Fire Fighting Procedures:** Nonflammable.

**Unusual Fire and Explosion Hazards:** No unusual fire or explosion hazards are anticipated.

**Note:** See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Accidental Release Measures:** Not applicable.

## SECTION 7: HANDLING AND STORAGE

### 7.1 HANDLING

This product is considered to be an article which does not release or otherwise result in exposure to a hazardous chemical under normal use conditions.

### 7.2 STORAGE

Store under normal warehouse conditions.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 ENGINEERING CONTROLS

Not applicable.

### 8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

#### 8.2.1 Eye/Face Protection

Not applicable.

#### 8.2.2 Skin Protection

Not applicable.

#### 8.2.3 Respiratory Protection

Not applicable.

#### 8.2.4 Prevention of Swallowing

Not an expected route of exposure.

### 8.3 EXPOSURE GUIDELINES

None Established

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specific Physical Form:	Roll of Tape
Odor, Color, Grade:	Various Colors
General Physical Form:	Solid
Autoignition temperature	No Data Available
Flash Point	Not Applicable
Flammable Limits - LEL	Not Applicable
Flammable Limits - UEL	Not Applicable
Boiling point	Not Applicable
Vapor Density	Not Applicable
Vapor Pressure	Not Applicable
Specific Gravity	1.3 - 1.4 [Ref Std: WATER=1]
pH	Not Applicable
Melting point	No Data Available
Solubility in Water	Nil
Evaporation rate	Not Applicable
Volatile Organic Compounds	Not Applicable
Percent volatile	Not Applicable
VOC Less H2O & Exempt Solvents	Not Applicable
Viscosity	Not Applicable

## SECTION 10: STABILITY AND REACTIVITY

**Stability:** Stable.

**Materials and Conditions to Avoid:** None known

**Hazardous Polymerization:** Hazardous polymerization will not occur.

### Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	Not Specified
Carbon dioxide	Not Specified

## SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

## SECTION 12: ECOLOGICAL INFORMATION

### ECOTOXICOLOGICAL INFORMATION

Not applicable.

## CHEMICAL FATE INFORMATION

Not applicable.

## SECTION 13: DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** Agglomerate and send to sanitary landfill.

Since regulations vary, consult applicable regulations or authorities before disposal.

## SECTION 14: TRANSPORT INFORMATION

### ID Number(s):

70-0000-0226-4, 70-0000-0227-2, 70-0000-0228-0, 70-0000-0229-8, 70-0000-0230-6, 70-0000-0231-4, 70-0000-0232-2, 70-0000-0233-0, 70-0000-0237-1, 70-0001-1449-9

Please contact the emergency numbers listed on the first page of the MSDS for Transportation Information for this material.

## SECTION 15: REGULATORY INFORMATION

### US FEDERAL REGULATIONS

#### 311/312 Hazard Categories:

Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - No Delayed Hazard - No

### STATE REGULATIONS

### CHEMICAL INVENTORIES

### INTERNATIONAL REGULATIONS

### ADDITIONAL INFORMATION

Not for consumer sale.

This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

## SECTION 16: OTHER INFORMATION

### NFPA Hazard Classification

Health: 2 Flammability: 1 Reactivity: 0 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

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No revision information is available.

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<b>Document Group:</b>	06-1862-9	<b>Version Number:</b>	28.00
<b>Issue Date:</b>	05/08/15	<b>Supersedes Date:</b>	10/09/12

### SECTION 1: Identification

#### 1.1. Product identifier

3M™ Fastbond™ Contact Adhesive 2000-NF, Blue

#### Product Identification Numbers

62-4286-7536-7, 62-4286-8430-2, 62-4286-9430-1, 62-4286-9932-6

#### 1.2. Recommended use and restrictions on use

##### Recommended use

Adhesive, Industrial use

#### 1.3. Supplier's details

<b>MANUFACTURER:</b>	3M
<b>DIVISION:</b>	Industrial Adhesives and Tapes Division
<b>ADDRESS:</b>	3M Center, St. Paul, MN 55144-1000, USA
<b>Telephone:</b>	1-888-3M HELPS (1-888-364-3577)

#### 1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

### SECTION 2: Hazard identification

#### 2.1. Hazard classification

Skin Sensitizer: Category 1.

Reproductive Toxicity: Category 2.

Carcinogenicity: Category 2.

Specific Target Organ Toxicity (single exposure): Category 1.

Specific Target Organ Toxicity (repeated exposure): Category 1.

#### 2.2. Label elements

##### Signal word

Danger

##### Symbols

Exclamation mark | Health Hazard |

##### Pictograms



#### **Hazard Statements**

May cause an allergic skin reaction.  
Suspected of damaging fertility or the unborn child.  
Suspected of causing cancer.

Causes damage to organs:  
sensory organs |

Causes damage to organs through prolonged or repeated exposure:  
nervous system |

May cause damage to organs through prolonged or repeated exposure:  
sensory organs |

#### **Precautionary Statements**

##### **Prevention:**

Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Do not breathe dust/fume/gas/mist/vapors/spray.  
Wear protective gloves and eye/face protection.  
Do not eat, drink or smoke when using this product.  
Wash thoroughly after handling.  
Contaminated work clothing must not be allowed out of the workplace.

##### **Response:**

IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice/attention.  
IF ON SKIN: Wash with plenty of soap and water.  
If skin irritation or rash occurs: Get medical advice/attention.  
Wash contaminated clothing before reuse.  
IF exposed or concerned: Get medical advice/attention.

##### **Storage:**

Store locked up.

##### **Disposal:**

Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

#### **2.3. Hazards not otherwise classified**

None.

10% of the mixture consists of ingredients of unknown acute oral toxicity.

10% of the mixture consists of ingredients of unknown acute dermal toxicity.

## **SECTION 3: Composition/information on ingredients**

Ingredient	C.A.S. No.	% by Wt
Water	7732-18-5	30 - 60 Trade Secret *
Polychloroprene	9010-98-4	25 - 50 Trade Secret *
Rosin, Polymer with Phenol	68083-03-4	5 - 10 Trade Secret *
Glycerol Esters of Rosin Acids	8050-31-5	5 - 10 Trade Secret *
Potassium Rosinate	61790-50-9	1 - 5 Trade Secret *
Ethanol	64-17-5	1 - 5 Trade Secret *
Xylene	1330-20-7	< 3 Trade Secret *
Zinc Oxide	1314-13-2	1 - 2 Trade Secret *
Rosin	8050-09-7	0.1 - 1 Trade Secret *
2,2'-Methylenebis(6-tert-butyl-p-cresol)	119-47-1	0.1 - 1 Trade Secret *
Ethylbenzene	100-41-4	< 1 Trade Secret *

\*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### Inhalation:

Remove person to fresh air. If you feel unwell, get medical attention.

#### Skin Contact:

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

#### Eye Contact:

Immediately flush with large amounts of water for at least 15 minutes. Remove contact lenses if easy to do. Continue rinsing. Immediately get medical attention.

#### If Swallowed:

Rinse mouth. If you feel unwell, get medical attention.

### 4.2. Most important symptoms and effects, both acute and delayed

See Section 11.1. Information on toxicological effects.

### 4.3. Indication of any immediate medical attention and special treatment required

Not applicable

## SECTION 5: Fire-fighting measures

### 5.1. Suitable extinguishing media

Material will not burn. Use a fire fighting agent suitable for the surrounding fire.

### 5.2. Special hazards arising from the substance or mixture

None inherent in this product.

### Hazardous Decomposition or By-Products

#### Substance

Formaldehyde  
Carbon monoxide  
Carbon dioxide  
Oxides of Nitrogen

#### Condition

During Combustion  
During Combustion  
During Combustion  
During Combustion

Oxides of Phosphorus

During Combustion

**5.3. Special protective actions for fire-fighters**

No special protective actions for fire-fighters are anticipated.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

**6.2. Environmental precautions**

Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

**6.3. Methods and material for containment and cleaning up**

Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue with water. Seal the container. Dispose of collected material as soon as possible.

**SECTION 7: Handling and storage****7.1. Precautions for safe handling**

For industrial or professional use only. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Use personal protective equipment (gloves, respirators, etc.) as required.

**7.2. Conditions for safe storage including any incompatibilities**

Store away from acids. Store away from oxidizing agents.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Occupational exposure limits**

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
Ethylbenzene	100-41-4	ACGIH	TWA:20 ppm	A3: Confirmed animal carcin.
Ethylbenzene	100-41-4	CMRG	TWA:25 ppm;STEL:75 ppm	
Ethylbenzene	100-41-4	OSHA	TWA:435 mg/m <sup>3</sup> (100 ppm)	
Zinc Oxide	1314-13-2	OSHA	TWA(as fume):5 mg/m <sup>3</sup> ;TWA(as total dust):15 mg/m <sup>3</sup> ;TWA(respirable fraction):5 mg/m <sup>3</sup>	
Zinc Oxide	1314-13-2	ACGIH	TWA(respirable fraction):2 mg/m <sup>3</sup> ;STEL(respirable	

			fraction):10 mg/m3	
Xylene	1330-20-7	OSHA	TWA:435 mg/m3(100 ppm)	
Xylene	1330-20-7	ACGIH	TWA:100 ppm;STEL:150 ppm	A4: Not class. as human carcin
Xylene	1330-20-7	CMRG	TWA:50 ppm;STEL:75 ppm	
Ethanol	64-17-5	OSHA	TWA:1900 mg/m3(1000 ppm)	
Ethanol	64-17-5	ACGIH	STEL:1000 ppm	A3: Confirmed animal carcin.
Rosin	8050-09-7	ACGIH	Limit value not established:	Cntrl all exposr-low as possib, Dermal/Respiratory Sensitizer

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

## 8.2. Exposure controls

### 8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

### 8.2.2. Personal protective equipment (PPE)

#### Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Full Face Shield

Indirect Vented Goggles

#### Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing.

Gloves made from the following material(s) are recommended: Fluoroelastomer

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron - polymer laminate

#### Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

General Physical Form:	Liquid
Odor, Color, Grade:	Blue, slight odor of ammonia.
Odor threshold	No Data Available
pH	10
Melting point	Not Applicable
Boiling Point	>=64 °C [Details: Methanol]
Flash Point	No flash point
Evaporation rate	1.0 [Ref Std: ETHER=1]
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	Not Applicable
Flammable Limits(UEL)	Not Applicable
Vapor Pressure	<=17.5 mmHg [@ 68 °F]
Vapor Density	1.1 [Ref Std: AIR=1]
Density	1.1 g/ml
Specific Gravity	1.1 [Ref Std: WATER=1]
Solubility in Water	Complete
Solubility- non-water	No Data Available
Partition coefficient: n-octanol/ water	No Data Available
Autoignition temperature	Not Applicable
Decomposition temperature	No Data Available
Viscosity	200 - 600 centipoise [@ 73.4 °F]
Hazardous Air Pollutants	<=3.5 % weight [Test Method: Calculated]
VOC Less H2O & Exempt Solvents	<=80 g/l [Test Method: tested per EPA method 24]
Solids Content	25 - 50 %

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

### 10.2. Chemical stability

Stable.

### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

### 10.4. Conditions to avoid

None known.

### 10.5. Incompatible materials

Strong acids

Strong oxidizing agents

### 10.6. Hazardous decomposition products

#### Substance

None known.

#### Condition

Refer to section 5.2 for hazardous decomposition products during combustion.

## SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

### 11.1. Information on Toxicological effects

#### Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

##### Inhalation:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May cause additional health effects (see below).

##### Skin Contact:

Contact with the skin during product use is not expected to result in significant irritation. Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

##### Eye Contact:

Contact with the eyes during product use is not expected to result in significant irritation.

##### Ingestion:

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

May cause additional health effects (see below).

#### Additional Health Effects:

##### Single exposure may cause target organ effects:

Auditory Effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears.

##### Prolonged or repeated exposure may cause target organ effects:

Auditory Effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears.

Neurological Effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and/or changes in blood pressure and heart rate.

##### Reproductive/Developmental Toxicity:

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

##### Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

Ingredient	CAS No.	Class Description	Regulation
Ethylbenzene	100-41-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

#### Additional Information:

This product contains ethanol. Alcoholic beverages and ethanol in alcoholic beverages have been classified by the International Agency for Research on Cancer as carcinogenic to humans. There are also data associating human consumption

of alcoholic beverages with developmental toxicity and liver toxicity. Exposure to ethanol during the foreseeable use of this product is not expected to cause cancer, developmental toxicity, or liver toxicity.

### Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

### Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE > 5,000 mg/kg
Overall product	Inhalation-Vapor(4 hr)		No data available; calculated ATE > 50 mg/l
Overall product	Ingestion		No data available; calculated ATE > 5,000 mg/kg
Polychloroprene	Dermal		LD50 estimated to be > 5,000 mg/kg
Polychloroprene	Ingestion	Rat	LD50 > 20,000 mg/kg
Glycerol Esters of Rosin Acids	Dermal	Rabbit	LD50 > 5,000 mg/kg
Glycerol Esters of Rosin Acids	Ingestion	Rat	LD50 > 2,000 mg/kg
Xylene	Dermal	Rabbit	LD50 > 4,200 mg/kg
Xylene	Inhalation-Vapor (4 hours)	Rat	LC50 29 mg/l
Xylene	Ingestion	Rat	LD50 3,523 mg/kg
Ethanol	Dermal	Rabbit	LD50 > 15,800 mg/kg
Ethanol	Inhalation-Vapor (4 hours)	Rat	LC50 124.7 mg/l
Ethanol	Ingestion	Rat	LD50 17,800 mg/kg
Zinc Oxide	Dermal		LD50 estimated to be > 5,000 mg/kg
Zinc Oxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 5.7 mg/l
Zinc Oxide	Ingestion	Rat	LD50 > 5,000 mg/kg
Ethylbenzene	Dermal	Rabbit	LD50 15,433 mg/kg
Ethylbenzene	Inhalation-Vapor (4 hours)	Rat	LC50 17.4 mg/l
Ethylbenzene	Ingestion	Rat	LD50 4,769 mg/kg
Rosin	Dermal	Rabbit	LD50 > 2,500 mg/kg
Rosin	Ingestion	Rat	LD50 7,600 mg/kg
2,2'-Methylenebis(6-tert-butyl-p-cresol)	Dermal	Rabbit	LD50 > 10,000 mg/kg
2,2'-Methylenebis(6-tert-butyl-p-cresol)	Ingestion	Rat	LD50 > 5,000 mg/kg

ATE = acute toxicity estimate

### Skin Corrosion/Irritation

Name	Species	Value
Polychloroprene	Human	No significant irritation
Glycerol Esters of Rosin Acids	Rabbit	Minimal irritation
Xylene	Rabbit	Mild irritant
Ethanol	Rabbit	No significant irritation
Zinc Oxide	Human and animal	No significant irritation
Ethylbenzene	Rabbit	Mild irritant
Rosin	Rabbit	No significant irritation

### Serious Eye Damage/Irritation

Name	Species	Value
Polychloroprene	Professional judgement	No significant irritation
Glycerol Esters of Rosin Acids	Rabbit	Mild irritant



Xylene	Rabbit	Mild irritant
Ethanol	Rabbit	Moderate irritant
Zinc Oxide	Rabbit	Mild irritant
Ethylbenzene	Rabbit	Moderate irritant
Rosin	Rabbit	Mild irritant

**Skin Sensitization**

Name	Species	Value
Glycerol Esters of Rosin Acids	Guinea pig	Not sensitizing
Ethanol	Human	Some positive data exist, but the data are not sufficient for classification
Zinc Oxide	Guinea pig	Some positive data exist, but the data are not sufficient for classification
Ethylbenzene	Human	Not sensitizing
Rosin	Guinea pig	Sensitizing

**Respiratory Sensitization**

Name	Species	Value
Rosin	Human	Some positive data exist, but the data are not sufficient for classification

**Germ Cell Mutagenicity**

Name	Route	Value
Glycerol Esters of Rosin Acids	In Vitro	Not mutagenic
Xylene	In Vitro	Not mutagenic
Xylene	In vivo	Not mutagenic
Ethanol	In Vitro	Some positive data exist, but the data are not sufficient for classification
Ethanol	In vivo	Some positive data exist, but the data are not sufficient for classification
Zinc Oxide	In Vitro	Some positive data exist, but the data are not sufficient for classification
Zinc Oxide	In vivo	Some positive data exist, but the data are not sufficient for classification
Ethylbenzene	In vivo	Not mutagenic
Ethylbenzene	In Vitro	Some positive data exist, but the data are not sufficient for classification

**Carcinogenicity**

Name	Route	Species	Value
Xylene	Dermal	Rat	Not carcinogenic
Xylene	Ingestion	Multiple animal species	Not carcinogenic
Xylene	Inhalation	Human	Some positive data exist, but the data are not sufficient for classification
Ethanol	Ingestion	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
Ethylbenzene	Inhalation	Multiple animal species	Carcinogenic

**Reproductive Toxicity****Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test Result	Exposure Duration
Glycerol Esters of Rosin Acids	Ingestion	Not toxic to female reproduction	Rat	NOAEL 5,000 mg/kg/day	90 days

Glycerol Esters of Rosin Acids	Ingestion	Not toxic to male reproduction	Rat	NOAEL 5,000 mg/kg/day	90 days
Xylene	Ingestion	Not toxic to female reproduction	Mouse	NOAEL 1,000 mg/kg/day	103 weeks
Xylene	Ingestion	Not toxic to male reproduction	Mouse	NOAEL 1,000 mg/kg/day	103 weeks
Xylene	Inhalation	Some positive female reproductive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Xylene	Ingestion	Some positive developmental data exist, but the data are not sufficient for classification	Mouse	NOAEL Not available	during organogenesis
Xylene	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	during gestation
Ethanol	Inhalation	Not toxic to development	Rat	NOAEL 38 mg/l	during gestation
Ethanol	Ingestion	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 5,200 mg/kg/day	premating & during gestation
Zinc Oxide	Ingestion	Some positive reproductive/developmental data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL 125 mg/kg/day	premating & during gestation
Ethylbenzene	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 4.3 mg/l	premating & during gestation
2,2'-Methylenebis(6-tert-butyl-p-cresol)	Ingestion	Some positive female reproductive data exist, but the data are not sufficient for classification	Rat	NOAEL 50 mg/kg/day	premating & during gestation
2,2'-Methylenebis(6-tert-butyl-p-cresol)	Ingestion	Toxic to male reproduction	Rat	NOAEL 12.5 mg/kg/day	50 days

## Lactation

Name	Route	Species	Value
Xylene	Ingestion	Mouse	Does not cause effects on or via lactation

## Target Organ(s)

### Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Xylene	Inhalation	auditory system	Causes damage to organs	Rat	LOAEL 6.3 mg/l	8 hours
Xylene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Xylene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Xylene	Inhalation	eyes	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 3.5 mg/l	not available
Xylene	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	
Xylene	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL Not available	
Xylene	Ingestion	eyes	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 250 mg/kg	not applicable
Ethanol	Inhalation	central nervous	May cause drowsiness or	Human	LOAEL 2.6	30 minutes

		system depression	dizziness		mg/l	
Ethanol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	LOAEL 9.4 mg/l	not available
Ethanol	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL not available	
Ethanol	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL 3,000 mg/kg	
Ethylbenzene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Ethylbenzene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human and animal	NOAEL Not available	

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Glycerol Esters of Rosin Acids	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 5,000 mg/kg/day	90 days
Glycerol Esters of Rosin Acids	Ingestion	heart   skin   endocrine system   bone, teeth, nails, and/or hair   blood   bone marrow   hematopoietic system   immune system   muscles   nervous system   eyes   kidney and/or bladder   respiratory system	All data are negative	Rat	NOAEL 5,000 mg/kg/day	90 days
Xylene	Inhalation	nervous system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.4 mg/l	4 weeks
Xylene	Inhalation	auditory system	May cause damage to organs through prolonged or repeated exposure	Rat	LOAEL 7.8 mg/l	5 days
Xylene	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	
Xylene	Inhalation	heart   endocrine system   hematopoietic system   muscles   kidney and/or bladder   respiratory system	All data are negative	Multiple animal species	NOAEL 3.5 mg/l	13 weeks
Xylene	Ingestion	auditory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 900 mg/kg/day	2 weeks
Xylene	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,500 mg/kg/day	90 days
Xylene	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	
Xylene	Ingestion	heart   skin   endocrine system   bone, teeth, nails, and/or hair   hematopoietic system   immune system   nervous system   respiratory system	All data are negative	Mouse	NOAEL 1,000 mg/kg/day	103 weeks

Ethanol	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rabbit	LOAEL 124 mg/l	365 days
Ethanol	Inhalation	hematopoietic system   immune system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 25 mg/l	14 days
Ethanol	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 8,000 mg/kg/day	4 months
Ethanol	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL 3,000 mg/kg/day	7 days
Zinc Oxide	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 600 mg/kg/day	10 days
Zinc Oxide	Ingestion	endocrine system   hematopoietic system   kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Other	NOAEL 500 mg/kg/day	6 months
Ethylbenzene	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1.1 mg/l	2 years
Ethylbenzene	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 1.1 mg/l	103 weeks
Ethylbenzene	Inhalation	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 3.4 mg/l	28 days
Ethylbenzene	Inhalation	auditory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 2.4 mg/l	5 days
Ethylbenzene	Inhalation	endocrine system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 3.3 mg/l	103 weeks
Ethylbenzene	Inhalation	bone, teeth, nails, and/or hair   muscles	All data are negative	Multiple animal species	NOAEL 4.2 mg/l	90 days
Ethylbenzene	Inhalation	heart   immune system   respiratory system	All data are negative	Multiple animal species	NOAEL 3.3 mg/l	2 years
Ethylbenzene	Ingestion	liver   kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 680 mg/kg/day	6 months

**Aspiration Hazard**

Name	Value
Xylene	Aspiration hazard
Ethylbenzene	Aspiration hazard

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

**SECTION 12: Ecological information****Ecotoxicological information**

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

**Chemical fate information**

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

**SECTION 13: Disposal considerations**

**13.1. Disposal methods**

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

**EPA Hazardous Waste Number (RCRA):** Not regulated

**SECTION 14: Transport Information**

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

**SECTION 15: Regulatory information****15.1. US Federal Regulations**

Contact 3M for more information.

**311/312 Hazard Categories:**

Fire Hazard - No   Pressure Hazard - No   Reactivity Hazard - No   Immediate Hazard - Yes   Delayed Hazard - Yes

**Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):**

<u><b>Ingredient</b></u>	<u><b>C.A.S. No</b></u>	<u><b>% by Wt</b></u>
Xylene (Benzene, 1,3-dimethyl-)	1330-20-7	< 3
Xylene (Benzene, 1,4-dimethyl-)	1330-20-7	< 3
Xylene (Benzene, dimethyl-)	1330-20-7	< 3
Xylene	1330-20-7	< 3
Xylene (Benzene, 1,2-dimethyl-)	1330-20-7	< 3
Zinc Oxide (ZINC COMPOUNDS)	1314-13-2	1 - 2
Ethylbenzene	100-41-4	< 1

**15.2. State Regulations**

Contact 3M for more information.

**California Proposition 65**

<u><b>Ingredient</b></u>	<u><b>C.A.S. No.</b></u>	<u><b>Classification</b></u>
Methyl isobutyl ketone	108-10-1	Developmental Toxin

**WARNING:** This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

**15.3. Chemical Inventories**

The components of this product are in compliance with the chemical notification requirements of TSCA.

Contact 3M for more information.

## 15.4. International Regulations

Contact 3M for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

## SECTION 16: Other information

### NFPA Hazard Classification

**Health:** 2 **Flammability:** 0 **Instability:** 0 **Special Hazards:** None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

**Document Group:** 06-1862-9  
**Issue Date:** 05/08/15

**Version Number:** 28.00  
**Supersedes Date:** 10/09/12

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## Material Safety Data Sheet

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This material safety data sheet (MSDS) is provided as a courtesy in response to a customer request. This product is not regulated under, and a MSDS is not required for this product by the OSHA Hazard Communication Standard (29 CFR 1910.1200) because, when used as recommended or under ordinary conditions, it should not present a health and safety hazard. However, use or processing of the product not in accordance with the product's recommendations or not under ordinary conditions may affect the performance of the product and may present potential health and safety hazards.

### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** 3M™ Duct Tape 3900, 3939, 6969 & 3M™ General Use Duct Tape 2929 & 3M™ Outdoor Masking and Stucco Tape 5959 & 3M™ Performance Plus Duct Tape 8979 & 8979N & 3M™ Value Duct Tape 1900 & Scotch(r) Polyethylene Coated Cloth Tape 390

**MANUFACTURER:** 3M

**DIVISION:** Industrial Adhesives and Tapes Division

**ADDRESS:** 3M Center  
St. Paul, MN 55144-1000

**EMERGENCY PHONE:** 1-800-364-3577 or (651) 737-6501 (24 hours)

**Issue Date:** 09/07/10

**Supersedes Date:** 02/02/10

**Document Group:** 26-2650-5

#### Product Use:

Specific Use: Bundling, Reinforcing, & Sealing  
Intended Use: Industrial use

### SECTION 2: INGREDIENTS

#### Ingredient

Polyethylene Film over Cloth Scrim Backing  
Rubber Adhesive

#### C.A.S. No.

None  
Trade Secret

#### % by Wt

51 - 99  
1 - 49

### SECTION 3: HAZARDS IDENTIFICATION

#### 3.1 EMERGENCY OVERVIEW

**Odor, Color, Grade:** various colored duct tape

**General Physical Form:** Solid

**Immediate health, physical, and environmental hazards:** The environmental properties of this product present a low environmental hazard. This product, when used under reasonable conditions and in accordance with the 3M directions for use, should not present a health hazard. However, use or processing of the product in a manner not in accordance with the product's directions for use may affect the performance of the product and may present potential health and safety hazards.

### 3.2 POTENTIAL HEALTH EFFECTS

**Eye Contact:**

No health effects are expected.

**Skin Contact:**

No health effects are expected.

**Inhalation:**

No health effects are expected.

**Ingestion:**

No health effects are expected.

### 3.3 POTENTIAL ENVIRONMENTAL EFFECTS

This substance does not leach metals or other RCRA (Resource Conservation and Recovery Act) listed TCLP (Toxic Characteristic Leaching Procedure) hazardous substances at concentrations that would make the product a hazardous waste.

## SECTION 4: FIRST AID MEASURES

### 4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

**Eye Contact:** No need for first aid is anticipated.

**Skin Contact:** No need for first aid is anticipated.

**Inhalation:** No need for first aid is anticipated.

**If Swallowed:** No need for first aid is anticipated.

## SECTION 5: FIRE FIGHTING MEASURES

### 5.1 FLAMMABLE PROPERTIES



**Autoignition temperature**

*Not Applicable*

**Flash Point**

*Not Applicable*

**Flammable Limits - LEL**

*Not Applicable*

**Flammable Limits - UEL**

*Not Applicable*

## **5.2 EXTINGUISHING MEDIA**

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

## **5.3 PROTECTION OF FIRE FIGHTERS**

**Special Fire Fighting Procedures:** Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

**Unusual Fire and Explosion Hazards:** No unusual fire or explosion hazards are anticipated.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Personal precautions**

Not applicable.

**Environmental procedures**

Not applicable.

**Clean-up methods**

Not applicable.

## **SECTION 7: HANDLING AND STORAGE**

### **7.1 HANDLING**

This product is considered to be an article which does not release or otherwise result in exposure to a hazardous chemical under normal use conditions.

### **7.2 STORAGE**

Not applicable.

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **8.1 ENGINEERING CONTROLS**

Not applicable.

### **8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)**

#### **8.2.1 Eye/Face Protection**

Avoid eye contact.

#### 8.2.2 Skin Protection

Avoid prolonged or repeated skin contact.

#### 8.2.3 Respiratory Protection

Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection.

#### 8.2.4 Prevention of Swallowing

Not applicable.

### 8.3 EXPOSURE GUIDELINES

None Established

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Odor, Color, Grade:	various colored duct tape
General Physical Form:	Solid
Autoignition temperature	<i>Not Applicable</i>
Flash Point	<i>Not Applicable</i>
Flammable Limits - LEL	<i>Not Applicable</i>
Flammable Limits - UEL	<i>Not Applicable</i>
Boiling point	<i>Not Applicable</i>
Density	<i>Not Applicable</i>
Vapor Density	<i>Not Applicable</i>
Vapor Pressure	<i>Not Applicable</i>
Specific Gravity	<i>Not Applicable</i>
pH	<i>Not Applicable</i>
Melting point	<i>Not Applicable</i>
Solubility in Water	Nil
Evaporation rate	<i>Not Applicable</i>
Volatile Organic Compounds	<i>Not Applicable</i>
Kow - Oct/Water partition coef	<i>Not Applicable</i>
Percent volatile	<i>Not Applicable</i>
VOC Less H2O & Exempt Solvents	<i>Not Applicable</i>
Viscosity	<i>Not Applicable</i>

## SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid:

10.1 Conditions to avoid

None known

#### 10.2 Materials to avoid

None known

**Hazardous Polymerization:** Hazardous polymerization will not occur.

**Hazardous Decomposition:** Under recommended usage conditions, hazardous decomposition products are not expected. Hazardous decomposition products may occur as a result of oxidation, heating, or reaction with another material.

## SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

## SECTION 12: ECOLOGICAL INFORMATION

### ECOTOXICOLOGICAL INFORMATION

Not determined.

### CHEMICAL FATE INFORMATION

Not determined.

## SECTION 13: DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** Reclaim if feasible. If product can't be reclaimed, dispose of waste product in a sanitary landfill. Alternatively, incinerate the waste product in an industrial, commercial, or municipal incinerator.

Since regulations vary, consult applicable regulations or authorities before disposal.

## SECTION 14: TRANSPORT INFORMATION

Not regulated per U.S. DOT, IATA or IMO.

*These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M's transportation classifications are based on product formulation, packaging, 3M policies and 3M's understanding of applicable current regulations. 3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and **not the packaging, labeling, or marking requirements**. The original 3M package is certified for U.S. ground shipment only. If you are shipping by air or ocean, the package may not meet applicable regulatory requirements.*

## **SECTION 15: REGULATORY INFORMATION**

### **US FEDERAL REGULATIONS**

Contact 3M for more information.

#### **311/312 Hazard Categories:**

Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - No Delayed Hazard - No

### **STATE REGULATIONS**

Contact 3M for more information.

### **CHEMICAL INVENTORIES**

This product is an article as defined by TSCA regulations, and is exempt from TSCA Inventory listing requirements.

Contact 3M for more information.

### **INTERNATIONAL REGULATIONS**

Contact 3M for more information.

**This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.**

## **SECTION 16: OTHER INFORMATION**

#### **NFPA Hazard Classification**

Health: 0 Flammability: 1 Reactivity: 0 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

**Revision Changes:**

Section 14: Transportation legal text was modified.

Section 10: Materials to avoid physical property was modified.

Section 10: Conditions to avoid physical property was modified.

Section 6: Environmental procedures heading was added.

Section 6: Personal precautions heading was added.

Section 6: Personal precautions information was added.

Section 6: Methods for cleaning up information was added.

Section 6: Clean-up methods heading was added.

Section 6: Release measures heading was deleted.

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<b>Issue Date:</b>	07/21/14	<b>Supersedes Date:</b>	05/14/13

### SECTION 1: Identification

#### 1.1. Product identifier

3M™ 101+, 200, 201+, 202, 203, 213, 214, 225, 226, 231/231A, 232, 234, 235, 250, 256, 301+, 401+, 501+, 2209, 2214, 2307, 2308, 2364, 2380, 2393, 2450, 2510, 2515, 2517, 2525, 2526, 2693, and 2750 Masking Tapes

#### 1.2. Recommended use and restrictions on use

##### Recommended use

Masking, Industrial use

#### 1.3. Supplier's details

<b>MANUFACTURER:</b>	3M
<b>DIVISION:</b>	Industrial Adhesives and Tapes Division
<b>ADDRESS:</b>	3M Center, St. Paul, MN 55144-1000, USA
<b>Telephone:</b>	1-888-3M HELPS (1-888-364-3577)

#### 1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

3M™ Value Masking Tape 101+  
3M™ Paper Tape 200  
3M™ General Use Masking Tape 201+  
Scotch® Crepe Masking Tape 202  
3M™ General Purpose Masking Tape 203  
Scotch® High Performance Masking Tape 213  
Scotch® High Performance Masking Tape 214  
Scotch® Weather Resistant Masking Tape 225  
Scotch® Solvent Resistant Masking Tape 226  
Scotch® Paint Masking Tape 231 /231A  
Scotch® High Performance Masking Tape 232  
Scotch® General Purpose Masking Tape 234  
Scotch® Photographic Tape 235  
Scotch® Flatback Masking Tape 250  
Scotch® Printable Flatback Paper Tape 256  
3M™ Performance Yellow Masking Tape 301+  
3M™ High Performance Green Masking Tape 401+/233+  
3M™ Specialty High Temperature Masking Tape 501+  
3M™ Paper Masking Tape 2209  
3M™ Paper Masking Tape 2214

3M™ 101+, 200, 201+, 202, 203, 213, 214, 225, 226, 231/231A, 232, 234, 235, 250, 256, 301+, 401+, 501+, 2209, 2214, 2307, 2308, 2364, 2380, 2393, 2450, 2510, 2515, 2517, 2525, 2526, 2693, and 2750 Masking Tapes 07/21/14

3M™ Masking Tape 2307  
Scotch® Masking Tape 2308  
Scotch® Performance Masking Tape 2364  
Scotch® Performance Masking Tape 2380  
Scotch® Premium High Temperature Masking Tape 2393  
3M™ Masking Tape 2450  
Scotch(R) Sealer Tape 2510  
Tartan™ Flat Back Paper Masking Tape 2515  
Scotch® Flatback Tape 2517  
Scotch® Performance Flatback Tape 2525  
Scotch® Textile Flatback Tape 2526  
Scotch® High Performance Masking Tape 2693  
ScotchBlue™ Industrial Masking Tape 2750

## SECTION 2: Hazard identification

### 2.1. Hazard classification

This product is exempt from hazard classification according to OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### 2.2. Label elements

#### Signal word

Not applicable.

#### Symbols

Not applicable.

#### Pictograms

Not applicable.

### 2.3. Hazards not otherwise classified

None.

148% of the mixture consists of ingredients of unknown acute oral toxicity.

## SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Paper Backing	None	51 - 99
Rubber Adhesive	Trade Secret*	1 - 49

\*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### Inhalation:

No need for first aid is anticipated.

#### Skin Contact:

Wash with soap and water. If signs/symptoms develop, get medical attention.

3M™ 101+, 200, 201+, 202, 203, 213, 214, 225, 226, 231/231A, 232, 234, 235, 250, 256, 301+, 401+, 501+, 2209, 2214, 2307, 2308, 2364, 2380, 2393, 2450, 2510, 2515, 2517, 2525, 2526, 2693, and 2750 Masking Tapes 07/21/14

**Eye Contact:**

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

**If Swallowed:**

No need for first aid is anticipated.

**4.2. Most important symptoms and effects, both acute and delayed**

See Section 11.1. Information on toxicological effects.

**4.3. Indication of any immediate medical attention and special treatment required**

Not applicable

## SECTION 5: Fire-fighting measures

**5.1. Suitable extinguishing media**

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

**5.2. Special hazards arising from the substance or mixture**

None inherent in this product.

**5.3. Special protective actions for fire-fighters**

No special protective actions for fire-fighters are anticipated.

## SECTION 6: Accidental release measures

**6.1. Personal precautions, protective equipment and emergency procedures**

Ventilate the area with fresh air.

**6.2. Environmental precautions**

Avoid release to the environment.

**6.3. Methods and material for containment and cleaning up**

Not applicable.

## SECTION 7: Handling and storage

**7.1. Precautions for safe handling**

This product is considered to be an article which does not release or otherwise result in exposure to a hazardous chemical under normal use conditions.

**7.2. Conditions for safe storage including any incompatibilities**

Not applicable.

## SECTION 8: Exposure controls/personal protection

**8.1. Control parameters****Occupational exposure limits**

No occupational exposure limit values exist for any of the components listed in Section 3 of this SDS.

**8.2. Exposure controls**



#### 8.2.1. Engineering controls

Not applicable.

#### 8.2.2. Personal protective equipment (PPE)

##### Eye/face protection

Eye protection not required.

##### Skin/hand protection

No chemical protective gloves are required.

##### Respiratory protection

Respiratory protection is not required.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

General Physical Form:	Solid
Odor, Color, Grade:	various colored paper tape
Odor threshold	<i>Not Applicable</i>
pH	<i>Not Applicable</i>
Melting point	<i>Not Applicable</i>
Boiling Point	<i>Not Applicable</i>
Flash Point	<i>Not Applicable</i>
Evaporation rate	<i>Not Applicable</i>
Flammability (solid, gas)	Not Classified
Flammable Limits(LEL)	<i>Not Applicable</i>
Flammable Limits(UEL)	<i>Not Applicable</i>
Vapor Pressure	<i>Not Applicable</i>
Vapor Density	<i>Not Applicable</i>
Density	<i>Not Applicable</i>
Specific Gravity	<i>Not Applicable</i>
Solubility in Water	Nil
Solubility- non-water	<i>Not Applicable</i>
Partition coefficient: n-octanol/ water	<i>Not Applicable</i>
Autoignition temperature	<i>Not Applicable</i>
Decomposition temperature	<i>Not Applicable</i>
Viscosity	<i>Not Applicable</i>
Volatile Organic Compounds	<i>Not Applicable</i>
Percent volatile	<i>Not Applicable</i>
VOC Less H2O & Exempt Solvents	<i>Not Applicable</i>

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

This material is considered to be non reactive under normal use conditions.

### 10.2. Chemical stability

Stable.

3M™ 101+, 200, 201+, 202, 203, 213, 214, 225, 226, 231/231A, 232, 234, 235, 250, 256, 301+, 401+, 501+, 2209, 2214, 2307, 2308, 2364, 2380, 2393, 2450, 2510, 2515, 2517, 2525, 2526, 2693, and 2750 Masking Tapes 07/21/14

### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

### 10.4. Conditions to avoid

None known.

### 10.5. Incompatible materials

None known.

### 10.6. Hazardous decomposition products

#### Substance

#### Condition

None known.

Under recommended usage conditions, hazardous decomposition products are not expected. Hazardous decomposition products may occur as a result of oxidation, heating, or reaction with another material.

## SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

### 11.1. Information on Toxicological effects

#### Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

#### Inhalation:

No health effects are expected.

#### Skin Contact:

Contact with the skin during product use is not expected to result in significant irritation.

#### Eye Contact:

Contact with the eyes during product use is not expected to result in significant irritation.

#### Ingestion:

No health effects are expected.

#### Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

#### Acute Toxicity

Name	Route	Species	Value
Overall product	Ingestion		No data available; calculated ATE > 5,000 mg/kg

ATE = acute toxicity estimate

#### Skin Corrosion/Irritation

3M™ 101+, 200, 201+, 202, 203, 213, 214, 225, 226, 231/231A, 232, 234, 235, 250, 256, 301+, 401+, 501+, 2209, 2214, 2307, 2308, 2364, 2380, 2393, 2450, 2510, 2515, 2517, 2525, 2526, 2693, and 2750 Masking Tapes 07/21/14

Name	Species	Value
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#### Serious Eye Damage/Irritation

Name	Species	Value
------	---------	-------

#### Skin Sensitization

Name	Species	Value
------	---------	-------

#### Respiratory Sensitization

Name	Species	Value
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#### Germ Cell Mutagenicity

Name	Route	Value
------	-------	-------

#### Carcinogenicity

Name	Route	Species	Value
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#### Reproductive Toxicity

#### Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
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#### Target Organ(s)

#### Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
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#### Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
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#### Aspiration Hazard

Name	Value
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Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

## SECTION 12: Ecological information

#### Ecotoxicological information

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

#### Chemical fate information

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

## SECTION 13: Disposal considerations

#### 13.1. Disposal methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Prior to disposal, consult all applicable authorities and regulations to insure proper classification. Dispose of waste product in

3M™ 101+, 200, 201+, 202, 203, 213, 214, 225, 226, 231/231A, 232, 234, 235, 250, 256, 301+, 401+, 501+, 2209, 2214, 2307, 2308, 2364, 2380, 2393, 2450, 2510, 2515, 2517, 2525, 2526, 2693, and 2750 Masking Tapes 07/21/14

a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. If no other disposal options are available, waste product may be placed in a landfill properly designed for industrial waste.

## SECTION 14: Transport Information

Not regulated per U.S. DOT, IATA or IMO.

*These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M transportation classifications are based on product formulation, packaging, 3M policies and 3M understanding of applicable current regulations. 3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and not the packaging, labeling, or marking requirements. The original 3M package is certified for U.S. ground shipment only. If you are shipping by air or ocean, the package may not meet applicable regulatory requirements.*

## SECTION 15: Regulatory information

### 15.1. US Federal Regulations

Contact 3M for more information.

#### 311/312 Hazard Categories:

Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - No Delayed Hazard - No

### 15.2. State Regulations

Contact 3M for more information.

### 15.3. Chemical Inventories

This product is an article as defined by TSCA regulations, and is exempt from TSCA Inventory listing requirements.

Contact 3M for more information.

### 15.4. International Regulations

Contact 3M for more information.

**This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.**

## SECTION 16: Other information

### NFPA Hazard Classification

**Health:** 0 **Flammability:** 1 **Instability:** 0 **Special Hazards:** None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

**Document Group:** 26-0759-6  
**Issue Date:** 07/21/14

**Version Number:** 2.00  
**Supersedes Date:** 05/14/13

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<b>Document Group:</b>	28-7883-3	<b>Version Number:</b>	3.05
<b>Issue Date:</b>	07/14/14	<b>Supersedes Date:</b>	03/24/14

### SECTION 1: Identification

#### 1.1. Product identifier

3M™ Abrasive Products, Contour Surface Sanding Sponges and Flexible Foam Sanding Sponges, 5mm

#### 1.2. Recommended use and restrictions on use

##### Recommended use

Abrasive Product

#### 1.3. Supplier's details

<b>MANUFACTURER:</b>	3M
<b>DIVISION:</b>	Abrasive Systems Division
<b>ADDRESS:</b>	3M Center, St. Paul, MN 55144-1000, USA
<b>Telephone:</b>	1-888-3M HELPS (1-888-364-3577)

#### 1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

### SECTION 2: Hazard identification

#### 2.1. Hazard classification

Not classified as hazardous according to OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### 2.2. Label elements

##### Signal word

Not applicable.

##### Symbols

Not applicable.

##### Pictograms

Not applicable.

#### 2.3. Hazards not otherwise classified

None.

27% of the mixture consists of ingredients of unknown acute oral toxicity.

### SECTION 3: Composition/information on ingredients

<b>Ingredient</b>	<b>C.A.S. No.</b>	<b>% by Wt</b>
Aluminum Oxide Mineral (non-fibrous)	1344-28-1	25 - 35
Titanium Oxide	13463-67-7	0.1 - 1.25
Cured Resin	Mixture	10 - 30
High Density Foam	Mixture	40 - 60

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### **Inhalation:**

Remove person to fresh air. If you feel unwell, get medical attention.

#### **Skin Contact:**

Wash with soap and water. If signs/symptoms develop, get medical attention.

#### **Eye Contact:**

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

#### **If Swallowed:**

No need for first aid is anticipated.

### 4.2. Most important symptoms and effects, both acute and delayed

See Section 11.1. Information on toxicological effects.

### 4.3. Indication of any immediate medical attention and special treatment required

Not applicable

## SECTION 5: Fire-fighting measures

### 5.1. Suitable extinguishing media

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

### 5.2. Special hazards arising from the substance or mixture

None inherent in this product.

### Hazardous Decomposition or By-Products

#### Substance

Carbon monoxide

Carbon dioxide

#### Condition

During Combustion

During Combustion

### 5.3. Special protective actions for fire-fighters

No special protective actions for fire-fighters are anticipated.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Observe precautions from other sections.

### 6.2. Environmental precautions

Not applicable.

**6.3. Methods and material for containment and cleaning up**

Not applicable.

**SECTION 7: Handling and storage****7.1. Precautions for safe handling**

For industrial or professional use only. Avoid breathing of dust created by sanding, grinding or machining. Combustible dust may form by action of this product on another material (substrate). Dust generated from the substrate during use of this product may be explosive if in sufficient concentration with an ignition source. Dust deposits should not be allowed to accumulate on surfaces because of the potential for secondary explosions.

**7.2. Conditions for safe storage including any incompatibilities**

No special storage requirements.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Occupational exposure limits**

<b>Ingredient</b>	<b>C.A.S. No.</b>	<b>Agency</b>	<b>Limit type</b>	<b>Additional Comments</b>
Aluminum Oxide Mineral (non-fibrous)	1344-28-1	CMRG	TWA:1 fiber/cc	
Aluminum Oxide Mineral (non-fibrous)	1344-28-1	OSHA	TWA(as total dust):15 mg/m3;TWA(respirable fraction):5 mg/m3	
Aluminum, insoluble compounds	1344-28-1	ACGIH	TWA(respirable fraction):1 mg/m3	A4: Not class. as human carcin
Titanium Oxide	13463-67-7	ACGIH	TWA:10 mg/m3	A4: Not class. as human carcin
Titanium Oxide	13463-67-7	CMRG	TWA(as respirable dust):5 mg/m3	
Titanium Oxide	13463-67-7	OSHA	TWA(as total dust):15 mg/m3	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

**8.2. Exposure controls****8.2.1. Engineering controls**

Provide appropriate local exhaust ventilation for sanding, grinding or machining. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment. Provide local exhaust at process emission sources to control exposure near the source and to prevent the escape of dust into the work area. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).

**8.2.2. Personal protective equipment (PPE)****Eye/face protection**



To minimize the risk of injury to face and eyes, always wear eye and face protection when working at sanding or grinding operations or when near such operations. Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Safety Glasses with side shields

#### **Skin/hand protection**

Wear appropriate gloves to minimize risk of injury to skin from contact with dust or physical abrasion from grinding or sanding.

#### **Respiratory protection**

Assess exposure concentrations of all materials involved in the work process. Consider material being abraded when determining the appropriate respiratory protection. Select and use appropriate respirators to prevent inhalation overexposure. An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

## **SECTION 9: Physical and chemical properties**

### **9.1. Information on basic physical and chemical properties**

<b>General Physical Form:</b>	Solid
<b>Odor, Color, Grade:</b>	Solid Abrasive Product
<b>Odor threshold</b>	<i>Not Applicable</i>
<b>pH</b>	<i>Not Applicable</i>
<b>Melting point</b>	<i>Not Applicable</i>
<b>Boiling Point</b>	<i>Not Applicable</i>
<b>Flash Point</b>	<i>Not Applicable</i>
<b>Evaporation rate</b>	<i>Not Applicable</i>
<b>Flammability (solid, gas)</b>	Not Classified
<b>Flammable Limits(LEL)</b>	<i>Not Applicable</i>
<b>Flammable Limits(UEL)</b>	<i>Not Applicable</i>
<b>Vapor Pressure</b>	<i>Not Applicable</i>
<b>Vapor Density</b>	<i>Not Applicable</i>
<b>Specific Gravity</b>	<i>Not Applicable</i>
<b>Solubility In Water</b>	<i>Not Applicable</i>
<b>Solubility- non-water</b>	<i>Not Applicable</i>
<b>Partition coefficient: n-octanol/ water</b>	<i>Not Applicable</i>
<b>Autoignition temperature</b>	<i>Not Applicable</i>
<b>Decomposition temperature</b>	<i>Not Applicable</i>
<b>Viscosity</b>	<i>Not Applicable</i>

## **SECTION 10: Stability and reactivity**

### **10.1. Reactivity**

This material is considered to be non reactive under normal use conditions.

### **10.2. Chemical stability**

Stable.

### **10.3. Possibility of hazardous reactions**

Hazardous polymerization will not occur.

#### 10.4. Conditions to avoid

None known.

#### 10.5. Incompatible materials

None known.

#### 10.6. Hazardous decomposition products

##### Substance

##### Condition

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

Under recommended usage conditions, hazardous decomposition products are not expected. Hazardous decomposition products may occur as a result of oxidation, heating, or reaction with another material.

## SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

### 11.1. Information on Toxicological effects

#### Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

##### **Inhalation:**

Dust from grinding, sanding or machining may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

##### **Skin Contact:**

Mechanical Skin irritation: Signs/symptoms may include abrasion, redness, pain, and itching.

##### **Eye Contact:**

Mechanical eye irritation: Signs/symptoms may include pain, redness, tearing and corneal abrasion.

Dust created by grinding, sanding, or machining may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

##### **Ingestion:**

No health effects are expected.

##### **Carcinogenicity:**

<b>Ingredient</b>	<b>C.A.S. No.</b>	<b>Class Description</b>	<b>Regulation</b>
Titanium Oxide	13463-67-7	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

#### **Additional Information:**

This document covers only the 3M product. For complete assessment, when determining the degree of hazard, the material

being abraded must also be considered.

This product contains titanium dioxide. Cancer of the lungs has been observed in rats that inhaled high levels of titanium dioxide. No exposure to inhaled titanium dioxide is expected during the normal handling and use of this product. Titanium dioxide was not detected when air sampling was conducted during simulated use of similar products containing titanium dioxide. Therefore, the health effects associated with titanium dioxide are not expected during the normal use of this product.

#### Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

#### Acute Toxicity

Name	Route	Species	Value
Overall product	Ingestion		No data available; calculated ATE > 5,000 mg/kg
Aluminum Oxide Mineral (non-fibrous)	Dermal		LD50 estimated to be > 5,000 mg/kg
Aluminum Oxide Mineral (non-fibrous)	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 2.3 mg/l
Aluminum Oxide Mineral (non-fibrous)	Ingestion	Rat	LD50 > 5,000 mg/kg
Titanium Oxide	Dermal	Rabbit	LD50 > 10,000 mg/kg
Titanium Oxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 6.82 mg/l
Titanium Oxide	Ingestion	Rat	LD50 > 10,000 mg/kg

ATE = acute toxicity estimate

#### Skin Corrosion/Irritation

Name	Species	Value
Aluminum Oxide Mineral (non-fibrous)	Rabbit	No significant irritation
Titanium Oxide	Rabbit	No significant irritation

#### Serious Eye Damage/Irritation

Name	Species	Value
Aluminum Oxide Mineral (non-fibrous)	Rabbit	No significant irritation
Titanium Oxide	Rabbit	No significant irritation

#### Skin Sensitization

Name	Species	Value
Titanium Oxide	Human and animal	Not sensitizing

#### Respiratory Sensitization

Name	Species	Value
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#### Germ Cell Mutagenicity

Name	Route	Value
Aluminum Oxide Mineral (non-fibrous)	In Vitro	Not mutagenic
Titanium Oxide	In Vitro	Not mutagenic
Titanium Oxide	In vivo	Not mutagenic

#### Carcinogenicity

Name	Route	Species	Value
Aluminum Oxide Mineral (non-fibrous)	Inhalation	Rat	Not carcinogenic
Titanium Oxide	Ingestion	Multiple animal species	Not carcinogenic
Titanium Oxide	Inhalation	Rat	Carcinogenic

#### Reproductive Toxicity

#### Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
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**Target Organ(s)****Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
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**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Aluminum Oxide Mineral (non-fibrous)	Inhalation	pneumoconiosis   pulmonary fibrosis	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Titanium Oxide	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 0.010 mg/l	2 years
Titanium Oxide	Inhalation	pulmonary fibrosis	All data are negative	Human	NOAEL Not available	occupational exposure

**Aspiration Hazard**

Name	Value
------	-------

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

**SECTION 12: Ecological information****Ecotoxicological information**

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

**Chemical fate information**

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

**SECTION 13: Disposal considerations****13.1. Disposal methods**

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Prior to disposal, consult all applicable authorities and regulations to insure proper classification. The substrate that was abraded must be considered as a factor in the disposal method for this product. Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. If no other disposal options are available, waste product may be placed in a landfill properly designed for industrial waste.

**EPA Hazardous Waste Number (RCRA):** Not regulated

**SECTION 14: Transport Information**

Not regulated per U.S. DOT, IATA or IMO.

*These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M transportation classifications are based on product formulation, packaging, 3M policies and 3M understanding of*

*applicable current regulations. 3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and **not the packaging, labeling, or marking requirements**. The original 3M package is certified for U.S. ground shipment only. If you are shipping by air or ocean, the package may not meet applicable regulatory requirements.*

## SECTION 15: Regulatory information

### 15.1. US Federal Regulations

Contact 3M for more information.

#### 311/312 Hazard Categories:

Fire Hazard - No   Pressure Hazard - No   Reactivity Hazard - No   Immediate Hazard - No   Delayed Hazard - No

### 15.2. State Regulations

Contact 3M for more information.

### 15.3. Chemical Inventories

This product is an article as defined by TSCA regulations, and is exempt from TSCA Inventory listing requirements.

Contact 3M for more information.

### 15.4. International Regulations

Contact 3M for more information.

**This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.**

## SECTION 16: Other information

### NFPA Hazard Classification

**Health:** 0 **Flammability:** 1 **Instability:** 0 **Special Hazards:** None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

<b>Document Group:</b>	28-7883-3	<b>Version Number:</b>	3.05
<b>Issue Date:</b>	07/14/14	<b>Supersedes Date:</b>	03/24/14

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## Safety Data Sheet

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**Issue Date:** 07/22/15

**Version Number:** 10.13  
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### SECTION 1: Identification

#### 1.1. Product identifier

3M™ Abrasive Products, 216U, 236U

#### 1.2. Recommended use and restrictions on use

##### Recommended use

Abrasive Product

#### 1.3. Supplier's details

**MANUFACTURER:** 3M  
**DIVISION:** Abrasive Systems Division  
**ADDRESS:** 3M Center, St. Paul, MN 55144-1000, USA  
**Telephone:** 1-888-3M HELPS (1-888-364-3577)

#### 1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

### SECTION 2: Hazard identification

#### 2.1. Hazard classification

Not classified as hazardous according to OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### 2.2. Label elements

##### Signal word

Not applicable.

##### Symbols

Not applicable.

##### Pictograms

Not applicable.

#### 2.3. Hazards not otherwise classified

This document is specific to the supplied product. For complete assessment, when determining the degree of hazard, the material being abraded must also be considered.

### SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
------------	------------	---------

Aluminum Oxide (non-fibrous)	1344-28-1	10 - 45
Lubricant	68424-16-8	1 - 5
Titanium Dioxide	13463-67-7	0.25 - 1.5
Paper Backing	None	20 - 70
Cured Resin	Mixture	20 - 50
Hookit Backing	Mixture	0 - 10
PSA Backing	Mixture	0 - 5

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### Inhalation:

Remove person to fresh air. If you feel unwell, get medical attention.

#### Skin Contact:

Wash with soap and water. If signs/symptoms develop, get medical attention.

#### Eye Contact:

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

#### If Swallowed:

No need for first aid is anticipated.

### 4.2. Most important symptoms and effects, both acute and delayed

See Section 11.1. Information on toxicological effects.

### 4.3. Indication of any immediate medical attention and special treatment required

Not applicable

## SECTION 5: Fire-fighting measures

### 5.1. Suitable extinguishing media

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

### 5.2. Special hazards arising from the substance or mixture

None inherent in this product.

#### Hazardous Decomposition or By-Products

##### Substance

Carbon monoxide  
Carbon dioxide

##### Condition

During Combustion  
During Combustion

### 5.3. Special protective actions for fire-fighters

No special protective actions for fire-fighters are anticipated.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Observe precautions from other sections.

### 6.2. Environmental precautions



Not applicable.

### 6.3. Methods and material for containment and cleaning up

Not applicable.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

For industrial or professional use only. Avoid breathing of dust created by sanding, grinding or machining. Combustible dust may form by action of this product on another material (substrate). Dust generated from the substrate during use of this product may be explosive if in sufficient concentration with an ignition source. Dust deposits should not be allowed to accumulate on surfaces because of the potential for secondary explosions.

### 7.2. Conditions for safe storage including any incompatibilities

No special storage requirements.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
Aluminum Oxide (non-fibrous)	1344-28-1	CMRG	TWA:1 fiber/cc	
Aluminum Oxide (non-fibrous)	1344-28-1	OSHA	TWA(as total dust):15 mg/m3;TWA(respirable fraction):5 mg/m3	
Aluminum, insoluble compounds	1344-28-1	ACGIH	TWA(respirable fraction):1 mg/m3	A4: Not class. as human carcin
Titanium Dioxide	13463-67-7	CMRG	TWA(as respirable dust):5 mg/m3	
Titanium Dioxide	13463-67-7	OSHA	TWA(as total dust):15 mg/m3	
Titanium Dioxide	13463-67-7	ACGIH	TWA:10 mg/m3	A4: Not class. as human carcin

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

### 8.2. Exposure controls

#### 8.2.1. Engineering controls

Provide appropriate local exhaust ventilation for sanding, grinding or machining. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment. Provide local exhaust at process emission sources to control exposure near the source and to prevent the escape of dust into the work area. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).

#### 8.2.2. Personal protective equipment (PPE)

##### Eye/face protection

To minimize the risk of injury to face and eyes, always wear eye and face protection when working at sanding or grinding operations or when near such operations. Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:  
Safety Glasses with side shields

#### **Skin/hand protection**

Wear appropriate gloves to minimize risk of injury to skin from contact with dust or physical abrasion from grinding or sanding.

#### **Respiratory protection**

Assess exposure concentrations of all materials involved in the work process. Consider material being abraded when determining the appropriate respiratory protection. Select and use appropriate respirators to prevent inhalation overexposure. An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

## **SECTION 9: Physical and chemical properties**

### **9.1. Information on basic physical and chemical properties**

<b>General Physical Form:</b>	Solid
<b>Odor, Color, Grade:</b>	Solid Abrasive Product
<b>Odor threshold</b>	<i>Not Applicable</i>
<b>pH</b>	<i>Not Applicable</i>
<b>Melting point</b>	<i>Not Applicable</i>
<b>Boiling Point</b>	<i>Not Applicable</i>
<b>Flash Point</b>	<i>Not Applicable</i>
<b>Evaporation rate</b>	<i>Not Applicable</i>
<b>Flammability (solid, gas)</b>	Not Classified
<b>Flammable Limits(LEL)</b>	<i>Not Applicable</i>
<b>Flammable Limits(UEL)</b>	<i>Not Applicable</i>
<b>Vapor Pressure</b>	<i>Not Applicable</i>
<b>Vapor Density</b>	<i>Not Applicable</i>
<b>Specific Gravity</b>	<i>Not Applicable</i>
<b>Solubility In Water</b>	<i>Not Applicable</i>
<b>Solubility- non-water</b>	<i>Not Applicable</i>
<b>Partition coefficient: n-octanol/ water</b>	<i>Not Applicable</i>
<b>Autoignition temperature</b>	<i>Not Applicable</i>
<b>Decomposition temperature</b>	<i>Not Applicable</i>
<b>Viscosity</b>	<i>Not Applicable</i>
<b>Hazardous Air Pollutants</b>	<i>No Data Available</i>
<b>Percent volatile</b>	<i>No Data Available</i>

## **SECTION 10: Stability and reactivity**

### **10.1. Reactivity**

This material is considered to be non reactive under normal use conditions.

### **10.2. Chemical stability**

Stable.

**10.3. Possibility of hazardous reactions**

Hazardous polymerization will not occur.

**10.4. Conditions to avoid**

None known.

**10.5. Incompatible materials**

None known.

**10.6. Hazardous decomposition products****Substance****Condition**

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

## SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

**11.1. Information on Toxicological effects****Signs and Symptoms of Exposure**

Based on test data and/or information on the components, this material may produce the following health effects:

**Inhalation:**

Dust from grinding, sanding or machining may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

**Skin Contact:**

Mechanical Skin irritation: Signs/symptoms may include abrasion, redness, pain, and itching.

**Eye Contact:**

Mechanical eye irritation: Signs/symptoms may include pain, redness, tearing and corneal abrasion.

Dust created by grinding, sanding, or machining may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

**Ingestion:**

No health effects are expected.

**Carcinogenicity:**

<b><u>Ingredient</u></b>	<b><u>CAS No.</u></b>	<b><u>Class Description</u></b>	<b><u>Regulation</u></b>
Titanium Dioxide	13463-67-7	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

**Additional Information:**

This document covers only the 3M product. For complete assessment, when determining the degree of hazard, the material being abraded must also be considered.

This product contains titanium dioxide. Cancer of the lungs has been observed in rats that inhaled high levels of titanium dioxide. No exposure to inhaled titanium dioxide is expected during the normal handling and use of this product. Titanium dioxide was not detected when air sampling was conducted during simulated use of similar products containing titanium dioxide. Therefore, the health effects associated with titanium dioxide are not expected during the normal use of this product.

#### Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

#### Acute Toxicity

Name	Route	Species	Value
Overall product	Ingestion		No data available; calculated ATE > 5,000 mg/kg
Aluminum Oxide (non-fibrous)	Dermal		LD50 estimated to be > 5,000 mg/kg
Aluminum Oxide (non-fibrous)	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 2.3 mg/l
Aluminum Oxide (non-fibrous)	Ingestion	Rat	LD50 > 5,000 mg/kg
Titanium Dioxide	Dermal	Rabbit	LD50 > 10,000 mg/kg
Titanium Dioxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 6.82 mg/l
Titanium Dioxide	Ingestion	Rat	LD50 > 10,000 mg/kg

ATE = acute toxicity estimate

#### Skin Corrosion/Irritation

Name	Species	Value
Aluminum Oxide (non-fibrous)	Rabbit	No significant irritation
Titanium Dioxide	Rabbit	No significant irritation

#### Serious Eye Damage/Irritation

Name	Species	Value
Aluminum Oxide (non-fibrous)	Rabbit	No significant irritation
Titanium Dioxide	Rabbit	No significant irritation

#### Skin Sensitization

Name	Species	Value
Titanium Dioxide	Human and animal	Not sensitizing

#### Respiratory Sensitization

For the component/components, either no data are currently available or the data are not sufficient for classification.

#### Germ Cell Mutagenicity

Name	Route	Value
Aluminum Oxide (non-fibrous)	In Vitro	Not mutagenic
Titanium Dioxide	In Vitro	Not mutagenic
Titanium Dioxide	In vivo	Not mutagenic

#### Carcinogenicity

Name	Route	Species	Value
Aluminum Oxide (non-fibrous)	Inhalation	Rat	Not carcinogenic
Titanium Dioxide	Ingestion	Multiple animal species	Not carcinogenic
Titanium Dioxide	Inhalation	Rat	Carcinogenic

**Reproductive Toxicity****Reproductive and/or Developmental Effects**

For the component/components, either no data are currently available or the data are not sufficient for classification.

**Target Organ(s)****Specific Target Organ Toxicity - single exposure**

For the component/components, either no data are currently available or the data are not sufficient for classification.

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Aluminum Oxide (non-fibrous)	Inhalation	pneumoconiosis   pulmonary fibrosis	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Titanium Dioxide	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 0.01 mg/l	2 years
Titanium Dioxide	Inhalation	pulmonary fibrosis	All data are negative	Human	NOAEL Not available	occupational exposure

**Aspiration Hazard**

For the component/components, either no data are currently available or the data are not sufficient for classification.

**Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.**

**SECTION 12: Ecological information****Ecotoxicological information**

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

**Chemical fate information**

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

**SECTION 13: Disposal considerations****13.1. Disposal methods**

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Prior to disposal, consult all applicable authorities and regulations to insure proper classification. The substrate that was abraded must be considered as a factor in the disposal method for this product. Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. If no other disposal options are available, waste product may be placed in a landfill properly designed for industrial waste.

**EPA Hazardous Waste Number (RCRA):** Not regulated

**SECTION 14: Transport Information**

Not regulated per U.S. DOT, IATA or IMO.

*These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for*

*complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M transportation classifications are based on product formulation, packaging, 3M policies and 3M understanding of applicable current regulations. 3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and **not the packaging, labeling, or marking requirements**. The original 3M package is certified for U.S. ground shipment only. If you are shipping by air or ocean, the package may not meet applicable regulatory requirements.*

## SECTION 15: Regulatory information

### 15.1. US Federal Regulations

Contact 3M for more information.

#### 311/312 Hazard Categories:

Fire Hazard - No   Pressure Hazard - No   Reactivity Hazard - No   Immediate Hazard - No   Delayed Hazard - No

### 15.2. State Regulations

Contact 3M for more information.

### 15.3. Chemical Inventories

This product is an article as defined by TSCA regulations, and is exempt from TSCA Inventory listing requirements.

Contact 3M for more information.

### 15.4. International Regulations

Contact 3M for more information.

**This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.**

## SECTION 16: Other information

### NFPA Hazard Classification

**Health: 0 Flammability: 1 Instability: 0 Special Hazards: None**

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

### HMIS Hazard Classification

**Health: 0 Flammability: 0 Physical Hazard: 0 Personal Protection: X - See PPE section.**

Hazardous Material Identification System (HMIS® III) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® III ratings are to be used with a fully implemented HMIS® III program. HMIS® is a registered mark of the American Coatings Association (ACA).

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### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** 3M™ Drywall Corner Bead Spray Adhesive 61

**MANUFACTURER:** 3M

**DIVISION:** Construction and Home Improvement Markets

**ADDRESS:** 3M Center  
St. Paul, MN 55144-1000

EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)

**Issue Date:** 04/06/09

**Supersedes Date:** 04/13/07

**Document Group:** 09-5506-2

**Product Use:**

Intended Use: Adhesive aerosol  
Specific Use: Aerosol adhesive

### SECTION 2: INGREDIENTS

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>% by Wt</u>
Non-Volatile Components - N.J.T.S. Reg No. 04499600-6346P	Trade Secret	20 - 30
Acetone	67-64-1	20 - 30
Propane	74-98-6	15 - 25
2-Methylpentane	107-83-5	10 - 20
3-Methylpentane	96-14-0	3 - 7
Cyclohexane	110-82-7	3 - 7
2,2-Dimethylbutane	75-83-2	1 - 3
2,3-Dimethylbutane	79-29-8	1 - 3
Hexane	110-54-3	0.1 - 1

### SECTION 3: HAZARDS IDENTIFICATION

#### 3.1 EMERGENCY OVERVIEW

**Odor, Color, Grade:** Pink, sweet/fruity odor.



**General Physical Form:** Gas

**Immediate health, physical, and environmental hazards:** Closed containers exposed to heat from fire may build pressure and explode. Extremely flammable liquid and vapor. Vapors may travel long distances along the ground or floor to an ignition source and flash back. Aerosol container contains flammable material under pressure. May cause target organ effects. Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

## 3.2 POTENTIAL HEALTH EFFECTS

### **Eye Contact:**

Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

### **Skin Contact:**

Moderate Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness.

May be absorbed through skin and cause target organ effects.

### **Inhalation:**

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Intentional concentration and inhalation may be harmful or fatal.

May be absorbed following inhalation and cause target organ effects.

### **Ingestion:**

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

May be absorbed following ingestion and cause target organ effects.

### **Target Organ Effects:**

Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Prolonged or repeated exposure may cause:

Liver Effects: Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice.

Peripheral Neuropathy: Signs/symptoms may include tingling or numbness of the extremities, incoordination, weakness of the hands and feet, tremors and muscle atrophy.

Kidney/Bladder Effects: Signs/symptoms may include changes in urine production, abdominal or lower back pain, increased protein in urine, increased blood urea nitrogen (BUN), blood in urine, and painful urination.

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

## SECTION 4: FIRST AID MEASURES

### 4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

**Eye Contact:** Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

**Skin Contact:** Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Get medical attention. Wash contaminated clothing and clean shoes before reuse.

**Inhalation:** Remove person to fresh air. If signs/symptoms develop, get medical attention.

**If Swallowed:** Do not induce vomiting unless instructed to do so by medical personnel. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.

## SECTION 5: FIRE FIGHTING MEASURES

### 5.1 FLAMMABLE PROPERTIES

Autoignition temperature	<i>No Data Available</i>
Flash Point	-42 °F [ <i>Test Method:</i> Closed Cup]
Flammable Limits - LEL	1.1 % volume
Flammable Limits - UEL	12.8 % volume
OSHA Flammability Classification:	Class IA Flammable Liquid

### 5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

### 5.3 PROTECTION OF FIRE FIGHTERS

**Special Fire Fighting Procedures:** Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

**Unusual Fire and Explosion Hazards:** Closed containers exposed to heat from fire may build pressure and explode. Extremely flammable liquid and vapor. Vapors may travel long distances along the ground or floor to an ignition source and flash back. Aerosol container contains flammable material under pressure.

**Note:** See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Accidental Release Measures:** If possible, seal leaking container. Place leaking containers in a well-ventilated area, preferably an operating exhaust hood, or if necessary outdoors on an impermeable surface until appropriate packaging for the leaking container or its contents is available.

Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Call 3M-HELPS line (1-800-364-3577) for more information on handling and managing the spill. Remove all ignition sources such as flames, smoking materials, and electrical spark sources. Use only non-sparking tools. Ventilate the area with fresh air. Contain spill. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and MSDS. Collect the resulting residue containing solution. Place in a closed container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

**In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.**

## **SECTION 7: HANDLING AND STORAGE**

### **7.1 HANDLING**

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Keep away from heat, sparks, open flame, pilot lights and other sources of ignition. Do not pierce or burn container, even after use. Avoid breathing of vapors, mists or spray. Avoid skin contact. Aerosol container contains flammable gas under pressure. Avoid eye contact with vapors, mists, or spray. Keep out of the reach of children.

### **7.2 STORAGE**

Store away from acids. Store away from heat. Store out of direct sunlight.

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **8.1 ENGINEERING CONTROLS**

Use with appropriate local exhaust ventilation. Use with functioning spray booth or local exhaust. Use in a well-ventilated area. If exhaust ventilation is not available, use appropriate respiratory protection. Do not use in a confined area or areas with little or no air movement. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits and/or control mist, vapor, or spray. If ventilation is not adequate, use respiratory protection equipment.

### **8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)**

#### **8.2.1 Eye/Face Protection**

Avoid eye contact with vapors, mists, or spray.

The following eye protection(s) are recommended: Safety Glasses with side shields.

#### **8.2.2 Skin Protection**

Avoid skin contact.

Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.

Gloves made from the following material(s) are recommended: Butyl Rubber, Nitrile Rubber, Polyethylene/Ethylene Vinyl Alcohol.

#### **8.2.3 Respiratory Protection**

Avoid breathing of vapors, mists or spray.

Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half facepiece or fullface air-purifying respirator with organic vapor cartridges. Consult the current 3M Respiratory Selection Guide for additional information or call 1-800-243-4630 for 3M technical assistance.

#### **8.2.4 Prevention of Swallowing**

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

### 8.3 EXPOSURE GUIDELINES

<u>Ingredient</u>	<u>Authority</u>	<u>Type</u>	<u>Limit</u>	<u>Additional Information</u>
Acetone	ACGIH	TWA	500 ppm	Table A4
Acetone	ACGIH	STEL	750 ppm	Table A4
Acetone	OSHA	TWA, Vacated	750 ppm	
Acetone	OSHA	TWA	1000 ppm	Table Z-1
Acetone	OSHA	STEL, Vacated	1000 ppm	
Cyclohexane	ACGIH	TWA	100 ppm	
Cyclohexane	OSHA	TWA	300 ppm	Table Z-1
Hexane	ACGIH	TWA	50 ppm	Skin Notation*
Hexane	OSHA	TWA, Vacated	50 ppm	Table Z-1A
Hexane	OSHA	TWA	500 ppm	Table Z-1A
HEXANE (ISOMERS OTHER THAN N-HEXANE)	ACGIH	TWA	500 ppm	
HEXANE (ISOMERS OTHER THAN N-HEXANE)	ACGIH	STEL	1000 ppm	
Propane	ACGIH	TWA	1000 ppm	
Propane	OSHA	TWA	1000 ppm	Table Z-1

\* Substance(s) refer to the potential contribution to the overall exposure by the cutaneous route including mucous membrane and eye, either by airborne or, more particularly, by direct contact with the substance. Vehicles can alter skin absorption.

VAC Vacated PEL: Vacated Permissible Exposure Limits [PEL] are enforced as the OSHA PEL in some states. Check with your local regulatory agency.

#### SOURCE OF EXPOSURE LIMIT DATA:

ACGIH: American Conference of Governmental Industrial Hygienists

CMRG: Chemical Manufacturer Recommended Guideline

OSHA: Occupational Safety and Health Administration

AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Odor, Color, Grade:</b>	Pink, sweet/fruity odor.
<b>General Physical Form:</b>	Gas
<b>Autoignition temperature</b>	<i>No Data Available</i>
<b>Flash Point</b>	-42 °F [ <i>Test Method:</i> Closed Cup]
<b>Flammable Limits - LEL</b>	1.1 % volume
<b>Flammable Limits - UEL</b>	12.8 % volume
<b>Boiling point</b>	<i>Not Applicable</i>
<b>Density</b>	0.726 g/ml
<b>Vapor Density</b>	2.97 [ <i>Ref Std:</i> AIR=1]
<b>Vapor Pressure</b>	<i>Not Applicable</i>
<b>Specific Gravity</b>	0.726 [ <i>Ref Std:</i> WATER=1]
<b>pH</b>	<i>Not Applicable</i>
<b>Melting point</b>	<i>Not Applicable</i>
<b>Solubility in Water</b>	Nil
<b>Evaporation rate</b>	1.9 [ <i>Ref Std:</i> ETHER=1]

Hazardous Air Pollutants	<=.4 % weight [ <i>Test Method: Calculated</i> ]
Volatile Organic Compounds	<i>No Data Available</i>
Percent volatile	70 - 80 % weight
VOC Less H2O & Exempt Solvents	<i>No Data Available</i>
Viscosity	<i>Not Applicable</i>

## SECTION 10: STABILITY AND REACTIVITY

**Stability:** Stable.

**Materials and Conditions to Avoid:** Heat; Sparks and/or flames

**Hazardous Polymerization:** Hazardous polymerization will not occur.

### Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Hydrocarbons	During Combustion
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion

## SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

## SECTION 12: ECOLOGICAL INFORMATION

### ECOTOXICOLOGICAL INFORMATION

Not determined.

### CHEMICAL FATE INFORMATION

Not determined.

## SECTION 13: DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** Incinerate in a permitted hazardous waste incinerator. As a disposal alternative, dispose of waste product in a permitted hazardous waste facility.

The facility should be equipped to handle gaseous waste.

RECYCLE EMPTY AEROSOL CONTAINERS WHERE AVAILABLE.

**EPA Hazardous Waste Number (RCRA):** D001 (Ignitable)

Since regulations vary, consult applicable regulations or authorities before disposal.

**SECTION 14: TRANSPORT INFORMATION****ID Number(s):**

62-4452-4930-3, 62-4452-4935-2, 62-4452-4938-6, 70-0714-7418-6

Please contact the emergency numbers listed on the first page of the MSDS for Transportation Information for this material.

**SECTION 15: REGULATORY INFORMATION****US FEDERAL REGULATIONS**

Contact 3M for more information.

**311/312 Hazard Categories:**

Fire Hazard - Yes Pressure Hazard - Yes Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - Yes

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

<u>Ingredient</u>	<u>C.A.S. No</u>	<u>% by Wt</u>
Cyclohexane	110-82-7	3 - 7

**STATE REGULATIONS**

Contact 3M for more information.

**CHEMICAL INVENTORIES**

The components of this product are in compliance with the chemical notification requirements of TSCA.

All applicable chemical ingredients in this material are listed on the European Inventory of Existing Chemical Substances (EINECS), or are exempt polymers whose monomers are listed on EINECS.

Contact 3M for more information.

**INTERNATIONAL REGULATIONS**

Non hazardous according to WHMIS criteria.

Contact 3M for more information.

WHMIS: Non-hazardous

This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

## SECTION 16: OTHER INFORMATION

### NFPA Hazard Classification

Health: 2 Flammability: 4 Reactivity: 0 Special Hazards: None  
Aerosol Storage Code: 3

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

#### Revision Changes:

Section 1: Product name was modified.

Section 1: Division name was modified.

Copyright was modified.

Page Heading: Product name was modified.

Section 14: ID Number Heading Template 1 was added.

Section 14: ID Number(s) Template 1 was added.

Section 2: Ingredient table was added.

Section 15: EPCRA 313 information was added.

Section 15: EPCRA 313 text was added.

Section 8: Exposure guidelines ingredient information was added.

Section 8: Exposure guidelines legend was added.

Section 8: Exposure guideline note was added.

Section 8: Exposure guidelines data source legend was added.

**DISCLAIMER:** The information in this Material Safety Data Sheet (MSDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

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3M MSDSs are available at [www.3M.com](http://www.3M.com)

## 1 Identification of the substance and manufacturer

**Trade name:** STRIPE INVERTED TIP CLEAR

**Product code:** 0000200631  
**Product category:** PC9a Paints and coatings.  
**Manufacturer/Supplier:** Seymour of Sycamore



917 Crosby Avenue  
Sycamore, IL 60178  
Phone: 815-895-9101 www.seymourpaint.com

**Emergency telephone number:** CHEMTEL 1-800-255-3924, 813-248-0585 \*if located outside the U.S.\*

## 2 Hazard(s) identification

### Classification of the substance or mixture

Flam. Aerosol 1 H222 Extremely flammable aerosol.  
Press. Gas H280 Contains gas under pressure; may explode if heated.  
Carc. 2 H351 Suspected of causing cancer.  
Eye Irrit. 2A H319 Causes serious eye irritation.

### GHS Hazard pictograms



GHS02 GHS04 GHS07 GHS08

### Signal word

### Hazard statements

Danger  
Extremely flammable aerosol.  
Contains gas under pressure; may explode if heated.  
Causes serious eye irritation.  
Suspected of causing cancer.

### Precautionary statements

If medical advice is needed, have product container or label at hand.  
Keep out of reach of children.  
Read label before use.  
Obtain special instructions before use.  
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
Do not spray on an open flame or other ignition source.  
Pressurized container: Do not pierce or burn, even after use.  
Wash hands thoroughly after handling.  
Do not handle until all safety precautions have been read and understood.  
Wear protective gloves/protective clothing/eye protection/face protection.  
Use personal protective equipment as required.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.  
IF exposed or concerned: Get medical advice/attention.  
If eye irritation persists: Get medical advice/attention.  
Store locked up.  
Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.  
Store in a well-ventilated place.  
Dispose of contents/container in accordance with local/regional/national/international regulations.

## 3 Composition/information on ingredients

**Chemical Description:** This product is a mixture of the substances listed below with nonhazardous additions.

### Dangerous components:

67-64-1	Acetone	17.89%
1317-65-3	Calcium Carbonate	15.19%
74-98-6	propane	13.86%
64742-47-8	Mineral Spirits	10.57%
106-97-8	n-butane	8.14%
64742-89-8	VM&P Naphtha	8.01%
111-76-2	Glycol Ether EB	5.25%
1330-20-7	xylene (mix)	2.53%

## 4 First-aid measures

**After inhalation:** Supply fresh air; consult doctor in case of complaints.  
**After skin contact:** Remove contaminated clothing. Wash exposed area with soap and water.  
**After eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.  
**After swallowing:** Rinse out mouth and then drink plenty of water.  
Rinse mouth with water. Do not induce vomiting.

### Most important symptoms and effects:

Dizziness

### Indication of any immediate medical attention needed:

No further relevant information available.

## 5 Fire-fighting measures

**Extinguishing agents:** CO2, extinguishing powder or water spray. Fight larger fires with water spray.



# Safety Data Sheet

acc. to OSHA HCS

Printing date 09/29/2014

Revised On 09/24/2014

Trade name: STRIPE INVERTED TIP CLEAR

**Special hazards:** Can form explosive gas-air mixtures.

**Protective equipment for firefighters:** A respiratory protective device may be necessary.

(Contd. of page 1)

## 6 Accidental release measures

**Personal precautions, protective equipment and emergency procedures:**

Wear protective equipment. Keep unprotected persons away.  
Use respiratory protective device against the effects of fumes/dust/aerosol.

**Methods and material for containment and cleaning up:**

Ensure adequate ventilation.

## 7 Handling and storage

**Precautions for safe handling**  
**Storage requirements:**

Use only in well ventilated areas.  
Keep away from sources of heat and direct sunlight. Do not warehouse in subfreezing conditions.  
Store locked up.

## 8 Exposure controls/personal protection

**Components with limit values that require monitoring at the workplace:**

### 67-64-1 Acetone

PEL (USA) Long-term value: 2400 mg/m<sup>3</sup>, 1000 ppm  
REL (USA) Long-term value: 590 mg/m<sup>3</sup>, 250 ppm  
TLV (USA) Short-term value: (1782) NIC-1187 mg/m<sup>3</sup>, (750) NIC-500 ppm  
Long-term value: (1188) NIC-594 mg/m<sup>3</sup>, (500) NIC-250 ppm  
BEI

### 74-98-6 propane

PEL (USA) Long-term value: 1800 mg/m<sup>3</sup>, 1000 ppm  
REL (USA) Long-term value: 1800 mg/m<sup>3</sup>, 1000 ppm  
TLV (USA) refer to Appendix F

### 106-97-8 n-butane

REL (USA) Long-term value: 1900 mg/m<sup>3</sup>, 800 ppm  
TLV (USA) Short-term value: 2370 mg/m<sup>3</sup>, 1000 ppm

### 111-76-2 Glycol Ether EB

PEL (USA) Long-term value: 240 mg/m<sup>3</sup>, 50 ppm  
Skin  
REL (USA) Long-term value: 24 mg/m<sup>3</sup>, 5 ppm  
Skin  
TLV (USA) Long-term value: 97 mg/m<sup>3</sup>, 20 ppm  
BEI

### 1330-20-7 xylene (mix)

PEL (USA) Long-term value: 435 mg/m<sup>3</sup>, 100 ppm  
REL (USA) Short-term value: 655 mg/m<sup>3</sup>, 150 ppm  
Long-term value: 435 mg/m<sup>3</sup>, 100 ppm  
TLV (USA) Short-term value: 651 mg/m<sup>3</sup>, 150 ppm  
Long-term value: 434 mg/m<sup>3</sup>, 100 ppm  
BEI

**Ingredients with biological limit values:**

### 67-64-1 Acetone

BEI (USA) 50 mg/L  
Medium: urine  
Time: end of shift  
Parameter: Acetone (nonspecific)

### 111-76-2 Glycol Ether EB

BEI (USA) 200 mg/g creatinine  
Medium: urine  
Time: end of shift  
Parameter: Butoxyacetic acid with hydrolysis

### 1330-20-7 xylene (mix)

BEI (USA) 1.5 g/g creatinine  
Medium: urine  
Time: end of shift  
Parameter: Methylhippuric acids

**Hygienic protection:** Keep away from foodstuffs and animal feed. Wash hands after use.  
Immediately remove all soiled and contaminated clothing.  
Wash hands after use.  
Avoid contact with the eyes and skin.  
Do not eat or drink while working.

(Contd. on page 3)

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Trade name: STRIPE INVERTED TIP CLEAR

(Contd. of page 2)

**Breathing equipment:** A respirator is generally not necessary when using this product outdoors or in large open areas. In cases where short and/or long term overexposure exists, a charcoal filter respirator should be worn. If you suspect overexposure conditions exist, please consult an authority on chemical hygiene.

**Hand protection:** Protective gloves. The glove material must be impermeable and resistant to the substance.

**Eye protection:** Tightly sealed goggles

## 9 Physical and chemical properties

**Appearance:** Aerosol.  
**Odor:** Aromatic  
**Odor threshold:** Not determined.  
**pH-value:** Not determined.  
**Melting point/Melting range:** Undetermined.  
**Boiling point:** -110 °C (-166 °F)  
**Flash point:** -19 °C (-2 °F)  
**Flammability (solid, gas):** Extremely flammable.  
**Decomposition temperature:** Not determined.  
**Auto igniting:** Product is not self-igniting.  
**Danger of explosion:** In use, may form flammable/explosive vapour-air mixture.  
**Lower Explosion Limit:** 0.5 Vol %  
**Upper Explosion Limit:** 10.9 Vol %  
**Vapor pressure:** Not determined.  
**Relative Density:** Between 0.77 and 0.85 (Water equals 1.00)  
**Vapour density:** Not determined.  
**Evaporation rate:** Not applicable.  
**Partition coefficient: n-octanol/water:** Not determined.  
**Solubility:** Not determined.  
**Viscosity:** Not determined.  
**VOC content:** 503.5 g/l / 4.20 lb/gl  
**VOC content (less exempt solvents):** 49.2 %  
**MIR Value:** 1.03  
**Solids content:** 32.9 %

## 10 Stability and reactivity

**Reactivity:** Stable at normal temperatures.  
**Conditions to avoid:** Do not allow can to exceed 120 degrees Fahrenheit. Do not warehouse in subfreezing temperatures.  
**Chemical stability:** Not fully evaluated.  
**Possibility of hazardous reactions:** No dangerous reactions known.  
**Incompatible materials:** No further relevant information available.  
**Hazardous decomposition:** No dangerous decomposition products known.

## 11 Toxicological information

### LD/LC50 values that are relevant for classification:

#### 106-97-8 n-butane

Inhalative LC50/4 h 658 mg/l (rat)

#### 111-76-2 Glycol Ether EB

Oral LD50 1480 mg/kg (rat)

Dermal LD50 400 mg/kg (rab)

#### 1330-20-7 xylene (mix)

Oral LD50 8700 mg/kg (rat)

Dermal LD50 2000 mg/kg (rbt)

Inhalative LC50/4 h 6350 mg/l (rat)

**Information on toxicological effects:** No data available.**Sensitization:** No sensitizing effects known.

### Carcinogenic categories

#### IARC (International Agency for Research on Cancer)

111-76-2 Glycol Ether EB

3

1330-20-7 xylene (mix)

3

#### NTP (National Toxicology Program)

None of the ingredients is listed.

(Contd. on page 4)

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Trade name: STRIPE INVERTED TIP CLEAR

(Contd. of page 3)

**OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

**12 Ecological information**

**Aquatic toxicity:** Hazardous for water, do not empty into drains.  
**Persistence and degradability:** The product is degradable after prolonged exposure to natural weathering processes.  
**Bioaccumulative potential:** No further relevant information available.  
**Mobility in soil:** No further relevant information available.  
**Other adverse effects:** No further relevant information available.

**13 Disposal considerations**

Dispose of in accordance with local, state, and federal regulations. Do not puncture, incinerate, or compact. Partially empty cans must be disposed of responsibly. Do not heat or cut empty containers with electric or gas torches.  
**Recommendation:** Completely empty cans should be recycled.

**14 Transport information**

**UN-Number** UN1950  
**DOT** Aerosols, flammable  
**ADR** 1950 Aerosols  
**Transport hazard class(es):**  
**Class** 2.1  
**Marine pollutant:** No  
**Special precautions for user:** Warning: Gases  
**EMS Number:** F-D,S-U  
**Packaging Group:** --  
**UN "Model Regulation":** UN1950, Aerosols, 2.1

**15 Regulatory information****SARA Section 355 (extremely hazardous substances):**

None of the ingredients in this product are listed.

**SARA Section 313 (Specific toxic chemical listings):**

111-76-2 Glycol Ether EB  
 1330-20-7 xylene (mix)

**CPSC:** This product complies with 16 CFR 1303 and does not contain more than 90 ppm of lead.**California Proposition 65 chemicals known to cause cancer:**

100-41-4 ethyl benzene

**EPA:**

67-64-1	Acetone	I
111-76-2	Glycol Ether EB	NL
1330-20-7	xylene (mix)	I

**16 Other information****Contact:** Regulatory Affairs

# Safety Data Sheet

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## 1 Identification of the substance and manufacturer

**Trade name:** COLD GALV  
**Product code:** 0000161445  
**Product category:** PC9a Paints and coatings.  
**Manufacturer/Supplier:** Seymour of Sycamore  
 917 Crosby Avenue  
 Sycamore, IL 60178  
 Phone: 815-895-9101 www.seymourpaint.com  
**Emergency telephone number:** CHEMTEL 1-800-255-3924, 813-248-0585 \*if located outside the U.S.\*



## 2 Hazard(s) identification

### Classification of the substance or mixture

Flam. Aerosol 1 H222 Extremely flammable aerosol.  
 Press. Gas H280 Contains gas under pressure; may explode if heated.  
 Repr. 2 H361 Suspected of damaging fertility or the unborn child.  
 STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.  
 Skin Irrit. 2 H315 Causes skin irritation.

### GHS Hazard pictograms



GHS02 GHS04 GHS07 GHS08

### Signal word

### Hazard statements

Danger  
 Extremely flammable aerosol.  
 Contains gas under pressure; may explode if heated.  
 Causes skin irritation.  
 Suspected of damaging fertility or the unborn child.  
 May cause damage to organs through prolonged or repeated exposure.  
 If medical advice is needed, have product container or label at hand.  
 Keep out of reach of children.  
 Read label before use.  
 Obtain special instructions before use.  
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
 Do not spray on an open flame or other ignition source.  
 Pressurized container: Do not pierce or burn, even after use.  
 Wash hands thoroughly after handling.  
 Do not handle until all safety precautions have been read and understood.  
 Wear protective gloves/protective clothing/eye protection/face protection.  
 Use personal protective equipment as required.  
 Do not breathe dust/fume/gas/mist/vapours/spray.  
 If skin irritation occurs: Get medical advice/attention.  
 IF ON SKIN: Wash with plenty of water.  
 Take off contaminated clothing and wash before reuse.  
 IF exposed or concerned: Get medical advice/attention.  
 Get medical advice/attention if you feel unwell.  
 Specific treatment (see on this label).  
 Store locked up.  
 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.  
 Store in a well-ventilated place.  
 Dispose of contents/container in accordance with local/regional/national/international regulations.

### Precautionary statements

## 3 Composition/information on ingredients

**Chemical Description:** This product is a mixture of the substances listed below with nonhazardous additions.

### Dangerous components:

7440-66-6	zinc powder	45.0%
74-98-6	propane	12.6%
108-88-3	Toluene	10.56%
64742-47-8	Mineral Spirits	10.42%
106-97-8	n-butane	7.4%
67-63-0	isopropyl alcohol	2.24%
8052-41-3	Stoddard Solvent	2.2%
872-50-4	N-methyl-2-pyrrolidone	0.15%

## 4 First-aid measures

**After inhalation:** Supply fresh air; consult doctor in case of complaints.  
**After skin contact:** Remove contaminated clothing. Wash exposed area with soap and water.  
**After eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.  
**After swallowing:** Rinse out mouth and then drink plenty of water.  
 Rinse mouth with water. Do not induce vomiting.  
**Most important symptoms and effects:** Dizziness

(Contd. on page 2)  
USA

# Safety Data Sheet

acc. to OSHA HCS

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Revised On 09/25/2014

Trade name: COLD GALV

(Contd. of page 1)

**Indication of any immediate medical attention needed:**

No further relevant information available.

## 5 Fire-fighting measures

**Extinguishing agents:** CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray.  
**Special hazards:** Can form explosive gas-air mixtures.  
**Protective equipment for firefighters:** A respiratory protective device may be necessary.

## 6 Accidental release measures

**Personal precautions, protective equipment and emergency procedures:** Wear protective equipment. Keep unprotected persons away.  
 Use respiratory protective device against the effects of fumes/dust/aerosol.  
**Methods and material for containment and cleaning up:** Ensure adequate ventilation.  
 Dispose contaminated material as waste according to section 13.

## 7 Handling and storage

**Precautions for safe handling** Use only in well ventilated areas.  
**Storage requirements:** Keep away from sources of heat and direct sunlight. Do not warehouse in subfreezing conditions.  
 Store locked up.

## 8 Exposure controls/personal protection

**Components with limit values that require monitoring at the workplace:**
**74-98-6 propane**

PEL (USA)	Long-term value: 1800 mg/m <sup>3</sup> , 1000 ppm
REL (USA)	Long-term value: 1800 mg/m <sup>3</sup> , 1000 ppm
TLV (USA)	refer to Appendix F

**108-88-3 Toluene**

PEL (USA)	Long-term value: 200 ppm Ceiling limit value: 300; 500* ppm *10-min peak per 8-hr shift
REL (USA)	Short-term value: 560 mg/m <sup>3</sup> , 150 ppm Long-term value: 375 mg/m <sup>3</sup> , 100 ppm
TLV (USA)	Long-term value: 75 mg/m <sup>3</sup> , 20 ppm BEI

**106-97-8 n-butane**

REL (USA)	Long-term value: 1900 mg/m <sup>3</sup> , 800 ppm
TLV (USA)	Short-term value: 2370 mg/m <sup>3</sup> , 1000 ppm

**67-63-0 isopropyl alcohol**

PEL (USA)	Long-term value: 980 mg/m <sup>3</sup> , 400 ppm
REL (USA)	Short-term value: 1225 mg/m <sup>3</sup> , 500 ppm Long-term value: 980 mg/m <sup>3</sup> , 400 ppm
TLV (USA)	Short-term value: 984 mg/m <sup>3</sup> , 400 ppm Long-term value: 492 mg/m <sup>3</sup> , 200 ppm BEI

**8052-41-3 Stoddard Solvent**

PEL (USA)	Long-term value: 2900 mg/m <sup>3</sup> , 500 ppm
REL (USA)	Long-term value: 350 mg/m <sup>3</sup> Ceiling limit value: 1800* mg/m <sup>3</sup> *15-min
TLV (USA)	Long-term value: 525 mg/m <sup>3</sup> , 100 ppm

**872-50-4 N-methyl-2-pyrrolidone**

WEEL (USA)	Long-term value: 10 ppm Skin
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(Contd. on page 3)  
US4

# Safety Data Sheet

acc. to OSHA HCS

Printing date 09/25/2014

Revised On 09/25/2014

Trade name: COLD GALV

(Contd. of page 2)

**Ingredients with biological limit values:****108-88-3 Toluene**

BEI (USA)	0.02 mg/L Medium: blood Time: prior to last shift of workweek Parameter: Toluene
	0.03 mg/L Medium: urine Time: end of shift Parameter: Toluene
	0.3 mg/g creatinine Medium: urine Time: end of shift Parameter: o-Cresol with hydrolysis (background)

**67-63-0 isopropyl alcohol**

BEI (USA)	40 mg/L Medium: urine Time: end of shift at end of workweek Parameter: Acetone (background, nonspecific)
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**872-50-4 N-methyl-2-pyrrolidone**

BEI (USA)	100 mg/L Medium: urine Time: end of shift Parameter: 5-Hydroxy-N-methyl-2-pyrrolidone
-----------	--

**Hygienic protection:**

Keep away from foodstuffs and animal feed. Wash hands after use.  
Immediately remove all soiled and contaminated clothing.  
Wash hands after use.  
Avoid contact with the eyes and skin.  
Do not eat or drink while working.

**Breathing equipment:**

A respirator is generally not necessary when using this product outdoors or in large open areas. In cases where short and/or long term overexposure exists, a charcoal filter respirator should be worn. If you suspect overexposure conditions exist, please consult an authority on chemical hygiene.

**Hand protection:**

Protective gloves. The glove material must be impermeable and resistant to the substance.

**Eye protection:**

Tightly sealed goggles

**9 Physical and chemical properties**

Appearance:	Aerosol.
Odor:	Aromatic
Odor threshold:	Not determined.
pH-value:	Not determined.
Melting point/Melting range	Undetermined.
Boiling point:	-44 °C (-47 °F)
Flash point:	-19 °C (-2 °F)
Flammability (solid, gas):	Extremely flammable.
Decomposition temperature:	Not determined.
Auto igniting:	Product is not self-igniting.
Danger of explosion:	In use, may form flammable/explosive vapour-air mixture.
Lower Explosion Limit:	0.5 Vol %
Upper Explosion Limit:	10.9 Vol %
Vapor pressure:	Not determined.
Relative Density:	Between 0.77 and 0.85 (Water equals 1.00)
Vapour density	Not determined.
Evaporation rate	Not applicable.
Partition coefficient: n-octonal/water:	Not determined.
Solubility:	Not determined.
Viscosity:	Not determined.
VOC content:	555.6 g/l / 4.64 lb/gl
VOC content (less exempt solvents):	45.6 %
MIR Value:	1.20
Solids content:	51.0 %

**10 Stability and reactivity**

Reactivity:	Stable at normal temperatures.
Conditions to avoid:	Do not allow can to exceed 120 degrees Fahrenheit. Do not warehouse in subfreezing temperatures.
Chemical stability:	Not fully evaluated.
Possibility of hazardous reactions:	No dangerous reactions known.

(Contd. on page 4)

US4

# Safety Data Sheet

acc. to OSHA HCS

Printing date 09/25/2014

Revised On 09/25/2014

Trade name: COLD GALV

**Incompatible materials:** No further relevant information available.  
**Hazardous decomposition:** No dangerous decomposition products known.

(Contd. of page 3)

## 11 Toxicological information

LD/LC50 values that are relevant for classification:

**106-97-8 n-butane**

Inhalative LC50/4 h 658 mg/l (rat)

**67-63-0 isopropyl alcohol**

Oral LD50 4570 mg/kg (rat)

Dermal LD50 13400 mg/kg (rab)

Inhalative LC50/4 h 30 mg/l (rat)

**872-50-4 N-methyl-2-pyrrolidone**

Oral LD50 3600 mg/kg (rat)

Dermal LD50 8000 mg/kg (rbt)

**Information on toxicological effects:** No data available.**Sensitization:** No sensitizing effects known.**Carcinogenic categories****IARC (International Agency for Research on Cancer)**

108-88-3 Toluene

3

67-63-0 isopropyl alcohol

3

**NTP (National Toxicology Program)**

None of the ingredients is listed.

**OSHA-Ca (Occupational Safety & Health Administration)**

7440-43-9 cadmium (non-pyrophoric)

## 12 Ecological information

**Aquatic toxicity:** Hazardous for water, do not empty into drains.  
**Persistence and degradability:** The product is degradable after prolonged exposure to natural weathering processes.  
**Bioaccumulative potential:** No further relevant information available.  
**Mobility in soil:** No further relevant information available.  
**Other adverse effects:** No further relevant information available.

## 13 Disposal considerations

Dispose of in accordance with local, state, and federal regulations. Do not puncture, incinerate, or compact. Partially empty cans must be disposed of responsibly. Do not heat or cut empty containers with electric or gas torches.  
**Recommendation:** Completely empty cans should be recycled.

## 14 Transport information

**UN-Number** UN1950  
**DOT** Aerosols, flammable  
**ADR** 1950 Aerosols, ENVIRONMENTALLY HAZARDOUS  
**Transport hazard class(es):**  
**Class** 2.1  
**Marine pollutant:** Yes  
**Special marking (ADR):** Symbol (fish and tree)  
**Special precautions for user:** Symbol (fish and tree)  
**EMS Number:** Warning: Gases  
**Quantity limitations:** F-D,S-U  
On passenger aircraft/rail: 75 kg  
On cargo aircraft only: 150 kg

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**ADR**  
**Excepted quantities (EQ)** Code: E0  
Not permitted as Excepted Quantity

---

**IMDG**  
**Limited quantities (LQ)** 1L  
**Excepted quantities (EQ)** Code: E0  
Not permitted as Excepted Quantity

**Packaging Group:** --  
**UN "Model Regulation":** UN1950, Aerosols, ENVIRONMENTALLY HAZARDOUS, 2.1

## 15 Regulatory information

**SARA Section 355 (extremely hazardous substances):**

None of the ingredients in this product are listed.

(Contd. on page 5)

USA

# Safety Data Sheet

acc. to OSHA HCS

Printing date 09/25/2014

Revised On 09/25/2014

Trade name: COLD GALV

(Contd. of page 4)

**SARA Section 313 (Specific toxic chemical listings):**

7440-66-6 zinc powder

108-88-3 Toluene

67-63-0 isopropyl alcohol

1314-13-2 zinc oxide

**CPSC:** This product complies with 16 CFR 1303 and does not contain more than 90 ppm of lead.**California Proposition 65 chemicals known to cause cancer:**

None of the ingredients in this product are listed.

**California Proposition 65 chemicals known to cause developmental toxicity:**

108-88-3 Toluene

**EPA:**

7440-66-6 zinc powder

108-88-3 Toluene

1314-13-2 zinc oxide

D, I, II

II

D, I, II

**16 Other information****Contact:** Regulatory Affairs

US4



# Franklin International

## Safety Data Sheet

### Titebond Solvent Based FRP Adhesive

#### Section 1. Identification

**GHS product identifier** : Titebond Solvent Based FRP Adhesive

**Product type** : Liquid.

**CAS #** : Mixture

**Address** : Franklin International  
2020 Bruck Street  
Columbus OH 43207

**Contact person** : Franklin Technical Services

**Telephone** : (800) 877-4583

**In case of emergency** : Franklin Security  
(614) 445-1300

**Reference number** : 3103

**Product code** : 3227

**Date of revision** : 10/27/2015.

**Print date** : 10/27/2015.

**Chemtrec (24 Hour)** : (800) 424 - 9300

**Chemtrec International** : (703) 527 - 3887

**Relevant identified uses of the substance or mixture and uses advised against**

Not applicable.

#### Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : FLAMMABLE LIQUIDS - Category 2  
SKIN CORROSION/IRRITATION - Category 2  
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2B  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (central nervous system (CNS), kidneys and liver) (inhalation) - Category 2

**GHS label elements**

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : Highly flammable liquid and vapor.  
Causes skin and eye irritation.  
May cause damage to organs through prolonged or repeated exposure if inhaled.  
(central nervous system (CNS), kidneys, liver)

**Precautionary statements**

**General** : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

## Section 2. Hazards identification

- Prevention** : Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Do not breathe vapor. Wash hands thoroughly after handling.
- Response** : Get medical attention if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
- Storage** : Store in a well-ventilated place. Keep cool.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Supplemental label elements** : Avoid contact with skin and clothing. Wash thoroughly after handling.
- Hazards not otherwise classified** : Prolonged or repeated contact may dry skin and cause irritation.

## Section 3. Composition/information on ingredients

### Hazardous ingredients

#### United States

Name	CAS number	%
n-hexane	110-54-3	10 - 25
6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol	119-47-1	0.1 - 0.5

#### Canada

Name	CAS number	%
n-hexane	110-54-3	10 - 25
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	5 - 10

#### Mexico

					Classification			
Name	CAS number	UN number	%	IDLH	H	F	R	Special
n-hexane	110-54-3	UN1993	10 - 25	1100 ppm	1	3	1	-
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	Not available.	5 - 10	2500 mg/m <sup>3</sup>	1	1	0	-

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention following exposure or if feeling unwell. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention following exposure or if feeling unwell. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Causes skin irritation. Defatting to the skin.
- Ingestion** : Irritating to mouth, throat and stomach.

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness  
dryness  
cracking
- Ingestion** : No specific data.

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

**Suitable extinguishing media** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

**Unsuitable extinguishing media** : Do not use water jet.

**Specific hazards arising from the chemical** : Highly flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

### Methods and materials for containment and cleaning up

**Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

**Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**Conditions for safe storage, including any incompatibilities** : Do not store above the following temperature: 43.333°C (110°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

### Control parameters

#### United States

#### Occupational exposure limits

Ingredient name	Exposure limits
n-hexane	<p><b>OSHA PEL 1989 (United States, 3/1989).</b> TWA: 50 ppm 8 hours. TWA: 180 mg/m<sup>3</sup> 8 hours.</p> <p><b>NIOSH REL (United States, 10/2013).</b> TWA: 50 ppm 10 hours. TWA: 180 mg/m<sup>3</sup> 10 hours.</p> <p><b>ACGIH TLV (United States, 3/2015). Absorbed through skin.</b> TWA: 50 ppm 8 hours.</p> <p><b>OSHA PEL (United States, 2/2013).</b> TWA: 500 ppm 8 hours. TWA: 1800 mg/m<sup>3</sup> 8 hours.</p>

#### Canada

Occupational exposure limits		TWA (8 hours)			STEL (15 mins)			Ceiling			Notations
Ingredient	List name	ppm	mg/m <sup>3</sup>	Other	ppm	mg/m <sup>3</sup>	Other	ppm	mg/m <sup>3</sup>	Other	
n-hexane  Distillates (petroleum), hydrotreated heavy naphthenic	US ACGIH 3/2015	50	-	-	-	-	-	-	-	-	[1]
	AB 4/2009	50	176	-	-	-	-	-	-	-	[1]
	BC 2/2015	20	-	-	-	-	-	-	-	-	[1]
	ON 7/2015	50	-	-	-	-	-	-	-	-	[1]
	QC 1/2014	50	176	-	-	-	-	-	-	-	[1]
	US ACGIH 3/2015	-	5	-	-	-	-	-	-	-	[a]
	AB 4/2009	-	5	-	-	10	-	-	-	-	[b]
	ON 7/2015	-	5	-	-	10	-	-	-	-	[c]
	QC 1/2014	-	5	-	-	10	-	-	-	-	[c]

## Section 8. Exposure controls/personal protection

[1] Absorbed through skin.

Form: [a] Inhalable fraction [b] Mist [c] mist

### Mexico

#### Occupational exposure limits

Ingredient	Exposure limits
n-hexane	<b>NOM-010-STPS (Mexico, 9/2000).</b> LMPE-PPT: 50 ppm 8 hours. LMPE-PPT: 176 mg/m <sup>3</sup> 8 hours.
Distillates (petroleum), hydrotreated heavy naphthenic	<b>NOM-010-STPS (Mexico, 9/2000).</b> LMPE-PPT: 5 mg/m <sup>3</sup> 8 hours. Form: mist LMPE-CT: 10 mg/m <sup>3</sup> 15 minutes. Form: mist

Consult local authorities for acceptable exposure limits.

**Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

#### Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

#### Skin protection

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## Section 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	: Liquid. [Paste.]
<b>Color</b>	: Beige.
<b>Odor</b>	: Solvent(s) [Slight]
<b>Odor threshold</b>	: Not available.
<b>pH</b>	: Not applicable.
<b>Melting point</b>	: Not available.
<b>Boiling point</b>	: 61.667°C (143°F)
<b>Flash point</b>	: Closed cup: <-17.778°C (<-0.0004°F) [Setaflash.]
<b>Flammability (solid, gas)</b>	: Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge.
<b>Lower and upper explosive (flammable) limits</b>	: Lower: 1.2% Upper: 7.5%
<b>VOC (less water, less exempt solvents)</b>	: 258.3 g/l
<b>Relative density</b>	: 1.26
<b>Solubility</b>	: Insoluble in the following materials: cold water and hot water.

## Section 10. Stability and reactivity

<b>Reactivity</b>	: No specific test data related to reactivity available for this product or its ingredients.
<b>Chemical stability</b>	: The product is stable.
<b>Possibility of hazardous reactions</b>	: Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to avoid</b>	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
<b>Incompatible materials</b>	: Reactive or incompatible with the following materials: oxidizing materials
<b>Hazardous decomposition products</b>	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
n-hexane	LC50 Inhalation Gas.	Rat	48000 ppm	4 hours
	LD50 Dermal	Rabbit	>3295 mg/kg	-
	LD50 Oral	Rat	15840 mg/kg	-
6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol	LD50 Oral	Rat	4880 mg/kg	-

**Conclusion/Summary** : Not available.

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
n-hexane	Eyes - Mild irritant	Rabbit	-	10 milligrams	-
6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-

#### Conclusion/Summary

**Skin** : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.



## Section 11. Toxicological information

**Eyes** : Severely irritating to eyes.

**Respiratory** : High vapor concentrations can cause headaches, dizziness, drowsiness and nausea and may lead to unconsciousness.

### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
n-hexane	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects

### Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
n-hexane	Category 1	Inhalation	peripheral nervous system adrenal, arms, bladder, blood system, bone marrow, bones, brain, cardiovascular system, central nervous system (CNS), conjunctiva, digestive system, ears, endocrine, endothelium, eyes, feet, finger, gall bladder, ganglia, gastrointestinal tract, glands, haematopoietic system, hands, head, heart, hypothalamus, immune system, kidneys, legs, liver, lungs, lymphatic system, mucous membranes, muscle tissue, nervous system, nose/sinuses, optic nerve, ovary, pancreas, pituitary gland, placenta, prostate, reproductive organs, respiratory system, respiratory tract, skin, spinal column, spleen, stomach, teeth, testes, throat, thymus, thyroid, tongue, trachea and uterus/cervix
	Category 2	Oral	



## Section 11. Toxicological information

### Aspiration hazard

Name	Result
n-hexane	ASPIRATION HAZARD - Category 1

**Information on the likely routes of exposure** : Routes of entry anticipated: Oral, Dermal, Inhalation.

### Potential acute health effects

**Eye contact** : Causes serious eye irritation.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : Causes skin irritation. Defatting to the skin.  
**Ingestion** : Irritating to mouth, throat and stomach.

### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : Adverse symptoms may include the following:  
 pain or irritation  
 watering  
 redness  
**Inhalation** : No specific data.  
**Skin contact** : Adverse symptoms may include the following:  
 irritation  
 redness  
 dryness  
 cracking  
**Ingestion** : No specific data.

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

**Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

#### Long term exposure

**Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
n-hexane	Acute EC50 0.89 mg/l Acute EC50 3.9 mg/l Acute LC50 2.5 mg/l Chronic NOEC 4.9 mg/l Chronic NOEC 2.8 mg/l	Algae Crustaceans Fish - fathead minnow Crustaceans Fish - rainbow trout	96 hours 48 hours 96 hours 21 days 28 days

**Conclusion/Summary** : Not available.

### Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
n-hexane	-	-	Readily

### Bioaccumulative potential

## Section 12. Ecological information









Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
n-hexane	4	501.187	high
6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol	6.25	549.54	high

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	IATA
<b>UN number</b>	1133	1133	1133	1133	1133	1133
<b>UN proper shipping name</b>	FLAMMABLE LIQUID, N.O.S. (n-hexane)	FLAMMABLE LIQUID, N.O.S. (n-hexane)	FLAMMABLE LIQUID, N.O.S. (n-hexane)	ADHESIVES, containing flammable liquid	FLAMMABLE LIQUID, N.O.S. (n-hexane)	ADHESIVES, containing flammable liquid
<b>Transport hazard class(es)</b>	3  	3 	3 	3 	3  	3 
<b>Packing group</b>	III	III	III	III	III	III
<b>Environmental hazards</b>	Yes.	No.	No.	No.	Yes.	No.
<b>Additional information</b>	The marine pollutant mark is not required when transported on inland waterways in sizes of ≤5 L or ≤5 kg or by road, rail, or	-	-	<b>Special provisions</b> 640 (E)  <b>Tunnel code</b> (D/E)	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.	The environmentally hazardous substance mark may appear if required by other transportation regulations.

## Section 14. Transport information

	inland air in non-bulk sizes.  <b><u>Reportable quantity</u></b> 24319.4 lbs / 11041 kg [2314.9 gal / 8762.7 L] Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.					
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**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** : Not available.

## Section 15. Regulatory information

**U.S. Federal regulations** : **TSCA 8(a) CDR Exempt/Partial exemption:** Not determined  
**United States inventory (TSCA 8b):** All components are listed or exempted.  
**Commerce control list precursor:** 2-diethylaminoethanol

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

### SARA 302/304

#### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

### SARA 311/312

**Classification** : Fire hazard  
Immediate (acute) health hazard  
Delayed (chronic) health hazard

## Section 15. Regulatory information

### Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
n-hexane 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol	10 - 25 0.1 - 0.5	Yes. Yes.	No. No.	No. No.	Yes. No.	Yes. Yes.

### SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	n-hexane	110-54-3	10 - 25
Supplier notification	n-hexane	110-54-3	10 - 25

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

### State regulations

- Massachusetts** : The following components are listed: HEXANE
- New York** : The following components are listed: Hexane
- New Jersey** : The following components are listed: n-HEXANE; HEXANE; MINERAL OIL (UNTREATED and MILDLY TREATED)
- Pennsylvania** : The following components are listed: HEXANE
- California Prop. 65**

Not available.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Not applicable.				

### Canada

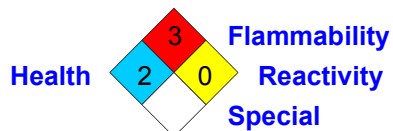
#### Canadian lists

- Canadian NPRI** : The following components are listed: n-Hexane
- CEPA Toxic substances** : None of the components are listed.
- Canada inventory** : Not determined.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

### Mexico

Classification :



### International regulations

## Section 15. Regulatory information

<b>International lists</b>	: Australia inventory (AICS): Not determined. China inventory (IECSC): Not determined. Japan inventory: Not determined. Korea inventory: Not determined. Malaysia Inventory (EHS Register): Not determined. New Zealand Inventory of Chemicals (NZIoC): Not determined. Philippines inventory (PICCS): Not determined. Taiwan inventory (CSNN): Not determined.
<b>Europe</b>	: Not determined.
<b>Chemical Weapons Convention List Schedule I Chemicals</b>	: Not listed
<b>Chemical Weapons Convention List Schedule II Chemicals</b>	: Not listed
<b>Chemical Weapons Convention List Schedule III Chemicals</b>	: Not listed

## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

Health	2
Flammability	3
Physical hazards	0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

### National Fire Protection Association (U.S.A.)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

### History

<b>Date of printing</b>	: 10/27/2015.
<b>Date of issue/Date of revision</b>	: 10/27/2015.

## Section 16. Other information

**Date of previous issue** : 6/2/2015.

**Version** : 4.2

**Key to abbreviations** :

- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- UN = United Nations

**References** : Not available.

Indicates information that has changed from previously issued version.

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

# Franklin International

## Safety Data Sheet

### GREENchoice Drywall Adhesive

#### Section 1. Identification

**GHS product identifier** : GREENchoice Drywall Adhesive  
**Product type** : Liquid.  
**CAS #** : mixture  
**Address** : Franklin International  
2020 Bruck Street  
Columbus OH 43207  
**Contact person** : Franklin Technical Services  
**Telephone** : (800) 877-4583  
**In case of emergency** : Franklin Security  
(614) 445-1300  
**Reference number** : 3620  
**Product code** : 7272  
**Date of revision** : 11/11/2015.  
**Print date** : 11/12/2015.  
**Chemtrec (24 Hour)** : (800) 424 - 9300  
**Chemtrec International** : (703) 527 - 3887  
**Chemical family** : Adhesive.

#### Relevant identified uses of the substance or mixture and uses advised against

Not applicable.

#### Section 2. Hazards identification

**OSHA/HCS status** : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

**Classification of the substance or mixture** : Not classified.

**GHS label elements**

**Signal word** : No signal word.

**Hazard statements** : No known significant effects or critical hazards.

**Precautionary statements**

**General** : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

**Hazards not otherwise classified** : None known.

### Section 3. Composition/information on ingredients

#### Hazardous ingredients

##### United States

Name	CAS number	%
No hazardous ingredient		

##### Canada

Name	CAS number	%
No hazardous ingredient		

##### Mexico

					Classification			
Name	CAS number	UN number	%	IDLH	H	F	R	Special
No hazardous ingredient								

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

**Occupational exposure limits, if available, are listed in Section 8.**

### Section 4. First aid measures

#### Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- Ingestion** : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

#### Most important symptoms/effects, acute and delayed

##### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

##### Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

#### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.



## Section 4. First aid measures

- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.

- Unsuitable extinguishing media** : None known.

- Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.

- Hazardous thermal decomposition products** : No specific data.

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8).
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Do not store below the following temperature: 4.4444°C (40°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

### Control parameters

#### United States

##### Occupational exposure limits

Ingredient name	Exposure limits
No exposure limit value known.	

#### Canada

Occupational exposure limits		TWA (8 hours)			STEL (15 mins)			Ceiling			
Ingredient	List name	ppm	mg/m <sup>3</sup>	Other	ppm	mg/m <sup>3</sup>	Other	ppm	mg/m <sup>3</sup>	Other	Notations
No exposure limit value known.											

#### Mexico

##### Occupational exposure limits

Ingredient	Exposure limits
No exposure limit value known.	

**Consult local authorities for acceptable exposure limits.**

- Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

## Section 8. Exposure controls/personal protection

- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## Section 9. Physical and chemical properties

### Appearance

- Physical state** : Liquid. [Paste.]
- Color** : Beige.
- Odor** : Not available.
- Odor threshold** : Not available.
- pH** : 7
- Melting point** : Not available.
- Boiling point** : 100°C (212°F)
- Flash point** : Closed cup: >93.333°C (>200°F) [Setaflash.]
- Evaporation rate** : <1 (butyl acetate = 1)
- VOC (less water, less exempt solvents)** : 33.18 g/l
- Relative density** : 1.44305

## Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : No specific data.
- Incompatible materials** : No specific data.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

**Information on the likely routes of exposure** : Routes of entry anticipated: Oral, Inhalation.  
Routes of entry not anticipated: Dermal.

### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : No known significant effects or critical hazards.  
**Ingestion** : No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : No specific data.  
**Inhalation** : No specific data.  
**Skin contact** : No specific data.  
**Ingestion** : No specific data.

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

**Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

#### Long term exposure

**Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

## Section 12. Ecological information

### Toxicity

**Conclusion/Summary** : Not available.

### Persistence and degradability

Not available.

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-	-
Packing group	-	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.	No.
Additional information	-	-	-	-	-	-

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** : Not available.

## Section 15. Regulatory information

**U.S. Federal regulations** : **TSCA 8(a) CDR Exempt/Partial exemption:** Not determined  
**United States inventory (TSCA 8b):** All components are listed or exempted.  
**Commerce control list precursor:** 2-diethylaminoethanol

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Not listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

### SARA 302/304

#### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

### SARA 311/312

**Classification** : Not applicable.

#### Composition/information on ingredients

No products were found.

### State regulations

## Section 15. Regulatory information

**Massachusetts** : None of the components are listed.

**New York** : None of the components are listed.

**New Jersey** : None of the components are listed.

**Pennsylvania** : None of the components are listed.

### California Prop. 65

Not available.

<b>Ingredient name</b>	<b>Cancer</b>	<b>Reproductive</b>	<b>No significant risk level</b>	<b>Maximum acceptable dosage level</b>
Not applicable.				

### Canada

#### Canadian lists

**Canadian NPRI** : None of the components are listed.

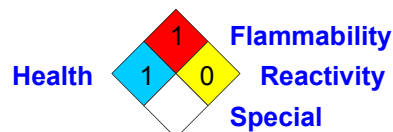
**CEPA Toxic substances** : None of the components are listed.

**Canada inventory** : At least one component is not listed in DSL but all such components are listed in NDSL.

**This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.**

### Mexico

**Classification** :



### International regulations

**International lists** :

- Australia inventory (AICS)**: All components are listed or exempted.
- China inventory (IECSC)**: All components are listed or exempted.
- Japan inventory**: Not determined.
- Korea inventory**: Not determined.
- Malaysia Inventory (EHS Register)**: Not determined.
- New Zealand Inventory of Chemicals (NZIoC)**: All components are listed or exempted.
- Philippines inventory (PICCS)**: All components are listed or exempted.
- Taiwan inventory (CSNN)**: Not determined.

**Europe** : Not determined.

**Chemical Weapons Convention List Schedule I Chemicals** : Not listed

**Chemical Weapons Convention List Schedule II Chemicals** : Not listed

**Chemical Weapons Convention List Schedule III Chemicals** : Not listed

## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

Health	1
Flammability	1
Physical hazards	0

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### National Fire Protection Association (U.S.A.)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

### History

**Date of printing** : 11/12/2015.

**Date of issue/Date of revision** : 11/11/2015.

**Date of previous issue** : 11/11/2015.

**Version** : 4.2

### Key to abbreviations

: ATE = Acute Toxicity Estimate  
 BCF = Bioconcentration Factor  
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
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 IBC = Intermediate Bulk Container  
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Indicates information that has changed from previously issued version.

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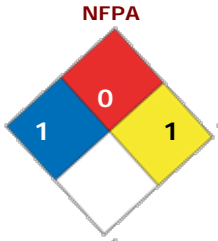


View (M)SDS Section :	<a href="#">1</a>	<a href="#">2</a>	<a href="#">3</a>	<a href="#">4</a>	<a href="#">5</a>	<a href="#">6</a>	<a href="#">7</a>	<a href="#">8</a>	<a href="#">9</a>	<a href="#">10</a>	<a href="#">11</a>	<a href="#">12</a>	<a href="#">13</a>	<a href="#">14</a>	<a href="#">15</a>	<a href="#">16</a>
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SAFETY DATA SHEET

SECTION 1 : IDENTIFICATION

Product Name: **Sanding Block**  
Product Code: SANDBLOCK  
Manufacturer Name: Saint-Gobain Abrasives, Inc.  
Address: 1 New Bond Street  
Worcester, MA 01615  
Website: www.Nortonabrasives.com  
General Phone Number: 508-795-5000  
Emergency Phone Number: 508-795-5000  
SDS Creation Date: August 15, 2009  
SDS Revision Date: July 01, 2013



HMIS	
Health Hazard	1
Fire Hazard	0
Reactivity	0
Personal Protection	X

SECTION 2 : HAZARD(S) IDENTIFICATION

Potential Health Effects:

Eye: Dust may cause slight irritation.

Skin: Dust from this product may cause temporary mechanical irritation.

Inhalation: Dusts from this product may cause mechanical irritation of the nose, throat and respiratory tract.

Ingestion: Ingestion of this product is unlikely. However, ingestion of product may produce gastrointestinal irritation and disturbances.

Chronic Health Effects: Chronic health effects are not expected as long as good hygiene and proper safety precautions are practiced.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Ingredient Percent	EC Num.
Unvulcanized rubber	No Data	10 - 30 by weight	
Aluminum Oxide, Non-fibrous	1344-28-1	30 - 60 by weight	215-691-6
Polyurethane resin	67700-43-0	7 - 13 by weight	
Silicon Carbide	409-21-2	30 - 60 by weight	

SECTION 4 : FIRST AID MEASURES

Eye Contact:	Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get medical attention, if irritation or symptoms of overexposure persists.
Skin Contact:	Immediately wash skin with soap and plenty of water. Get medical attention if irritation develops or persists.
Inhalation:	If dust from cutting or drilling is inhaled, remove the affected person to fresh air. If symptoms persist, get medical attention.
Ingestion:	Accidental ingestion of this material is unlikely. If this does occur, watch person for several days to make sure intestinal blockage does not occur. If symptoms persist, call a physician.
Note to Physicians:	No information available.

SECTION 5 : FIRE FIGHTING MEASURES

Flammable Properties:	Non Flammable.
Flash Point:	Does not apply.
Auto Ignition Temperature:	Not determined.
Lower Flammable/Explosive Limit:	Not available.
Upper Flammable/Explosive Limit:	Not available.
Extinguishing Media:	Use any extinguishing media appropriate for the surrounding fires.
Unsuitable Media:	None.
Protective Equipment:	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
<b><u>NFPA Ratings:</u></b>	
NFPA Health:	1
NFPA Flammability:	0
NFPA Reactivity:	1

SECTION 6 : ACCIDENTAL RELEASE MEASURES

Methods for containment:	Containment of this material should not be necessary.
Methods for cleanup:	Shovel or sweep up for re-use or disposal. Avoid creating dusty conditions. Evaluate residue to determine if it is a hazardous waste by characteristic. Dispose of in accordance with Local, State, Federal and Provincial regulations.

SECTION 7 : HANDLING and STORAGE

Handling:	Handle with adequate ventilation for nuisance dust.
Storage:	No special storage conditions required.
Hygiene Practices:	Wear suitable gloves and eye/face protection.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:	General dilution ventilation and/or local exhaust ventilation should be provided as necessary to maintain exposures below occupational exposure limits.
Eye/Face Protection:	Always WEAR SAFETY GLASSES or some type of eye protection when grinding.
Skin Protection Description:	Protective gloves. Long sleeved shirt and long pants.
Respiratory Protection:	When workers are facing airborne particulate/dust concentrations above the exposure limit they must use appropriate certified respirators. A properly fitted NIOSH approved disposable N 95 type dust respirator or better is recommended.
Other Protective:	Use of this product may create elevated sound levels. Hearing protection should be worn where required (see OSHA 29 CFR 1910.134 and other applicable regulations).

EXPOSURE GUIDELINES

Ingredient	Guideline OSHA	Guideline ACGIH	Quebec Canada	Ontario Canada	Alberta Canada
Aluminum Oxide, Non-fibrous	PEL-TWA: 5 mg/m3 Respirable fraction (R) PEL-TWA: 15 mg/m3 Total particulate/dust (T)	TLV-TWA: 10 mg/m3	VEMP-TWA: 10 mg/m3 Total particulate/dust (T)	OEL-TWAEV: 10 mg/m3 Total particulate/dust (T)	OEL-TWA: 10 mg/m3
Silicon Carbide	PEL-TWA: 15 mg/m3 Total particulate/dust (T) PEL-TWA: 5 mg/m3 Respirable fraction (R)	TLV-TWA: 10 mg/m3 Inhalable fraction (I) TLV-TWA: 3 mg/m3 Respirable fraction (R) TLV-TWA: 0.1 f/cc Respirable fraction (R)			
Ingredient	Mexico	British Columbia Canada			
Aluminum Oxide, Non-fibrous	MPE-PPT: 0.1 mg/m3 Respirable fraction (R)	OEL-TWA: 3 mg/m3 Respirable fraction (R) OEL-TWA: 10 mg/m3 OEL-TWA: 10 mg/m3 Total particulate/dust (T) OEL-STEL: 20 mg/m3 Total particulate/dust (T)			

SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

Physical State Appearance:	Solid article.
Odor:	Odorless.
Flash Point:	Does not apply.
Auto Ignition Temperature:	Not determined.

SECTION 10 : STABILITY and REACTIVITY

Chemical Stability:	Stable under normal conditions.
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Hazardous Polymerization:

Hazardous polymerization does not occur.

Conditions to Avoid:

Keep away from heat, sparks, or open flame.

Special Decomposition Products:

In use, dust and decomposing odors may be generated. In most cases, the material removed from the workplace will be significantly greater than the sandpaper components.  
Coolants may produce other decomposition products.  
Thermal decomposition may produce trace amounts of ammonia and formaldehyde.

SECTION 11 : TOXICOLOGICAL INFORMATION

Acute Toxicity:

This product has not been tested for its toxicity.

Carcinogens:							
	ACGIH	NIOSH	OSHA	IARC	NTP		MEXICO

Aluminum Oxide, Non-fibrous :

Inhalation:

Inhalation - Rat TCLo: 200 mg/m3/5H/28W (Intermittent) [Lungs, Thorax, or Respiration - Structural or functional change in trachea or bronchi; Lungs, Thorax, or Respiration - Chronic pulmonary edema; Related to Chronic Data - death] (RTECS)

SECTION 12 : ECOLOGICAL INFORMATION

Ecotoxicity:

No ecotoxicity data was found for the product.

SECTION 13 : DISPOSAL CONSIDERATIONS

Waste Disposal:

Use standard landfill methods consistent with applicable Federal, State, Provincial and local laws.

SECTION 14 : TRANSPORT INFORMATION

DOT Shipping Name:

Not regulated as hazardous material for transportation.

DOT UN Number:

Not regulated as hazardous material for transportation.

IATA Shipping Name:

Not regulated as hazardous material for transportation.

Canadian Shipping Name:

This product is Not Regulated under the Transportation of Dangerous Goods Act. (CAN).

SECTION 15 : REGULATORY INFORMATION

Aluminum Oxide, Non-fibrous :

TSCA Inventory Status:

Listed

EINECS Number:

215-691-6

New Jersey:

Listed: NJ Hazardous List; Substance Number: 2891

Massachusetts:

Listed

Pennsylvania:

Listed

Canada DSL:	Listed
Canada IDL:	Identified under the Canadian Hazardous Products Act Ingredient Disclosure List: 0.1%.50(1298)
EC Number:	215-691-6
<a href="#">Silicon Carbide :</a>	
TSCA Inventory Status:	Listed
EINECS Number:	206-991-8

SECTION 16 : ADDITIONAL INFORMATION

HMIS Ratings:

HMIS Health Hazard:	1
HMIS Fire Hazard:	0
HMIS Reactivity:	0
HMIS Personal Protection:	X

SDS Creation Date:	August 15, 2009
SDS Revision Date:	July 01, 2013

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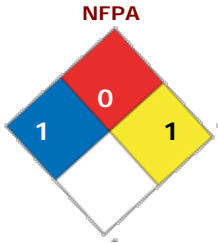


View (M)SDS Section :	<a href="#">1</a>	<a href="#">2</a>	<a href="#">3</a>	<a href="#">4</a>	<a href="#">5</a>	<a href="#">6</a>	<a href="#">7</a>	<a href="#">8</a>	<a href="#">9</a>	<a href="#">10</a>	<a href="#">11</a>	<a href="#">12</a>	<a href="#">13</a>	<a href="#">14</a>	<a href="#">15</a>	<a href="#">16</a>
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SAFETY DATA SHEET

SECTION 1 : IDENTIFICATION

Product Name: **Coated Abrasive**  
SDS Manufacturer Number: 1045085\_CA\_All  
Manufacturer Name: Saint-Gobain Abrasives, Inc.  
Address: 1 New Bond Street  
Worcester, MA 01615  
Website: www.Nortonabrasives.com  
General Phone Number: 508-795-5000  
Emergency Phone Number: 508-795-5000  
SDS Creation Date: August 15, 2009  
SDS Revision Date: July 01, 2013



HMIS	
Health Hazard	1
Fire Hazard	0
Reactivity	0
Personal Protection	X

SECTION 2 : HAZARD(S) IDENTIFICATION

Potential Health Effects:

Eye: Dust may cause slight irritation.

Skin: Dust from this product may cause temporary mechanical irritation.

Inhalation: Dusts from this product may cause mechanical irritation of the nose, throat and respiratory tract.

Ingestion: Ingestion of this product is unlikely. However, ingestion of product may produce gastrointestinal irritation and disturbances.

Chronic Health Effects: Chronic health effects are not expected as long as good hygiene and proper safety precautions are practiced.

[Urea-formaldehyde polymer](#)

Chronic Health Effects:

For products containing Urea/Formaldehyde resin, dust generated from intended use may contain trace amounts of formaldehyde which under excessive exposure may cause skin sensitization and airway obstruction.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Ingredient Percent	EC Num.
Sulfates/Sulfides	No Data	10.0 - 30 by weight	
Silicon carbide	409-21-2	30.0 - 60 by weight	206-991-8
Urea-formaldehyde polymer	9011-05-6	10.0 - 30 by weight	
Animal Glue	No Data	1.0 - 5 by weight	
Paper - Processed Cellulose	9004-34-6	30.0 - 60 by weight	232-674-9

SECTION 4 : FIRST AID MEASURES

Eye Contact:

Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers.  
Get medical attention, if irritation or symptoms of overexposure persists.

Skin Contact:

Immediately wash skin with soap and plenty of water.  
Get medical attention if irritation develops or persists.

Inhalation:

If dust from cutting or drilling is inhaled, remove the affected person to fresh air. If symptoms persist, get medical attention.

Ingestion:

Accidental ingestion of this material is unlikely. If this does occur, watch person for several days to make sure intestinal blockage does not occur. If symptoms persist, call a physician.

Note to Physicians:

No information available.

SECTION 5 : FIRE FIGHTING MEASURES

Flammable Properties:

Non Flammable.

Flash Point:

Does not apply.

Auto Ignition Temperature:

Not determined.

Lower Flammable/Explosive Limit:

Not available.

Upper Flammable/Explosive Limit:

Not available.

Extinguishing Media:

Use any extinguishing media appropriate for the surrounding fires.

Unsuitable Media:

None.

Protective Equipment:

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA Ratings:

NFPA Health:

1

NFPA Flammability:

0

NFPA Reactivity:

1

NFPA Other:

SECTION 6 : ACCIDENTAL RELEASE MEASURES

Methods for containment: Containment of this material should not be necessary.

Methods for cleanup: Shovel or sweep up for re-use or disposal. Avoid creating dusty conditions.  
Evaluate residue to determine if it is a hazardous waste by characteristic.  
Dispose of in accordance with Local, State, Federal and Provincial regulations.

SECTION 7 : HANDLING and STORAGE

Handling: Handle with adequate ventilation for nuisance dust.

Storage: No special storage conditions required.

Hygiene Practices: Wear suitable gloves and eye/face protection.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls: General dilution ventilation and/or local exhaust ventilation should be provided as necessary to maintain exposures below occupational exposure limits.

Eye/Face Protection: Always WEAR SAFETY GLASSES or some type of eye protection when grinding.

Skin Protection Description: Protective gloves.  
Long sleeved shirt and long pants.

Respiratory Protection: When workers are facing airborne particulate/dust concentrations above the exposure limit they must use appropriate certified respirators.  
A properly fitted NIOSH approved disposable N 95 type dust respirator or better is recommended.

Other Protective: Use of this product may create elevated sound levels. Hearing protection should be worn where required (see OSHA 29 CFR 1910.134 and other applicable regulations).

EXPOSURE GUIDELINES

Ingredient	Guideline OSHA	Guideline NIOSH	Guideline ACGIH	Quebec Canada	Ontario Canada
Silicon carbide	PEL-TWA: 15 mg/m3 Total particulate/dust (T) PEL-TWA: 5 mg/m3 Respirable fraction (R)		TLV-TWA: 10 mg/m3 Inhalable fraction (I) TLV-TWA: 3 mg/m3 Respirable fraction (R) TLV-TWA: 0.1 f/cc Respirable fraction (R)	VEMP-TWA: 10 mg/m3 Total particulate/dust (T)	OEL-TWAEV: 10 mg/m3 Total particulate/dust (T) OEL-TWAEV: 3 mg/m3 Respirable fraction (R) OEL-TWAEV: 10 mg/m3 Inhalable fraction (I) OEL-TWAEV: 0.1 f/cc Respirable fraction (R)
Paper - Processed Cellulose	PEL-TWA: 15 mg/m3 Total particulate/dust (T) PEL-TWA: 5 mg/m3 Respirable fraction (R)	REL-TWA: 10 mg/m3 Total particulate/dust (T) REL-TWA: 5 mg/m3 Respirable fraction (R)	TLV-TWA: 10 mg/m3	VEMP-TWA: 10 ppm Total particulate/dust (T)	OEL-TWAEV: 10 mg/m3 Total particulate/dust (T)
Ingredient	Alberta Canada	Mexico	British Columbia Canada		
Silicon carbide	OEL-TWA: 10 mg/m3	LMPE-PPT: 10 mg/m3 LMPE-CT: 20 mg/m3	OEL-TWA: 10 mg/m3 Inhalable fraction (I) OEL-TWA: 3 mg/m3 Respirable fraction (R) OEL-TWA: 0.1 f/cc Respirable fraction (R)		
Paper - Processed Cellulose	OEL-TWA: 10 mg/m3	LMPE-PPT: 10 mg/m3 LMPE-CT: 20 mg/m3	OEL-TWA: 3 mg/m3 Respirable fraction (R) OEL-TWA: 10 mg/m3 Total particulate/dust (T)		

SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES



Physical State Appearance:	Solid article.
Odor:	Odorless.
Flash Point:	Does not apply.
Auto Ignition Temperature:	Not determined.

SECTION 10 : STABILITY and REACTIVITY

Chemical Stability:	Stable under normal conditions.
Hazardous Polymerization:	Hazardous polymerization does not occur.
Conditions to Avoid:	Keep away from heat, sparks, or open flame.
Special Decomposition Products:	In use, dust and decomposing odors may be generated. In most cases, the material removed from the workplace will be significantly greater than the sandpaper components. Coolants may produce other decomposition products. Thermal decomposition may produce trace amounts of ammonia and formaldehyde.

SECTION 11 : TOXICOLOGICAL INFORMATION

Acute Toxicity:	This product has not been tested for its toxicity.
<u>Silicon carbide :</u>	
RTECS Number:	VW0450000
Inhalation:	No Data
<u>Urea-formaldehyde polymer :</u>	
RTECS Number:	YU1610000
Eye:	Eye - Rabbit Standard Draize test.: 100 uL/24H [severe] (RTECS)
Skin:	Administration onto the skin - Rabbit Standard Draize test.: 500 mg/24H [severe] Administration onto the skin - Rat LD50 : >2100 mg/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)
Inhalation:	Inhalation - Rat LC50 : >167 mg/m3/4H [Details of toxic effects not reported other than lethal dose value] (RTECS)
Ingestion:	Oral - Rat LD50 : 8394 mg/kg [Details of toxic effects not reported other than lethal dose value] Oral - Mouse LD50 : 6361 mg/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)
<u>Paper - Processed Cellulose :</u>	
RTECS Number:	FJ5691460
Inhalation:	Inhalation - Rat LC50: >5800 mg/m3/4H [Details of toxic effects not reported other than lethal dose value] (RTECS)
Ingestion:	Oral - Rat LD50: >5 gm/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)

SECTION 12 : ECOLOGICAL INFORMATION

Ecotoxicity:	No ecotoxicity data was found for the product.
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SECTION 13 : DISPOSAL CONSIDERATIONS

Waste Disposal: Use standard landfill methods consistent with applicable Federal, State, Provincial and local laws.

SECTION 14 : TRANSPORT INFORMATION

DOT Shipping Name: Not regulated as hazardous material for transportation.

DOT UN Number: Not regulated as hazardous material for transportation.

IATA Shipping Name: Not regulated as hazardous material for transportation.

Canadian Shipping Name: This product is Not Regulated under the Transportation of Dangerous Goods Act. (CAN).

SECTION 15 : REGULATORY INFORMATION

Inventory Status

	EINECS Number	Canada DSL	TSCA Inventory Status		
Silicon carbide		Listed	Listed		
Urea-formaldehyde polymer		Listed	Listed		
Paper - Processed Cellulose	232-674-9	Listed	Listed		

Silicon carbide :

EC Number: 206-991-8

Paper - Processed Cellulose :

EC Number: 232-674-9

State Right To Know

	PA	MA			
Silicon carbide	Listed	Listed			
Paper - Processed Cellulose	Listed	Listed			

SECTION 16 : ADDITIONAL INFORMATION

HMIS Ratings:

HMIS Health Hazard: 1  
HMIS Fire Hazard: 0  
HMIS Reactivity: 0  
HMIS Personal Protection: X

SDS Creation Date: August 15, 2009

SDS Revision Date: July 01, 2013



# SAFETY DATA SHEET

## 1. Identification

**Product number** 1000002432  
**Product identifier** **16 OZ TRIMTEX 847 ADHESIVE SXT LT 12PK**  
**Company information** TRIM-TEX INC  
3700 WEST PRATT AVENUE  
LINCOLNWOOD, IL 60712 United States  
**Company phone** General Assistance 847-679-3000  
**Emergency telephone US** 1-866-836-8855  
**Emergency telephone outside US** 1-952-852-4646  
**Version #** 01  
**Recommended use** Adhesive  
**Recommended restrictions** None known.

## 2. Hazard(s) identification

**Physical hazards** Flammable aerosols Category 1  
**Health hazards** Skin corrosion/irritation Category 2  
Serious eye damage/eye irritation Category 2A  
Reproductive toxicity Category 2  
Specific target organ toxicity, single exposure Category 3 narcotic effects  
Specific target organ toxicity, repeated exposure Category 2  
Aspiration hazard Category 1  
**Environmental hazards** Hazardous to the aquatic environment, acute hazard Category 2  
Hazardous to the aquatic environment, long-term hazard Category 2  
**OSHA defined hazards** Not classified.  
**Label elements**



**Signal word** Danger

**Hazard statement** Extremely flammable aerosol. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure. Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

### Precautionary statement

#### Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Do not breathe gas. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

#### Response

If swallowed: Immediately call a poison center/doctor. If on skin: Wash with plenty of water. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. Call a poison center/doctor if you feel unwell. Specific treatment (see this label). Do NOT induce vomiting. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse. Collect spillage.

<b>Storage</b>	Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	57.17% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

### 3. Composition/information on ingredients

#### Mixtures

Chemical name	Common name and synonyms	CAS number	%
Acetone		67-64-1	20 - 40
Dimethyl Ether		115-10-6	10 - 20
n-Hexane		110-54-3	10 - 20
Propane		74-98-6	10 - 20
2-Methylpentane		107-83-5	2.5 - 10
Toluene		108-88-3	2.5 - 10
3-Methylpentane		96-14-0	1 - 2.5
Other components below reportable levels			20 - 40

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

### 4. First-aid measures

<b>Inhalation</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
<b>Skin contact</b>	Wash off with soap and water. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Rinse with water. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	May cause drowsiness and dizziness. Headache. Nausea, vomiting. Irritation of nose and throat. Aspiration may cause pulmonary edema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Alcohol resistant foam. Dry powder. Carbon dioxide (CO2).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	Contents under pressure. Pressurized container may explode when exposed to heat or flame.
<b>Special protective equipment and precautions for firefighters</b>	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
<b>Fire-fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.
<b>General fire hazards</b>	Extremely flammable aerosol.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not breathe gas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

### Methods and materials for containment and cleaning up

Refer to attached safety data sheets and/or instructions for use. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.

### Environmental precautions

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

### Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Do not breathe gas. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Use only in well-ventilated areas. Should be handled in closed systems, if possible. Pregnant or breastfeeding women must not handle this product. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

### Conditions for safe storage, including any incompatibilities

Level 3 Aerosol.

Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Refrigeration recommended. Store away from incompatible materials (see Section 10 of the SDS). Level 3 Aerosol.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Components	Type	Value
Dimethyl Ether (CAS 115-10-6)	STEL	2 ppm
	TWA	0.75 ppm

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Acetone (CAS 67-64-1)	PEL	2400 mg/m3
		1000 ppm
n-Hexane (CAS 110-54-3)	PEL	1800 mg/m3
		500 ppm
Propane (CAS 74-98-6)	PEL	1800 mg/m3
		1000 ppm

#### US. OSHA Table Z-2 (29 CFR 1910.1000)

Components	Type	Value
Toluene (CAS 108-88-3)	Ceiling	300 ppm
	TWA	200 ppm

#### US. ACGIH Threshold Limit Values

Components	Type	Value
2-Methylpentane (CAS 107-83-5)	STEL	1000 ppm
	TWA	500 ppm

**US. ACGIH Threshold Limit Values**

Components	Type	Value
3-Methylpentane (CAS 96-14-0)	STEL	1000 ppm
Acetone (CAS 67-64-1)	TWA	500 ppm
	STEL	750 ppm
	TWA	500 ppm
Dimethyl Ether (CAS 115-10-6)	Ceiling	0.3 ppm
n-Hexane (CAS 110-54-3)	TWA	50 ppm
Toluene (CAS 108-88-3)	TWA	20 ppm

**US. NIOSH: Pocket Guide to Chemical Hazards**

Components	Type	Value
Acetone (CAS 67-64-1)	TWA	590 mg/m3
		250 ppm
Dimethyl Ether (CAS 115-10-6)	Ceiling	0.1 ppm
		0.016 ppm
n-Hexane (CAS 110-54-3)	TWA	180 mg/m3
		50 ppm
Propane (CAS 74-98-6)	TWA	1800 mg/m3
		1000 ppm
Toluene (CAS 108-88-3)	STEL	560 mg/m3
		150 ppm
		375 mg/m3
	TWA	100 ppm

**US. Workplace Environmental Exposure Level (WEEL) Guides**

Components	Type	Value
Dimethyl Ether (CAS 115-10-6)	TWA	1880 mg/m3
		1000 ppm

**Biological limit values****ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
Acetone (CAS 67-64-1)	50 mg/l	Acetone	Urine	*
n-Hexane (CAS 110-54-3)	0.4 mg/l	2,5-Hexanedio n, without hydrolysis	Urine	*
Toluene (CAS 108-88-3)	0.3 mg/g	o-Cresol, with hydrolysis	Creatinine in urine	*
	0.03 mg/l	Toluene	Urine	*
	0.02 mg/l	Toluene	Blood	*

\* - For sampling details, please see the source document.

**Exposure guidelines****US - California OELs: Skin designation**

n-Hexane (CAS 110-54-3)

Can be absorbed through the skin.

Toluene (CAS 108-88-3)

Can be absorbed through the skin.

**US - Minnesota Haz Subs: Skin designation applies**

Toluene (CAS 108-88-3)

Skin designation applies.

**US ACGIH Threshold Limit Values: Skin designation**

n-Hexane (CAS 110-54-3)

Can be absorbed through the skin.

**Appropriate engineering controls**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

**Individual protection measures, such as personal protective equipment****Eye/face protection**

Wear safety glasses with side shields (or goggles).

<b>Hand protection</b>	Wear appropriate chemical resistant gloves.
<b>Skin protection</b>	
<b>Other</b>	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.
<b>Skin protection</b>	
<b>Respiratory protection</b>	If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.
<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.
<b>General hygiene considerations</b>	When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	Gas.
<b>Form</b>	Aerosol.
<b>Color</b>	Not available.
<b>Odor</b>	Not available.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	96.79 °F (36 °C) estimated
<b>Flash point</b>	-156.0 °F (-104.4 °C) estimated
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	2.2 % estimated
<b>Flammability limit - upper (%)</b>	8.7 % estimated
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	187.1 psig @70F estimated
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	605.17 °F (318.43 °C) estimated
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Specific gravity</b>	0.649 estimated

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents.



**Hazardous decomposition products**

No hazardous decomposition products are known.

**11. Toxicological information****Information on likely routes of exposure**

<b>Ingestion</b>	Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.
<b>Inhalation</b>	May cause damage to organs through prolonged or repeated exposure by inhalation. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Narcotic effects. Prolonged inhalation may be harmful.
<b>Skin contact</b>	Causes skin irritation.
<b>Eye contact</b>	Causes serious eye irritation.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	May cause drowsiness and dizziness. Headache. Nausea, vomiting. Irritation of nose and throat. Aspiration may cause pulmonary edema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

**Information on toxicological effects****Acute toxicity** May be fatal if swallowed and enters airways. Narcotic effects.

<b>Product</b>	<b>Species</b>	<b>Test Results</b>
16 OZ TRIMTEX 847 ADHESIVE SXT LT 12PK (CAS Mixture)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Guinea pig	31174.4355 mg/kg, 24 Hours estimated
		39.4613 ml/kg, 24 Hours estimated
	Rabbit	6346.3242 mg/kg, 24 Hours estimated
	Rat	44579.1719 ml/kg, 24 Hours estimated
<i>Inhalation</i>		
LC100	Cat	461.0042 % estimated
		6309.9297 mg/l estimated
LC50	Mouse	266.358 %, 120 Minutes estimated
		81.9563 mm/l, 2 Hours estimated
	Rat	52401.582 ppm, 24 Hours estimated
		234.0517 mg/l/4h estimated
		226.2014 mg/l, 3 Hours estimated
		89.7797 mg/l, 4 Hours estimated
NOEL	Rat	19.2084 ppm, 6 Hours estimated
<i>Oral</i>		
LD50	Rat	3665.1902 mg/kg estimated
		8.9077 ml/kg estimated
	Wistar rat	513.5355 g/kg estimated
<b>Components</b>	<b>Species</b>	<b>Test Results</b>

Acetone (CAS 67-64-1)

**Acute***Dermal*

LD50	Guinea pig	> 7426 mg/kg, 24 Hours
		> 9.4 ml/kg, 24 Hours
	Rabbit	> 7426 mg/kg, 24 Hours
		> 9.4 ml/kg, 24 Hours

*Inhalation*

LC50	Rat	55700 ppm, 3 Hours
------	-----	--------------------

Components	Species	Test Results
		132 mg/l, 3 Hours
		50.1 mg/l
<i>Oral</i> LD50	Rat	5800 mg/kg
		2.2 ml/kg
Dimethyl Ether (CAS 115-10-6)		
<b>Acute</b> <i>Inhalation</i> NOEL	Rat	2 ppm, 6 Hours
<i>Oral</i> LD50	Rat	460 mg/kg
n-Hexane (CAS 110-54-3)		
<b>Acute</b> <i>Dermal</i> LD50	Rabbit	> 2000 mg/kg, 4 Hours > 5 ml/kg, 4 Hours
<i>Inhalation</i> LC50	Rat	> 5000 ppm, 24 Hours > 31.86 mg/l 73860 ppm, 4 Hours
<i>Oral</i> LD50	Rat	24 ml/kg 24 g/kg
	Wistar rat	49 g/kg
Propane (CAS 74-98-6)		
<b>Acute</b> <i>Inhalation</i> LC50	Mouse	1237 mg/l, 120 Minutes 52 %, 120 Minutes
	Rat	1355 mg/l 658 mg/l/4h
Toluene (CAS 108-88-3)		
<b>Acute</b> <i>Dermal</i> LD50	Rabbit	> 5000 mg/kg, 24 Hours
<i>Inhalation</i> LC50	Mouse	6405 - 7436 ppm, 6 Hours 5320 ppm, 8 Hours
	Rat	5879 - 6281 ppm, 6 Hours 12.5 - 28.8 mg/l, 4 Hours
<i>Oral</i> LD50	Rat	5000 mg/kg

\* Estimates for product may be based on additional component data not shown.

<b>Skin corrosion/irritation</b>	Causes skin irritation.
<b>Serious eye damage/eye irritation</b>	Causes serious eye irritation.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not available.
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.

<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	Risk of cancer cannot be excluded with prolonged exposure.
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>	
Toluene (CAS 108-88-3)	3 Not classifiable as to carcinogenicity to humans.
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	
Not listed.	
<b>Reproductive toxicity</b>	Suspected of damaging fertility or the unborn child.
<b>Specific target organ toxicity - single exposure</b>	May cause drowsiness and dizziness.
<b>Specific target organ toxicity - repeated exposure</b>	Respiratory system. Skin. Kidneys. Central nervous system. Eyes. Liver. Peripheral nervous system. May cause damage to organs through prolonged or repeated exposure.
<b>Aspiration hazard</b>	May be fatal if swallowed and enters airways.
<b>Chronic effects</b>	Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects. May cause damage to organs through prolonged or repeated exposure.

## 12. Ecological information

**Ecotoxicity** Toxic to aquatic life with long lasting effects.

Product	Species		Test Results
16 OZ TRIMTEX 847 ADHESIVE SXT LT 12PK (CAS Mixture)			
Aquatic			
Algae	IC50	Algae	8846.0273 mg/L, 72 Hours estimated
Crustacea	EC50	Daphnia	76.0734 mg/l, 48 hours estimated
Fish	LC50	Fish	21.2891 mg/l, 96 hours estimated
Components	Species		Test Results
Acetone (CAS 67-64-1)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	21.6 - 23.9 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	4740 - 6330 mg/l, 96 hours
Dimethyl Ether (CAS 115-10-6)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia pulex)	4.3 - 7.8 mg/l, 48 hours
Fish	LC50	Striped bass (Morone saxatilis)	10.302 - 16.743 mg/l, 96 hours
n-Hexane (CAS 110-54-3)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	2.101 - 2.981 mg/l, 96 hours
Toluene (CAS 108-88-3)			
Aquatic			
Algae	IC50	Algae	433.0001 mg/L, 72 Hours
Crustacea	EC50	Daphnia	7.645 mg/L, 48 Hours
		Water flea (Daphnia magna)	5.46 - 9.83 mg/l, 48 hours
Fish	LC50	Coho salmon,silver salmon (Oncorhynchus kisutch)	8.11 mg/l, 96 hours

\* Estimates for product may be based on additional component data not shown.

<b>Persistence and degradability</b>	No data is available on the degradability of this product.
<b>Bioaccumulative potential</b>	No data available.

### Partition coefficient n-octanol / water (log Kow)

2-Methylpentane	3.74
3-Methylpentane	3.6
Acetone	-0.24
Dimethyl Ether	0.1

**Partition coefficient n-octanol / water (log Kow)**

n-Hexane	3.9
Propane	2.36
Toluene	2.73

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

**13. Disposal considerations**

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**US RCRA Hazardous Waste U List: Reference**

Acetone (CAS 67-64-1)	U002
Toluene (CAS 108-88-3)	U220

**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Do not re-use empty containers.

**14. Transport information****DOT**

<b>UN number</b>	UN1950
<b>UN proper shipping name</b>	Aerosols, flammable
<b>Transport hazard class(es)</b>	
<b>Class</b>	2.1
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	None
<b>Packing group</b>	Not applicable.
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.
<b>Special provisions</b>	N82
<b>Packaging exceptions</b>	306
<b>Packaging non bulk</b>	None
<b>Packaging bulk</b>	None

This product meets the exception requirements of section 173.306 as a limited quantity and may be shipped as a limited quantity. Until 12/31/2020, the "Consumer Commodity - ORM-D" marking may still be used in place of the new limited quantity diamond mark for packages of UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/20 and may be used now in place of the "Consumer Commodity ORM-D" marking and both may be displayed concurrently.

**IATA**

<b>UN number</b>	UN1950
<b>UN proper shipping name</b>	Aerosols, flammable
<b>Transport hazard class(es)</b>	
<b>Class</b>	2.1
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	2.1
<b>Packing group</b>	Not applicable.
<b>Environmental hazards</b>	Yes
<b>ERG Code</b>	10L
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.
<b>Other information</b>	
<b>Passenger and cargo aircraft</b>	Allowed.
<b>Cargo aircraft only</b>	Allowed.

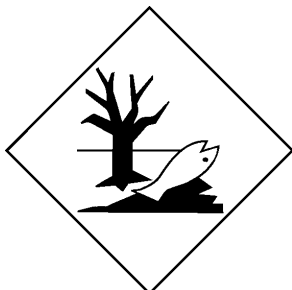
<b>Packaging Exceptions</b>	LTD QTY
<b>IMDG</b>	
<b>UN number</b>	UN1950
<b>UN proper shipping name</b>	AEROSOLS
<b>Transport hazard class(es)</b>	
<b>Class</b>	2.1
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	None
<b>Packing group</b>	Not applicable.
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	Yes
<b>EmS</b>	Not available.
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.
<b>Packaging Exceptions</b>	LTD QTY
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable.
<b>DOT</b>	



IATA; IMDG



Marine pollutant



**General information** IMDG Regulated Marine Pollutant.

## 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.  
All components are on the U.S. EPA TSCA Inventory List.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**  
Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Acetone (CAS 67-64-1)	Listed.
n-Hexane (CAS 110-54-3)	Listed.
Toluene (CAS 108-88-3)	Listed.

**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

<b>Hazard categories</b>	Immediate Hazard - Yes
	Delayed Hazard - Yes
	Fire Hazard - Yes
	Pressure Hazard - No
	Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**

Chemical name	CAS number	Reportable quantity	Threshold planning quantity	Threshold planning quantity, lower value	Threshold planning quantity, upper value
Phenol	108-95-2	1000		500 lbs	10000 lbs
Vinyl Acetate	108-05-4	5000	1000 lbs		

**SARA 311/312 Hazardous chemical**      No

**SARA 313 (TRI reporting)**

Chemical name	CAS number	% by wt.
n-Hexane	110-54-3	10 - 20
Toluene	108-88-3	2.5 - 10
Ethyl Benzene	100-41-4	0.01 - 0.1
Styrene	100-42-5	0.01 - 0.1
Vinyl Acetate	108-05-4	0.01 - 0.1

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

n-Hexane (CAS 110-54-3)  
Toluene (CAS 108-88-3)

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Dimethyl Ether (CAS 115-10-6)  
Propane (CAS 74-98-6)

**Safe Drinking Water Act (SDWA)**      Not regulated.

**Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number**

Acetone (CAS 67-64-1)	6532
Toluene (CAS 108-88-3)	6594

**Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))**

Acetone (CAS 67-64-1)	35 %WV
Toluene (CAS 108-88-3)	35 %WV

**DEA Exempt Chemical Mixtures Code Number**

Acetone (CAS 67-64-1)	6532
Toluene (CAS 108-88-3)	594

**US state regulations****US. Massachusetts RTK - Substance List**

2-Methylpentane (CAS 107-83-5)  
3-Methylpentane (CAS 96-14-0)  
Acetone (CAS 67-64-1)  
Dimethyl Ether (CAS 115-10-6)  
n-Hexane (CAS 110-54-3)  
Propane (CAS 74-98-6)  
Toluene (CAS 108-88-3)

**US. New Jersey Worker and Community Right-to-Know Act**

2-Methylpentane (CAS 107-83-5)

Acetone (CAS 67-64-1)  
Dimethyl Ether (CAS 115-10-6)  
n-Hexane (CAS 110-54-3)  
Propane (CAS 74-98-6)  
Toluene (CAS 108-88-3)

**US. Pennsylvania Worker and Community Right-to-Know Law**

2-Methylpentane (CAS 107-83-5)  
3-Methylpentane (CAS 96-14-0)  
Acetone (CAS 67-64-1)  
Dimethyl Ether (CAS 115-10-6)  
n-Hexane (CAS 110-54-3)  
Propane (CAS 74-98-6)  
Toluene (CAS 108-88-3)

**US. Rhode Island RTK**

Acetone (CAS 67-64-1)  
Dimethyl Ether (CAS 115-10-6)  
n-Hexane (CAS 110-54-3)  
Propane (CAS 74-98-6)  
Toluene (CAS 108-88-3)

**US. California Proposition 65**

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

**US - California Proposition 65 - CRT: Listed date/Carcinogenic substance**

Ethyl Benzene (CAS 100-41-4) Listed: June 11, 2004

**US - California Proposition 65 - CRT: Listed date/Developmental toxin**

Toluene (CAS 108-88-3) Listed: January 1, 1991

**US - California Proposition 65 - CRT: Listed date/Female reproductive toxin**

Toluene (CAS 108-88-3) Listed: August 7, 2009

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

**Issue date** 10-07-2014  
**Version #** 01

**Disclaimer**

We cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**Revision Information**

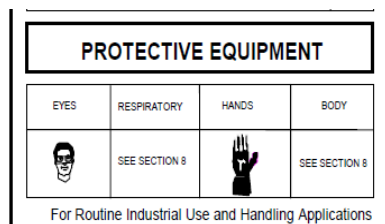
This document has undergone significant changes and should be reviewed in its entirety.



**SECTION 1: PRODUCT AND COMPANY IDENTIFICATION****PRODUCT NAME:** Marking Chalk Blue**USE OF PRODUCT:** Chalk Box Marking Chalk**MANUFACTURER:** Keson Industries**ADDRESS:** 810 Commerce St., Aurora, IL 60504**EMERGENCY PHONE:** 1-800-345-3766 (8am to 5pm Central Time, Monday – Friday)**SECTION 1 NOTES:****SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS**

Substance name	Value (%)	CAS No.	EC No.
Calcium carbonate (1)	85-90	471-34-1	207-439-9
Ultra Marine Blue	10 - 15	57455-37-5	None
Silica (crystalline quartz) (1)	0.1 - 1	14808-60-7	238-878-4

1 Calcium carbonate may contain crystalline silica at levels between 0.1 and 1.0 % and varies naturally.

**SECTION 2 NOTES:****SECTION 3: HAZARDS IDENTIFICATION****OSHA GHS Hazard Statements (Warning Label)****DANGER –May cause cancer (lung)****Hazard Ratings:****Hazardous Material Identification System (HMIS):** Health 1\*, Flammability 0, Reactivity 0\*chronic effects**National Fire Protection Association (NFPA):** Health 1, Flammability 0, Reactivity 0Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate  
3 = Serious 4 = Severe \* = Chronic hazard**EMERGENCY OVERVIEW:**

**Product Description:** These products are colored, finely powdered, odorless chalks. Health Hazards: Inhalation of dusts from this product may irritate the respiratory system. Skin and eye contact may cause mechanical abrasion. These chalks contain Crystalline Silica, a known human carcinogen by inhalation.

**Flammability Hazards:** These chalks are not flammable. Finely divided dusts from these products can form explosive mixtures in air. If involved in a fire, these products may decompose to form iron oxides, aluminum oxides, silicon dioxide, sulfur dioxide, magnesium oxides, carbon oxides and calcium oxides.

**POTENTIAL HEALTH EFFECTS****EYES:** May cause irritation. Chalk dust is discomforting and abrasive to the eyes.**SKIN:** Prolonged contact may cause irritation. When the product is used as intended, it is unlikely to cause problems.**INGESTION:** Ingestion of large amount may cause internal irritation. Ingestion is considered an unlikely route of entry in commercial or industrial environments.**INHALATION:** May irritate the respiratory system. When the product is used as intended, it is unlikely to cause problems.

**Chronic:** Repeated or prolonged inhalation exposure to crystalline silica dust beyond exposure limits may cause chronic lung injury (silicosis). Prolonged inhalation of iron oxide dust is known to produce a benign lung condition known as siderosis. When the product is used as intended, dust levels should not exceed exposure limits. See Sections 8 and 11.

**WARNING****DANGER**

Obtain special instructions before use. May cause cancer by inhalation. Avoid breathing dust or fume. Causes serious eye irritation. Causes mild skin irritation. Do not handle until all safety precautions have been read and understood. Wear protective gloves and eye protection.

**SECTION 3 NOTES:****SECTION 4: FIRST AID MEASURES**

**EYES:** If product enters the eye do not rub, rubbing may cause abrasions. Flush eyes with copious amounts of water for 15 minutes, occasionally lifting upper and lower eyelids. If adverse effects persist after flushing with water, get medical aid.

**SKIN:** Wet clothing first to minimize dust generation, then; remove contaminated clothing and shoes. Wash contaminated clothing before wearing again. Wash infected areas with water and soap. Get medical attention in the event of irritation.

**INGESTION:** If this material is swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. If professional advice is not available, seek immediate medical attention. If alert, victim should drink up to three glasses of water. Do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or unable to swallow. If victim is convulsing, maintain an open airway and obtain emergency medical attention.

**INHALATION:** If dust or particulates are inhaled, Remove from exposure and move to fresh air immediately. Encourage to blow nose to ensure clear breathing passages. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

**NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:** Show this data safety sheet to medical professionals.

**SECTION 5: FIRE-FIGHTING MEASURES**

**EXTINGUISHING MEDIA:** Substance is noncombustible, however; the containers may burn, releasing carbon monoxide and carbon dioxide. Use appropriate extinguishing media for the combustible material involved in a fire.

**SPECIAL FIRE FIGHTING PROCEDURES:** As in any fire, wear self-contained breathing apparatus in pressure demand and full protective gear.

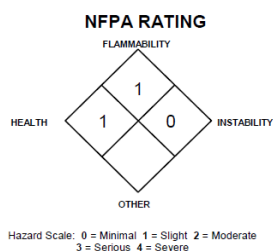
**FIRE EXTINGUISHING MEDIA:** Unless incompatibilities exist for surrounding materials, carbon dioxide, water spray, „ABC“ type chemical extinguishers, foam, dry chemical and halon extinguishers can be used to fight fires involving this material.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Finely divided dusts from this material pose a hazard of an air/dust explosion in presence of an ignition source

**HAZARDOUS DECOMPOSITION PRODUCTS:** If oxidation of this product should occur, heat will be liberated which could cause surrounding combustibles to burn.

# SAFETY DATA SHEET (MSDS)

DATE: 3.25.2015 Rev 1



## SECTION 6: ACCIDENTAL RELEASE MEASURES

**ACCIDENTAL RELEASE MEASURES:** Wear appropriate personal protective equipment. Do not allow this material to be released into the environment. Recover the product whenever possible. Avoid generating dust when sweeping or shoveling up. If required, wet the material with water to prevent creating dust. Pick up and place in a suitable container for reclamation or disposal.

**Cleanup of Small Spills:** Solids should be gently covered with wet absorbent pads. Clean spill with pad and dispose of properly. Decontaminate the spill area (three times) using a bleach and detergent solution and then rinse with clean water.

**Large Spills:** Restrict access to the spill areas. For spills of greater than 5 g, be sure not to generate dusts by gently covering with damp absorbent sheets, spill-control pads, pillows, cloths, or towels. The dispersion of particles into surrounding air and the possibility of inhalation is a serious matter and should be treated as such. Do not apply chemical in-activators as they may produce hazardous by-products. Sweep up or vacuum spilled solid (an explosion-proof vacuum should be used), avoiding the generation of airborne dusts. Decontaminate the area thoroughly.

**All Spills:** Use procedures described above and then place all spill residues in an appropriate, labeled container and seal. Move to a secure area. Dispose of in accordance with Federal, State, and local hazardous waste disposal regulations (see Section 13, Disposal Considerations). For spills on water, contain, minimize dispersion and collect. Dispose of recovered material and report spill per regulatory requirements.

## SECTION 7: HANDLING AND STORAGE

**PRECAUTIONS FOR SAFE HANDLING:** All employees who handle this material should be trained to handle it safely. Open containers slowly on a stable surface. As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat, drink, smoke, or apply cosmetics while handling this product. Avoid breathing airborne dusts generated by this product. Use in a well-ventilated area. Ensure this product is used with adequate ventilation and personal protective equipment (see Section 8, Exposure Controls and Personal Protection). Avoid airborne dusts generated by this product. Clean work areas routinely to prevent accumulation of dust. Clean up spills promptly.

**CONDITIONS FOR SAFE STORAGE:** Empty containers may contain residual amounts of this product; therefore, empty containers should be handled with care. Store containers in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. Store away from incompatible materials (see Section 10, Stability and Reactivity). Have appropriate extinguishing equipment in the storage area (e.g., sprinkler system, portable fire extinguishers). Keep container tightly closed when not in use. Refer to NFPA 654, *Prevention of Fire and Dust Explosions from the Manufacturing, Processing and Handling of Combustible Particulate Solids* for additional information on storage.

**SPECIFIC END USE(S):** These products are used in chalk line devices in construction. Follow all industry standards for use of this product.

**PROTECTIVE PRACTICES DURING MAINTENANCE OF CONTAMINATED EQUIPMENT:** Follow practices indicated in Section 6 (Accidental Release Measures). Make certain that application equipment is locked and tagged-out safely. Always use this product in areas where adequate ventilation is provided. Decontaminate equipment thoroughly, before maintenance begins. Collect all residue and dispose of according to applicable or applicable federal, state, provincial and local standards.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

Exposure Limit 8-Hour TWA <sup>1</sup> (mg/m <sup>3</sup> )					
Component	CAS No.	% by weight	OSHA PEL	ACGIH TLV	NIOSH REL
Calcium Carbonate (Limestone) (4)	471-34-1; (1317-65-3)	85-90	15(2), 5 (3)	10(2)	10(2), 5(3)
Ultra Marine Blue	57455-37-5	10-15	None	None	None
Silica-Crystalline Quartz (4)	14808-60-7	0.1-1.0	10(2,5), 3.3(3,5)	0.05(3)	0.05(3)

<sup>1</sup>TWA = Time-weighted average

<sup>2</sup>Total dust.

<sup>3</sup>Respirable dust.

<sup>4</sup>Calcium carbonate may contain crystalline silica at levels between 0.1 and 1.0 % and varies naturally.

<sup>5</sup>Using the OSHA quartz formula, this PEL was calculated assuming crystalline silica content of 1.0% in this ingredient.

**SPECIAL NOTE:** The following information is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132, including U.S. Federal OSHA Respiratory Protection (29 CFR 1910.134), OSHA Eye Protection 29 CFR 1910.133, OSHA Hand Protection 29 CFR 1910.138, OSHA Foot Protection 29 CFR 1910.136 and OSHA Body Protection 29 CFR 1910.132), equivalent standards of Canada (including CSA Respiratory Standard Z94.4-02, Z94.3-M1982, Industrial Eye and Face Protectors and CSA Standard Z195-02, Protective Footwear), or standards of EU member states (including EN 529:2005 for respiratory PPE, CEN/TR 15419:2006 for hand protection, and CR 13464:1999 for face/eye protection). Please reference applicable regulations and standards for relevant details.

**ENGINEERING CONTROLS:** Facilities storing or utilizing this material should have potable water available for washing of eyes and skin. Use sufficient general area ventilation. To ensure exposure levels are maintained below the limits provided in this section if applicable.

**VENTILATION:** Local ventilation should be used.

**RESPIRATORY PROTECTION:** Maintain airborne contaminant concentrations below exposure limits listed above. For materials without listed exposure limits, minimize respiratory exposure. If necessary, use only respiratory protection authorized under appropriate regulations. Oxygen levels below 20% are considered IDLH by U.S. OSHA. In such atmospheres, use of a full-face piece pressure/demand SCBA or a full face piece, supplied air respirator with auxiliary self-contained air supply is required under U.S. OSHA's Respiratory Protection Standard (1910.134-1998).

**EYE PROTECTION:** Wear safety goggles/glasses as appropriate for the task if dust or other particulates are present. Face shields may be recommended if solutions are made. If necessary, refer to appropriate regulations.

**SKIN PROTECTION:** Use appropriate protective clothing for the task. Full-body protective clothing and gloves are recommended for emergency response procedures. If necessary, refer to the U.S. OSHA Technical Manual (Section VII: Personal Protective Equipment) or other appropriate regulations.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** No information found.

**WORK HYGIENIC PRACTICES:** Wash contaminated clothing before reuse.

**EXPOSURE GUIDELINES:** No information found.

**SECTION 8 NOTES:**

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**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

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**APPEARANCE:** Powder – Blue Color

**ODOR:** Odorless

**pH AS SUPPLIED:** 8.5-9.5 (at 10% solids)

**BOILING POINT:** No Data Available

**MELTING POINT:** Decomposes

F: 1517 Deg

C: 825Deg

**FREEZING POINT:** No Data Available.

**VAPOR PRESSURE (mmHg):** No Data Available.

**VAPOR DENSITY (AIR = 1):** No Data Available.

**SPECIFIC GRAVITY (H<sub>2</sub>O = 1):** No Data Available.

**EVAPORATION RATE:** No Data Available.

**SECTION 9 NOTES:**

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**SECTION 10: STABILITY AND REACTIVITY**

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**STABILITY:** Stable under normal temperatures and pressures.

**CONDITIONS TO AVOID (STABILITY):** Incompatible materials

**INCOMPATIBILITY (MATERIAL TO AVOID):** Strong oxidizing agents, acids, aluminum, fluorine, magnesium, peroxides, hydrazine, calcium hypochlorite, performic acid, and bromine pentafluoride.

**HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:** Carbon monoxide, carbon dioxide, calcium oxide.

**HAZARDOUS POLYMERIZATION:** Does not occur.

**SECTION 10 NOTES:**

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**SECTION 11: TOXICOLOGICAL INFORMATION**

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**TOXICOLOGICAL INFORMATION: SYMPTOMS OF EXPOSURE BY ROUTE OF EXPOSURE:** The most significant routes of industrial exposure to this product are by skin or eye contact and inhalation.

**INHALATION:** If dusts or particulates from these products are inhaled, irritation of the nose, throat, and lungs can occur. Symptoms may include sneezing, coughing, nasal congestion, and difficulty breathing. Symptoms are generally alleviated upon exposure to fresh air. If heated, chronic exposure to concentrations of silicon dioxide fume may cause chronic obstructive lung disease. Inhalation of iron oxide fume or dust is cause of pulmonary roentgen graphic appearance called siderosis, or an accumulation of iron that leads to reduced lung capacity. These products contain Crystalline Silica, which is a known human carcinogen. Chronic inhalation exposure to this material may cause silicosis, pulmonary fibrosis, bronchitis or present a hazard of cancer, due to the presence of Crystalline Silica.

**CONTACT WITH SKIN or EYES:** Skin contact may cause abrasion, redness, and discomfort. Prolonged and repeated skin exposure may cause dermatitis (dry, red skin). Direct eye contact with these products may cause stinging, abrasions, and redness. Dust can cause mechanical irritation to the eye. Repeated contact of dust with the eyes can cause conjunctivitis a disease that may cause eyes to become pink and sore), or can cause discoloration of the eyes.

**SKIN ABSORPTION:** This product does not pose a hazard of skin absorption.

**INGESTION:** Ingestion is an unlikely route of occupational exposure to this product. In the unlikely event that dusts from the product are ingested nausea, vomiting, and diarrhea may result.

Repeated ingestion of iron compounds can cause vomiting, diarrhea, pink urine, black stool, and liver or kidney damage. Repeated ingestion of iron compounds can also cause siderosis, which is an accumulation of iron in tissues.

# **SAFETY DATA SHEET (MSDS)**

**DATE: 3.25.2015 Rev 1**

Chronic: Repeated inhalation exposure of crystalline silica above safe levels may cause adverse effects to the respiratory system. Chronic inhalation may result in pulmonary fibrosis. This product contains crystalline silica, which is a known human carcinogen.

**SECTION 11 NOTES:** The International Agency for Research on Cancer (IARC) classified (quartz) crystalline silica (cs) as a probable carcinogen and in 1997 reclassified it as a Group 1 carcinogen, i.e., that there was sufficient evidence for carcinogenicity in experimental animals and sufficient evidence for carcinogenicity in humans. In its Ninth Annual Report on Carcinogens, the National Toxicology Program (NTP) listed crystalline silica as a known human carcinogen, based on sufficient evidence of carcinogenicity from studies in humans indicating a causal relationship between exposure to respirable crystalline silica and increased lung cancer rates in workers exposed to crystalline silica dust. The International Agency for Research on Cancer (IARC) has evaluated crystalline silica and determined that "crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1)."

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## **SECTION 12: ECOLOGICAL INFORMATION**

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**ECOLOGICAL INFORMATION:** Safe practices must be in place to prevent environmental contamination.

**SECTION 12 NOTES:** These products have not been tested for aquatic or animal toxicity. All release to terrestrial, atmospheric and aquatic environments should be avoided.

## **SECTION 13: DISPOSAL CONSIDERATIONS**

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**WASTE DISPOSAL METHOD:** Waste from residue of this product is NOT hazardous waste according to the EPA regulations. Disposal by landfill may be acceptable. Waste disposal must follow all US Federal, State and Local (EPA) regulations, Canadian and European Governmental Guidelines.

**SECTION 13 NOTES:**

## **SECTION 14: TRANSPORT INFORMATION**

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**U.S. DEPARTMENT OF TRANSPORTATION: (DOT)** These products are not classified as dangerous goods under the DOT regulations 49CFR: 172.101

**WATER TRANSPORTATION: (IMO)** Not classified as dangerous

**AIR TRANSPORTATION: (ATA)** Not classified as dangerous

**SECTION 14 NOTES:**

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## **SECTION 15: REGULATORY INFORMATION**

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### **U.S. FEDERAL REGULATIONS**

**OSHA:** Components are listed as air contaminants. Regulation standards -29CFR. Standard number 1910.100 Table 2-1

**TSCA (TOXIC SUBSTANCE CONTROL ACT):** All components are listed on the TSCA inventory

**CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT):** Not Listed

# **SAFETY DATA SHEET** (MSDS)

**DATE:** 3.25.2015 Rev 1

**SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):** The components of this product has been reviewed on the EAP Hazards Categories in section 311-312 and is considered a chronic health risk.

**STATE REGULATIONS:** California: (Proposition 65) This product contains compounds known to the State of California to cause cancer reproductive harm.

**CANADA WHIMS:** (Workplace Hazardous Materials Information System) This SDS sheet contains all of the information needed by the CPR. (Controlled Products Regulation)

**WHIMS CLASSIFICATION D2A:** Very toxic (carcinogenicity)

**EU CLASSIFICATION, LABELING:** This product does meet the definition of hazard class described by the EUROPEAN UNION COUNCIL DIRECTIVE EC# 1272/2008. Classification information for components Crystalline Silica. EU Classification (xn) Harmful EU risk r68/20 harmful: Risk of irreversible damage through inhalation.

## **SECTION 15 NOTES:**

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## **SECTION 16: OTHER INFORMATION**

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The contents and format of this SDS are in accordance with the U.S. Hazard Communication Standard 29 CFR 1910.1200; the Canadian CPR, and Workplace Hazardous Materials Information System (WHMIS); and EEC Commission Directive 1999/45/EC, and EEC Commission Regulation 1907/2006/EC (REACH) Annex II.

**DISCLAIMER OF LIABILITY** The information in this SDS was obtained from sources which we believe are correct. However, the information is provided without any warranty, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

End of document

# SAFETY DATA SHEET

## 1. Identification

<b>Product identifier</b>	<b>ZRC and Galviline Cold Galvanizing Compounds - Aerosol</b>
<b>Other means of identification</b>	
<b>Product code</b>	10000, 20010
<b>Recommended use</b>	Corrosion protection of iron and steel.
<b>Recommended restrictions</b>	None known.
<b>Manufacturer/Importer/Supplier/Distributor information</b>	
<b>Supplier/Manufacturer</b>	ZRC Worldwide
<b>Address</b>	145 Enterprise Drive, Marshfield, MA 02050
<b>Telephone</b>	781-319-0400
<b>Emergency telephone (CHEMTREC)</b>	703-527-3887 CCN15781
<b>Email</b>	info@zrcworldwide.com

## 2. Hazard(s) identification

<b>Physical hazards</b>	Flammable aerosols	Category 1
<b>Health hazards</b>	Serious eye damage/eye irritation	Category 2
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
<b>Environmental hazards</b>	Hazardous to the aquatic environment, acute hazard	Category 1
	Hazardous to the aquatic environment, long-term hazard	Category 1
<b>OSHA defined hazards</b>	Not classified.	
<b>Label elements</b>		



<b>Signal word</b>	Danger
<b>Hazard statement</b>	Extremely flammable aerosol. Causes serious eye irritation. May cause drowsiness or dizziness. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.
<b>Precautionary statement</b>	
<b>Prevention</b>	Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Avoid breathing gas. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear eye/face protection.
<b>Response</b>	If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Collect spillage.
<b>Storage</b>	Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.

## 3. Composition/information on ingredients

### Mixtures



Chemical name	CAS number	%
Zinc	7440-66-6	40 - < 50
Acetone	67-64-1	20 - < 30
Propane	74-98-6	5 - 15
Methyl Ethyl Ketone	78-93-3	5 - 10
Stoddard solvent	8052-41-3	5 - < 10
N-Butane	106-97-8	3 - 8
Zinc oxide	1314-13-2	1 - < 3
Other components below reportable levels		3 - < 5

## 4. First-aid measures

<b>Inhalation</b>	Move to fresh air. Get medical attention if any discomfort continues.
<b>Skin contact</b>	Wash off with soap and water. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>Ingestion</b>	Rinse mouth. Get medical attention if any discomfort continues.
<b>Most important symptoms/effects, acute and delayed</b>	Causes serious eye irritation. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically.
<b>General information</b>	In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Dry chemicals. Foam. Class B fire extinguisher.
<b>Unsuitable extinguishing media</b>	Water. Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	Contents under pressure. Pressurized container may explode when exposed to heat or flame.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. Water runoff can cause environmental damage.
<b>General fire hazards</b>	Extremely flammable aerosol.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate personal protective equipment. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop leak if you can do so without risk. Collect spillage. Scoop up used absorbent into drums or other appropriate container. Prevent product from entering drains. For waste disposal, see Section 13 of the SDS.
<b>Environmental precautions</b>	Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

### Precautions for safe handling

Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Do not taste or swallow. Avoid breathing gas. Avoid contact with eyes. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Avoid release to the environment. Do not empty into drains.

### Conditions for safe storage, including any incompatibilities

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Keep away from heat, sparks and open flame.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Acetone (CAS 67-64-1)	PEL	2400 mg/m3 1000 ppm	
Methyl Ethyl Ketone (CAS 78-93-3)	PEL	590 mg/m3	
Propane (CAS 74-98-6)	PEL	200 ppm 1800 mg/m3	
Stoddard solvent (CAS 8052-41-3)	PEL	1000 ppm 2900 mg/m3	
Zinc oxide (CAS 1314-13-2)	PEL	500 ppm 5 mg/m3 5 mg/m3 15 mg/m3	Respirable fraction. Fume. Total dust.

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Acetone (CAS 67-64-1)	STEL	750 ppm	
	TWA	500 ppm	
Methyl Ethyl Ketone (CAS 78-93-3)	STEL	300 ppm	
	TWA	200 ppm	
N-Butane (CAS 106-97-8)	STEL	1000 ppm	
Stoddard solvent (CAS 8052-41-3)	TWA	100 ppm	
Zinc oxide (CAS 1314-13-2)	STEL	10 mg/m3	Respirable fraction.
	TWA	2 mg/m3	Respirable fraction.

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Acetone (CAS 67-64-1)	TWA	590 mg/m3 250 ppm	
Methyl Ethyl Ketone (CAS 78-93-3)	STEL	885 mg/m3	
	TWA	300 ppm 590 mg/m3 200 ppm	
N-Butane (CAS 106-97-8)	TWA	1900 mg/m3 800 ppm	
Propane (CAS 74-98-6)	TWA	1800 mg/m3 1000 ppm	
Stoddard solvent (CAS 8052-41-3)	Ceiling	1800 mg/m3	
	TWA	350 mg/m3	
Zinc oxide (CAS 1314-13-2)	Ceiling	15 mg/m3	Dust.

## US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
	STEL	10 mg/m3	Fume.
	TWA	5 mg/m3	Fume.
		5 mg/m3	Dust.

### Biological limit values

#### ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Acetone (CAS 67-64-1)	50 mg/l	Acetone	Urine	*
Methyl Ethyl Ketone (CAS 78-93-3)	2 mg/l	MEK	Urine	*

\* - For sampling details, please see the source document.

### Exposure guidelines

#### US - California OELs: Skin designation

Methyl Ethyl Ketone (CAS 78-93-3)

Can be absorbed through the skin.

#### Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Avoid contact with eyes. Wear safety glasses with side shields (or goggles). Eye wash fountain and emergency showers are recommended.

#### Skin protection

##### Hand protection

For prolonged or repeated skin contact use suitable protective gloves. Neoprene gloves are recommended.

##### Other

Wear appropriate chemical resistant clothing.

#### Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.

#### Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

#### General hygiene considerations

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

Appearance	Gray liquid.
Physical state	Gas.
Form	Aerosol. Aerosol- Pressurized Liquid.
Color	Gray.
Odor	Hydrocarbon.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	395.6 °F (202 °C)
Flash point	< 19.4 °F (< -7.0 °C) Tag Open Cup
Evaporation rate	> 1 BuAc (n-Butyl acetate=1)
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	1.1
Flammability limit - upper (%)	12.8
Explosive limit - lower (%)	Not available.

<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	50 mm Hg (21°C / 70°F)
<b>Vapor density</b>	> 1 (24°C / 77°F)
<b>Relative density</b>	1.2
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Slightly soluble in water.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Bulk density</b>	10.01 lb/gal
<b>VOC (Weight %)</b>	< 30 %

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Avoid temperatures exceeding the flash point.
<b>Incompatible materials</b>	Avoid contact with acids and alkalis. Strong oxidizing agents. Water.
<b>Hazardous decomposition products</b>	Zinc oxides. CO, CO2, Various hydrocarbon gases. Contact with acids will release flammable hydrogen gas.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Vapors may cause drowsiness and dizziness.
<b>Skin contact</b>	Prolonged or repeated contact may dry skin and cause irritation.
<b>Eye contact</b>	Causes serious eye irritation.
<b>Ingestion</b>	May cause discomfort if swallowed.

<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Causes serious eye irritation. Symptoms include itching, burning, redness, and tearing of eyes. Vapors may cause drowsiness and dizziness.
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### Information on toxicological effects

<b>Acute toxicity</b>	May cause discomfort if swallowed.
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<b>Components</b>	<b>Species</b>	<b>Test Results</b>
Acetone (CAS 67-64-1)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	20 ml/kg
<i>Inhalation</i>		
LC50	Rat	50 mg/l, 8 Hours
<i>Oral</i>		
LD50	Rat	5800 mg/kg
Propane (CAS 74-98-6)		
<b>Acute</b>		
<i>Inhalation</i>		
LC50	Rat	1355 mg/l

Components	Species	Test Results
Stoddard solvent (CAS 8052-41-3)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Inhalation		
LC50	Rat	> 5.2 mg/l, 4 hours
Oral		
LD50	Rat	> 5000 mg/kg
Zinc (CAS 7440-66-6)		
Acute		
Oral		
LD50	Rat	630 mg/kg
Skin corrosion/irritation	Not classified.	
Serious eye damage/eye irritation	Causes serious eye irritation.	
Respiratory or skin sensitization		
Respiratory sensitization	Not classified.	
Skin sensitization	Not classified.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. Not classifiable as to carcinogenicity to humans.	
IARC Monographs. Overall Evaluation of Carcinogenicity		
Not available.		
NTP Report on Carcinogens		
Not available.		
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)		
Not listed.		
Reproductive toxicity	Not classified.	
Specific target organ toxicity - single exposure	Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Not classified.	
Chronic effects	Prolonged inhalation may be harmful.	
12. Ecological information		
Ecotoxicity	Very toxic to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected.	
Components	Species	Test Results
Acetone (CAS 67-64-1)		
Aquatic		
Fish	LC50	Fathead minnow (Pimephales promelas) > 100 mg/l, 96 hours
Zinc (CAS 7440-66-6)		
Aquatic		
Crustacea	LC50	Daphnia magna 0.068 mg/l, 48 hours
Zinc oxide (CAS 1314-13-2)		
Aquatic		
Crustacea	LC50	Water flea (Daphnia magna) 0.098 mg/l, 48 Hours
Persistence and degradability	No data is available on the degradability of this product.	
Bioaccumulative potential	No data available for this product.	
Partition coefficient n-octanol / water (log Kow)		
Acetone (CAS 67-64-1)	-0.24	

**Partition coefficient n-octanol / water (log Kow)**

Methyl Ethyl Ketone (CAS 78-93-3)	0.29
N-Butane (CAS 106-97-8)	2.89
Propane (CAS 74-98-6)	2.36
Stoddard solvent (CAS 8052-41-3)	3.16 - 7.15

**Mobility in soil** Not available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

### 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Hazardous waste code** D001: Waste Flammable material with a flash point <140 F  
D003: Waste Reactive material

**Waste from residues / unused products** Dispose of in accordance with local regulations.

**Contaminated packaging** Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Do not re-use empty containers.

### 14. Transport information

**DOT**

<b>UN number</b>	UN1950
<b>UN proper shipping name</b>	Aerosols, flammable
<b>Transport hazard class(es)</b>	
<b>Class</b>	2.1
<b>Subsidiary risk</b>	-
<b>Packing group</b>	Not applicable.
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	Yes
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

**IATA**

<b>UN number</b>	UN1950
<b>UN proper shipping name</b>	Aerosols, flammable
<b>Transport hazard class(es)</b>	
<b>Class</b>	2.1
<b>Subsidiary risk</b>	-
<b>Packing group</b>	Not applicable.
<b>Environmental hazards</b>	Yes
<b>ERG Code</b>	10L
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

**IMDG**

<b>UN number</b>	UN1950
<b>UN proper shipping name</b>	AEROSOLS, flammable
<b>Transport hazard class(es)</b>	
<b>Class</b>	2.1
<b>Subsidiary risk</b>	-
<b>Packing group</b>	Not applicable.
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	Yes
<b>EmS</b>	Not available.
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

**General information** Limited Quantity exemption may apply.

## 15. Regulatory information

### US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

Acetone (CAS 67-64-1)	LISTED
Methyl Ethyl Ketone (CAS 78-93-3)	LISTED
N-Butane (CAS 106-97-8)	LISTED
Propane (CAS 74-98-6)	LISTED
Zinc (CAS 7440-66-6)	LISTED
Zinc oxide (CAS 1314-13-2)	LISTED

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### Hazard categories

Immediate Hazard - Yes  
Delayed Hazard - Yes  
Fire Hazard - Yes  
Pressure Hazard - Yes  
Reactivity Hazard - No

#### SARA 302 Extremely hazardous substance

Not listed.

#### SARA 311/312 Hazardous chemical

Yes

#### SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Zinc	7440-66-6	40 - < 50
Zinc oxide	1314-13-2	1 - < 3

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

N-Butane (CAS 106-97-8)  
Propane (CAS 74-98-6)

#### Safe Drinking Water Act (SDWA)

Not regulated.

#### Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Acetone (CAS 67-64-1)	6532
Methyl Ethyl Ketone (CAS 78-93-3)	6714

#### Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Acetone (CAS 67-64-1)	35 %WV
Methyl Ethyl Ketone (CAS 78-93-3)	35 %WV

#### DEA Exempt Chemical Mixtures Code Number

Acetone (CAS 67-64-1)	6532
Methyl Ethyl Ketone (CAS 78-93-3)	6714

### US state regulations

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

#### US. Massachusetts RTK - Substance List

Acetone (CAS 67-64-1)  
Methyl Ethyl Ketone (CAS 78-93-3)  
N-Butane (CAS 106-97-8)  
Propane (CAS 74-98-6)  
Stoddard solvent (CAS 8052-41-3)  
Zinc (CAS 7440-66-6)  
Zinc oxide (CAS 1314-13-2)

#### US. New Jersey Worker and Community Right-to-Know Act

Acetone (CAS 67-64-1)

Methyl Ethyl Ketone (CAS 78-93-3)  
N-Butane (CAS 106-97-8)  
Propane (CAS 74-98-6)  
Stoddard solvent (CAS 8052-41-3)  
Zinc (CAS 7440-66-6)  
Zinc oxide (CAS 1314-13-2)

#### US. Pennsylvania Worker and Community Right-to-Know Law

Acetone (CAS 67-64-1)  
Methyl Ethyl Ketone (CAS 78-93-3)  
N-Butane (CAS 106-97-8)  
Propane (CAS 74-98-6)  
Stoddard solvent (CAS 8052-41-3)  
Zinc (CAS 7440-66-6)  
Zinc oxide (CAS 1314-13-2)

#### US. Rhode Island RTK

Acetone (CAS 67-64-1)  
Methyl Ethyl Ketone (CAS 78-93-3)  
N-Butane (CAS 106-97-8)  
Propane (CAS 74-98-6)  
Zinc (CAS 7440-66-6)  
Zinc oxide (CAS 1314-13-2)

#### US. California Proposition 65

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

#### International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

**Issue date** 14-December-2013  
**Revision date** 17-January-2014  
**Version #** 03  
**NFPA ratings**



#### List of abbreviations

**Disclaimer** The information in the sheet was written based on the best knowledge and experience currently available.





# SAFETY DATA SHEET

Page: 1(8)  
SDS Number: CAN300-C  
Date Revised: 04/03/2013

This Safety Data Sheet complies with Regulation (EC) No. 1907/2006, ISO 11014-1 and ANSI Z400.1

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** SUREWELD AND OK® MILD STEEL AND LOW ALLOY COVERED ELECTRODES  
**Application:** Arc Welding  
**Classification:** AWS A5.1 & A5.5  
**Supplier:** ESAB GROUP CANADA, INC., 6010 Tomken Road, Mississauga, ON L5T 1X9  
**Telephone No.:** (905) 670-0220, 1-877-935-3226  
**Web site:** [www.esab.ca](http://www.esab.ca)

## 2. HAZARDS IDENTIFICATION

**Emergency Overview:** Coated metal rods in varying colors. These products are normally not considered hazardous as shipped. Gloves should be worn when handling to prevent contaminating hands with product dust.

Some of these products contain nickel, which is classified as toxic by prolonged inhalation, a skin sensitizer and a suspect carcinogen. Nickel powder is harmful for the environment. These products, however, are not classified as hazardous based on the limited concentration of nickel. These products contain titanium dioxide which is possibly carcinogenic. These products contain quartz, but normally not in an inhalable fraction. Quartz can cause silicosis and may cause cancer.

Avoid eye contact or inhalation of dust from these products. Skin contact is normally no hazard but should be avoided to prevent possible allergic reactions.

Persons with a pacemaker should not go near welding or cutting operations until they have consulted their doctor and obtained information from the manufacturer of the device.

When these products are used in a welding process, the most important hazards are heat, radiation, electric shock and welding fumes.

**Heat:** Spatter and melting metal can cause burn injuries and start fires.

**Radiation:** Arc rays can severely damage eyes or skin.

**Electricity:** Electric shock can kill.

**Fumes:** Overexposure to welding fumes may result in symptoms like metal fume fever, dizziness, nausea, dryness or irritation of the nose, throat or eyes. Chronic overexposure to welding fumes may affect pulmonary function. Prolonged inhalation of nickel and chromium compounds above safe exposure limits can cause cancer. Overexposure to manganese and manganese compounds above safe exposure limits can cause irreversible damage to the central nervous system, including the brain, symptoms of which may include slurred speech, lethargy, tremor, muscular weakness, psychological disturbances and spastic gait.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

These products are preparations of core wire with extruded coating.

Ingredients	REACH Reg. #	CAS#	EINECS#	Hazard classification <sup>(1)</sup>	IARC <sup>(2)</sup>	NTP <sup>(3)</sup>	OSHA List <sup>(4)</sup>
Aluminum Oxide	--	1344-28-1	215-691-6	No	--	--	--
Aluminum Silicate	--	12141-46-7	235-253-8	No	--	--	--
Calcium Carbonate	--	1317-65-3	215-279-6	No	--	--	--
Carbon	--	7440-44-0	231-153-3	No	--	--	--
Cellulose	--	9004-34-6	232-674-9	No	--	--	--
Chromium	--	7440-47-3	231-157-5	No	--	--	--
Graphite	--	7782-42-5	231-955-3	No	--	--	--
Iron	01-2119462838-24	7439-89-6	231-096-4	No	--	--	--
Iron Carbonate	--	10290-71-8	233-647-4	No	--	--	--
Magnesium Carbonate	--	546-93-0	208-915-9	No	--	--	--
Manganese	--	7439-96-5	231-105-1	No	--	--	--



Ingredients	REACH Reg. #	CAS#	EINECS#	Hazard classification <sup>(1)</sup>	IARC <sup>(2)</sup>	NTP <sup>(3)</sup>	OSHA List <sup>(4)</sup>
Mill Scale	--	65996-74-9	266-007-8	No	--	--	--
Iron Oxide		1309-37-1	215-168-2	No	--	--	--
Silicon Dioxide		14808-60-7	238-878-4	T; R45	1	K	--
Mineral Silicates	All substances with CAS # of 14808-60-7 are considered to be quartz.						
Bentonite Clays	--	1302-78-9	215-108-5	No	--	--	--
Chlorite	--	14808-60-7	238-878-4	T; R45	1	K	--
Feldspar	--	14808-60-7	238-878-4	T; R45	1	K	--
Hectorite	--	14808-60-7	238-878-4	T; R45	1	K	--
Pyrrhopolite	--	14808-60-7	238-878-4	T; R45	1	K	--
Wollanstanite	--	14808-60-7	238-878-4	T; R45	1	K	--
Zircon	--	14808-60-7	238-878-4	T; R45	1	K	--
Molybdenum	--	7439-98-7	231-107-2	No	--	--	--
Nickel Powder	--	7440-02-0	231-111-4	Carc. Cat. 3; R40 T; R48/23 R43 R52/53	2B	S	--
Other Silicates							
Kaolinite Clay	--	1332-58-7	310-194-1	No	--	--	--
Mica (2 possible CAS numbers) <sup>x</sup>	--	12001-26-2	Not found	No	--	--	--
		12003-38-2	234-426-5	No	--	--	--
Potassium Titanate	--	12030-97-6	234-748-6	No	--	--	--
Rosin	--	8050-09-7	232-475-7	R43	--	--	--
Silica	--	14808-60-7	238-878-4	T; R45	1	K	--
Silicate Binder (Potassium Silicate)	--	1312-76-1	215-199-1	No	--	--	--
Silicate Binder (Sodium Silicate)	--	1344-09-8	215-687-4	No	--	--	--
Silicon	--	7440-21-3	231-130-8	No	--	--	--
Silicon Dioxide	--	14808-60-7	238-878-4	T; R45	1	K	--
Titanium Oxide	--	13463-67-7	236-675-5	No	2B	--	--
Zirconium Silicate	--	14940-68-2	239-019-6	No	--	--	--

<sup>(1)</sup> Hazard Classification according to European Council Directive 67/548/EEC, for R-phrases, see Section 16.

<sup>(2)</sup> Evaluation according to the International Agency for Research on Cancer.

1 – Carcinogenic to humans. 2A – Probably carcinogenic to humans. 2B – Possibly carcinogenic to humans.

<sup>(3)</sup> Classification according to the 11th Report on Carcinogens, published by the US National Toxicology Program.

K – Known Carcinogen S – Suspect Carcinogen

<sup>(4)</sup> Carcinogen listing according to OSHA, Occupational Safety & Health Administration (USA).



**APPROXIMATE COMPOSITION OF ELECTRODE (Wt. %)**

Product Trade Name	Sureweld 10P	Sureweld 10P-Plus	Sureweld 6011 (formerly SW-14)	Sureweld 6013 (formerly 6013-LV)	Sureweld 710P
Aluminum Oxide	--	--	--	0.1-1	--
Calcium Carbonate	<0.5	1-2.5	<0.5	1-2.5	<0.5
Carbon	<0.3	<0.3	<0.3	<0.3	<0.3
Cellulose	2-6	2-6	2-6	0.5-2.5	2-6
Chromium & Cmpds	--	--	--	--	--
Graphite	<0.3	<0.3	--	--	--
Iron Carbonate	--	--	--	--	--
Magnesium Carbonate	0.3-1.5	--	0.3-1.5	--	0.3-1.5
Manganese	1-2	1-2	1-2	2-3	1-2
Mill Scale	0.05-1	0.05-1	0.05-1	0.05-1	0.05-1
Mineral Silicates	0.5-2.5	0-1.5	--	1-2.5	0.2-1
Molybdenum	--	--	--	--	<0.5
Nickel	--	--	--	--	<0.5
Other Silicates					
Kaolinite Clay	--	--	--	0.3-2	0.3-2
Mica	--	--	--	0.3-2	--
Potassium Titanate	--	--	2-3	--	--
Silicate Binder (cured)	1-4.5	1-4.5	1-4.5	1-4.5	1-4.5
Silicon	<0.2	<0.2	<0.2	<0.2	<0.2
Silicon Dioxide	0.05-1	0.05-1	0.05-1	0.05-1	0.05-1
Titanium Oxide	1-3	1-3	1-3	8-12	1-3
Iron	Bal >80	Bal >80	Bal >80	Bal >70	Bal >80
AWS Classification	A5.1 E6010	A5.1 E6010	A5.1 E6011	A5.1 E6013	A5.5 E7010-P1

Product Trade Name	Sureweld 7014 (formerly SW-15 IP)	Sureweld 7024	Sureweld 810P
Aluminum Oxide	<0.3	0.3-1.4	--
Aluminum Silicate	--	2-5	--
Calcium Carbonate	0.5-1.5	0.5-1.5	--
Carbon	<0.3	<0.3	<0.3
Cellulose	1-3	1-3	3-6
Chromium & Cmpds	--	--	0.03-0.10
Graphite	--	--	--
Iron Carbonate	--	0.5-1.5	--
Magnesium Carbonate	--	0.3-1.5	0.3-1.5
Manganese	1.5-2.5	3-4	1-2
Mill Scale	<0.3	0.3-1.5	0.3-1.5
Mineral Silicates	1-2.5	1-2.5	0.5-2
Molybdenum	--	--	<0.5
Nickel	--	--	0.5-1
Other Silicates			
Kaolinite Clay	--	0.2-1.5	--
Mica	2-4	--	0.2-1.5
Potassium Titanate	--	--	--
Silicate Binder (cured)	1-4.5	1-4.5	1-4.5
Silicon	<0.5	<0.5	<0.2
Silicon Dioxide	0.05-1	0.05-1	0.05-1
Titanium Oxide	9-13	9-13	1-3
Iron	Bal >70	Bal >70	Bal >80
AWS Classification	A5.1 E7014	A5.1 E7024	A5.5 E8010-P1



#### APPROXIMATE COMPOSITION OF COATING (Wt. %)

The core wire type is mild steel.

Product Trade Name	OK 33.80
Aluminum Oxide	2-5
Aluminum Silicate	2-5
Calcium Carbonate	2-5
Manganese	5-10
Silicate Binder (cured)	5-10
Silicon Dioxide	5-10
Titanium Oxide	15-20
Zirconium Silicate	1-2
Iron	Bal.>60
AWS Classification	A5.1 E7024

#### 4. FIRST AID MEASURES

- Inhalation: If breathing has stopped, perform artificial respiration and obtain medical assistance immediately! If breathing is difficult, provide fresh air and call physician.
- Eye contact: For radiation burns due to arc flash, see physician. To remove dusts or fumes flush with water for at least fifteen minutes. If irritation persists, obtain medical assistance.
- Skin contact: For skin burns from arc radiation, promptly flush with cold water. Get medical attention for burns or irritations that persist. To remove dust or particles wash with mild soap and water.
- Electric shock: Disconnect and turn off the power. Use a nonconductive material to pull victim away from contact with live parts or wires. If not breathing, begin artificial respiration, preferably mouth-to-mouth. If no detectable pulse, begin Cardio Pulmonary Resuscitation (CPR). Immediately call a physician.
- General: Move to fresh air and call for medical aid.

#### 5. FIRE FIGHTING MEASURES

No specific recommendations for welding consumables. Welding arcs and sparks can ignite combustible and flammable materials. Use the extinguishing media recommended for the burning materials and fire situation. Wear self-contained breathing apparatus as fumes or vapors may be harmful.

#### 6. ACCIDENTAL RELEASE MEASURES

Solid objects may be picked up and placed into a container. Liquids or pastes should be scooped up and placed into a container. Wear proper protective equipment while handling these materials. Do not discard as refuse.

- Personal precautions: refer to Section 8.
- Environmental precautions: refer to Section 13.

#### 7. HANDLING AND STORAGE

Handling:

Handle with care to avoid stings and cuts. Wear gloves when handling welding consumables. Avoid exposure to dust. Do not ingest. Some individuals can develop an allergic reaction to certain materials. Retain all warning and identity labels.

Storage:

Keep separate from chemical substances like acids and strong bases, which could cause chemical reactions.

#### 8. EXPOSURE CONTROL/PERSONAL PROTECTION

Avoid exposure to welding fumes, radiation, spatter, electric shock, heated materials and dust.

Engineering measures:

Ensure sufficient ventilation, local exhaust, or both, to keep welding fumes and gases from breathing zone and general area. Keep working place and protective clothing clean and dry. Train welders to avoid contact with live electrical parts and insulate conductive parts. Check condition of protective clothing and equipment on a regular basis.



**Personal protective equipment:**

Use respirator or air supplied respirator when welding or brazing in a confined space, or where local exhaust or ventilation is not sufficient to keep exposure values within safe limits. Use special care when welding painted or coated steels since hazardous substances from the coating may be emitted. Wear hand, head, eyes, ear and body protection like welders gloves, helmet or face shield with filter lens, safety boots, apron, arm and shoulder protection. Keep protective clothing clean and dry.

Use industrial hygiene monitoring equipment to ensure that exposure does not exceed applicable national exposure limits. The following limits can be used as guidance. For information about welding fume analysis refer to Section 10.

Substance		CAS#	ACGIH TLV <sup>(1)</sup> mg/m <sup>3</sup>	OSHA PEL <sup>(2)</sup> mg/m <sup>3</sup>
Aluminum Oxide		1344-28-1	1** (as Al)	15*, 5**
Aluminum Silicate	(as Al)	12141-46-7	1**	15*, 5**
Calcium Carbonate		1317-65-3	Withdrawn	15*, 5**
Carbon		7440-44-0	None	None
Cellulose		9004-34-6	10	15*, 5**
Chromium Compounds		7440-47-3		
Metal	(as Cr)		0.5	1
Cr (VI), inorganic, water insoluble	(as Cr)		0.01	0.005
Cr (VI), inorganic, water soluble	(as Cr)		0.05	0.005
Graphite		7782-42-5	2**	15*, 5**
Iron Carbonate		10290-71-8	None	None
Iron Oxide		1309-37-1	5**	10 (fume)
Magnesium Carbonate		546-93-0	10***, 3** (PNOS)	15*, 5**
Manganese and inorganic compounds	(as Mn)	7439-96-5	0.02**, 0.1***	5 Ceiling
Manganese, fume	(as Mn)	7939-96-5	0.2	5 Ceiling
Mill Scale (Ferrous metal)				
Iron Oxide		1309-37-1	5**	10 (fume)
Silicon Dioxide		14808-60-7	0.025**	<u>10 mg/m<sup>3</sup> ###</u> %SiO <sub>2</sub> +2
Mineral Silicates (no exposure anticipated)				
All substances with CAS # of 14808-60-7 are considered to be quartz.				
Bentonite Clays		1302-78-9	None	None
Chlorite Silica-Crystalline-Quartz		14808-60-7	0.025**	<u>10 mg/m<sup>3</sup> ###</u> %SiO <sub>2</sub> +2
Feldspar Silica-Crystalline-Quartz		14808-60-7	0.025**	<u>10 mg/m<sup>3</sup> ###</u> %SiO <sub>2</sub> +2
Hectorite Silica-Crystalline-Quartz		14808-60-7	0.025**	<u>10 mg/m<sup>3</sup> ###</u> %SiO <sub>2</sub> +2
Pyrrophyllite Silica-Crystalline-Quartz		14808-60-7	0.025**	<u>10 mg/m<sup>3</sup> ###</u> %SiO <sub>2</sub> +2
Wollanstanite Silica-Crystalline-Quartz		14808-60-7	0.025**	<u>10 mg/m<sup>3</sup> ###</u> %SiO <sub>2</sub> +2
Zircon Silica-Crystalline-Quartz		14808-60-7	0.025**	<u>10 mg/m<sup>3</sup> ###</u> %SiO <sub>2</sub> +2
Molybdenum	(metal and insoluble compounds, as Mo) (soluble compounds, as Mo)	7439-98-7	3 **, 10 *** 0.5 **	15* 5
Nickel, elemental		7440-02-0	1.5***	1
Other Silicates				
Kaolin		1332-58-7	2**	15*, 5**
Use Quartz Formula		14808-60-7	0.025**	<u>10 mg/m<sup>3</sup> ###</u> %SiO <sub>2</sub> +2
Mica		12001-26-2	3**	20 mppcf, quartz < 1%
Potassium Titanate		12030-97-6	None	None



Substance	CAS#	ACGIH TLV <sup>(1)</sup> mg/m <sup>3</sup>	OSHA PEL <sup>(2)</sup> mg/m <sup>3</sup>
Silicate Binder (Potassium Silicate & Sodium Silicate)	1312-76-1	None	None
	1344-09-8	None	None
Silicon	7440-21-3	Withdrawn	15*, 5**
Silicon Dioxide (quartz)	14808-60-7	0.025**	10 mg/m <sup>3</sup> ### %SiO <sub>2</sub> +2
Titanium Oxide	13463-67-7	10	15*
Zirconium Silicate (as Zr)	14940-68-2	5, 10 (STEL)	5

(1) Threshold Limit Values according to American Conference of Governmental Hygienists, 2013

(2) Permissible Exposure Limits according to the Occupational Safety & Health Administration (USA)

Unless noted, all values are for 8 hour time weighted averages (TWA).

\* Total dust, \*\* Respirable fraction, \*\*\* Inhalable fraction.

### Respirable dust

**NOTE:** Some of these products may not contain all of the materials listed. For details of composition, refer to the COMPOSITION TABLES in Section 3.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Solid, non-volatile with varying color.

Melting Point: >1300°C/>2300°F

## 10. STABILITY AND REACTIVITY

General: These products are only intended for normal welding purposes.

Stability: These products are stable under normal conditions.

Reactivity: Contact with chemical substances like acids or strong bases could cause generation of gas.

When these products are used in a welding process, hazardous decomposition products would include those from the volatilization, reaction or oxidation of the materials listed in Section 3 and those from the base metal and coating.

The amount of fumes generated from manual metal arc welding varies with welding parameters and dimensions but is generally no more than 5 to 15 g/kg consumable. Fumes from these products may contain compounds of the following chemical elements: Fe, O, Mn, Cr, Ni, F, Na, Si, K, Ca, Al, Mg, C, Mo, and Ti. The rest is not analyzed, according to available standards.

Refer to applicable national exposure limits for fume compounds, including those exposure limits for fume compounds found in Section 8. A significant amount of the chromium in the fumes can be hexavalent chromium, which has a very low exposure limit in some countries. Manganese and nickel also have low exposure limits, in some countries, that may be easily exceeded.

Reasonably expected gaseous products would include carbon oxides, nitrogen oxides and ozone. Air contaminants around the welding area can be affected by the welding process and influence the composition and quantity of fumes and gases produced.

## 11. TOXICOLOGICAL INFORMATION

Inhalation of welding fumes and gases can be dangerous to your health. Classification of welding fumes is difficult because of varying base materials, coatings, air contamination and processes. The International Agency for Research on Cancer has classified welding fumes as possibly carcinogenic to humans (Group 2B).

Acute toxicity: Overexposure to welding fumes may result in symptoms like metal fume fever, dizziness, nausea, dryness or irritation of the nose, throat or eyes.

Chronic toxicity: Overexposure to welding fumes may affect pulmonary function. Prolonged inhalation of nickel and chromium compounds above safe exposure limits can cause cancer. Overexposure to manganese and manganese compounds above safe exposure limits can cause irreversible damage to the central nervous system, including the brain, symptoms of which may include slurred speech, lethargy, tremor, muscular weakness, psychological disturbances and spastic gait. Prolonged inhalation of titanium dioxide above safe exposure limits can cause cancer. Inhalable quartz is a respiratory carcinogen; however, the process of welding converts crystalline quartz to the amorphous form which is not considered to be a carcinogen.

## 12. ECOLOGICAL INFORMATION

Welding consumables and materials could degrade/weather into components originating from the consumables or from the materials used in the welding process. Avoid exposure to conditions that could lead to accumulation in soils or groundwater.

Nickel powder is harmful for the environment. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.



### 13. DISPOSAL CONSIDERATIONS

Discard any product, residue, disposable container or liner in an environmentally acceptable manner, in full compliance with federal and local regulations. Use recycling procedures if available.

USA RCRA: Unused products or product residue containing chromium is considered hazardous waste if discarded, RCRA ID Characteristic Toxic Hazardous Waste D007.

Residues from welding consumables and processes could degrade and accumulate in soils and groundwater. Welding slag from these products typically contain mainly the following components originating from the coating of the electrode: Fe, O, Mn, Cr, Ni, F, Na, Si, K, Ca, Al, Mg, C, Mo, and Ti.

### 14. TRANSPORT INFORMATION

No international regulations or restrictions are applicable.

### 15. REGULATORY INFORMATION

Read and understand the manufacturer's instructions, your employer's safety practices and the health and safety instructions on the label. Observe any federal and local regulations. Take precautions when welding and protect yourself and others.

WARNING: Welding fumes and gases are hazardous to your health and may damage lungs and other organs. Use adequate ventilation.

ELECTRIC SHOCK can kill.

ARC RAYS and SPARKS can injure eyes and burn skin.

Wear correct hand, head, eye and body protection.

**Canada:** WHMIS classification: Class D; Division 2, Subdivision A

Canadian Environmental Protection Act (CEPA): All constituents of these products are on the Domestic Substance List (DSL).

**USA:** Under the OSHA Hazard Communication Standard, these products are considered hazardous.

These products contain or produce a chemical known to the state of California to cause cancer and birth defects (or other reproductive harm). (California Health & Safety Code § 25249.5 et seq.)

United States EPA Toxic Substance Control Act: All constituents of these products are on the TSCA inventory list or are excluded from listing.

#### CERCLA/SARA Title III

Reportable Quantities (RQs) and/or Threshold Planning Quantities (TPQs):

Ingredient name	RQ (lb)	TPQ (lb)
Product is a solid solution in the form of a solid article.	--	--

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center and to your Local Emergency Planning Committee.

#### Section 311 Hazard Class

As shipped: Immediate                      In use: Immediate delayed

#### EPCRA/SARA Title III 313 Toxic Chemicals

The following metallic components are listed as SARA 313 "Toxic Chemicals" and potential subject to annual SARA 313 reporting. See Section 3 for weight percent.

Ingredient name	Disclosure threshold
Chromium	1.0% de minimis concentration
Manganese	1.0% de minimis concentration
Nickel	0.1% de minimis concentration

### 16. OTHER INFORMATION

This Safety Data Sheet has been revised due to modifications to Section 8. This SDS supersedes CAN300-B.

Refer to ESAB "Welding and Cutting - Risks and Measures", F52-529 "Precautions and Safe Practices for Electric Welding and Cutting" and F2035 "Precautions and Safe Practices for Gas Welding, Cutting and Heating" available from ESAB, and to:



USA: Contact ESAB at [www.esabna.com](http://www.esabna.com) or 1-800-ESAB-123 if you have questions about this SDS.

American National Standard Z49.1 "Safety in Welding and Cutting", ANSI/AWS F1.5 "Methods for Sampling and Analyzing Gases from Welding and Allied Processes", ANSI/AWS F1.1 "Method for Sampling Airborne Particles Generated by Welding and Allied Processes", AWSF3.2M/F3.2 "Ventilation Guide for Weld Fume", American Welding Society, 550 North Le Jeune Road, Miami, Florida, 33135. Safety and Health Fact Sheets available from AWS at [www.aws.org](http://www.aws.org).

OSHA Publication 2206 (29 C.F.R. 1910), U.S. Government Printing Office, Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954.

American Conference of Governmental Hygienists (ACGIH), Threshold Limit Values and Biological Exposure Indices, 6500 Glenway Ave., Cincinnati, Ohio 45211, USA.

NFPA 51B "Standard for Fire Prevention During Welding, Cutting and Other Hot Work" published by the National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169.

UK: WMA Publication 236 and 237, "Hazards from Welding Fume", "The arc welder at work, some general aspects of health and safety".

Germany: Unfallverhütungsvorschrift BGV D1, "Schweißen, Schneiden und verwandte Verfahren".

Canada: CSA Standard CAN/CSA-W117.2-01 "Safety in Welding, Cutting and Allied Processes".

These products have been classified according to the hazard criteria of the CPR and the SDS contains all the information required by the CPR.

Explanation of risk phrases mentioned in this SDS:

R-phrases: R40 – Limited evidence of a carcinogenic effect.

R43 – May cause sensitization by skin contact.

R45 – May cause cancer.

R48/23 – Toxic: danger of serious damage to health by prolonged exposure through inhalation.

R52/53 – Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

ESAB requests the users of these products to study this Safety Data Sheet (SDS) and become aware of product hazards and safety information. To promote safe use of these products a user should:

- notify its employees, agents and contractors of the information on this SDS and any product hazards/safety information.
- furnish this same information to each of its customers for these products.
- request such customers to notify employees and customers for the same product hazards and safety information.

The information herein is given in good faith and based on technical data that ESAB believes to be reliable. Since the conditions of use are outside our control, we assume no liability in connection with any use of this information and no warranty, expressed or implied is given. Contact ESAB for more information.



# SAFETY DATA SHEET

Date Issued : 4/9/2014

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Date Revised : 11/5/2014

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## MIRACLE DSA20 Drywall Adhesive

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** MIRACLE DSA20 Drywall Adhesive

**MANUFACTURER**

ITW Polymers Sealants North America  
56 Air Station Industrial Park  
Rockland, MA 02370

**Product Stewardship:** (781) 878-7015

**24 HR. EMERGENCY TELEPHONE NUMBERS**

CHEMTREC (US Transportation): (800) 424-9300

**COMMENTS:** MIRACLE is a registered trademark of Illinois Tool Works, Inc.

### 2. HAZARDS IDENTIFICATION

**GHS CLASSIFICATIONS**

**Health:**

Skin Irritation, Category 2  
Eye Irritation, Category 2A  
Respiratory Sensitization, Category 1  
Skin Sensitization, Category 1  
Mutagenicity, Category 1B  
Carcinogenicity, Category 1B  
Reproductive Toxicity, Category 2  
Target Organ Toxicity (Single exposure), Category 3  
Target Organ Toxicity (Repeated exposure), Category 2  
Aspiration Hazard, Category 1

**Environmental:**

Acute Hazards to the Aquatic Environment, Category 2  
Chronic Hazards to the Aquatic Environment, Category 2

**Physical:**

Flammable Liquids, Category 2

**GHS LABEL**



Flame



Exclamation  
mark



Health  
hazard



Environment

**SIGNAL WORD:** DANGER

**HAZARD STATEMENTS**

H225: Highly flammable liquid and vapour.  
H304: May be fatal if swallowed and enters airways.  
H315: Causes skin irritation.  
H317: May cause an allergic skin reaction.  
H319: Causes serious eye irritation.  
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

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H336: May cause drowsiness or dizziness.  
 H340: May cause genetic defects.  
 H350: May cause cancer.  
 H361: Suspected of damaging fertility or the unborn child.  
 H373: May cause damage to organs through prolonged or repeated exposure.  
 H401: Toxic to aquatic life.  
 H411: Toxic to aquatic life with long lasting effects.

### PRECAUTIONARY STATEMENT(S)

#### Prevention:

[201]: P201: Obtain special instructions before use.  
 P202: Do not handle until all safety precautions have been read and understood.  
 P210: Keep away from heat/sparks/open flames/hot surfaces. – No smoking.  
 P233: Keep container tightly closed.  
 P240: Ground/bond container and receiving equipment.  
 P241: Use explosion-proof electrical/ventilating/lighting equipment.  
 P242: Use only non-sparking tools.  
 P243: Take precautionary measures against static discharge.  
 P260: Do not breathe dust/fume/gas/mist/vapours/spray.  
 P264: Wash hands, forearms, and other exposed areas thoroughly after handling.  
 P271: Use only outdoors or in a well-ventilated area.  
 P272: Contaminated work clothing should not be allowed out of the workplace.  
 P273: Avoid release to the environment.  
 P280: Wear protective gloves/protective clothing/eye protection/face protection.  
 P284: Wear respiratory protection.

#### Response:

P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
 P302+P352: IF ON SKIN: Wash with plenty of soap and water.  
 P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
 P304+P340: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.  
 P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P308+P313: IF exposed or concerned: Get medical advice/attention.  
 P312: Call a POISON CENTER or doctor/physician if you feel unwell.  
 P314: Get medical advice/attention if you feel unwell.  
 P321: Specific treatment (see section 4).  
 P331: Do NOT induce vomiting.  
 P332+P313: If skin irritation occurs: Get medical advice/attention.  
 P333+P313: If skin irritation or rash occurs: Get medical advice/attention.  
 P337+P313: If eye irritation persists: Get medical advice/attention.  
 P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.  
 P362: Take off contaminated clothing and wash before reuse.  
 P370+P378: In case of fire: Use appropriate media to extinguish.  
 P391: Collect spillage.

#### Storage:

P403+P233: Store in a well-ventilated place. Keep container tightly closed.  
 P403+P235: Store in a well-ventilated place. Keep cool.  
 P405: Store locked up.

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## MIRACLE DSA20 Drywall Adhesive

### Disposal:

P501: Dispose of contents/container according to local, regional, national, and international regulations.

### EMERGENCY OVERVIEW

**PHYSICAL APPEARANCE:** Tan. Viscous. Liquid.

**IMMEDIATE CONCERNS:** DANGER! Extremely flammable liquid and vapor. Vapor may cause flash fire and explosion. Harmful or fatal if swallowed. Harmful if absorbed through the skin. Pulmonary aspiration hazard. After ingestion, may enter lungs and produce damage. High vapor concentrations may cause drowsiness. Can cause eye, skin and respiratory tract irritation.

### POTENTIAL HEALTH EFFECTS

**EYES:** Can cause severe eye irritation and corneal damage.

**SKIN:** Causes defatting and skin irritation. Can cause dermatitis.

**SKIN ABSORPTION:** May be absorbed through the skin in harmful amounts.

**INGESTION:** Can cause gastrointestinal irritation, nausea and vomiting. Aspiration of material into the lungs may cause chemical pneumonitis, which can be fatal. Harmful or fatal if swallowed.

**INHALATION:** May cause nose or throat irritation. High concentrations may lead to central nervous system effects (drowsiness, dizziness, nausea, headaches, paralysis and loss of consciousness).

**ROUTES OF ENTRY:** Eye Contact, Ingestion, Inhalation, Skin Absorption, and Skin Contact

**TARGET ORGAN STATEMENT:** Central Nervous System (CNS)

**IRRITANCY:** Eyes, nose, throat, respiratory tract, and skin irritation.

**HEALTH HAZARDS:** This product contains silica quartz, a chemical known to the State of California to cause cancer.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt. %	CAS
n-Hexane	7 - 13	110-54-3
Low Boiling Point Naphtha - Solvent Naphtha (petroleum), Light Aliph.	3 - 10	64742-89-8
n-Heptane	3 - 10	142-82-5
Cyclohexane	1 - 5	110-82-7
Silica, Crystalline	< 0.5	14808-60-7

### 4. FIRST AID MEASURES

**EYES:** Immediately flush eyes with plenty of tempered water (at least 15-20 minutes) lifting upper and lower eye lids occasionally. Get immediate medical attention.

**SKIN:** Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur. Wash or dispose of clothing before reuse.

**INGESTION:** Do not induce vomiting, keep person warm, quiet and get medical attention immediately. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Aspiration of this material into the lungs due to vomiting can cause chemical pneumonitis which can be fatal.

**INHALATION:** Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.

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### SIGNS AND SYMPTOMS OF OVEREXPOSURE

**EYES:** Liquid and vapor can severely irritate the eyes depending on type of exposure (splash, vapor) and exposure time.

**SKIN:** Mild to moderate skin irritant.

**SKIN ABSORPTION:** May be absorbed through the skin and can contribute to overall exposure. Effects are similar to CNS depression.

**INGESTION:** May result in central nervous system (CNS) depression with symptoms such as headaches, nausea, vomiting, diarrhea, dizziness, incoordination and unconsciousness. Aspiration of material into lungs may cause chemical pneumonitis which can be fatal.

**INHALATION:** High vapor concentrations may cause CNS depression with symptoms including light headedness, giddiness, nausea, drowsiness, headache, nose, throat and respiratory tract irritation, reduced appetite, confusion, and unconsciousness.

**ACUTE TOXICITY:** High vapor concentrations may cause central nervous system (CNS) depression with symptoms including light headedness, giddiness, nausea, drowsiness, headache, nose, throat and respiratory tract irritation, reduced appetite, confusion and unconsciousness.

**CHRONIC EFFECTS:** Damage to the nervous system of the extremities, peripheral neuropathy, with symptoms including numbness, tingling and weakness in the toes and fingers, sensory impairment to touch, pain, vibration and temperature, muscular weakness, blurred vision, coldness of extremities, loss of body weight and reflexes, and even paralysis. Frequent or prolonged contact may irritate the skin and cause a skin rash (dermatitis).

### 5. FIRE FIGHTING MEASURES

**FLAMMABLE CLASS:** Class IB

**GENERAL HAZARD:** Flammable liquid and vapor.

**EXTINGUISHING MEDIA:** Foam, dry chemical, carbon dioxide, water spray or fog.

**HAZARDOUS COMBUSTION PRODUCTS:** Carbon Monoxide, Carbon Dioxide, Aldehydes

**EXPLOSION HAZARDS:** Avoid fire, sparks, static electricity and hot surfaces. Liquid readily evaporates at room/ambient temperature. Vapors are invisible, flammable, heavier than air, and may accumulate in low areas and spread long distances. Distant ignition and flashback are possible.

**FIRE FIGHTING PROCEDURES:** As in any fire, wear self-contained breathing apparatus with pressure-demand, full face piece SCBA (MSHA/NIOSH approved or equivalent) and full protective gear.

**SENSITIVE TO STATIC DISCHARGE:** Likely to catch fire from near-by spark. Static charge may accumulate by flow or agitation. Grounding and bonding of containers is required.

**SENSITIVITY TO IMPACT:** None known.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon Monoxide and Carbon Dioxide may form when heated to decomposition.

### 6. ACCIDENTAL RELEASE MEASURES

**SMALL SPILL:** Dike area to contain spill. Take precautions as necessary to prevent contamination of ground and surface waters. Recover spilled material on absorbent, such as sawdust or vermiculite, and sweep into closed containers for disposal. After all visible traces, including ignitable vapors, have been removed, thoroughly wet vacuum the area. Do not flush to sewer. If area of spill is porous, remove as much contaminated earth and gravel, etc. as necessary and place in closed containers for disposal. Only those persons who are adequately trained, authorized, and wearing the required personal protective equipment (PPE) should participate in spill

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response and clean-up.

**LARGE SPILL:** Keep spectators away. Only those persons who are adequately trained, authorized and wearing the required personal protective equipment (PPE) should participate in spill response and clean-up. Ventilate the area by natural means or by explosion proof mechanical means (i.e. fans). Know and prepare for spill response before using or handling this product. Eliminate all ignition sources (flames, hot surfaces, portable heaters and sources of electrical, static, or frictional sparks). Dike and contain spill with inert material (e.g. sand, earth). Transfer liquids to covered and labeled metal containers for recovery or disposal, or remove with inert absorbent. Use only non-sparking tools and appropriate PPE. Place absorbent diking materials in covered metal containers for disposal. Prevent contamination of sewers, streams, and groundwater with spilled material or used absorbent.

### 7. HANDLING AND STORAGE

**GENERAL PROCEDURES:** For professional or industrial use only. Follow label instructions. Keep out of the reach of children. Not for consumption. No smoking. Do not breathe vapors. Avoid contact with body. Turn off all pilot lights, flames, stoves, heaters, electric motors, welding equipment and other sources of ignition. Empty containers must not be washed and re-used for any purpose. Contact lens wearers must wear protective eye wear around chemical vapors and liquid. Wash hands thoroughly after handling. Flammable vapors may cause flash fire or ignite explosively. To prevent build-up of vapors, use adequate natural and/or mechanical ventilation (e.g. open all windows and doors to achieve cross ventilation). Containers may be hazardous when empty. Never use welding or cutting torch on or near container. Do not cut, drill, grind, or expose containers to heat, sparks, static electricity or other source of ignition. Explosion may occur causing injury or death.

**HANDLING:** Use adequate ventilation and appropriate respiratory protection to avoid breathing vapors when cover is removed. Ground and bond all equipment when handling flammable solvent-borne material.

**STORAGE:** Keep container closed when not in use. Store in a dry, well ventilated area, out of the sun and away from ignition sources. Do not remove or deface label. Prevent water or moist air from entering container.

**STORAGE TEMPERATURE:** 15.5°C (60°F) Minimum to 35°C (95°F) Maximum

**SHELF LIFE:** 1 year from manufacture date

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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### EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)					
		EXPOSURE LIMITS			
		OSHA PEL		ACGIH TLV	
Chemical Name		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
n-Hexane	TWA	500 ppm <sup>[1]</sup>	1800 mg/m <sup>3</sup> <sup>[1]</sup>	50 ppm	176 mg/m <sup>3</sup>
	STEL	NL <sup>[2]</sup>	NL <sup>[2]</sup>	NL <sup>[2]</sup>	NL <sup>[2]</sup>
Low Boiling Point Naphtha - Solvent Naphtha (petroleum), Light Aliph.	TWA	400 ppm	NL	400 ppm	NL
	STEL	NL <sup>[2]</sup>	NL <sup>[2]</sup>	NL <sup>[2]</sup>	NL <sup>[2]</sup>
n-Heptane	TWA	500 ppm <sup>[1]</sup>	2000 mg/m <sup>3</sup> <sup>[1]</sup>	400 ppm	1640 mg/m <sup>3</sup>
	STEL	NL <sup>[2]</sup>	NL <sup>[2]</sup>	500 ppm	2050 mg/m <sup>3</sup>
Cyclohexane	TWA	300 ppm <sup>[1]</sup>	1050 mg/m <sup>3</sup> <sup>[1]</sup>	100 ppm	334 mg/m <sup>3</sup>
	STEL	NL <sup>[2]</sup>	NL <sup>[2]</sup>	NL <sup>[2]</sup>	NL <sup>[2]</sup>
Silica, Crystalline	TWA	NL	0.1 mg/m <sup>3</sup>	NL	0.05 mg/m <sup>3</sup>
	STEL	NL <sup>[2]</sup>	NL <sup>[2]</sup>	NL <sup>[2]</sup>	NL <sup>[2]</sup>
<b>Footnotes:</b> 1. OSHA limits per 29 CFR 1910.1000 Table Z-1 & Z-2 2. NL = Not Listed					

**ENGINEERING CONTROLS:** Provide sufficient explosion proof mechanical (general and/or local exhaust) ventilation to maintain exposure below the occupational exposure limit and exposure concentration.

### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** Wear safety glasses with side shields (or goggles) or a full face respirator.

**SKIN:** Wear chemical protective clothing & boots to prevent repeated or prolonged skin contact. Wear impervious gloves, if needed, to prevent repeated or prolonged skin contact.

**RESPIRATORY:** NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection. A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

**PROTECTIVE CLOTHING:** Wear chemical resistant gloves, such as nitrile rubber.

**WORK HYGIENIC PRACTICES:** Use good hygiene practices when handling this material. Wash hands thoroughly after use.

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## MIRACLE DSA20 Drywall Adhesive

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE:** Liquid

**ODOR:** Solvent-like

**ODOR THRESHOLD:** Not Determined

**COLOR:** Tan

**pH:** Not Determined

**PERCENT VOLATILE:** 27.9

**Notes:** by weight

**FLASHPOINT AND METHOD:** -23°C (-9.4°F)

**FLAMMABLE LIMITS:** 1.1 to 8.7

**AUTOIGNITION TEMPERATURE:** (437°F) to (682°F)

**VAPOR PRESSURE:** Not Determined

**VAPOR DENSITY:** Not Determined

**BOILING POINT:** 64°C (120.7°F) to 90°C (194°F)

**FREEZING POINT:** Not Determined

**MELTING POINT:** Not Determined

**POUR POINT:** Not Determined

**SOLUBILITY IN WATER:** Slight

**EVAPORATION RATE:** > 1.0 (n-Butyl Acetate=1)

**DENSITY:** 9.61 lbs/gal

**PARTICLE SIZE:** Not Determined

**SPECIFIC GRAVITY:** 1.153

**VISCOSITY:** Not Determined

**MOLECULAR WEIGHT:** Not Determined

**(VOC):** 322.100 gr/L EPA Method 24 VOC

**Notes:** Photochemically Reactive Only VOC: 322.1 gr/L

**COEFF. OIL/WATER:** Not Determined

**OXIDIZING PROPERTIES:** Not Determined

**COMMENTS:** 0.15 lb VHAP/lb Solid  
11.0% by weight HAP

### 10. STABILITY AND REACTIVITY

**STABLE:** Yes

**HAZARDOUS POLYMERIZATION:** No

**STABILITY:** Stable.

**POLYMERIZATION:** Product will not undergo polymerization.

**CONDITIONS TO AVOID:** Avoid fire, sparks, static electricity and hot surfaces.

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**POSSIBILITY OF HAZARDOUS REACTIONS:** None Expected.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon monoxide and carbon dioxide may form when heated to decomposition.

**INCOMPATIBLE MATERIALS:** Strong oxidizing agents, strong acids and strong bases.

### 11. TOXICOLOGICAL INFORMATION

#### ACUTE

Chemical Name	ORAL LD <sub>50</sub> (rat)	DERMAL LD <sub>50</sub> (rabbit)	INHALATION LC <sub>50</sub> (rat)
n-Hexane	25000 mg/kg	No data	48000 ppm (4-hr dose)
Low Boiling Point Naphtha - Solvent Naphtha (petroleum), Light Aliph.	> 2000 mg/kg	> 2000 mg/kg	> 5000 ppm (1-hr dose)
n-Heptane	> 15000 mg/kg	> 2001 mg/kg	103000 mg/cub m (4- hr dose)
Cyclohexane	29820 mg/kg	No data	No data
Silica, Crystalline	No data	No data	No data

#### CARCINOGENICITY

Chemical Name	NTP Status	IARC Status
Silica, Crystalline	1	1

**IARC:** IARC has concluded that "crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group I)."

**Notes:** This product contains silica quartz, a chemical known to the State of California to cause cancer.

**IRRITATION:** Eyes, nose, throat, respiratory tract irritation.

**SYNERGISTIC MATERIALS:** The neurotoxic effects of n-hexane vapor can be enhanced in rats by both methyl ethyl ketone (MEK) and lead acetate, but are decreased by toluene. Toluene and xylene prevent testicular atrophy by n-hexane.

### 12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL DATA:** This product contains components that will normally float on water. These components may be harmful to aquatic organisms and may cause long term adverse effects in the aquatic environment.

**ECOTOXICOLOGICAL INFORMATION:** Contains components that are potentially toxic to freshwater and saltwater ecosystems.

**BIOACCUMULATION/ACCUMULATION:** Contains components with the potential to bio-accumulate.

### 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Dispose of in accordance with all local, state and federal regulations.



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## MIRACLE DSA20 Drywall Adhesive

### 14. TRANSPORT INFORMATION

#### DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Adhesives

PRIMARY HAZARD CLASS/DIVISION: 3

UN/NA NUMBER: 1133

PACKING GROUP: II

NAERG: 128

MARINE POLLUTANT #1: None

OTHER SHIPPING INFORMATION: contains (n-Hexane, n-Heptane)

### 15. REGULATORY INFORMATION

#### UNITED STATES

#### DOT LABEL SYMBOL AND HAZARD CLASSIFICATION

Flammable  
Liquid

#### SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

FIRE: Yes PRESSURE GENERATING: No REACTIVITY: No ACUTE: Yes CHRONIC: Yes

#### EPCRA SECTION 313 SUPPLIER NOTIFICATION

Chemical Name	Wt. %	CAS
n-Hexane	7 - 13	110-54-3
Cyclohexane	1 - 5	110-82-7

#### CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

Chemical Name	Wt. %	CERCLA RQ
n-Hexane	7 - 13	5,000 lbs.
Cyclohexane	1 - 5	1,000 lbs.

#### TSCA (TOXIC SUBSTANCE CONTROL ACT)

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Chemical Name	CAS	TSCA SECTION
n-Hexane	110-54-3	
Low Boiling Point Naphtha - Solvent Naphtha (petroleum), Light Aliph.	64742-89-8	
n-Heptane	142-82-5	12b,
Cyclohexane	110-82-7	
Silica, Crystalline	14808-60-7	

### CLEAN AIR ACT

Chemical Name	Wt. %	CAS
n-Hexane	7 - 13	110-54-3

### STATES WITH SPECIAL REQUIREMENTS

Chemical Name	Requirements
n-Hexane	New Jersey Right to Know List Pennsylvania Right to Know List Massachusetts Toxic Use Reduction Act (TURA) Reportable Chemical
Low Boiling Point Naphtha - Solvent Naphtha (petroleum), Light Aliph.	Pennsylvania Right to Know List
n-Heptane	New Jersey Right to Know List Pennsylvania Right to Know List
Cyclohexane	New Jersey Right to Know List Pennsylvania Right to Know List Massachusetts Toxic Use Reduction Act (TURA) Reportable Chemical
Silica, Crystalline	New Jersey Right to Know List Pennsylvania Right to Know List Massachusetts Toxic Use Reduction Act (TURA) Reportable Chemical

### CALIFORNIA PROPOSITION 65

Chemical Name	Wt. %	Listed
Silica, Crystalline	< 0.5	Cancer

### CANADA

#### WHMIS HAZARD SYMBOL AND CLASSIFICATION



Flammable  
Liquid



Toxic

### 16. OTHER INFORMATION

# SAFETY DATA SHEET

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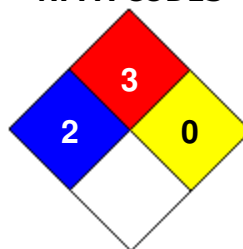
## MIRACLE DSA20 Drywall Adhesive

**INFORMATION CONTACT:** (781) 878-7015**REVISION SUMMARY:** This MSDS replaces the 11/5/2014 MSDS.

### HMIS RATING

HEALTH	*	2
FLAMMABILITY		3
PHYSICAL HAZARD		0
PERSONAL PROTECTION	B	

### NFPA CODES

**GENERAL STATEMENTS:** Keep out of reach of children

For professional or industrial use only

**MANUFACTURER DISCLAIMER:** This document may be used to comply with OSHA's Hazardous Communication Standard, 29 CFR 1910.1200.

To the best of our knowledge, the information contained in this SDS is accurate. It is intended to assist the user in his/her evaluation of the product's hazards and safety precautions to be taken in its use. The data in this SDS relate only to the specific material designated herein. We do not assume liability for the use of, or reliance on this information, nor do we guarantee its accuracy or completeness.

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of ITW Polymers Sealants North America. The data on this sheet relates only to the specific material designated herein. ITW Polymers Sealants North America assumes no legal responsibility for use or reliance upon these data.



# MATERIAL SAFETY DATA SHEET—SOFT LEAD

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## SECTION 1, IDENTIFICATION

**Product Name:** Soft Lead

**Synonyms:** Corroding grade lead, pure lead

**CAS No:** 7439-92-1

**Chemical Formula:** Pb

**RTECS:** OF7525000

**TSCA:** TSCA 8(b) inventory: Lead

**CI#:** Not available.

**Synonym:** Lead Metal, granular; Lead Metal, foil;  
Lead Metal, sheet; Lead Metal, shot

**Chemical Name:** Lead

**Contact Information:**

Radiation Protection Products, Inc.

P.O. Box 862

1000 Superior Boulevard, Suite 310

Wayzata, MN 55391

**Phone:** 1.888.746.4777 (RINGRPP)

**Sales:** 1.888.746.4777 (RINGRPP)

**Web site:** [www.radiationproducts.com](http://www.radiationproducts.com)

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## SECTION 2, HAZARD(S) IDENTIFICATION

### POTENTIAL HEALTH EFFECTS

**Inhalation:** When scattered in the air as a dust, fume or mist, it may be inhaled (breathed) and absorbed through the lungs and upper respiratory tract irritation and it can result in both acute and chronic overexposure.

**Ingestion:** When it gets into the mouth and is swallowed, it may be absorbed through the digestive system and can result in both acute and chronic overexposure.

**Skin Contact:** Dust, fume or mist, are not readily absorbed through the skin; however, they may cause mechanical irritation to the skin.

**Eye Contact:** Dust, fume or mist may cause mechanical irritation.

### SIGNS & SYMPTOMS OF OVEREXPOSURE

**Acute (short term) exposure:** If left untreated—weakness, vomiting, loss of appetite, uncoordinated body movements, convulsions, stupor, bloody stools, and possible coma.

**Chronic (long term) exposure:** If left untreated—weakness, insomnia, hypertension, slight irritation to skin and eyes, metallic taste in mouth, anemia, constipation, headache, muscle and joint pains, neuromuscular dysfunction, possible paralysis and encephalopathy. Lead and its inorganic compounds are neurotoxins that may produce peripheral neuropathy. For an overview of the effects of lead exposure, see OSHA 29CFR1910.1025, Appendix A.

---

## SECTION 3, COMPOSITION/INFORMATION ON INGREDIENTS

**Material:**

Lead

**% by Weight:**

99.9+%

**CAS #:**

7439-92-1

**Toxicological Data on Ingredients:** Lead LD50: Not available. LC50: Not available.

---

## SECTION 4, FIRST-AID MEASURES

**Inhalation:** Remove from exposure. Get medical attention if experiencing affects of overexposure.

**Ingestion:** Get immediate medical attention.

**Eyes:** Flush with large quantities of water. Get immediate medical attention.

**Skin:** Wash thoroughly with soap and water.

---

## SECTION 5, FIRE-FIGHTING MEASURES

**Flash Point:** Not Applicable

**Fire Extinguishing Media:** Dry chemical or carbon dioxide should be used on surrounding fire.

DO NOT use water on fires where molten metal is present.

**Special Fire Fighting Precautions:** Use approved full-face-piece, self-contained breathing apparatus and full protective clothing if involved in a fire.

**Unusual Fire and Explosion Hazard:** Molten metals produce fume, dust or mist that may be toxic.

---

## SECTION 6, ACCIDENTAL RELEASE MEASURES

**Spill or Leak:** Dust or particulate should be vacuumed or wet swept where vacuuming is infeasible. Place material in dry, closed containers for disposal or recycling. Do not use compressed air or dry sweeping for cleaning. Use approved respiratory protection if dust/fume exposure possibility exists.

---

## SECTION 7, HANDLING AND STORAGE

**Storage:** Store in a dry area where accidental contact with hydrogen peroxide is not possible.

**Other Special Precautions/Procedures:** Wash hands, face, neck and arms thoroughly before eating or smoking. Eating and smoking should be confined to non-contaminated areas. Work clothes and equipment should remain in designated contaminated areas, and should never be taken home or laundered with personal clothing. Do not use compressed air for blowing dust off of clothes.

Before using the product, consult the OSHA Federal Standard for Occupational Exposure to Lead 29CFR1910.1025.

---

## SECTION 8, EXPOSURE CONTROLS/PERSONAL PROTECTION

**OSHA Exposure Limit:** 0.05 mg/meter (OSHA)

**Ventilation:** Local exhaust ventilation shall be provided in areas where exposures are above the permissible limits or threshold limit values specified by OSHA or other local, state, and federal regulations.

**Respiratory Protection:** Use of approved (OSHA 29CFR1910.1025 (f)) respirators is required for applications where adequate ventilation cannot be provided.

**Eyes and Face:** Face shields or vented goggles should be used around molten metal. Safety glasses should be used for operations generating flying pieces.

**Gloves:** Gloves should be worn when handling the product.

**Other Clothing and Equipment:** Full protective clothing is required if the permissible exposure limit is exceeded. Hard hat, safety shoes, and other safety equipment should be worn as appropriate for the environment.

---

## SECTION 9, PHYSICAL AND CHEMICAL PROPERTIES

**Appearance and Odor:** Silver-gray metal, odorless. Various shapes and sizes.

**Molecular Weight:** 207.2

**Boiling Point:** Greater than 3164°F (1740°C)

**Vapor Density:** Not Applicable

**Vapor Pressure:** Not Applicable

**% Volatiles by Volume:** Not Applicable

**Specific Gravity (H<sub>2</sub>O=1):** 11.34

**Melting Point:** 621°F (327°C)

**Solubility in Water:** Insoluble

**Evaporation Rate:** Not Applicable

---

## SECTION 10, STABILITY AND REACTIVITY

**Stability:** Stable

**Conditions to Avoid:** Not Applicable

**Hazardous Polymerization:** Not Applicable

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## SECTION 11, TOXICOLOGICAL INFORMATION

**Routes of Entry:** Absorbed through skin. Inhalation. Ingestion.

**Biological Limit for Lead:** 50 micrograms lead/100 grams whole blood.

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## SECTION 12, ECOLOGICAL INFORMATION

Precautions should be taken to prevent the release of lead into the environment. Lead may bioaccumulate to some extent.

---

## SECTION 13, DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** Material should be recycled if at all possible. Collection, transportation, and storage should be in accordance with federal, state and local laws.

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## SECTION 14, TRANSPORT INFORMATION

Lead metal is not a DOT regulated material.

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## SECTION 15, REGULATORY INFORMATION

### FEDERAL AND STATE REGULATIONS

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Lead California prop. 65: This product contains the following ingredients for which the State of California has found to cause reproductive harm (female) which would require a warning under the statute: Lead California prop. 65: This product contains the following ingredients for which the State of California has found to cause reproductive harm (male) which would require a warning under the statute: Lead California prop. 65 (no significant risk level): Lead: 0.0005 mg/day (value) California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: Lead California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Lead Connecticut hazardous material survey.: Lead Illinois toxic substances disclosure to employee act: Lead Illinois chemical safety act: Lead New York release reporting list: Lead Rhode Island RTK hazardous substances: Lead Pennsylvania RTK: Lead

### OTHER REGULATIONS

**OSHA:** Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

### OTHER CLASSIFICATIONS

**WHMIS (Canada):** CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

### DSCL (EEC):

R20/22- Harmful by inhalation and if swallowed. R33- Danger of cumulative effects. R61- May cause harm to the unborn child. R62- Possible risk of impaired fertility. S36/37- Wear suitable protective clothing and gloves. S44- If you feel unwell, seek medical advice (show the label when possible). S53- Avoid exposure - obtain special instructions before use.

### HMIS (U.S.A.):

**Health Hazard: 1**

**Fire Hazard: 0**

**Reactivity: 0**

**Personal Protection: E**

### National Fire Protection Association (U.S.A.):

**Health: 1**

**Flammability: 0**

**Reactivity: 0**

**Specific hazard:**

### Protective Equipment:

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Safety glasses.

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## SECTION 16, OTHER INFORMATION

**Created:** September 25, 2014

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Radiation Protection Products, Inc. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Radiation Protection Products, Inc. has been advised of the possibility of such damages.*



# Safety Data Sheet

**Material Name: Gasoline All Grades**

**SDS No. 9950**  
US GHS

**Synonyms:** Hess Conventional (Oxygenated and Non-oxygenated) Gasoline; Reformulated Gasoline (RFG); Reformulated Gasoline Blendstock for Oxygenate Blending (RBOB); Unleaded Motor or Automotive Gasoline

## \*\*\* Section 1 - Product and Company Identification \*\*\*

### Manufacturer Information

Hess Corporation  
1 Hess Plaza  
Woodbridge, NJ 07095-0961

Phone: 732-750-6000 Corporate EHS  
Emergency # 800-424-9300 CHEMTREC  
[www.hess.com](http://www.hess.com) (Environment, Health, Safety Internet Website)

## \*\*\* Section 2 - Hazards Identification \*\*\*

### GHS Classification:

Flammable Liquid - Category 2  
Skin Corrosion/Irritation - Category 2  
Germ Cell Mutagenicity - Category 1B  
Carcinogenicity - Category 1B  
Toxic to Reproduction - Category 1A  
Specific Target Organ Toxicity (Single Exposure) - Category 3 (respiratory irritation, narcosis)  
Specific Target Organ Toxicity (Repeat Exposure) - Category 1 (liver, kidneys, bladder, blood, bone marrow, nervous system)  
Aspiration Hazard - Category 1  
Hazardous to the Aquatic Environment – Acute Hazard - Category 3

### GHS LABEL ELEMENTS

#### Symbol(s)



#### Signal Word

DANGER

#### Hazard Statements

Highly flammable liquid and vapour.  
Causes skin irritation.  
May cause genetic defects.  
May cause cancer.  
May damage fertility or the unborn child.  
May cause respiratory irritation.  
May cause drowsiness or dizziness.  
Causes damage to organs (liver, kidneys, bladder, blood, bone marrow, nervous system) through prolonged or repeated exposure.  
May be fatal if swallowed and enters airways.  
Harmful to aquatic life.



# Safety Data Sheet

Material Name: Gasoline All Grades

SDS No. 9950

## Precautionary Statements

### Prevention

Keep away from heat/sparks/open flames/hot surfaces. No smoking  
Keep container tightly closed.  
Ground/bond container and receiving equipment.  
Use explosion-proof electrical/ventilating/lighting/equipment.  
Use only non-sparking tools.  
Take precautionary measures against static discharge.  
Wear protective gloves/protective clothing/eye protection/face protection.  
Wash hands and forearms thoroughly after handling.  
Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Do not breathe mist/vapours/spray.  
Use only outdoors or in well-ventilated area.  
Do not eat, drink or smoke when using this product.  
Avoid release to the environment.

### Response

In case of fire: Use water spray, fog, dry chemical fire extinguishers or hand held fire extinguisher.  
IF ON SKIN (or hair): Wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing and wash before reuse. If skin irritation occurs, get medical advice/attention.  
IF exposed or concerned: Get medical advice/attention.  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.  
Get medical advice/attention if you feel unwell.  
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do not induce vomiting.

### Storage

Store in a well-ventilated place.  
Keep cool. Keep container tightly closed.  
Store locked up.

### Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

## \* \* \* Section 3 - Composition / Information on Ingredients \* \* \*

CAS #	Component	Percent
86290-81-5	Gasoline, motor fuel	100
108-88-3	Toluene	1-25
106-97-8	Butane	<10
1330-20-7	Xylenes (o-, m-, p- isomers)	1-15
95-63-6	Benzene, 1,2,4-trimethyl-	<6
64-17-5	Ethyl alcohol	0-10
100-41-4	Ethylbenzene	<3
71-43-2	Benzene	0.1-4.9

# Safety Data Sheet

**Material Name: Gasoline All Grades**

**SDS No. 9950**

110-54-3	Hexane	0.5-4
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A complex blend of petroleum-derived normal and branched-chain alkane, cycloalkane, alkene, and aromatic hydrocarbons. May contain antioxidant and multifunctional additives. Non-oxygenated Conventional Gasoline and RBOB do not have oxygenates (Ethanol). Oxygenated Conventional and Reformulated Gasoline will have oxygenates for octane enhancement or as legally required.

## \* \* \* Section 4 - First Aid Measures \* \* \*

### **First Aid: Eyes**

In case of contact with eyes, immediately flush with clean, low-pressure water for at least 15 min. Hold eyelids open to ensure adequate flushing. Seek medical attention.

### **First Aid: Skin**

Remove contaminated clothing. Wash contaminated areas thoroughly with soap and water or with waterless hand cleanser. Obtain medical attention if irritation or redness develops.

### **First Aid: Ingestion**

DO NOT INDUCE VOMITING. Do not give liquids. Obtain immediate medical attention. If spontaneous vomiting occurs, lean victim forward to reduce the risk of aspiration. Monitor for breathing difficulties. Small amounts of material which enter the mouth should be rinsed out until the taste is dissipated.

### **First Aid: Inhalation**

Remove person to fresh air. If person is not breathing, provide artificial respiration. If necessary, provide additional oxygen once breathing is restored if trained to do so. Seek medical attention immediately.

## \* \* \* Section 5 - Fire Fighting Measures \* \* \*

### **General Fire Hazards**

See Section 9 for Flammability Properties.

Vapors may be ignited rapidly when exposed to heat, spark, open flame or other source of ignition. Flowing product may be ignited by self-generated static electricity. When mixed with air and exposed to an ignition source, flammable vapors can burn in the open or explode in confined spaces. Being heavier than air, vapors may travel long distances to an ignition source and flash back. Runoff to sewer may cause fire or explosion hazard.

### **Hazardous Combustion Products**

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke). Contact with nitric and sulfuric acids will form nitrocresols that can decompose violently.

### **Extinguishing Media**

SMALL FIRES: Any extinguisher suitable for Class B fires, dry chemical, CO<sub>2</sub>, water spray, fire fighting foam, or gaseous extinguishing agent.

LARGE FIRES: Water spray, fog or fire fighting foam. Water may be ineffective for fighting the fire, but may be used to cool fire-exposed containers.

Firefighting foam suitable for polar solvents is recommended for fuel with greater than 10% oxygenate concentration.

### **Unsuitable Extinguishing Media**

None

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Material Name: Gasoline All Grades

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## Fire Fighting Equipment/Instructions

Small fires in the incipient (beginning) stage may typically be extinguished using handheld portable fire extinguishers and other fire fighting equipment. Firefighting activities that may result in potential exposure to high heat, smoke or toxic by-products of combustion should require NIOSH/MSHA- approved pressure-demand self-contained breathing apparatus with full facepiece and full protective clothing. Isolate area around container involved in fire. Cool tanks, shells, and containers exposed to fire and excessive heat with water. For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to further minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish the fire, often including the need for properly applied fire fighting foam.

## \*\*\* Section 6 - Accidental Release Measures \*\*\*

### Recovery and Neutralization

Carefully contain and stop the source of the spill, if safe to do so.

### Materials and Methods for Clean-Up

Take up with sand or other oil absorbing materials. Carefully shovel, scoop or sweep up into a waste container for reclamation or disposal. Caution, flammable vapors may accumulate in closed containers.

### Emergency Measures

Evacuate nonessential personnel and remove or secure all ignition sources. Consider wind direction; stay upwind and uphill, if possible. Evaluate the direction of product travel, diking, sewers, etc. to confirm spill areas. Spills may infiltrate subsurface soil and groundwater; professional assistance may be necessary to determine the extent of subsurface impact.

### Personal Precautions and Protective Equipment

Response and clean-up crews must be properly trained and must utilize proper protective equipment (see Section 8).

### Environmental Precautions

Protect bodies of water by diking, absorbents, or absorbent boom, if possible. Do not flush down sewer or drainage systems, unless system is designed and permitted to handle such material. The use of fire fighting foam may be useful in certain situations to reduce vapors. The proper use of water spray may effectively disperse product vapors or the liquid itself, preventing contact with ignition sources or areas/equipment that require protection.

### Prevention of Secondary Hazards

None

## \*\*\* Section 7 - Handling and Storage \*\*\*

### Handling Procedures

USE ONLY AS A MOTOR FUEL.  
DO NOT SIPHON BY MOUTH

Handle as a flammable liquid. Keep away from heat, sparks, and open flame! Electrical equipment should be approved for classified area. Bond and ground containers during product transfer to reduce the possibility of static-initiated fire or explosion.

# Safety Data Sheet

**Material Name: Gasoline All Grades**

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Special slow load procedures for "switch loading" must be followed to avoid the static ignition hazard that can exist when higher flash point material (such as fuel oil) is loaded into tanks previously containing low flash point products (such as this product) - see API Publication 2003, "Protection Against Ignitions Arising Out Of Static, Lightning and Stray Currents."

## Storage Procedures

Keep away from flame, sparks, excessive temperatures and open flame. Use approved vented containers. Keep containers closed and clearly labeled. Empty product containers or vessels may contain explosive vapors. Do not pressurize, cut, heat, weld or expose such containers to sources of ignition.

Store in a well-ventilated area. This storage area should comply with NFPA 30 "Flammable and Combustible Liquid Code". Avoid storage near incompatible materials. The cleaning of tanks previously containing this product should follow API Recommended Practice (RP) 2013 "Cleaning Mobile Tanks In Flammable and Combustible Liquid Service" and API RP 2015 "Cleaning Petroleum Storage Tanks".

## Incompatibilities

Keep away from strong oxidizers.

## \* \* \* Section 8 - Exposure Controls / Personal Protection \* \* \*

### Component Exposure Limits

#### Gasoline, motor fuel (86290-81-5)

ACGIH: 300 ppm TWA  
500 ppm STEL

#### Toluene (108-88-3)

ACGIH: 20 ppm TWA  
OSHA: 200 ppm TWA; 375 mg/m<sup>3</sup> TWA  
150 ppm STEL; 560 mg/m<sup>3</sup> STEL  
NIOSH: 100 ppm TWA; 375 mg/m<sup>3</sup> TWA  
150 ppm STEL; 560 mg/m<sup>3</sup> STEL

#### Butane (106-97-8)

ACGIH: 1000 ppm TWA (listed under Aliphatic hydrocarbon gases: Alkane C1-4)  
OSHA: 800 ppm TWA; 1900 mg/m<sup>3</sup> TWA  
NIOSH: 800 ppm TWA; 1900 mg/m<sup>3</sup> TWA

#### Xylenes (o-, m-, p- isomers) (1330-20-7)

ACGIH: 100 ppm TWA  
150 ppm STEL  
OSHA: 100 ppm TWA; 435 mg/m<sup>3</sup> TWA  
150 ppm STEL; 655 mg/m<sup>3</sup> STEL

#### Benzene, 1,2,4-trimethyl- (95-63-6)

NIOSH: 25 ppm TWA; 125 mg/m<sup>3</sup> TWA

#### Ethyl alcohol (64-17-5)

ACGIH: 1000 ppm STEL  
OSHA: 1000 ppm TWA; 1900 mg/m<sup>3</sup> TWA  
NIOSH: 1000 ppm TWA; 1900 mg/m<sup>3</sup> TWA

# Safety Data Sheet

Material Name: Gasoline All Grades

SDS No. 9950

## Ethylbenzene (100-41-4)

ACGIH: 20 ppm TWA  
OSHA: 100 ppm TWA; 435 mg/m<sup>3</sup> TWA  
125 ppm STEL; 545 mg/m<sup>3</sup> STEL  
NIOSH: 100 ppm TWA; 435 mg/m<sup>3</sup> TWA  
125 ppm STEL; 545 mg/m<sup>3</sup> STEL

## Benzene (71-43-2)

ACGIH: 0.5 ppm TWA  
2.5 ppm STEL  
Skin - potential significant contribution to overall exposure by the cutaneous route  
OSHA: 5 ppm STEL (Cancer hazard, Flammable, See 29 CFR 1910.1028, 15 min); 0.5 ppm Action Level; 1 ppm TWA  
NIOSH: 0.1 ppm TWA  
1 ppm STEL

## Hexane (110-54-3)

ACGIH: 50 ppm TWA  
Skin - potential significant contribution to overall exposure by the cutaneous route  
OSHA: 500 ppm TWA; 1800 mg/m<sup>3</sup> TWA  
NIOSH: 50 ppm TWA; 180 mg/m<sup>3</sup> TWA

## Engineering Measures

Use adequate ventilation to keep vapor concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces.

## Personal Protective Equipment: Respiratory

A NIOSH/MSHA-approved air-purifying respirator with organic vapor cartridges or canister may be permissible under certain circumstances where airborne concentrations are or may be expected to exceed exposure limits or for odor or irritation. Protection provided by air-purifying respirators is limited.

Use a positive pressure, air-supplied respirator if there is a potential for uncontrolled release, exposure levels are not known, in oxygen-deficient atmospheres, or any other circumstance where an air-purifying respirator may not provide adequate protection.

## Personal Protective Equipment: Hands

Gloves constructed of nitrile, neoprene, or PVC are recommended.

## PERSONAL PROTECTIVE EQUIPMENT

### Personal Protective Equipment: Eyes

Safety glasses or goggles are recommended where there is a possibility of splashing or spraying.

### Personal Protective Equipment: Skin and Body

Chemical protective clothing such as of E.I. DuPont TyChem®, Saranex® or equivalent recommended based on degree of exposure. Note: The resistance of specific material may vary from product to product as well as with degree of exposure. Consult manufacturer specifications for further information.

# Safety Data Sheet

Material Name: Gasoline All Grades

SDS No. 9950

## \*\*\* Section 9 - Physical & Chemical Properties \*\*\*

<b>Appearance:</b>	Translucent, straw-colored or light yellow	<b>Odor:</b>	Strong, characteristic aromatic hydrocarbon odor. Sweet-ether like
<b>Physical State:</b>	Liquid	<b>pH:</b>	ND
<b>Vapor Pressure:</b>	6.4 - 15 RVP @ 100 °F (38 °C) (275-475 mm Hg @ 68 °F (20 °C)	<b>Vapor Density:</b>	AP 3-4
<b>Boiling Point:</b>	85-437 °F (39-200 °C)	<b>Melting Point:</b>	ND
<b>Solubility (H2O):</b>	Negligible to Slight	<b>Specific Gravity:</b>	0.70-0.78
<b>Evaporation Rate:</b>	10-11	<b>VOC:</b>	ND
<b>Percent Volatile:</b>	100%	<b>Octanol/H2O Coeff.:</b>	ND
<b>Flash Point:</b>	-45 °F (-43 °C)	<b>Flash Point Method:</b>	PMCC
<b>Upper Flammability Limit (UFL):</b>	7.6%	<b>Lower Flammability Limit (LFL):</b>	1.4%
<b>Burning Rate:</b>	ND	<b>Auto Ignition:</b>	>530°F (>280°C)

## \*\*\* Section 10 - Chemical Stability & Reactivity Information \*\*\*

### Chemical Stability

This is a stable material.

### Hazardous Reaction Potential

Will not occur.

### Conditions to Avoid

Avoid high temperatures, open flames, sparks, welding, smoking and other ignition sources.

### Incompatible Products

Keep away from strong oxidizers.

### Hazardous Decomposition Products

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke). Contact with nitric and sulfuric acids will form nitrocresols that can decompose violently.

## \*\*\* Section 11 - Toxicological Information \*\*\*

### Acute Toxicity

#### A: General Product Information

Harmful if swallowed.

#### B: Component Analysis - LD50/LC50

##### Gasoline, motor fuel (86290-81-5)

Inhalation LC50 Rat >5.2 mg/L 4 h; Oral LD50 Rat 14000 mg/kg; Dermal LD50 Rabbit >2000 mg/kg

##### Toluene (108-88-3)

Inhalation LC50 Rat 12.5 mg/L 4 h; Inhalation LC50 Rat >26700 ppm 1 h; Oral LD50 Rat 636 mg/kg; Dermal LD50 Rabbit 8390 mg/kg; Dermal LD50 Rat 12124 mg/kg

##### Butane (106-97-8)

Inhalation LC50 Rat 658 mg/L 4 h

# Safety Data Sheet

**Material Name: Gasoline All Grades**

**SDS No. 9950**

**Xylenes (o-, m-, p- isomers) (1330-20-7)**

Inhalation LC50 Rat 5000 ppm 4 h; Inhalation LC50 Rat 47635 mg/L 4 h; Oral LD50 Rat 4300 mg/kg; Dermal LD50 Rabbit >1700 mg/kg

**Benzene, 1,2,4-trimethyl- (95-63-6)**

Inhalation LC50 Rat 18 g/m<sup>3</sup> 4 h; Oral LD50 Rat 3400 mg/kg; Dermal LD50 Rabbit >3160 mg/kg

**Ethyl alcohol (64-17-5)**

Oral LD50 Rat 7060 mg/kg; Inhalation LC50 Rat 124.7 mg/L 4 h

**Ethylbenzene (100-41-4)**

Inhalation LC50 Rat 17.2 mg/L 4 h; Oral LD50 Rat 3500 mg/kg; Dermal LD50 Rabbit 15354 mg/kg

**Benzene (71-43-2)**

Inhalation LC50 Rat 13050-14380 ppm 4 h; Oral LD50 Rat 1800 mg/kg

**Hexane (110-54-3)**

Inhalation LC50 Rat 48000 ppm 4 h; Oral LD50 Rat 25 g/kg; Dermal LD50 Rabbit 3000 mg/kg

## Potential Health Effects: Skin Corrosion Property/Stimulativeness

Practically non-toxic if absorbed following acute (single) exposure. May cause skin irritation with prolonged or repeated contact. Liquid may be absorbed through the skin in toxic amounts if large areas of skin are repeatedly exposed.

## Potential Health Effects: Eye Critical Damage/ Stimulativeness

Moderate irritant. Contact with liquid or vapor may cause irritation.

## Potential Health Effects: Ingestion

Ingestion may cause gastrointestinal disturbances, including irritation, nausea, vomiting and diarrhea, and central nervous system (brain) effects similar to alcohol intoxication. In severe cases, tremors, convulsions, loss of consciousness, coma, respiratory arrest, and death may occur.

## Potential Health Effects: Inhalation

Excessive exposure may cause irritations to the nose, throat, lungs and respiratory tract. Central nervous system (brain) effects may include headache, dizziness, loss of balance and coordination, unconsciousness, coma, respiratory failure, and death.

WARNING: the burning of any hydrocarbon as a fuel in an area without adequate ventilation may result in hazardous levels of combustion products, including carbon monoxide, and inadequate oxygen levels, which may cause unconsciousness, suffocation, and death.

## Respiratory Organs Sensitization/Skin Sensitization

This product is not reported to have any skin sensitization effects.

## Generative Cell Mutagenicity

This product may cause genetic defects.

## Carcinogenicity

### A: General Product Information

May cause cancer.

# Safety Data Sheet

**Material Name: Gasoline All Grades**

**SDS No. 9950**

IARC has determined that gasoline and gasoline exhaust are possibly carcinogenic in humans. Inhalation exposure to completely vaporized unleaded gasoline caused kidney cancers in male rats and liver tumors in female mice. The U.S. EPA has determined that the male kidney tumors are species-specific and are irrelevant for human health risk assessment. The significance of the tumors seen in female mice is not known. Exposure to light hydrocarbons in the same boiling range as this product has been associated in animal studies with effects to the central and peripheral nervous systems, liver, and kidneys. The significance of these animal models to predict similar human response to gasoline is uncertain.

This product contains benzene. Human health studies indicate that prolonged and/or repeated overexposure to benzene may cause damage to the blood-forming system (particularly bone marrow), and serious blood disorders such as aplastic anemia and leukemia. Benzene is listed as a human carcinogen by the NTP, IARC, OSHA and ACGIH.

## B: Component Carcinogenicity

### **Gasoline, motor fuel (86290-81-5)**

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

### **Toluene (108-88-3)**

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Monograph 71 [1999]; Monograph 47 [1989] (Group 3 (not classifiable))

### **Xylenes (o-, m-, p- isomers) (1330-20-7)**

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Monograph 71 [1999]; Monograph 47 [1989] (Group 3 (not classifiable))

### **Ethyl alcohol (64-17-5)**

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

IARC: Monograph 100E [in preparation] (in alcoholic beverages); Monograph 96 [2010] (in alcoholic beverages) (Group 1 (carcinogenic to humans))

### **Ethylbenzene (100-41-4)**

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

IARC: Monograph 77 [2000] (Group 2B (possibly carcinogenic to humans))

### **Benzene (71-43-2)**

ACGIH: A1 - Confirmed Human Carcinogen

OSHA: 5 ppm STEL (Cancer hazard, Flammable, See 29 CFR 1910.1028, 15 min); 0.5 ppm Action Level; 1 ppm TWA

NIOSH: potential occupational carcinogen

NTP: Known Human Carcinogen (Select Carcinogen)

IARC: Monograph 100F [in preparation]; Supplement 7 [1987]; Monograph 29 [1982] (Group 1 (carcinogenic to humans))

## Reproductive Toxicity

This product is suspected of damaging fertility or the unborn child.

## Specified Target Organ General Toxicity: Single Exposure

This product may cause drowsiness or dizziness.



# Safety Data Sheet

Material Name: Gasoline All Grades

SDS No. 9950

## Specified Target Organ General Toxicity: Repeated Exposure

This product causes damage to organs through prolonged or repeated exposure.

## Aspiration Respiratory Organs Hazard

The major health threat of ingestion occurs from the danger of aspiration (breathing) of liquid drops into the lungs, particularly from vomiting. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure and even death.

## \* \* \* Section 12 - Ecological Information \* \* \*

### Ecotoxicity

#### A: General Product Information

Very toxic to aquatic life with long lasting effects. Keep out of sewers, drainage areas and waterways. Report spills and releases, as applicable, under Federal and State regulations.

#### B: Component Analysis - Ecotoxicity - Aquatic Toxicity

##### Gasoline, motor fuel (86290-81-5)

###### Test & Species

###### Conditions

96 Hr LC50 Alburnus alburnus	119 mg/L [static]
96 Hr LC50 Cyprinodon variegatus	82 mg/L [static]
72 Hr EC50 Pseudokirchneriella subcapitata	56 mg/L
24 Hr EC50 Daphnia magna	170 mg/L

##### Toluene (108-88-3)

###### Test & Species

###### Conditions

96 Hr LC50 Pimephales promelas	15.22-19.05 mg/L [flow-through]	1 day old
96 Hr LC50 Pimephales promelas	12.6 mg/L [static]	
96 Hr LC50 Oncorhynchus mykiss	5.89-7.81 mg/L [flow-through]	
96 Hr LC50 Oncorhynchus mykiss	14.1-17.16 mg/L [static]	
96 Hr LC50 Oncorhynchus mykiss	5.8 mg/L [semi-static]	
96 Hr LC50 Lepomis macrochirus	11.0-15.0 mg/L [static]	
96 Hr LC50 Oryzias latipes	54 mg/L [static]	
96 Hr LC50 Poecilia reticulata	28.2 mg/L [semi-static]	
96 Hr LC50 Poecilia reticulata	50.87-70.34 mg/L [static]	
96 Hr EC50 Pseudokirchneriella subcapitata	>433 mg/L	
72 Hr EC50 Pseudokirchneriella subcapitata	12.5 mg/L [static]	
48 Hr EC50 Daphnia magna	5.46 - 9.83 mg/L [Static]	
48 Hr EC50 Daphnia magna	11.5 mg/L	

##### Xylenes (o-, m-, p- isomers) (1330-20-7)

###### Test & Species

###### Conditions

96 Hr LC50 Pimephales promelas	13.4 mg/L [flow-through]
--------------------------------	--------------------------

# Safety Data Sheet

**Material Name: Gasoline All Grades**

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96 Hr LC50 Oncorhynchus mykiss	2.661-4.093 mg/L [static]
96 Hr LC50 Oncorhynchus mykiss	13.5-17.3 mg/L
96 Hr LC50 Lepomis macrochirus	13.1-16.5 mg/L [flow-through]
96 Hr LC50 Lepomis macrochirus	19 mg/L
96 Hr LC50 Lepomis macrochirus	7.711-9.591 mg/L [static]
96 Hr LC50 Pimephales promelas	23.53-29.97 mg/L [static]
96 Hr LC50 Cyprinus carpio	780 mg/L [semi- static]
96 Hr LC50 Cyprinus carpio	>780 mg/L
96 Hr LC50 Poecilia reticulata	30.26-40.75 mg/L [static]
48 Hr EC50 water flea	3.82 mg/L
48 Hr LC50 Gammarus lacustris	0.6 mg/L

## **Benzene, 1,2,4-trimethyl- (95-63-6)**

### **Test & Species**

### **Conditions**

96 Hr LC50 Pimephales promelas	7.19-8.28 mg/L [flow-through]
48 Hr EC50 Daphnia magna	6.14 mg/L

## **Ethyl alcohol (64-17-5)**

### **Test & Species**

### **Conditions**

96 Hr LC50 Oncorhynchus mykiss	12.0 - 16.0 mL/L [static]
96 Hr LC50 Pimephales promelas	>100 mg/L [static]
96 Hr LC50 Pimephales promelas	13400 - 15100 mg/L [flow-through]
48 Hr LC50 Daphnia magna	9268 - 14221 mg/L
24 Hr EC50 Daphnia magna	10800 mg/L
48 Hr EC50 Daphnia magna	2 mg/L [Static]

## **Ethylbenzene (100-41-4)**

### **Test & Species**

### **Conditions**

96 Hr LC50 Oncorhynchus mykiss	11.0-18.0 mg/L [static]
96 Hr LC50 Oncorhynchus mykiss	4.2 mg/L [semi- static]
96 Hr LC50 Pimephales promelas	7.55-11 mg/L [flow- through]
96 Hr LC50 Lepomis macrochirus	32 mg/L [static]
96 Hr LC50 Pimephales promelas	9.1-15.6 mg/L [static]
96 Hr LC50 Poecilia reticulata	9.6 mg/L [static]
72 Hr EC50 Pseudokirchneriella subcapitata	4.6 mg/L
96 Hr EC50 Pseudokirchneriella subcapitata	>438 mg/L
72 Hr EC50 Pseudokirchneriella subcapitata	2.6 - 11.3 mg/L [static]

# Safety Data Sheet

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96 Hr EC50 Pseudokirchneriella subcapitata	1.7 - 7.6 mg/L [static]
48 Hr EC50 Daphnia magna	1.8 - 2.4 mg/L

## **Benzene (71-43-2)**

### **Test & Species**

### **Conditions**

96 Hr LC50 Pimephales promelas	10.7-14.7 mg/L [flow-through]
96 Hr LC50 Oncorhynchus mykiss	5.3 mg/L [flow-through]
96 Hr LC50 Lepomis macrochirus	22.49 mg/L [static]
96 Hr LC50 Poecilia reticulata	28.6 mg/L [static]
96 Hr LC50 Pimephales promelas	22330-41160 µg/L [static]
96 Hr LC50 Lepomis macrochirus	70000-142000 µg/L [static]
72 Hr EC50 Pseudokirchneriella subcapitata	29 mg/L
48 Hr EC50 Daphnia magna	8.76 - 15.6 mg/L [Static]
48 Hr EC50 Daphnia magna	10 mg/L

## **Hexane (110-54-3)**

### **Test & Species**

### **Conditions**

96 Hr LC50 Pimephales promelas	2.1-2.98 mg/L [flow-through]
24 Hr EC50 Daphnia magna	>1000 mg/L

## **Persistence/Degradability**

No information available.

## **Bioaccumulation**

No information available.

## **Mobility in Soil**

No information available.

## **\* \* \* Section 13 - Disposal Considerations \* \* \***

### **Waste Disposal Instructions**

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

### **Disposal of Contaminated Containers or Packaging**

Dispose of contents/container in accordance with local/regional/national/international regulations.

# Safety Data Sheet

Material Name: Gasoline All Grades

SDS No. 9950

## \*\*\* Section 14 - Transportation Information \*\*\*

### Component Marine Pollutants

This material contains one or more of the following chemicals required by US DOT to be identified as marine pollutants.

Component	CAS #	
Gasoline, motor fuel	86290-81-5	DOT regulated marine pollutant

### DOT Information

Shipping Name: Gasoline

UN #: 1203 Hazard Class: 3 Packing Group: II

Placard:



## \*\*\* Section 15 - Regulatory Information \*\*\*

### Regulatory Information

#### A: Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

##### Toluene (108-88-3)

SARA 313: 1.0 % de minimis concentration  
CERCLA: 1000 lb final RQ; 454 kg final RQ

##### Xylenes (o-, m-, p- isomers) (1330-20-7)

SARA 313: 1.0 % de minimis concentration  
CERCLA: 100 lb final RQ; 45.4 kg final RQ

##### Benzene, 1,2,4-trimethyl- (95-63-6)

SARA 313: 1.0 % de minimis concentration

##### Ethylbenzene (100-41-4)

SARA 313: 0.1 % de minimis concentration  
CERCLA: 1000 lb final RQ; 454 kg final RQ

##### Benzene (71-43-2)

SARA 313: 0.1 % de minimis concentration  
CERCLA: 10 lb final RQ (received an adjusted RQ of 10 lbs based on potential carcinogenicity in an August 14, 1989 final rule); 4.54 kg final RQ (received an adjusted RQ of 10 lbs based on potential carcinogenicity in an August 14, 1989 final rule)

# Safety Data Sheet

Material Name: Gasoline All Grades

SDS No. 9950

## Hexane (110-54-3)

SARA 313: 1.0 % de minimis concentration

CERCLA: 5000 lb final RQ; 2270 kg final RQ

## SARA Section 311/312 – Hazard Classes

Acute Health

X

Chronic Health

X

Fire

X

Sudden Release of Pressure

--

Reactive

--

## Component Marine Pollutants

This material contains one or more of the following chemicals required by US DOT to be identified as marine pollutants.

Component	CAS #	
Gasoline, motor fuel	86290-81-5	DOT regulated marine pollutant

## State Regulations

### Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Gasoline, motor fuel	86290-81-5	No	No	No	No	Yes	No
Toluene	108-88-3	Yes	Yes	Yes	Yes	Yes	No
Butane	106-97-8	Yes	Yes	Yes	Yes	Yes	No
Xylenes (o-, m-, p- isomers)	1330-20-7	Yes	Yes	Yes	Yes	Yes	No
Benzene, 1,2,4-trimethyl-	95-63-6	No	Yes	Yes	Yes	Yes	No
Ethyl alcohol	64-17-5	Yes	Yes	Yes	Yes	Yes	No
Ethylbenzene	100-41-4	Yes	Yes	Yes	Yes	Yes	No
Benzene	71-43-2	Yes	Yes	Yes	Yes	Yes	No
Hexane	110-54-3	No	Yes	Yes	Yes	Yes	No

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer.

WARNING! This product contains a chemical known to the state of California to cause reproductive/developmental effects.

# Safety Data Sheet

Material Name: Gasoline All Grades

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## Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	Minimum Concentration
Toluene	108-88-3	1 %
Butane	106-97-8	1 %
Benzene, 1,2,4-trimethyl-	95-63-6	0.1 %
Ethyl alcohol	64-17-5	0.1 %
Ethylbenzene	100-41-4	0.1 %
Benzene	71-43-2	0.1 %
Hexane	110-54-3	1 %

## Additional Regulatory Information

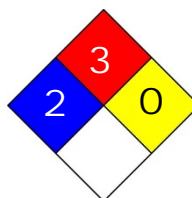
## Component Analysis - Inventory

Component	CAS #	TSCA	CAN	EEC
Gasoline, motor fuel	86290-81-5	No	DSL	EINECS
Toluene	108-88-3	Yes	DSL	EINECS
Butane	106-97-8	Yes	DSL	EINECS
Xylenes (o-, m-, p- isomers)	1330-20-7	Yes	DSL	EINECS
Benzene, 1,2,4-trimethyl-	95-63-6	Yes	DSL	EINECS
Ethyl alcohol	64-17-5	Yes	DSL	EINECS
Ethylbenzene	100-41-4	Yes	DSL	EINECS
Benzene	71-43-2	Yes	DSL	EINECS
Hexane	110-54-3	Yes	DSL	EINECS

## \*\*\* Section 16 - Other Information \*\*\*

**NFPA® Hazard Rating**

Health	2
Fire	3
Reactivity	0



**HMIS® Hazard Rating**

Health	2	Moderate
Fire	3	Serious
Physical	0	Minimal

\*Chronic

## Key/Legend

EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration., NJTSR = New Jersey Trade Secret Registry.

## Literature References

None

# Safety Data Sheet

**Material Name: Gasoline All Grades**

**SDS No. 9950**

## Other Information

Information presented herein has been compiled from sources considered to be dependable, and is accurate and reliable to the best of our knowledge and belief, but is not guaranteed to be so. Since conditions of use are beyond our control, we make no warranties, expressed or implied, except those that may be contained in our written contract of sale or acknowledgment.

Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material, even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in their use of the material.

End of Sheet

# SAFETY DATA SHEET

**Airgas**

Propane

## Section 1. Identification

<b>GHS product identifier</b>	: Propane
<b>Chemical name</b>	: propane
<b>Other means of identification</b>	: Propyl hydride; n-Propane; Dimethyl methane; Bottled gas; propane in gaseous state; propane liquefied, n-Propane; Dimethylmethane; Freon 290; Liquefied petroleum gas; Lpg; Propyl hydride; R 290; C3H8; UN 1075; UN 1978; A-108; Hydrocarbon propellant.
<b>Product use</b>	: Synthetic/Analytical chemistry.
<b>Synonym</b>	: Propyl hydride; n-Propane; Dimethyl methane; Bottled gas; propane in gaseous state; propane liquefied, n-Propane; Dimethylmethane; Freon 290; Liquefied petroleum gas; Lpg; Propyl hydride; R 290; C3H8; UN 1075; UN 1978; A-108; Hydrocarbon propellant.
<b>SDS #</b>	: 001045
<b>Supplier's details</b>	: Airgas USA, LLC and its affiliates 259 North Radnor-Chester Road Suite 100 Radnor, PA 19087-5283 1-610-687-5253
<b>24-hour telephone</b>	: 1-866-734-3438

## Section 2. Hazards identification

<b>OSHA/HCS status</b>	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
<b>Classification of the substance or mixture</b>	: FLAMMABLE GASES - Category 1 GASES UNDER PRESSURE - Liquefied gas

### GHS label elements

#### **Hazard pictograms**



#### **Signal word**

: Danger

#### **Hazard statements**

: Extremely flammable gas.  
Contains gas under pressure; may explode if heated.  
May cause frostbite.  
May form explosive mixtures in Air.  
May displace oxygen and cause rapid suffocation.

### Precautionary statements

#### **General**

: Read and follow all Safety Data Sheets (SDS'S) before use. Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand. Close valve after each use and when empty. Use equipment rated for cylinder pressure. Do not open valve until connected to equipment prepared for use. Use a back flow preventative device in the piping. Use only equipment of compatible materials of construction. Always keep container in upright position. Approach suspected leak area with caution.

#### **Prevention**

: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

#### **Response**

: Leaking gas fire: Do not extinguish, unless leak can be stopped safely. Eliminate all ignition sources if safe to do so.

#### **Storage**

: Protect from sunlight when ambient temperature exceeds 52°C/125°F. Store in a well-ventilated place.



## Section 2. Hazards identification

- Disposal** : Not applicable.
- Hazards not otherwise classified** : In addition to any other important health or physical hazards, this product may displace oxygen and cause rapid suffocation.

## Section 3. Composition/information on ingredients

- Substance/mixture** : Substance
- Chemical name** : propane
- Other means of identification** : Propyl hydride; n-Propane; Dimethyl methane; Bottled gas; propane in gaseous state; propane liquefied, n-Propane; Dimethylmethane; Freon 290; Liquefied petroleum gas; Lpg; Propyl hydride; R 290; C3H8; UN 1075; UN 1978; A-108; Hydrocarbon propellant.

### CAS number/other identifiers

**CAS number** : 74-98-6

**Product code** : 001045

Ingredient name	%	CAS number
Propane	100	74-98-6

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. To avoid the risk of static discharges and gas ignition, soak contaminated clothing thoroughly with water before removing it. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : As this product is a gas, refer to the inhalation section.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Frostbite** : Try to warm up the frozen tissues and seek medical attention.
- Ingestion** : As this product is a gas, refer to the inhalation section.

#### Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : No specific data.

## Section 4. First aid measures

**Ingestion** : No specific data.

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** : Contains gas under pressure. Extremely flammable gas. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Contact supplier immediately for specialist advice. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. If involved in fire, shut off flow immediately if it can be done without risk. If this is impossible, withdraw from area and allow fire to burn. Fight fire from protected location or maximum possible distance. Eliminate all ignition sources if safe to do so.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : Accidental releases pose a serious fire or explosion hazard. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing gas. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : Ensure emergency procedures to deal with accidental gas releases are in place to avoid contamination of the environment. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

- Small spill** : Immediately contact emergency personnel. Stop leak if without risk. Use spark-proof tools and explosion-proof equipment.

## Section 6. Accidental release measures

- Large spill** : Immediately contact emergency personnel. Stop leak if without risk. Use spark-proof tools and explosion-proof equipment. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Contains gas under pressure. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not puncture or incinerate container. Use equipment rated for cylinder pressure. Close valve after each use and when empty. Protect cylinders from physical damage; do not drag, roll, slide, or drop. Use a suitable hand truck for cylinder movement.

- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in a segregated and approved area. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Eliminate all ignition sources. Keep container tightly closed and sealed until ready for use. Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over. Cylinder temperatures should not exceed 52 °C (125 °F).

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
Propane	<b>NIOSH REL (United States, 10/2013).</b> TWA: 1800 mg/m <sup>3</sup> 10 hours. TWA: 1000 ppm 10 hours. <b>OSHA PEL (United States, 2/2013).</b> TWA: 1800 mg/m <sup>3</sup> 8 hours. TWA: 1000 ppm 8 hours. <b>OSHA PEL 1989 (United States, 3/1989).</b> TWA: 1800 mg/m <sup>3</sup> 8 hours. TWA: 1000 ppm 8 hours.

- Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

## Section 8. Exposure controls/personal protection

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## Section 9. Physical and chemical properties

### Appearance

- Physical state** : Gas. [Liquefied compressed gas.]
- Color** : Colorless.
- Molecular weight** : 44.11 g/mole
- Molecular formula** : C<sub>3</sub>H<sub>8</sub>
- Boiling/condensation point** : -161.48°C (-258.7°F)
- Melting/freezing point** : -187.6°C (-305.7°F)
- Critical temperature** : 96.55°C (205.8°F)
- Odor** : Odorless.BUT MAY HAVE SKUNK ODOR ADDED.
- Odor threshold** : Not available.
- pH** : Not available.
- Flash point** : Closed cup: -104°C (-155.2°F)  
Open cup: -104°C (-155.2°F)
- Burning time** : Not applicable.
- Burning rate** : Not applicable.
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Extremely flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and oxidizing materials.
- Lower and upper explosive (flammable) limits** : Lower: 1.8%  
Upper: 8.4%
- Vapor pressure** : 109 (psig)
- Vapor density** : 1.6 (Air = 1)

## Section 9. Physical and chemical properties

<b>Specific Volume (ft<sup>3</sup>/lb)</b>	: 8.6206
<b>Gas Density (lb/ft<sup>3</sup>)</b>	: 0.116 (25°C / 77 to °F)
<b>Relative density</b>	: Not applicable.
<b>Solubility</b>	: Not available.
<b>Solubility in water</b>	: 0.0244 g/l
<b>Partition coefficient: n-octanol/water</b>	: 1.09
<b>Auto-ignition temperature</b>	: 287°C (548.6°F)
<b>Decomposition temperature</b>	: Not available.
<b>SADT</b>	: Not available.
<b>Viscosity</b>	: Not applicable.

## Section 10. Stability and reactivity

<b>Reactivity</b>	: No specific test data related to reactivity available for this product or its ingredients.
<b>Chemical stability</b>	: The product is stable.
<b>Possibility of hazardous reactions</b>	: Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to avoid</b>	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
<b>Incompatible materials</b>	: Oxidizers
<b>Hazardous decomposition products</b>	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
<b>Hazardous polymerization</b>	: Under normal conditions of storage and use, hazardous polymerization will not occur.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Not available.

**IDLH** : 2100 ppm

#### Irritation/Corrosion

Not available.

#### Sensitization

Not available.

#### Mutagenicity

Not available.

#### Carcinogenicity

Not available.

#### Reproductive toxicity

Not available.

#### Teratogenicity

Not available.

## Section 11. Toxicological information

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

**Information on the likely routes of exposure** : Not available.

### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : No known significant effects or critical hazards.  
**Ingestion** : As this product is a gas, refer to the inhalation section.

### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : No specific data.  
**Inhalation** : No specific data.  
**Skin contact** : No specific data.  
**Ingestion** : No specific data.

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

**Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

#### Long term exposure

**Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

**General** : No known significant effects or critical hazards.  
**Carcinogenicity** : No known significant effects or critical hazards.  
**Mutagenicity** : No known significant effects or critical hazards.  
**Teratogenicity** : No known significant effects or critical hazards.  
**Developmental effects** : No known significant effects or critical hazards.  
**Fertility effects** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Not available.

## Section 12. Ecological information

### Toxicity

Not available.

### Persistence and degradability

Not available.

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Propane	1.09	-	low

### Mobility in soil






**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Empty Airgas-owned pressure vessels should be returned to Airgas. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

## Section 14. Transport information

	DOT	TDG	Mexico	IMDG	IATA
<b>UN number</b>	UN1978	UN1978	UN1978	UN1978	UN1978
<b>UN proper shipping name</b>	PROPANE	PROPANE	PROPANE	PROPANE	PROPANE
<b>Transport hazard class(es)</b>	2.1 	2.1 	2.1 	2.1 	2.1 
<b>Packing group</b>	-	-	-	-	-
<b>Environment</b>	No.	No.	No.	No.	No.
<b>Additional information</b>	<b>Limited quantity</b> Yes.  <b>Packaging instruction</b> <b>Passenger aircraft</b> Quantity limitation: Forbidden.  <b>Cargo aircraft</b> Quantity limitation: 150 kg  <b>Special provisions</b> 19, T50	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.13-2.17 (Class 2).  <b>Explosive Limit and Limited Quantity Index</b> 0.125  <b>ERAP Index</b> 3000	-	-	<b>Passenger and Cargo Aircraft</b> Quantity limitation: 0 Forbidden <b>Cargo Aircraft Only</b> Quantity limitation: 150 kg



## Section 14. Transport information

		<u>Passenger Carrying Ship Index</u> 65  <u>Passenger Carrying Road or Rail Index</u> Forbidden  <u>Special provisions</u> 29, 42			
--	--	--	--	--	--

“Refer to CFR 49 (or authority having jurisdiction) to determine the information required for shipment of the product.”

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** : Not available.

## Section 15. Regulatory information

**U.S. Federal regulations** : **TSCA 8(a) CDR Exempt/Partial exemption:** Not determined  
**United States inventory (TSCA 8b):** This material is listed or exempted.  
**Clean Air Act (CAA) 112 regulated flammable substances:** propane

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Not listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

### SARA 302/304

#### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

### SARA 311/312

**Classification** : Fire hazard  
Sudden release of pressure

#### Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Propane	100	Yes.	Yes.	No.	No.	No.

### State regulations

**Massachusetts** : This material is listed.

**New York** : This material is not listed.



## Section 15. Regulatory information

**New Jersey** : This material is listed.

**Pennsylvania** : This material is listed.

### International regulations

#### International lists

#### National inventory

**Australia** : This material is listed or exempted.

**Canada** : This material is listed or exempted.

**China** : This material is listed or exempted.

**Europe** : This material is listed or exempted.

**Japan** : This material is listed or exempted.

**Malaysia** : This material is listed or exempted.

**New Zealand** : This material is listed or exempted.

**Philippines** : This material is listed or exempted.

**Republic of Korea** : This material is listed or exempted.

**Taiwan** : This material is listed or exempted.

### Canada

**WHMIS (Canada)** : Class A: Compressed gas.  
Class B-1: Flammable gas.  
**CEPA Toxic substances**: This material is not listed.  
**Canadian ARET**: This material is not listed.  
**Canadian NPRI**: This material is listed.  
**Alberta Designated Substances**: This material is not listed.  
**Ontario Designated Substances**: This material is not listed.  
**Quebec Designated Substances**: This material is not listed.

## Section 16. Other information

**Canada Label requirements** : Class A: Compressed gas.  
Class B-1: Flammable gas.

### Hazardous Material Information System (U.S.A.)

Health	*	1
Flammability		4
Physical hazards		2

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

### National Fire Protection Association (U.S.A.)



Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

## Section 16. Other information

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

### Procedure used to derive the classification

Classification	Justification
Flam. Gas 1, H220 Press. Gas Liq. Gas, H280	Expert judgment Expert judgment

### History

**Date of printing** : 10/20/2015  
**Date of issue/Date of revision** : 10/20/2015  
**Date of previous issue** : No previous validation  
**Version** : 0.01

**Key to abbreviations** : ATE = Acute Toxicity Estimate  
 BCF = Bioconcentration Factor  
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
 IATA = International Air Transport Association  
 IBC = Intermediate Bulk Container  
 IMDG = International Maritime Dangerous Goods  
 LogPow = logarithm of the octanol/water partition coefficient  
 MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
 UN = United Nations

**References** : Not available.

Indicates information that has changed from previously issued version.

**Other special considerations** : The information below is given to call attention to the issue of "Naturally occurring radioactive materials". Although Radon-222 levels in the product represented by this MSDS do not present any direct Radon exposure hazard, customers should be aware of the potential for Radon daughter build up within their processing systems, whatever the source of their product streams. Radon-222 is a naturally occurring radioactive gas which can be a contaminant in natural gas. During subsequent processing, Radon tends to be concentrated in Liquefied Petroleum Gas streams and in product streams having a similar boiling point range. Industry experience has shown that this product may contain small amounts of Radon-222 and its radioactive decay products, called Radon "daughters". The actual concentration of Radon-222 and radioactive daughters in the delivered product is dependent on the geographical source of the natural gas and storage time prior to delivery. Process equipment (i.e. lines, filters, pumps and reaction units) may accumulate significant levels of radioactive daughters and show a gamma radiation reading during operation. A potential external radiation hazard exists at or near any pipe valve or vessel containing a Radon enriched stream, or containing internal deposits of radioactive material due to the transmission of gamma radiation through its wall. Field studies reported in the literature have not shown any conditions that subject workers to cumulative exposures in excess of general population limits. Equipment emitting gamma radiation should be presumed to be internally contaminated with alpha emitting decay products which may be a hazard if inhaled or ingested. Protective equipment such as coveralls, gloves, and respirator (NIOSH/MHSA approved for high efficiency particulates and radionuclides, or supplied air) should be worn by personnel entering a vessel or working on contaminated process equipment to prevent skin contamination, ingestion, or inhalation of any residues containing alpha radiation. Airborne contamination may be minimized by handling scale and/or contaminated materials in a wet state.

### Notice to reader

## Section 16. Other information

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.



## SAFETY DATA SHEET WD40 AEROSOL

According to Regulation (EC) No 1907/2006

### 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME                      WD40 AEROSOL

APPLICATION                      Anti-squeak. Moisture repellant. Releasing agent

SUPPLIER                            WD40 Company Limited  
PO Box 440  
Kiln Farm  
Milton Keynes  
MK11 3LF  
Tel: 01908 555400  
Fax: 01908 266900  
info@wd40.co.uk

EMERGENCY TELEPHONE        00 44 1908 555 400 (08.00 - 16.30)

### 2 HAZARDS IDENTIFICATION

Flammable. Repeated exposure may cause skin dryness or cracking.

CLASSIFICATION                      R10, R66.

#### ENVIRONMENT

The product is not expected to be hazardous to the environment.

#### PHYSICAL AND CHEMICAL HAZARDS

Aerosol containers can explode when heated, due to excessive pressure build-up. When sprayed on a naked flame or any incandescent material the aerosol vapours can be ignited.

#### HUMAN HEALTH

See section 11 for additional information on health hazards. This substance has no evidence of carcinogenic properties.

### 3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification
CARBON DIOXIDE	204-696-9	124-38-9	1-5%	-
PETROLEUM DISTILLATE	265-150-3	64742-48-9	60-80%	Xn;R65. R10,R66.

The Full Text for all R-Phrases are Displayed in Section 16

### 4 FIRST-AID MEASURES

#### INHALATION

Move the exposed person to fresh air at once. Keep the affected person warm and at rest. Get prompt medical attention.

#### INGESTION

DO NOT INDUCE VOMITING! NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Immediately rinse mouth and drink plenty of water (200-300 ml). Get medical attention.

#### SKIN CONTACT

Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.

#### EYE CONTACT

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

### 5 FIRE-FIGHTING MEASURES

#### EXTINGUISHING MEDIA

Use: Foam. Water spray, fog or mist. Dry chemicals, sand, dolomite etc.

#### SPECIAL FIRE FIGHTING PROCEDURES

Containers close to fire should be removed or cooled with water. Avoid water in straight hose stream; will scatter and spread fire.

**WD40 AEROSOL****UNUSUAL FIRE & EXPLOSION HAZARDS**

Aerosol cans may explode in a fire.

**SPECIFIC HAZARDS**

Fire or high temperatures create: Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

**PROTECTIVE MEASURES IN FIRE**

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

**6 ACCIDENTAL RELEASE MEASURES****PERSONAL PRECAUTIONS**

Wear protective clothing as described in Section 8 of this safety data sheet.

**SPILL CLEAN UP METHODS**

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Absorb with inert, damp, non-combustible material, then flush area with water.

**7 HANDLING AND STORAGE****USAGE PRECAUTIONS**

Read and follow manufacturer's recommendations. Keep away from heat, sparks and open flame. Avoid inhalation of vapours/spray and contact with skin and eyes. Wash hands after handling.

**STORAGE PRECAUTIONS**

Aerosol cans: Must not be exposed to direct sunlight or temperatures above 50°C.

**8 EXPOSURE CONTROLS/PERSONAL PROTECTION**

Name	Std	LT - ppm	LT - mg/m <sup>3</sup>	ST - ppm	ST - mg/m <sup>3</sup>
CARBON DIOXIDE			Asphyxiating		Asphyxiating

**PROTECTIVE EQUIPMENT****ENGINEERING MEASURES**

Provide adequate ventilation.

**HAND PROTECTION**

Use suitable protective gloves if risk of skin contact. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

**EYE PROTECTION**

Wear approved chemical safety goggles where eye exposure is reasonably probable.

**HYGIENE MEASURES**

DO NOT SMOKE IN WORK AREA! Promptly remove any clothing that becomes contaminated. Wash promptly if skin becomes contaminated. When using do not eat, drink or smoke.

**9 PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE	Liquid Aerosol		
COLOUR	Light (or pale) Amber		
ODOUR	Characteristic		
SOLUBILITY	Insoluble in water		
RELATIVE DENSITY	0.817 @ 21°C	VAPOUR DENSITY (air=1)	> 1
VAPOUR PRESSURE	95-105 psi @ 21°C	VOLATILE BY VOL. (%)	57%
FLASH POINT (°C)	44°C TOC (Tag open cup).	FLAMMABILITY LIMIT - LOWER(%)	0.6%
FLAMMABILITY LIMIT - UPPER(%)	8.0%		

**10 STABILITY AND REACTIVITY****STABILITY**

Stable under normal temperature conditions and recommended use.

**WD40 AEROSOL****CONDITIONS TO AVOID**

Aerosol cans: Must not be exposed to direct sunlight or temperatures above 50°C.

**HAZARDOUS DECOMPOSITION PRODUCTS**

During fire, toxic gases (CO, CO<sub>2</sub>) are formed.

**11 TOXICOLOGICAL INFORMATION****INHALATION**

Vapours may cause headache, fatigue, dizziness and nausea.

**SKIN CONTACT**

Repeated exposure may cause skin dryness or cracking.

**EYE CONTACT**

Spray and vapour in the eyes may cause irritation and smarting.

**Other Health Effects**

This substance has no evidence of carcinogenic properties.

**12 ECOLOGICAL INFORMATION****ECOTOXICITY**

The product contains substances which contribute to global warming (greenhouse effect).

**BIOACCUMULATION**

The product contains potentially bioaccumulating substances.

**DEGRADABILITY**

The product is easily biodegradable.

**13 DISPOSAL CONSIDERATIONS****DISPOSAL METHODS**

Dispose of waste and residues in accordance with local authority requirements. Make sure containers are empty before discarding (explosion risk). Recover and reclaim or recycle, if practical.

**14 TRANSPORT INFORMATION**

UK ROAD CLASS	2.1		
PROPER SHIPPING NAME	AEROSOLS		
UN NO. ROAD	1950	UK ROAD PACK GR.	#
ADR CLASS NO.	2.1	ADR CLASS	Class 2: Gases
ADR PACK GROUP	#	ADR LABEL NO.	2.1
CEPIC TEC(R) NO.	20G5F	RID CLASS NO.	2.1
RID PACK GROUP	#	UN NO. SEA	1950
IMDG CLASS	2.1	IMDG PACK GR.	#
EMS	F-D, S-U	MFAG	See Guide
MARINE POLLUTANT	No.	UN NO. AIR	1950
AIR CLASS	2.1	AIR PACK GR.	#

**15 REGULATORY INFORMATION**

CONTAINS PETROLEUM DISTILLATE

**RISK PHRASES**

R10	Flammable.
R66	Repeated exposure may cause skin dryness or cracking.

**WD40 AEROSOL****SAFETY PHRASES**

S2	Keep out of the reach of children
S16	Keep away from sources of ignition - No smoking.
S23	Do not breathe vapour/spray.
S37	Wear suitable gloves.
S51	Use only in well-ventilated areas.
A1	Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.
A2	Do not spray on a naked flame or any incandescent material.

**EU DIRECTIVES**

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

**STATUTORY INSTRUMENTS**

Chemicals (Hazard Information and Packaging) Regulations.

**APPROVED CODE OF PRACTICE**

Classification and Labelling of Substances and Preparations Dangerous for Supply.

**GUIDANCE NOTES**

Workplace Exposure Limits EH40.

**16 OTHER INFORMATION****REVISION COMMENTS**

Re-issued in accordance with Regulation (EC) No. 1907/2006 Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

REVISION DATE 09-2007

REV. NO./REPL. SDS GENERATED 3 / 02-2007

**RISK PHRASES IN FULL**

NC	Not classified.
R10	Flammable.
R65	Harmful: may cause lung damage if swallowed.
R66	Repeated exposure may cause skin dryness or cracking.

**DISCLAIMER**

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use. ,

# SAFETY DATA SHEET

[www.zinsserdirect.co.uk](http://www.zinsserdirect.co.uk)**Zinsser Gardz**

## 1. Identification of the substance/preparation and of the company/undertaking

**Product name** : Zinsser Gardz**Emergency phone:** : Rust-Oleum: (+31)165-593636;**Product use** : Paint.

## 2. Composition/information on ingredients

**Substance/preparation** : Preparation

Within the present knowledge of the supplier, this product does not contain any hazardous ingredients, in accordance with EU or national regulations.

## 3. Hazards identification

The preparation is not classified as dangerous according to Directive 1999/45/EC and its amendments.

**Classification** : Not classified.

See section 11 for more detailed information on health effects and symptoms.

## 4. First aid measures

### First aid measures

- General** : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Seek medical attention.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do not induce vomiting.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do not use solvents or thinners.
- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open.

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

See section 11 for more detailed information on health effects and symptoms.

## 5. Fire-fighting measures

### Extinguishing media

- Suitable** : Use an extinguishing agent suitable for the surrounding fire. In case of fire, use DRY chemicals, CO2, alcohol resistant foam or water spray.
- Not suitable** : water jet
- Special exposure hazards** : No specific hazard.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## 6. Accidental release measures

- Personal precautions** : Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment.
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.



## 6. Accidental release measures

**Methods for cleaning up** : If emergency personnel are unavailable, contain spilled material. For small spills, add absorbent (soil may be used in the absence of other suitable materials), scoop up material and place in a sealable, liquid-proof container for disposal. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.

**Note:** see section 8 for personal protective equipment and section 13 for waste disposal.

## 7. Handling and storage

**Handling** : Keep container tightly closed.

Avoid contact with skin and eyes. Avoid inhalation of vapor, spray or mist.

Eating, drinking and smoking should be prohibited in area where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking.

Put on appropriate personal protective equipment (see section 8).

Never use pressure to empty. Container is not a pressure vessel. Always keep in containers made from the same material as the original one.

Comply with the health and safety at work laws.

When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapors in all cases. In such circumstances, they should wear a compressed-air-fed respirator during the spraying process and until the particulate and solvent vapor concentrations have fallen below the exposure limits.

**Storage** : Store in accordance with local regulations. Observe label precautions. Do not store below 0°C (32°F). Store in a cool, well-ventilated area away from incompatible materials and ignition sources. Keep away from heat and direct sunlight.

Keep away from: oxidizing agents, strong alkalis, strong acids.  
No smoking. Prevent unauthorized access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.  
Do not empty into drains..

## 8. Exposure controls/personal protection

**Engineering measures** : Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapors below the OEL, suitable respiratory protection must be worn.

**Hygiene measures** : Never eat, drink or smoke in work areas. Practice good personal hygiene before using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics. It is generally recognized that contact lenses should not be worn when working with chemicals because contact lenses may contribute to the severity of an eye injury.

**Occupational exposure limits** : Not available.

**Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

### Exposure controls

**Occupational exposure controls** : No special ventilation requirements. Good general ventilation should be sufficient to control airborne levels. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

### Personal protective equipment

**Respiratory system** : In case of insufficient ventilation, wear suitable respiratory equipment. When spraying and sanding, suitable respiratory protection must be used.

When spraying and sanding, suitable respiratory protection must be used.

**Skin and body** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Wear overalls or long sleeved shirt.

### **Hands**

**Gloves** : For prolonged or repeated handling, use the following type of gloves: disposable vinyl

## 8. Exposure controls/personal protection

Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

EN 374-3 : 2003

**Eyes** : Use safety eyewear designed to protect against splash of liquids.

### Environmental exposure controls

Do not allow to enter drains or watercourses.

## 9. Physical and chemical properties

### General information

#### Appearance

**Physical state** : Liquid. (Viscous liquid.)

**Color** : White.

**Odor** : Faint Odor

### Important health, safety and environmental information

**pH** : 8 to 9 [Alcaline.]

**Boiling point** : > 100 °C

**Melting point** : 0°C (32°F)

**Vapor pressure** : 2.3 kPa (17.3 mm Hg) (at 20°C) (Water).

**Relative density** : 1.3 kgs/l

**Solubility** : Easily soluble in methanol, diethyl ether.  
Insoluble in cold water, hot water.

**Viscosity** : Dynamic: 100 to 500 cP

**Vapor density** : >1 (Air = 1)

**Evaporation rate (butyl acetate = 1)** : <1 compared with Butyl acetate.

**Volatility %** : 65% (v/v). 50% (w/w).

**VOC content w/w** : 29 (g/l).

## 10. Stability and reactivity

Stable under recommended storage and handling conditions (see section 7).

Hazardous decomposition products: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.

## 11. Toxicological information

There is no data available on the preparation itself. The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly. See sections 2 and 15 for details.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage.

### Potential acute health effects

**Inhalation** : No known significant effects or critical hazards.

**Ingestion** : No known significant effects or critical hazards.

**Skin contact** : No known significant effects or critical hazards.

**Eye contact** : No known significant effects or critical hazards.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Reproductive toxicity** : No known significant effects or critical hazards.

## 12. Ecological information

There is no data available on the preparation itself.

Do not allow to enter drains or watercourses.

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and is not classified as dangerous for the environment.

**Mobility** : This product is not likely to volatilize rapidly into the air because of its low vapor pressure.

## 12. Ecological information

**Other adverse effects** : No known significant effects or critical hazards.

## 13. Disposal considerations

Do not allow to enter drains or watercourses.

Dispose of according to all federal, state and local applicable regulations.

**Methods of disposal** : The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

**European waste catalogue (EWC)** : 08 01 15\* aqueous sludges containing paint or varnish containing organic solvents or other dangerous substances

**Hazardous waste** : Yes.

## 14. Transport information

### International transport regulations

Regulatory information	UN number	Proper shipping name	Class	Packing group	Label	Additional information
<b>ADR/RID Class</b>	Not regulated.	-	-	-		<b>Remarks</b> Not controlled under ADR (Europe).
<b>IMDG Class</b>	Not regulated.	-	-	-		<b>Remarks</b> Not controlled under IMDG.
<b>IATA-DGR Class</b>	Not regulated.	-	-	-		<b>Remarks</b> Not controlled under IATA.

This preparation is not classified as dangerous according to international transport regulations (ADR/RID, IMDG or ICAO/IATA).

## 15. Regulatory information

**EU regulations** : The preparation is not classified as dangerous according to Directive 1999/45/EC and its amendments.

**Risk phrases** : This product is not classified according to EU legislation.

**Safety phrases** : S23- Do not breathe spray.  
S51- Use only in well-ventilated areas.

**Product use** : Consumer applications, Industrial applications, Used by spraying.

**EU statistical classification (Tariff Code)** : 3209 10 00

## 16. Other information

**Full text of R-phrases referred to in sections 2 and 3 - United Kingdom (UK)** : Not applicable.

**Full text of classifications referred to in sections 2 and 3 - United Kingdom (UK)** : Not applicable.

### History

**Date of printing** : 14-12-2006. **Date of issue** : 13-12-2006.

**Version** : 1

**Prepared by** : RPM Europe - Department Environment, Health and Safety

### Notice to reader

*To the best of our knowledge, the information contained herein is accurate. However, neither the manufacturer nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. ©Copyright by Rust-Oleum Netherlands B.V. / Martin Mathys B.V.*

16. Other information



Version 1

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Date of issue 13-12-2006.



MSDS No.: 287  
Revision No.: 004  
Revision Date: 01/30/09  
Page: 1 of 2

## MATERIAL SAFETY DATA SHEET

**Product name:** HIT-ICE  
**Description:** Methacrylate resin and hardener.  
**Supplier:** Hilti, Inc. P.O. Box 21148, Tulsa, OK 74121  
**Emergency # (Chem-Trec.):** 1 800 424 9300 (USA, PR, Virgin Islands, Canada); 001 703 527 3887 (other countries)

### INGREDIENTS AND EXPOSURE LIMITS

Ingredients:	CAS Number:	TLV:	PEL:	STEL:
<b>Part A:</b> Quartz sand	14808-60-7	0.025 mg/m <sup>3</sup> (R)	10mg/m <sup>3</sup> (R) % SiO <sub>2</sub> + 2	N/E
Dimethacrylate resin	NJ TSRN: 19136100-5015	N/E	N/E	N/E
1,6-Hexanediol dimethacrylate	6606-59-3	N/E	N/E	N/E
Dialkyl aryl amine	NJ TSRN: 19136100-5018	N/E	N/E	N/E
<b>Part B:</b> Dibenzoyl peroxide	00094-36-0	5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>	N/E
Quartz sand	14808-60-7	0.025 mg/m <sup>3</sup> (R)	10mg/m <sup>3</sup> (R) % SiO <sub>2</sub> + 2	N/E
Amorphous silica	07631-86-9	N/E	20 mppcf	N/E

**Abbreviations:** NJ TSRN indicates New Jersey Trade Secret Registry Number. (R) indicates "as respirable dust". PEL = OSHA Permissible Exposure Limit. TLV = ACGIH Threshold Limit Value. STEL = Short Term Exposure Limit (15 minute time-weighted average). N/E = None Established. mppcf = million particles per cubic foot.

### PHYSICAL DATA

<b>Appearance and Odor:</b>	Gray paste. Ester-like odor.	<b>VOC Content:</b>	4.4 g/l
<b>Boiling Point:</b>	Not determined	<b>Vapor Pressure:</b>	Not determined
<b>Vapor Density: (air = 1)</b>	Not determined	<b>Odor Theshold</b>	Not determined
<b>Evaporation Rate:</b>	Not determined	<b>Solubility in Water:</b>	Insoluble
<b>Specific Gravity:</b>	1.7	<b>pH:</b>	Not determined

### FIRE AND EXPLOSION HAZARD DATA

<b>Flash Point:</b>	Not applicable	<b>Flammable Limits:</b>	Not applicable
<b>Extinguishing Media:</b>	CO <sub>2</sub> , Dry Chemical, Foam, Water		
<b>Special Fire Fighting Procedures:</b>	None known. Use a self-contained breathing apparatus when fighting fires involving chemicals.		
<b>Unusual Fire and Explosion Hazards:</b>	Thermal decomposition products can be formed when exposed to fire. Part B (dibenzoyl peroxide) begins to decompose at temperatures exceeding 120° F / 50° C.		

### REACTIVITY DATA

<b>Stability:</b>	Stable under normal conditions. Dibenzoyl peroxide begins to decompose at temperatures >120° F. This releases CO <sub>2</sub> which can cause deformation and even rupture of the cartridge.
<b>Hazardous Polymerization:</b>	Will not occur.
<b>Incompatibility:</b>	Strong acids and oxidizing agents. Do not store in direct sunlight.
<b>Decomposition Products:</b>	Thermal decomposition can yield CO, CO <sub>2</sub> and NO <sub>x</sub> .
<b>Conditions to Avoid:</b>	Avoid temperature extremes which could shorten the shelf-life of this product; i.e. below freezing and above 100° F. (See handling and storage requirements).

### HEALTH HAZARD DATA

<b>Known Hazards:</b>	Eye and skin irritation. Possible sensitizer.
<b>Signs and Symptoms of Exposure:</b>	<b>Eyes:</b> can cause irritation. <b>Skin:</b> Prolonged and repeated contact can cause irritation. <b>Inhalation:</b> Possible irritation. <b>Ingestion:</b> Not a likely route of exposure.
<b>Routes of Exposure:</b>	Contact. Inhalation.
<b>Carcinogenicity:</b>	IARC classifies crystalline silica (quartz sand) as a Gp I carcinogen based upon evidence among workers in industries where there has been long-term and chronic exposure (via inhalation) to silica dust; e.g. mining, quarry, stone crushing, refractory brick and pottery workers. This product does not pose a dust hazard; therefore, this classification is not relevant.
<b>Medical Conditions Aggravated by Exposure:</b>	Eye, skin, and respiratory conditions.

## EMERGENCY AND FIRST AID PROCEDURES

<b>Eyes:</b>	Flush immediately with plenty of water. Contact a physician if symptoms occur.
<b>Skin:</b>	Wash with soap and water. Contact a physician if symptoms occur.
<b>Inhalation:</b>	Move victim to fresh air. Contact a physician if symptoms persist.
<b>Ingestion:</b>	Do not induce vomiting unless directed by a physician. Contact a physician immediately.
<b>Other:</b>	Referral to a physician is recommended if there is any question about the seriousness of the injury/exposure.

## CONTROL MEASURES AND PERSONAL PROTECTIVE EQUIPMENT

<b>Ventilation:</b>	General (natural or mechanically induced fresh air movements).
<b>Eye Protection:</b>	Safety glasses with side shields recommended.
<b>Skin Protection:</b>	Impermeable (neoprene or rubber) gloves recommended.
<b>Respiratory Protection:</b>	None normally required. Established exposure limits are for airborne dusts. This product is a paste; therefore, values are not relevant under normal and expected conditions of use.

## PRECAUTIONS FOR SAFE HANDLING AND USE

<b>Handling and Storing Precautions:</b>	Store in a cool, dry area preferably between 40° and 77° F. Do not store in direct sunlight. Keep away from open flames, heat sources and sparks. Avoid prolonged or repeated contact. Use with adequate ventilation. Always wash thoroughly after handling chemical products. For industrial use only. Keep out of reach of children.
<b>Spill Procedures:</b>	Wipe away with an absorbent material before it hardens. Do not get into the eyes or on the skin. Wear appropriate personal protective equipment. Place in a container for proper disposal.

## REGULATORY INFORMATION

<b>Hazard Communication:</b>	This MSDS has been prepared in accordance with the federal OSHA Hazard Communication Standard. 29 CFR 1910.1200.
<b>HMIS Codes:</b>	Health 1, Flammability 1, Reactivity 1, PPE B (Gloves, Glasses)
<b>DOT Shipping Name:</b>	Consumer commodity, ORM-D
<b>IATA / ICAO shipping name:</b>	Organic peroxide type E, solid (dibenzoyl peroxide), Class 5.2, UN 3108
<b>TSCA Inventory Status:</b>	Chemical components listed on TSCA inventory.
<b>SARA Title III, Section 313:</b>	This product contains 10% Benzoyl peroxide (CAS # 94-36-0), which is subject to reporting under Section 313 of SARA Title III (40 CFR Part 372).
<b>EPA Waste Code(s):</b>	Not regulated by EPA as a hazardous waste
<b>Waste Disposal Methods:</b>	Consult with regulatory agencies or your corporate personnel for disposal methods that comply with local, state, and federal safety, health and environmental regulations.

## CONTACTS

<b>Customer Service:</b>	1 800 879 8000	<b>Technical Service:</b>	1 800 879 8000
<b>Health / Safety:</b>	1 800 879 6000	Jerry Metcalf	(x3704)
<b>Emergency # (Chem-Trec):</b>	1 800 424 9300 (USA, PR, Virgin Islands, Canada); 001 703 527 3887 (Other countries)		

The information and recommendations contained herein are based upon data believed to be correct; however, no guarantee or warranty of any kind expressed or implied is made with respect to the information provided.



MSDS No.: 277  
Revision No.: 005  
Revision Date: 04/16/02  
Page: 1 of 2

## MATERIAL SAFETY DATA SHEET

**Product name:** CF 128-DW Insulating Foam for Doors and Windows  
**Description:** Urethane resin system  
**Supplier:** Hilti, Inc. P.O. Box 21148, Tulsa, OK 74121  
**Emergency # (Chem-Trec.):** 1 800 424 9300 (USA, PR, Virgin Islands, Canada); 001 703 527 3887 (other countries)

## INGREDIENTS AND EXPOSURE LIMITS

Ingredients:	CAS Number:	PEL:	TLV:	STEL:
Urethane / polyol prepolymer *	NE / Mixture	NE	NE	NE
4,4' diphenylmethane diisocyanate (free MDI) *	101-68-8	C: 20 ppb	5 ppb	NE
1,1,1,2 tetrafluoroethane	811-97-2	NE	NE	NE
Dimethyl ether	115-10-6	NE	NE	NE
Butane	106-97-8	NE	800 ppm	NE
Propane	074-98-6	1000 ppm	2500 ppm	NE

\* MDI isomers and homologues are partially linked with a polyol mixture. Excess MDI is available in the mixture (container); however MDI is completely (>99.9%) reacted while curing.

**Abbreviations:** PEL = OSHA Permissible Exposure Limit. TLV = ACGIH Threshold Limit Value. STEL = Short Term Exposure Limit. C = Ceiling. NE = None Established. NA = Not Applicable

## PHYSICAL DATA

<b>Appearance:</b>	Yellow to tan liquid.	<b>Odor:</b>	Mild.
<b>Vapor Density: (air = 1)</b>	> 1 (MDI Polymer)	<b>Vapor Pressure:</b>	5 - 5.6 bar @ 68° F
<b>Boiling Point:</b>	Not determined.	<b>VOC Content:</b>	100 g/l
<b>Evaporation Rate:</b>	< .1 (ether = 1)	<b>Solubility in Water:</b>	Not soluble.
<b>Specific Gravity:</b>	1.1	<b>pH:</b>	Not determined.

## FIRE AND EXPLOSION HAZARD DATA

<b>Flash Point:</b>	- 40° F (propellants)	<b>Flammable Limits:</b>	1.9 - 27%
<b>Extinguishing Media:</b>	Aerosol cans: CO <sub>2</sub> , Dry Chemical, Foam. Cured foam: CO <sub>2</sub> , Dry Chemical, Foam, Water		
<b>Special Fire Fighting Proc.</b>	None known for cured foam. Uncured isocyanates react with water to release CO <sub>2</sub> .		
<b>Unusual Fire and Explosion Hazards:</b>	Extremely flammable. Contains flammable propellants under pressure. Aerosol cans exposed to fire or direct heat can rupture from pressure build-up. CAUTION: Do not heat cold cans with a torch or flame to raise product temperature. This may cause the can to burst.		

## REACTIVITY DATA

<b>Stability:</b>	Reacts (i.e. expands at a ratio of > 40:1 to form a polyurethane foam) upon contact with air. Contact with moisture or water will also cause material to polymerize (non-violently).
<b>Hazardous Polymerization:</b>	Will not occur. Reacts with water (nonviolently).
<b>Incompatibility:</b>	Alcohols, amines, strong bases, alkali metal compounds.
<b>Decomposition Products:</b>	Thermal decomposition of uncured foam can yield CO, CO <sub>2</sub> , HCN, HCNO, HCl, NO <sub>x</sub> , PO <sub>x</sub> . Thermal decomposition products from cured foam include CO <sub>x</sub> , NO <sub>x</sub> and traces of HCN and HCl.
<b>Conditions to Avoid:</b>	Temperature extremes will shorten product shelf life; i.e. below 40° F / above 100° F. Contact with air or moisture will cause foam to polymerize (cure).

## HEALTH HAZARD DATA

<b>Known Hazards:</b>	<b>Acute:</b> Eye, skin, and respiratory irritation. <b>Chronic:</b> Sensitization
<b>Signs and Symptoms of Exposure:</b>	<b>Eyes:</b> Can adhere to cornea. <b>Skin:</b> Can adhere to the skin. Can cause irritation and possibly sensitization; e.g. itching, swelling, rashes, etc. <b>Inhalation:</b> Vapor generated when heated to temperatures > 100° F can cause irritation of the breathing tract. Some individuals can develop an allergic (asthmatic-like) response. <b>Ingestion:</b> Effects of ingestion have not been determined. Not a likely route of exposure. No ill effects expected.
<b>Routes of Exposure:</b>	Inhalation. Contact.



<b>Carcinogenicity:</b>	No ingredients are classified as a carcinogen by IARC, NTP or OSHA.		
<b>Medical Conditions Aggravated by Exposure:</b>	Eye, skin, and respiratory conditions.		
<b>EMERGENCY AND FIRST AID PROCEDURES</b>			
<b>Eyes:</b>	<b>Immediately</b> flush with large amounts of clean water and seek medical attention.		
<b>Skin:</b>	Cured product is difficult to remove from the skin. Remove immediately with soap and warm water. Acetone may remove uncured product. If material has hardened, use Hilti MC 400 Hand Cleaner or a light mineral oil. If still unable to remove, buff off with a pumice stone.		
<b>Inhalation:</b>	Should sensitization occur, immediately move to fresh air. Call a physician if symptoms persist. Those individuals who develop an allergic reaction should avoid future use of this product.		
<b>Ingestion:</b>	Seek medical attention. Do not induce vomiting unless directed by a physician.		
<b>Other:</b>	Referral to a physician is recommended if there is any question about the seriousness of the injury/exposure. If sensitization occurs, future contact with the material should be avoided.		
<b>CONTROL MEASURES AND PERSONAL PROTECTIVE EQUIPMENT</b>			
<b>Ventilation:</b>	General (natural or mechanically induced fresh air movements).		
<b>Eye Protection:</b>	Goggles recommended; safety glasses with side shields as a minimum.		
<b>Skin Protection:</b>	Cotton gloves are suitable.		
<b>Respiratory Protection:</b>	Not normally required.		
<b>PRECAUTIONS FOR SAFE HANDLING AND USE</b>			
<b>Handling and Storing Precautions:</b>	Avoid contact. Material will adhere to eyes and skin. Contents under pressure. Extremely flammable. Do not apply direct heat to the cans. Before using, remove ignition sources such as flames or equipment / tools that generate sparks. Store in a cool dry place. Do not store in direct sunlight. Keep from freezing. Store between 40° and 100° F. Always wash thoroughly after handling chemical products. For industrial use only. Keep out of reach of children. Follow label / use instructions. Storage classifications: NFPA = Level 3; OSHA = Class 1A.		
<b>Spill Procedures:</b>	Wear appropriate personal protective equipment. CF 128-DW insulating foam will polymerize (cure) upon contact with air/moisture. Allow product to cure, then remove for disposal. See disposal guidelines below.		
<b>REGULATORY INFORMATION</b>			
<b>TSCA Inventory Status:</b>	Chemical components listed on TSCA inventory.		
<b>SARA Title III, Section 313:</b>	This product contains 5 - 15% 4, 4' diphenylmethane diisocyanate (CAS # 101-68-8) which is subject to reporting under Section 313 of SARA Title III (40 CFR Part 372). (Technical note: MDI is not available in cured foam due to reaction of parts A and B upon exposure to air; i.e. when released from the can)		
<b>DOT Shipping Name:</b>	Consumer Commodity, ORM-D.		
<b>IATA / ICAO Shipping Name:</b>	Aerosols, Class 2.1, UN 1950		
<b>HMIS Codes:</b>	Health 2, Flammability 3, Reactivity 1, PPE B (Goggles, Gloves)		
<b>EPA Waste Code(s):</b>	D003 (for aerosol cans) / not regulated if product has been dispensed and has cured		
<b>Waste Disposal Methods:</b>	Consult with regulatory agencies or your corporate personnel for disposal methods that comply with local, state, and federal safety, health and environmental regulations.		
<b>CONTACTS</b>			
<b>Customer Service:</b>	1 800 879 8000	<b>Technical Service:</b>	1 800 879 8000
<b>Health / Safety:</b>	1 800 879 6000	Jerry Metcalf	(x6704)
<b>Emergency # (Chem-Trec):</b>	1 800 424 9300 (USA, PR, Virgin Islands, Canada); 703 527 3887 (other countries)		

The information and recommendations contained herein are based upon data believed to be correct; however, no guarantee or warranty of any kind expressed or implied is made with respect to the information provided.





## 1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** Hilti B 36 / 3.0 Li-Ion   Hilti B 36 / 3.3 Li-Ion   Hilti B 36 / 3.9 Li-Ion   Hilti B 36 / 6.0 Li-Ion
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Article category** AC3   Electrical batteries and accumulators
- **Application of the substance / the preparation** Rechargeable Lithium Ion battery for power tools
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Hilti (Gt. Britain) Ltd.  
1 Trafford Wharf Road  
Trafford Park  
GB-M17 1BY Manchester  
Tel +44 161 886 1000  
Fax +44 161 872 1240  
Customer Service:  
Tel 0800 886 100 Toll-free  
Fax 0800 886200 Toll-free
- **Informing department:** see section 16
- **Emergency telephone number:**  
Hilti (Gt. Britain) Ltd.  
Tel: 0044 / 161 886 1000  
Fax 0044 / 161 872 1240  
Schweizerisches Toxikologisches Informationszentrum - 24 h Service  
Tel.: 0041 / 1 251 51 51 (international)

## 2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**  
The product is not classified as hazardous to health or environment according to the CLP regulation.
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** May cause an allergic skin reaction.
- **Information concerning particular hazards for human and environment:**

For the battery chemical materials are stored in a hermetically sealed metal case, designed to withstand temperatures and pressures encountered during normal use. As a result, during normal use there is no physical danger of ignition or explosion and chemical danger of hazardous materials leakage.

It may cause heat generation or electrolyte leakage if battery terminals contact with other metals. Elektrolyte is flammable. In case of electrolyte leakage move the battery from fire immediately.

However if exposed to a fire, added mechanical shocks, decomposed, added electric stress by miss-use, the gas release vent will be operated. The battery case will be breaked at the extreme, hazardous materials may be released.

Moreover, if heated strongly by a surrounding fire, acrid gas may be emitted.

The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

- **Classification system:**  
The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.
- **Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

## 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
  - **Description:**  
Lithium Ion rechargeable battery pack:
- | Name/Type               | Lithium equivalent (g) | Energy content (Wh) |
|-------------------------|------------------------|---------------------|
| Hilti B 36 / 3.0 Li-Ion | 9,0                    | 108                 |
| Hilti B 36 / 3.3 Li-Ion | 9,9                    | 118,8               |
| Hilti B 36 / 3.9 Li-Ion | 11,7                   | 140                 |
| Hilti B 36 / 6.0 Li-Ion | 18,0                   | 216                 |

(Contd. on page 2)



# Safety data sheet

according to 1907/2006/EC, Article 31 / ISO 11014

Printing date 11.05.2011

Version number 4

Revision: 11.05.2011

Trade name: Hilti B 36 / 3.0 Li-Ion    Hilti B 36 / 3.3 Li-Ion    Hilti B 36 / 3.9 Li-Ion    Hilti B 36 / 6.0 Li-Ion

(Contd. of page 1)

## Dangerous components:

This product contains a positive electrode (Lithium cobalt oxide), a negative electrode (graphite) and electrolyte (ethylene carbonate, diethyl carbonate and lithium hexafluorophosphate). The physical form of the product, however, precludes exposure to workers under normal conditions of use.

## 4 First aid measures

### Description of first aid measures

#### General information

This product contains an organic electrolyte. If the electrolyte is leaking out of the battery pack, the following measures have to be taken.

#### After inhalation

Take affected persons into the open air and position comfortably

Supply fresh air or oxygen; call for doctor.

#### After skin contact

Instantly wash with water and soap and rinse thoroughly. If skin irritation persists, call a physician.

#### After eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### After swallowing

Seek immediate medical advice.

## 5 Firefighting measures

### Extinguishing media

#### Suitable extinguishing agents

Water spray, carbon dioxide (CO<sub>2</sub>), carbon dioxide blanket, foam, or dry powder.

Foam

#### Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

#### Advice for firefighters

#### Protective equipment:

In the event of fire, wear self contained breathing apparatus

Wear full protective suit.

Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition.

## 6 Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Keep away from ignition sources

Keep people at a distance and stay on the windward side.

Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition.

### Environmental precautions:

Do not allow to enter the ground/soil.

### Methods and material for containment and cleaning up:

Absorb liquid components with liquid-binding material.

Collect mechanically.

### Reference to other sections

See Section 7 for information on safe handling

## 7 Handling and storage

### Handling

#### Precautions for safe handling

Do not soak in water or seawater.

Do not expose to strong oxidizers.

Do not give a strong mechanical shock or fling.

Never disassemble, modify or deform.

Do not connect the positive terminal to the negative terminal with electrically conductive material.

In case of charging, use only dedicated charger specified by Hilti.

No special precautions necessary if used correctly.

#### Information about protection against explosions and fires:

Do not throw into fire or expose to high temperatures (>85°C).

Do not connect the positive terminal to the negative terminal with electrically conductive material.

#### Conditions for safe storage, including any incompatibilities

#### Storage

#### Requirements to be met by storerooms and containers:

Avoid direct sunlight, high temperature, high humidity.

Store in a cool place (temperature: -20°C ~ 35°C, humidity: 45 - 85%)

#### Information about storage in one common storage facility:

Do not store together with oxidizing and acidic materials.

Store away from water.

Do not store together with electrically conductive materials.

#### Further information about storage conditions:

The accu-pack should be stored at 30 to 50% of the charging capacity.

Avoid storing in places where it is exposed to static electricity.

(Contd. on page 3)



# Safety data sheet

according to 1907/2006/EC, Article 31 / ISO 11014

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Trade name: Hilti B 36 / 3.0 Li-Ion    Hilti B 36 / 3.3 Li-Ion    Hilti B 36 / 3.9 Li-Ion    Hilti B 36 / 6.0 Li-Ion

(Contd. of page 2)

- **Storage class**  
As per VCI (1991) storage classification concept.
- 11

## 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the compilation were used as basis.
- **Exposure controls**
- **Personal protective equipment**
- **Breathing equipment:** Not required.
- **Protection of hands:** Not required.
- **Material of gloves:** Not required.
- **Penetration time of glove material:** Not required.
- **Eye protection:** Not required.
- **Body protection:** Protective work clothing.

## 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
  - Form:** plastic case
  - Colour:** Black / Red
  - Odour:** Odourless
- **pH-value:** Not applicable
- **Change in condition**
  - Melting point/Melting range:** Not applicable
- **Flash point:** Not applicable
- **Self-inflammability:** Product is not selfigniting.
- **Danger of explosion:** Risk of explosion by shock, friction, fire or other sources of ignition.
- **Density:** Not applicable

## 10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known
- **Incompatible materials:** Conductive materials, water, seawater, strong oxidizers and strong acids.
- **Hazardous decomposition products:** Acrid or harmful gas is emitted during fire

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:**  
This product contains an organic electrolyte. If the electrolyte is leaking out of the battery pack, the following effects are known when getting into contact:  
Irritant to skin and mucous membranes.
- **on the eye:** Irritant effect.
- **Sensitization:** No sensitizing effect known.
- **Additional toxicological information:**  
The product is not subject to classification according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version.  
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

(Contd. on page 4)



# Safety data sheet

according to 1907/2006/EC, Article 31 / ISO 11014

Printing date 11.05.2011

Version number 4

Revision: 11.05.2011

Trade name: Hilti B 36 / 3.0 Li-Ion    Hilti B 36 / 3.3 Li-Ion    Hilti B 36 / 3.9 Li-Ion    Hilti B 36 / 6.0 Li-Ion

(Contd. of page 3)

## 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Do not allow battery packs to penetrate the soil.  
The battery cell may corrode and electrolyte may leak.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

## 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation** Dispose of this battery pack according to national regulations or return the used battery pack to Hilti.

### · European waste catalogue

16 00 00	WASTES NOT OTHERWISE SPECIFIED IN THE LIST
16 06 00	batteries and accumulators
16 06 05	other batteries and accumulators
20 00 00	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 01 00	separately collected fractions (except 15 01)
20 01 34	batteries and accumulators other than those mentioned in 20 01 33

- **Uncleaned packagings:**
- **Recommendation:**  
Disposal must be made according to official regulations.  
Dispose of packaging according to regulations on the disposal of packagings.

## 14 Transport information

- **Land transport ADR/RID (cross-border)**
- **ADR/RID-GGVS/E Class:** 9 Miscellaneous dangerous substances and articles.
- **UN-Number:** 3480
- **UN proper shipping name:** UN 3480 Lithium ion batteries

### · Maritime transport IMDG:

- **IMDG Class:** 9
- **UN Number:** 3480
- **Packaging group:** II
- **EMS Number:** F-A, S-
- **Correct technical name:** UN 3480 Lithium ion batteries

### · Air transport ICAO-TI and IATA-DGR:

- **ICAO/IATA Class:** 9
- **UN/ID Number:** 3480
- **Packaging group:** II
- **Correct technical name:** UN 3480 Lithium Ion batteries

- **UN "Model Regulation":** 9, II
- **Special precautions for user** Warning: Miscellaneous dangerous substances and articles.
- **Transport/Additional information:**  
Lithium-ion batteries are tested in accordance with: UN manual of Tests and Criteria, Part III, subsection 38.3

## 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **National regulations**
- **Other regulations, limitations and prohibitive regulations**
- **Substances of very high concern (SVHC) according to REACH, Article 57** None
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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(Contd. on page 5)



# Safety data sheet

according to 1907/2006/EC, Article 31 / ISO 11014

Printing date 11.05.2011

Version number 4

Revision: 11.05.2011

Trade name: Hilti B 36 / 3.0 Li-Ion    Hilti B 36 / 3.3 Li-Ion    Hilti B 36 / 3.9 Li-Ion    Hilti B 36 / 6.0 Li-Ion

(Contd. of page 4)

## 16 Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing data specification sheet:**

Hilti Entwicklungsgesellschaft mbH  
Hiltistrasse 6  
D-86916 Kaufering  
Tel.: +49 8191 906310  
Fax: +49 8191 906826  
e-mail: monika.moench@hilti.com

· **Contact:** Monika Mönch

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)  
ICAO: International Civil Aviation Organization  
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals

· **\* Data compared to the previous version altered.**

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**Eastman(TM) EB Solvent**

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**SECTION 1. IDENTIFICATION**

Product name                        : Eastman(TM) EB Solvent

Product code                        : EAN 902270. 00650-00, P0065000, P0065001, P0065002,  
P0065006, E00650E1, E00650E2, E00650E3, P0065007,  
P0065009, P0065010, P0065011, N0065011, N0065010

**Manufacturer or supplier's details**

Company name of supplier        : Eastman Chemical Company

Address                               : 200 South Wilcox Drive  
Kingsport TN 37660-5280

Telephone                            : (423) 229-2000

Emergency telephone number    : CHEMTREC: +1-800-424-9300, +1-703-527-3887 CCN7321

**Recommended use of the chemical and restrictions on use**

Recommended use                   : Solvent

Restrictions on use                : None known.

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**SECTION 2. HAZARDS IDENTIFICATION****GHS Classification**

Flammable liquids                   : Category 4

Acute toxicity (Oral)                : Category 4

Acute toxicity (Inhalation)        : Category 4

Acute toxicity (Dermal)            : Category 4

Skin irritation                       : Category 2

Eye irritation                        : Category 2A

Specific target organ toxicity    : Category 3 (Respiratory system)  
- single exposure

**GHS Label element**

Hazard pictograms                :



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**Other hazards**  
None known.

## Components

Chemical Name	CAS-No.	Concentration (% w/w)
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2-butoxyethanol	111-76-2	100
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**SECTION 4. FIRST AID MEASURES**

- If inhaled : Remove to fresh air.  
If not breathing, give artificial respiration.  
If breathing is difficult, give oxygen.  
Get immediate medical advice/ attention.
- In case of skin contact : Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.  
Get immediate medical advice/ attention.  
Wash contaminated clothing before reuse.  
Please "unchoose" this phrase if selected.
- In case of eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.  
Get medical advice/ attention.
- If swallowed : Seek medical advice.
- Most important symptoms and effects, both acute and delayed : Irritating to eyes, respiratory system and skin.  
Please "unchoose" this phrase if selected.  
Harmful if swallowed, in contact with skin or if inhaled  
Causes skin irritation.  
Causes serious eye irritation.  
May cause respiratory irritation.
- Notes to physician : Treat symptomatically.

**SECTION 5. FIREFIGHTING MEASURES**

- Suitable extinguishing media : Water spray  
Dry chemical  
Carbon dioxide (CO2)  
Please "unchoose" this phrase if selected.
- Unsuitable extinguishing media : None known.
- Specific hazards during fire-fighting : Forms peroxides of unknown stability.
- Hazardous combustion products : No hazardous combustion products are known
- Further information : Combustible liquid and vapour.
- Special protective equipment for firefighters : Please "unchoose" this phrase if selected.



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**SECTION 6. ACCIDENTAL RELEASE MEASURES**

- Personal precautions, protective equipment and emergency procedures : Wear appropriate personal protective equipment.  
 Please "unchoose" this phrase if selected.
- Environmental precautions : Avoid release to the environment.
- Methods and materials for containment and cleaning up : Please "unchoose" this phrase if selected.  
 Please "unchoose" this phrase if selected.  
 Please "unchoose" this phrase if selected.  
 Please "unchoose" this phrase if selected.  
 Prevent runoff from entering drains, sewers, or streams.  
 Please "unchoose" this phrase if selected.

**SECTION 7. HANDLING AND STORAGE**

- Advice on protection against fire and explosion : Please "unchoose" this phrase if selected.
- Advice on safe handling : Please "unchoose" this phrase if selected.  
 Please "unchoose" this phrase if selected.  
 Do not taste or swallow.  
 Use only with adequate ventilation.  
 Wash thoroughly after handling.  
 Minimize exposure to air.  
 After opening, purge container with nitrogen before reclosing.  
 Periodically test for peroxide formation on long-term storage.  
 Please "unchoose" this phrase if selected.  
 Please "unchoose" this phrase if selected.  
 Please "unchoose" this phrase if selected.
- Conditions for safe storage : Keep container tightly closed and in a well-ventilated place.  
 Please "unchoose" this phrase if selected.

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Components with workplace control parameters**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
2-butoxyethanol	111-76-2	TWA	20 ppm	ACGIH
		TWA	5 ppm 24 mg/m3	NIOSH REL
		TWA	50 ppm 240 mg/m3	OSHA Z-1
		TWA	25 ppm 120 mg/m3	OSHA P0

- Engineering measures** : Good general ventilation (typically 10 air changes per hour)

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should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Personal protective equipment**

Respiratory protection : If engineering controls do not maintain airborne concentrations below recommended exposure limits, an approved respirator must be worn.  
Please "unchoose" this phrase if selected.  
Respirator type:  
Please "unchoose" this phrase if selected.

Hand protection

Remarks : Please "unchoose" this phrase if selected.

Eye protection : Please "unchoose" this phrase if selected.

Protective measures : Please "unchoose" this phrase if selected.

Hygiene measures : Please "unchoose" this phrase if selected.

---

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	: liquid
Colour	: colourless
Odour	: sweet, ester-like
Odour Threshold	: 0.48 ppm
Melting point/freezing point	: -75 °C
Boiling point/boiling range	: 171 °C
Flash point	: 62 °C Method: Tag closed cup
Evaporation rate	: 0.1
Vapour pressure	: 1.17 hPa (25 °C)
Relative vapour density	: 4

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Relative density	: 0.90 (20 °C)
Solubility(ies)	
Water solubility	: 900 g/l completely soluble (25 °C)
Partition coefficient: n-octanol/water	: Pow: 6.46 (20 °C) log Pow: 0.81 (20 °C)
Auto-ignition temperature	: 230 °C (1,013 hPa ) Method: ASTM D2155
Decomposition temperature	: 124.7 °C Method: DSC Weak exotherm
Viscosity	
Viscosity, dynamic	: 3.3 mPa.s (20 °C)
Viscosity, kinematic	: 3.642 mm <sup>2</sup> /s (20 °C)
Molecular weight	: 118.2 g/mol

---

**SECTION 10. STABILITY AND REACTIVITY**

Reactivity	: Stable under recommended storage conditions.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Forms peroxides of unknown stability.
Conditions to avoid	: Please "unchoose" this phrase if selected.
Incompatible materials	: Strong oxidizing agents
Hazardous decomposition products	: Carbon dioxide (CO <sub>2</sub> ) Carbon monoxide

---

**SECTION 11. TOXICOLOGICAL INFORMATION****Acute toxicity**

Harmful if swallowed, in contact with skin or if inhaled

**Components:****2-butoxyethanol:**

Acute oral toxicity	: LD50 Oral (Rat): 1,300 mg/kg
Acute inhalation toxicity	: LC50 (Rat): > 4.9 mg/l Exposure time: 3 h Test atmosphere: vapour

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Acute dermal toxicity                      : LD50 Dermal (Rat): > 2,000 mg/kg

**Skin corrosion/irritation**

Causes skin irritation.

**Components:****2-butoxyethanol:**

Species: Rabbit

Exposure time: 24 h

Result: slight

**Serious eye damage/eye irritation**

Causes serious eye irritation.

**Components:****2-butoxyethanol:**

Species: Rabbit

Result: slight

Exposure time: 24 h

**Respiratory or skin sensitisation**

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

**Components:****2-butoxyethanol:**

Test Type: Skin Sensitization

Species: Guinea pig

Result: Please "unchoose" this phrase if selected.

**Germ cell mutagenicity**

Not classified based on available information.

**Components:****2-butoxyethanol:**

Genotoxicity in vitro                      : Test Type: Salmonella typhimurium assay (Ames test)  
Metabolic activation: +/- activation  
Result: negative

Genotoxicity in vivo                      : Test Type: Please "unchoose" this phrase if selected.  
Species: Mouse  
Application Route: intraperitoneal injection  
Result: negative

**Carcinogenicity**

Not classified based on available information.

**Components:****2-butoxyethanol:**

Species: Rat, (Male and Female)

Application Route: Inhalation

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Method: OECD Test No. 451: Carcinogenicity Studies  
Remarks: negative

<b>IARC</b>	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
<b>OSHA</b>	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
<b>NTP</b>	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**Reproductive toxicity**

Not classified based on available information.

**Components:****2-butoxyethanol:**

Effects on fertility	:	Test Type: OECD Test No. 416: Two-Generation Reproduction Toxicity Study Species: Mouse Sex: Male and Female Application Route: Ingestion NOAEL: 720 mg/kg, F1: 720 mg/kg, F2: 720 mg/kg
----------------------	---	--

Effects on foetal development	:	Species: Rat, Male and Female Application Route: Ingestion 100 mg/kg 30 mg/kg
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**STOT - single exposure**

May cause respiratory irritation.

**STOT - repeated exposure**

Not classified based on available information.

**Repeated dose toxicity****Components:****2-butoxyethanol:**

Species: Rat  
LOAEL: 69 mg/kg  
Application Route: Oral Study  
Target Organs: Liver

Species: Rat  
NOAEL: 150 mg/kg  
Application Route: Dermal Study

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Species: Rat  
LOAEC: 152 mg/l  
Application Route: Inhalation study:

**Aspiration toxicity**

Not classified based on available information.

**Experience with human exposure****Product:**

Inhalation	: Remarks: Harmful if inhaled. May cause respiratory irritation.
Skin contact	: Remarks: Harmful in contact with skin. Causes skin irritation.
Eye contact	: Remarks: Causes serious eye irritation.
Ingestion	: Remarks: Harmful if swallowed.

---

**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity****Components:****2-butoxyethanol:**

Toxicity to fish	: LC50 (Oncorhynchus mykiss (rainbow trout)): 1,474 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): 1,550 mg/l Exposure time: 48 h
Toxicity to algae	: EC50 (Pseudokirchneriella subcapitata (algae)): 1,840 mg/l Exposure time: 72 h
Toxicity to fish (Chronic toxicity)	: NOEC (Danio rerio (zebra fish)): > 100 mg/l Exposure time: 21 d
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: NOEC (daphnid): 100 mg/l Exposure time: 21 d

**Persistence and degradability****Components:****2-butoxyethanol:**

Biodegradability	: Please "unchoose" this phrase if selected. Biodegradation: 90.4 % Exposure time: 28 d Remarks: Readily biodegradable
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**Bioaccumulative potential****Components:****2-butoxyethanol:**

Partition coefficient: n-octanol/water	:	Pow: 6.46
		log Pow: 0.81

**Mobility in soil****Product:**

Distribution among environmental compartments	:	Remarks: Please "unchoose" this phrase if selected.
---	---	---

**Other adverse effects****Product:**

Ozone-Depletion Potential	:	Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
		Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

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**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**

Waste from residues	:	Please "unchoose" this phrase if selected.
		Since emptied containers retain product residue, follow label warnings even after container is emptied.

---

**SECTION 14. TRANSPORT INFORMATION****International Regulation****IATA-DGR**

Not regulated as a dangerous good

**IMDG-Code**

Not regulated as a dangerous good

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

**National Regulations****49 CFR**

UN/ID/NA number	:	NA 1993
Proper shipping name	:	COMBUSTIBLE LIQUID, N.O.S. (ethylene glycol monobutyl ether)

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Class	: CBL
Packing group	: III
Labels	: None
ERG Code	: 128
Marine pollutant	: no

**SECTION 15. REGULATORY INFORMATION****EPCRA - Emergency Planning and Community Right-to-Know Act**

**SARA 311/312 Hazards** : Acute Health Hazard  
Fire Hazard

**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**Clean Air Act**

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489):

2-butoxyethanol	111-76-2	100 %
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**Clean Water Act**

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

**The components of this product are reported in the following inventories:**

TSCA : On TSCA Inventory

DSL : All components of this product are on the Canadian DSL

AICS : On the inventory, or in compliance with the inventory

ENCS : On the inventory, or in compliance with the inventory

ISHL : On the inventory, or in compliance with the inventory

KECI : On the inventory, or in compliance with the inventory



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PICCS : On the inventory, or in compliance with the inventory

IECSC : On the inventory, or in compliance with the inventory

**TSCA list**

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

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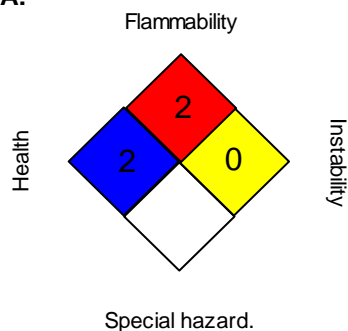
**SECTION 16. OTHER INFORMATION****Full text of other abbreviations**

(Q)SAR - (Quantitative) Structure Activity Relationship; ASTM - American Society for the Testing of Materials; bw - Body weight; DIN - Standard of the German Institute for Standardisation; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISO - International Organisation for Standardization; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative; DSL - Domestic Substances List (Canada); KECI - Korea Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); AICS - Australian Inventory of Chemical Substances; IECSC - Inventory of Existing Chemical Substances in China; ENCS - Existing and New Chemical Substances (Japan); ISHL - Industrial Safety and Health Law (Japan); PICCS - Philippines Inventory of Chemicals and Chemical Substances; NZIoC - New Zealand Inventory of Chemicals; TCSI - Taiwan Chemical Substance Inventory; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; DOT - Department of Transportation; EHS - Extremely Hazardous Substance; HMIS - Hazardous Materials Identification System; MSHA - Mine Safety and Health Administration; NFPA - National Fire Protection Association; RCRA - Resource Conservation and Recovery Act; RQ - Reportable Quantity; SARA - Superfund Amendments and Reauthorization Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; GLP - Good Laboratory Practice; ERG - Emergency Response Guide; NTP - National Toxicology Program; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods

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**Further information****NFPA:****HMIS III:**

HEALTH	3
FLAMMABILITY	2
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

Revision Date : 04/04/2016

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

US / EN

# SAFETY DATA SHEET

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

**Product name:** Eastman(TM) EB Solvent

**Product No.:** EAN 902270. 00650-00, P0065000, P0065001, P0065002, P0065003, P0065004, P0065005, P0065006, P006500N, E00650E1, E00650E2, E00650E3, P0065007, P0065008, P0065009, P0065010, P0065011

**Synonyms, Trade Names:** 00650-00

#### Additional identification

**Chemical name:** 2-butoxyethanol

**CAS-No.:** 111-76-2

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Identified uses:** Solvent

**Uses advised against:** None known.

### 1.3 Details of the supplier of the safety data sheet

#### Manufacturer / Supplier

Eastman Chemical Company  
200 South Wilcox Drive  
Kingsport, TN 37660-5280 US  
+14232292000

Visit our website at [www.EASTMAN.com](http://www.EASTMAN.com) or email [emnmsds@eastman.com](mailto:emnmsds@eastman.com)

### 1.4 Emergency telephone number:

For emergency health, safety, and environmental information, call 1-423-229-4511 or 1-423-229-2000.

For emergency transportation information, in the United States: call CHEMTREC at 800-424-9300 or call 423-229-2000.

## SECTION 2: Hazards identification

WARNING!

HARMFUL IF INHALED, ABSORBED THROUGH SKIN, OR SWALLOWED

CAUSES SKIN AND EYE IRRITATION

MAY CAUSE BLOOD DISORDERS BASED ON ANIMAL DATA

COMBUSTIBLE LIQUID AND VAPOR

PEROXIDE FORMER

## SECTION 3: Composition/information on ingredients

### 3.1 / 3.2 Substances / Mixtures

**General information:**

Chemical name	Concentration	Additional identification	Notes
2-butoxyethanol; ethylene glycol monobutyl ether butyl cellosolve	100%	CAS-No.: 111-76-2 EC No.: 203-905-0 INDEX No.: 603-014-00-0 REACH Registration No.: 01-2119475108-36-0007	#

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

#This substance has workplace exposure limit(s).

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

**SECTION 4: First aid measures****4.1 Description of first aid measures**

<b>Inhalation:</b>	Move to fresh air. If breathing stops, provide artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
<b>Eye contact:</b>	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.
<b>Skin contact:</b>	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.
<b>Ingestion:</b>	Call a physician or poison control center immediately. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person.

**4.2 Most important symptoms and effects, both acute and delayed:** May irritate and cause redness and pain.

**4.3 Indication of any immediate medical attention and special treatment needed**

<b>Hazards:</b>	Glycol Ethers: Some glycol ethers cause adverse effects in animals that include the reproductive system, offspring, blood, kidney and liver.
<b>Treatment:</b>	Treat symptomatically.

**SECTION 5: Firefighting measures**

**General fire hazards:** Combustible liquid and vapor.

**5.1 Extinguishing media**

**Suitable extinguishing media:** Water spray. Dry chemical. Carbon Dioxide. Alcohol foam.

**Unsuitable extinguishing media:** None known.

- 5.2 Special hazards arising from the substance or mixture:** Forms peroxides of unknown stability.
- 5.3 Advice for firefighters**
- Special fire fighting procedures:** Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters:** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

## SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures:** Wear appropriate personal protective equipment.
- 6.2 Environmental precautions:** Avoid release to the environment.
- 6.3 Methods and material for containment and cleaning up:** Eliminate sources of ignition. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Large Spillages: Flush spill area with water spray. Prevent runoff from entering drains, sewers, or streams. Dike for later disposal.
- Notification Procedures:** In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

## SECTION 7: Handling and storage:

- 7.1 Precautions for safe handling:** Avoid breathing mists or vapors. Avoid contact with eyes, skin, and clothing. Do not taste or swallow. Use only with adequate ventilation. Wash thoroughly after handling. Minimize exposure to air. After opening, purge container with nitrogen before reclosing. Periodically test for peroxide formation on long-term storage. Do not allow to evaporate to near dryness. Do not distill to near dryness. Addition of water or appropriate reducing materials will lessen peroxide formation.
- 7.2 Conditions for safe storage, including any incompatibilities:** Keep container tightly closed and in a well-ventilated place. Store away from heat and light.
- 7.3 Specific end use(s):** Solvent

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters Occupational exposure limits

If exposure limits have not been established, maintain airborne levels to an acceptable level.

Chemical name	Type	Exposure Limit values	Source
2-butoxyethanol; ethylene glycol monobutyl ether butyl cellosolve	TWA	20 ppm	US. ACGIH Threshold Limit Values (01 2010)
	PEL	50 ppm 240 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)

**Biological limit values**

Chemical name	Exposure Limit values	Source
2-butoxyethanol; ethylene glycol monobutyl ether butyl cellosolve (Butoxyacetic acid (BAA), with hydrolysis: Sampling time: End of shift.)	200 mg/g (Creatinine in urine)	ACGIH BEL (01 2010)

**8.2 Exposure controls****Appropriate engineering controls:**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Individual protection measures, such as personal protective equipment****General information:**

Eye bath. Washing facilities. Safety shower.

**Eye/face protection:**

Wear safety glasses with side shields (or goggles) and a face shield. Wear a full-face respirator, if needed.

**Skin protection****Hand protection:**

Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.

**Other:**

No data available.

**Respiratory Protection:**

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Respirator type: Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.

**Hygiene measures:**

Observe good industrial hygiene practices.

**Environmental Controls:**

No data available.

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****Appearance**

<b>Physical State:</b>	Liquid
<b>Form:</b>	Liquid
<b>Color:</b>	Colorless
<b>Odor:</b>	Mild sweet, ester
<b>Odor Threshold:</b>	0.48 ppm
<b>pH:</b>	No data available.
<b>Freezing Point:</b>	-75 °C
<b>Boiling Point:</b>	171 °C
<b>Flash Point:</b>	67 °C (Closed Cup)
<b>Evaporation Rate:</b>	0.1
<b>Flammability (solid, gas):</b>	No data available.
<b>Flammability Limit - Upper (%)—:</b>	No data available.
<b>Flammability Limit - Lower (%)—:</b>	No data available.
<b>Vapor pressure:</b>	1.17 hPa (25 °C)
<b>Vapor density (air=1):</b>	4
<b>Specific Gravity:</b>	0.90 (20 °C)
<b>Solubility(ies)</b>	
<b>Solubility in Water:</b>	900 g/l (25 °C)
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	Pow: 6.46 log Pow: 0.81
<b>Autoignition Temperature:</b>	No data available.
<b>Decomposition Temperature:</b>	124.7 °C (DSC) 21.7 J/g Weak exotherm
<b>Dynamic Viscosity:</b>	3.3 mPa.s (20 °C)
<b>Kinematic viscosity:</b>	3.642 mm <sup>2</sup> /s (20 °C)
<b>Explosive properties:</b>	No data available.
<b>Oxidizing properties:</b>	Not classified

**Other information**

<b>Minimum ignition temperature:</b>	230 °C (1,013 hPa, ASTM D2155)
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**SECTION 10: Stability and reactivity**

<b>10.1 Reactivity:</b>	None known.
<b>10.2 Chemical stability:</b>	Stable
<b>10.3 Possibility of hazardous reactions:</b>	Forms peroxides of unknown stability.
<b>10.4 Conditions to avoid:</b>	Heat, sparks, flames.
<b>10.5 Incompatible materials:</b>	Strong oxidizing agents.

**10.6 Hazardous decomposition products:** Carbon Dioxide. Carbon Monoxide.

## SECTION 11: Toxicological information

### Information on likely routes of exposure

**Inhalation:** Harmful if inhaled.

**Ingestion:** Harmful if swallowed.

**Skin contact:** Toxic in contact with skin. Causes skin irritation.

**Eye contact:** Causes eye irritation.

### 11.1 Information on toxicological effects

#### Acute Toxicity

##### Oral

**Product:** No data available.

##### Specified substance(s)

2-butoxyethanol; ethylene glycol monobutyl ether butyl cellosolve

Oral LD-50: (Rat): 1,746 mg/kg  
Oral LD-50: (Rat, Male.): 880 mg/kg  
Oral LD-50: (Rat, Female.): 615 mg/kg

##### Dermal

**Product:** No data available.

##### Specified substance(s)

2-butoxyethanol; ethylene glycol monobutyl ether butyl cellosolve

Dermal LD-50: (Rabbit, Male.): 435 mg/kg

##### Inhalation

**Product:** No data available.

##### Specified substance(s)

2-butoxyethanol; ethylene glycol monobutyl ether butyl cellosolve

LC50 (Rat, Female., 4 h): 450 ppm  
LC50 (Rat, Male., 4 h): 486 ppm

##### Repeated dose toxicity

**Product:** No data available.

##### Specified substance(s)

2-butoxyethanol; ethylene glycol monobutyl ether butyl cellosolve

No data available.

##### Skin corrosion/irritation:

**Product:** No data available.

##### Specified substance(s)



2-butoxyethanol; ethylene  
glycol monobutyl ether  
butyl cellosolve (Rabbit, 4 h): moderate

**Serious eye damage/eye  
irritation:**

**Product:** No data available.

**Specified substance(s)**

2-butoxyethanol; ethylene  
glycol monobutyl ether  
butyl cellosolve (Rabbit): moderate

**Respiratory or skin  
sensitization:**

**Product:** No data available.

**Specified substance(s)**

2-butoxyethanol; ethylene  
glycol monobutyl ether  
butyl cellosolve Skin Sensitization:, (Human) - Not a skin sensitizer.

**Germ cell mutagenicity****In vitro**

**Product:** No data available.

**Specified substance(s)**

2-butoxyethanol; ethylene  
glycol monobutyl ether butyl  
cellosolve No data available.

**In vivo**

**Product:** No data available.

**Specified substance(s)**

2-butoxyethanol; ethylene  
glycol monobutyl ether butyl  
cellosolve No data available.

**Carcinogenicity**

**Product:** No data available.

**Specified substance(s)**

2-butoxyethanol; ethylene  
glycol monobutyl ether butyl  
cellosolve No data available.

**Reproductive toxicity**

**Product:** No data available.

**Specified substance(s)**

2-butoxyethanol; ethylene  
glycol monobutyl ether butyl  
cellosolve No data available.

**Specific target organ toxicity - single exposure**

**Product:** No data available.

**Specified substance(s)**2-butoxyethanol; ethylene  
glycol monobutyl ether butyl  
cellosolve

No data available.

**Specific target organ toxicity - repeated exposure****Product:**

No data available.

**Specified substance(s)**2-butoxyethanol; ethylene  
glycol monobutyl ether butyl  
cellosolve

No data available.

**Aspiration hazard****Product:**

No data available.

**Specified substance(s)**2-butoxyethanol; ethylene  
glycol monobutyl ether butyl  
cellosolve

No data available.

**Other adverse effects:**

No data available.

**SECTION 12: Ecological information****12.1 Toxicity****Acute toxicity****Fish****Product:**

No data available.

**Specified substance(s)**2-butoxyethanol; ethylene  
glycol monobutyl ether butyl  
cellosolve

LC-50 (Oncorhynchus mykiss, 96 h): 1,474 mg/l

**Aquatic invertebrates****Product:**

No data available.

**Specified substance(s)**2-butoxyethanol; ethylene  
glycol monobutyl ether butyl  
cellosolve

EC-50 (Water Flea, 48 h): 1,550 mg/l

**Chronic Toxicity****Fish****Product:**

No data available.

**Specified substance(s)**2-butoxyethanol; ethylene  
glycol monobutyl ether butyl  
cellosolve

NOEC (Zebra Fish, 21 d): &gt; 100 mg/l

**Aquatic invertebrates****Product:** No data available.**Specified substance(s)**2-butoxyethanol; ethylene glycol monobutyl ether butyl cellosolve  
NOEC (daphnid, 21 d): 100 mg/l**Toxicity to Aquatic Plants****Product:** No data available.**Specified substance(s)**2-butoxyethanol; ethylene glycol monobutyl ether butyl cellosolve  
EC-50 (Pseudokirchneriella subcapitata, 72 h): 1,840 mg/l**12.2 Persistence and degradability****Biodegradation****Product:** No data available.**Specified substance(s)**2-butoxyethanol; ethylene glycol monobutyl ether butyl cellosolve  
No data available.**Biological Oxygen Demand:****Product** No data available.**Specified substance(s)**2-butoxyethanol; ethylene glycol monobutyl ether butyl cellosolve  
BOD-5: 1,300 mg/g  
BOD-20: 1,800 mg/g**Chemical Oxygen Demand:****Product** No data available.**Specified substance(s)**2-butoxyethanol; ethylene glycol monobutyl ether butyl cellosolve  
2,180 mg/g**BOD/COD ratio****Product** No data available.**Specified substance(s)**2-butoxyethanol; ethylene glycol monobutyl ether butyl cellosolve  
No data available.**12.3 Bioaccumulative potential****Product:** No data available.**Specified substance(s)**2-butoxyethanol; ethylene glycol monobutyl ether butyl cellosolve  
No data available.

**12.4 Mobility in soil:** No data available.

**Known or predicted distribution to environmental compartments**

2-butoxyethanol; ethylene glycol monobutyl ether butyl cellosolve No data available.

**12.5 Results of PBT and vPvB assessment:** No data available.

2-butoxyethanol; ethylene glycol monobutyl ether butyl cellosolve No data available.

**12.6 Other adverse effects:** No data available.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

**General information:** No data available.

**Disposal methods:** Dispose of waste and residues in accordance with local authority requirements. Incinerate. Since emptied containers retain product residue, follow label warnings even after container is emptied.

## SECTION 14: Transport information

*Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.*

**DOT**

Class combustible liquid, Packing group III for quantities of 450 liters (119 gallons) or more; not regulated for smaller quantities

*Possible Shipping Description(s):*

NA 1993 Combustible liquid, n.o.s. (ethylene glycol monobutyl ether) combustible liquid III

**IMDG - International Maritime Dangerous Goods Code**

Class not regulated

*Possible Shipping Description(s):*

not regulated

**IATA**

Class not regulated  
*Possible Shipping Description(s):*

not regulated

## **SECTION 15: Regulatory information**

### **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:**

**This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.**

**WHMIS (Canada) Status:** controlled

**WHMIS (Canada) Hazard Classification:** B/3, D/1/A, D/2/B

**SARA 311-312 Hazard Classification(s):**

immediate (acute) health hazard  
delayed (chronic) health hazard  
fire hazard

**US EPCRA (SARA Title III) Section 313 - Toxic Chemical List**

2-BUTOXYETHANOL (ETHYLENE GLYCOL MONOBUTYL ETHER) (GLYCOL ETHER CATEGORY)

**OSHA:** hazardous

**TSCA (US Toxic Substances Control Act):** This product is listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

**DSL (Canadian Domestic Substances List) and CEPA (Canadian Environmental Protection Act):** This product is listed on the DSL. Any impurities present in this product are exempt from listing.

**AICS / NICNAS (Australian Inventory of Chemical Substances and National Industrial Chemicals Notification and Assessment Scheme):** This product is listed on AICS or otherwise complies with NICNAS.

**MITI (Japanese Handbook of Existing and New Chemical Substances):** This product is listed in the Handbook or has been approved in Japan by new substance notification.

**ECL (Korean Toxic Substances Control Act):** This product is listed on the Korean inventory or otherwise complies with the Korean Toxic Substances Control Act.

**Philippines Inventory (PICCS) :** This product is listed on the Philippine Inventory or otherwise complies with PICCS.

**Inventory of Existing Chemical Substances in China:** All components of this product are listed on the Inventory of Existing Chemical Substances in China (IECSC).

## SECTION 16: Other information

**HMIS® Hazard Ratings:** Health - 2\*, Flammability - 2, Chemical Reactivity - 1

*HMIS® rating involves data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.*

**Revision Information:** Not relevant.

**Key literature references and sources for data:** No data available.

**Training information:** No data available.

**Issue date:** 03/13/2013

**SDS No.:**

**Disclaimer:** This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



# SAFETY DATA SHEET

**Issuing Date** January 5, 2015

**Revision Date** June 12, 2015

**Revision Number** 1

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### Product identifier

**Product Name** Clorox® Regular-Bleach<sub>1</sub>

### Other means of identification

**EPA Registration Number** 5813-100

### Recommended use of the chemical and restrictions on use

**Recommended use** Household disinfecting, sanitizing, and laundry bleach

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### **Supplier Address**

The Clorox Company  
1221 Broadway  
Oakland, CA 94612

Phone: 1-510-271-7000

### Emergency telephone number


**Emergency Phone Numbers** For Medical Emergencies, call: 1-800-446-1014  
For Transportation Emergencies, call Chemtrec: 1-800-424-9300

**2. HAZARDS IDENTIFICATION****Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1

**GHS Label elements, including precautionary statements****Emergency Overview**

<b>Signal word</b>		<b>Danger</b>	
<b>Hazard Statements</b>			
Causes severe skin burns and eye damage			
Causes serious eye damage			
			
<b>Appearance</b>	Clear, pale yellow	<b>Physical State</b>	Thin liquid
		<b>Odor</b>	Bleach

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling.

Wear protective gloves, protective clothing, face protection, and eye protection such as safety glasses.

**Precautionary Statements - Response**

Immediately call a poison center or doctor.

If swallowed: Rinse mouth. Do NOT induce vomiting.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

Wash contaminated clothing before reuse.

If inhaled: Remove person to fresh air and keep comfortable for breathing.

Specific treatment (see supplemental first aid instructions on this label).

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Precautionary Statements - Storage**

Store locked up.

**Precautionary Statements - Disposal**

Dispose of contents in accordance with all applicable federal, state, and local regulations.

**Hazards not otherwise classified (HNOC)**

Although not expected, heart conditions or chronic respiratory problems such as asthma, chronic bronchitis, or obstructive lung disease may be aggravated by exposure to high concentrations of vapor or mist.

Product contains a strong oxidizer. Always flush drains before and after use.



**Unknown Toxicity**

Not applicable.

**Other information**

Very toxic to aquatic life with long lasting effects.

**Interactions with Other Chemicals**

Reacts with other household chemicals such as toilet bowl cleaners, rust removers, acids, or products containing ammonia to produce hazardous irritating gases, such as chlorine and other chlorinated compounds.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS-No	Weight %	Trade Secret
Sodium hypochlorite	7681-52-9	5 - 10	*

\* The exact percentage (concentration) of composition has been withheld as a trade secret.

**4. FIRST AID MEASURES****First aid measures****General Advice**

Call a poison control center or doctor immediately for treatment advice. Show this safety data sheet to the doctor in attendance.

**Eye Contact**

Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

**Skin Contact**

Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

**Inhalation**

Move to fresh air. If breathing is affected, call a doctor.

**Ingestion**

Have person sip a glassful of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person. Call a poison control center or doctor immediately for treatment advice.

**Protection of First-aiders**

Avoid contact with skin, eyes, and clothing. Use personal protective equipment as required. Wear personal protective clothing (see section 8).

**Most important symptoms and effects, both acute and delayed****Most Important Symptoms and Effects**

Burning of eyes and skin.

**Indication of any immediate medical attention and special treatment needed****Notes to Physician**

Treat symptomatically. Probable mucosal damage may contraindicate the use of gastric lavage.

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## 5. FIRE-FIGHTING MEASURES

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### Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

### Unsuitable Extinguishing Media

CAUTION: Use of water spray when fighting fire may be inefficient.

### Specific Hazards Arising from the Chemical

This product causes burns to eyes, skin, and mucous membranes. Thermal decomposition can release sodium chlorate and irritating gases and vapors.

### Explosion Data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

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## 6. ACCIDENTAL RELEASE MEASURES

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### Personal precautions, protective equipment and emergency procedures

#### **Personal Precautions**

Avoid contact with eyes, skin, and clothing. Ensure adequate ventilation. Use personal protective equipment as required. For spills of multiple products, responders should evaluate the MSDSs of the products for incompatibility with sodium hypochlorite. Breathing protection should be worn in enclosed and/or poorly-ventilated areas until hazard assessment is complete.

#### **Other Information**

Refer to protective measures listed in Sections 7 and 8.

### Environmental precautions

#### **Environmental Precautions**

This product is toxic to fish, aquatic invertebrates, oysters, and shrimp. Do not allow product to enter storm drains, lakes, or streams. See Section 12 for ecological Information.

### Methods and material for containment and cleaning up

#### **Methods for Containment**

Prevent further leakage or spillage if safe to do so.

#### **Methods for Cleaning Up**

Absorb and containerize. Wash residual down to sanitary sewer. Contact the sanitary treatment facility in advance to assure ability to process washed-down material.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes, and clothing. Do not eat, drink, or smoke when using this product.

### Conditions for safe storage, including any incompatibilities

**Storage** Store away from children. Reclose cap tightly after each use. Store this product upright in a cool, dry area, away from direct sunlight and heat to avoid deterioration. Do not contaminate food or feed by storage of this product.

**Incompatible Products** Toilet bowl cleaners, rust removers, acids, and products containing ammonia.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium hypochlorite 7681-52-9	None	None	None

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

### Appropriate engineering controls

**Engineering Measures** Showers  
Eyewash stations  
Ventilation systems

### Individual protection measures, such as personal protective equipment

**Eye/Face Protection** If splashes are likely to occur: Wear safety glasses with side shields (or goggles) or face shield.

**Skin and Body Protection** Wear rubber or neoprene gloves and protective clothing such as long-sleeved shirt.

**Respiratory Protection** If irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice. Wash hands after direct contact. Do not wear product-contaminated clothing for prolonged periods. Remove and wash contaminated clothing before re-use. Do not eat, drink, or smoke when using this product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Physical and Chemical Properties

<b>Physical State</b>	Thin liquid	<b>Odor</b>	Bleach
<b>Appearance</b>	Clear	<b>Odor Threshold</b>	No information available
<b>Color</b>	Pale yellow		

<u>Property</u>	<u>Values</u>	<u>Remarks/ Method</u>
pH	~12	None known
Melting/freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash Point	Not flammable	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limits in Air		
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	~1.1	None known
Water Solubility	Soluble	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Explosive Properties	Not explosive	
Oxidizing Properties	No data available	

### Other Information

<b>Softening Point</b>	No data available
<b>VOC Content (%)</b>	No data available
<b>Particle Size</b>	No data available
<b>Particle Size Distribution</b>	No data available

## 10. STABILITY AND REACTIVITY

### Reactivity

Reacts with other household chemicals such as toilet bowl cleaners, rust removers, acids, or products containing ammonia to produce hazardous irritating gases, such as chlorine and other chlorinated compounds.

### Chemical stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

### Conditions to avoid

None known based on information supplied.

### Incompatible materials

Toilet bowl cleaners, rust removers, acids, and products containing ammonia.

### Hazardous Decomposition Products

None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

<b>Inhalation</b>	Exposure to vapor or mist may irritate respiratory tract and cause coughing. Inhalation of high concentrations may cause pulmonary edema.
<b>Eye Contact</b>	Corrosive. May cause severe damage to eyes.
<b>Skin Contact</b>	May cause severe irritation to skin. Prolonged contact may cause burns to skin.
<b>Ingestion</b>	Ingestion may cause burns to gastrointestinal tract and respiratory tract, nausea, vomiting, and diarrhea.

#### Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium hypochlorite 7681-52-9	8200 mg/kg (Rat)	>10000 mg/kg (Rabbit)	-

### Information on toxicological effects

<b>Symptoms</b>	May cause redness and tearing of the eyes. May cause burns to eyes. May cause redness or burns to skin. Inhalation may cause coughing.
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### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Sensitization</b>	No information available.
<b>Mutagenic Effects</b>	No information available.
<b>Carcinogenicity</b>	The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Sodium hypochlorite 7681-52-9	-	Group 3	-	-

*IARC (International Agency for Research on Cancer)  
Group 3 - Not Classifiable as to Carcinogenicity in Humans*

<b>Reproductive Toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Chronic Toxicity</b>	Carcinogenic potential is unknown.
<b>Target Organ Effects</b>	Respiratory system, eyes, skin, gastrointestinal tract (GI).
<b>Aspiration Hazard</b>	No information available.

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document

**ATEmix (oral)**

54 g/kg

**ATEmix (inhalation-dust/mist)**

58 mg/L

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Very toxic to aquatic life with long lasting effects.

This product is toxic to fish, aquatic invertebrates, oysters, and shrimp. Do not allow product to enter storm drains, lakes, or streams.

**Persistence and Degradability**

No information available.

**Bioaccumulation**

No information available.

**Other adverse effects**

No information available.

**13. DISPOSAL CONSIDERATIONS****Disposal methods**

Dispose of in accordance with all applicable federal, state, and local regulations. Do not contaminate food or feed by disposal of this product.

**Contaminated Packaging**

Do not reuse empty containers. Dispose of in accordance with all applicable federal, state, and local regulations.

**14. TRANSPORT INFORMATION****DOT**

Not restricted.

**TDG**

Not restricted for road or rail.

**ICAO**

Not restricted, as per Special Provision A197, Environmentally Hazardous Substance exception.

**IATA**

Not restricted, as per Special Provision A197, Environmentally Hazardous Substance exception.

**IMDG/IMO**

Not restricted, as per IMDG Code 2.10.2.7, Marine Pollutant exception.

## 15. REGULATORY INFORMATION

### Chemical Inventories

**TSCA** All components of this product are either on the TSCA 8(b) Inventory or otherwise exempt from listing.

**DSL/NDSL** All components are on the DSL or NDSL.

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

### U.S. Federal Regulations

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

#### **SARA 311/312 Hazard Categories**

<b>Acute Health Hazard</b>	Yes
<b>Chronic Health Hazard</b>	No
<b>Fire Hazard</b>	No
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	No

#### **Clean Water Act**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium hypochlorite 7681-52-9	100 lb			X

#### **CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Sodium hypochlorite 7681-52-9	100 lb	-	RQ 100 lb final RQ RQ 45.4 kg final RQ

#### **EPA Statement**

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

**DANGER: CORROSIVE.** Causes irreversible eye damage and skin burns. Harmful if swallowed. Do not get in eyes, on skin, or on clothing. Wear protective eyewear and rubber gloves when handling this product. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the restroom. Avoid breathing vapors and use only in a well-ventilated area.

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Sodium hypochlorite 7681-52-9	X	X	X	X	
Sodium chlorate 7775-09-9	X	X	X		

**International Regulations****Canada****WHMIS Hazard Class**

E - Corrosive material

**16. OTHER INFORMATION**

**NFPA**      Health Hazard   3      Flammability   0      Instability   0      Physical and Chemical Hazards   -

**HMIS**      Health Hazard   3      Flammability   0      Physical Hazard   0      Personal Protection   B

**Prepared By**      Product Stewardship  
23 British American Blvd.  
Latham, NY 12110  
1-800-572-6501

**Revision Date**      June 12, 2015

**Revision Note**      Revision Section 14.

**Reference**      1096036/164964.159

**General Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**





# SAFETY DATA SHEET

Revision Date 10-October-2014

Version 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

### Product Identifier

**Product Name** Foremost 1817 Citri-Kote  
NA1993

**UN/ID No**  
**Product Code** 1817

### Recommended Use of the Chemical and Restrictions on Use

**Recommended Use** Industrial cleaner.

### Details of the Supplier of the Safety Data Sheet

#### Supplier Address

Delta Foremost Chemical Corporation  
3915 Air Park St.  
Memphis, Tennessee 38118

### Emergency Telephone Number

**Company Phone Number** (901) 363-4340  
**Emergency Telephone** INFOTRAC 1-352-323-3500 (International)  
1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

### Classification

Skin Corrosion/Irritation	Category 2
Aspiration toxicity	Category 1
Flammable liquids	Category 4

### Signal Word

**DANGER**

### Hazard Statements

Causes skin irritation  
May be fatal if swallowed and enters airways  
Combustible liquid and vapor



**Appearance** Yellow Emulsion

**Physical State** Liquid Emulsion

**Odor** Citrus

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection  
Keep away from heat/sparks/open flames/hot surfaces. — No smoking  
Keep container tightly closed  
Ground/bond container and receiving equipment  
Use explosion-proof equipment  
Use only non-sparking tools  
Take precautionary measures against static discharge

**Precautionary Statements - Response**

If skin irritation occurs: Get medical advice/attention  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
Wash contaminated clothing before reuse  
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
Do NOT induce vomiting  
In case of fire: Use CO2, dry chemical, or foam for extinction

**Precautionary Statements - Storage**

Store locked up  
Store in a well-ventilated place.

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards Not Otherwise Classified (HNOC)**

May be harmful if swallowed  
May be harmful in contact with skin

**Other Hazards**

Very toxic to aquatic life with long lasting effects  
Very toxic to aquatic life

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS No	Weight-%
d-Limonene	5989-27-5	Proprietary

**4. FIRST AID MEASURES****First Aid Measures**

<b>General Advice</b>	Provide this SDS to medical personnel for treatment.
<b>Eye Contact</b>	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get immediate medical advice/attention.
<b>Skin Contact</b>	Wash affected areas with copious amount of soap and water. If there is dryness and skin irritation, use a skin cream or Vaseline on skin. If irritation persists, see physician.
<b>Inhalation</b>	Remove exposed individual(s) to fresh air for 20 minutes. Consult a physician / poison center if individual's condition declines or if symptoms persist.

**Ingestion**

Do not induce vomiting unless directed by medical personnel. If vomiting occurs, lean patient forward to maintain an open airway & prevent aspiration. Get immediate medical attention.

**Most Important Symptoms and Effects, both Acute and Delayed****Symptoms**

May cause skin and eye irritation. Direct contact with eyes may cause temporary irritation. May cause nausea, vomiting, stomach ache, and diarrhea. May cause respiratory irritation.

**Indication of any Immediate Medical Attention and Special Treatment Needed****Note to Physicians**

Aspiration into the lungs may occur during ingestion or vomiting, causing lung damage or even death due to chemical pneumonia.

**5. FIRE-FIGHTING MEASURES****Suitable Extinguishing Media**

Foam, carbon dioxide or dry chemical extinguisher. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** Water.

**Specific Hazards Arising from the Chemical**

Closed containers may explode due to buildup of pressure when exposed to extreme heat.

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Water may be used to cool closed containers to prevent pressure buildups and possible ignition or explosion when exposed to extreme heat.

**6. ACCIDENTAL RELEASE MEASURES****Personal Precautions, Protective Equipment and Emergency Procedures****Personal Precautions**

Wear protective clothing as described in Section 8 of this safety data sheet. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

**Methods and Material for Containment and Cleaning Up****Methods for Containment**

Prevent further leakage or spillage if safe to do so. Absorb spill with inert material (e.g. dry sand or earth).

**Methods for Cleaning Up**

Use clean non-sparking tools to collect absorbed material. Sweep up absorbed material and shovel into suitable containers for disposal. Discard any product, residue, disposable container or liner in full compliance with federal, state, and local regulations. For waste disposal, see section 13 of the SDS.

**7. HANDLING AND STORAGE****Precautions for Safe Handling****Advice on Safe Handling**

Handle in accordance with good industrial hygiene and safety practice. Wash face, hands, and any exposed skin thoroughly after handling. Use personal protection recommended in Section 8. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Use spark-proof tools and explosion-proof equipment. Take precautionary measures against static discharges. Keep container closed when not in use.

**Conditions for Safe Storage, Including any Incompatibilities**

<b>Storage Conditions</b>	Keep container tightly closed and store in a cool, dry and well-ventilated place. Store locked up.
<b>Incompatible Materials</b>	Strong oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure Guidelines** The following information is given as general guidance

### Appropriate Engineering Controls

**Engineering Controls** Good general mechanical ventilation. Local exhaust recommended.

### Individual Protection Measures, such as Personal Protective Equipment

**Eye/Face Protection** Goggles or face shield.

**Skin and Body Protection** Wear rubber or neoprene gloves, Rubber apron.

**Respiratory Protection** For normal use, none necessary.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on Basic Physical and Chemical Properties

<b>Physical State</b>	Liquid Emulsion	<b>Odor</b>	Citrus
<b>Appearance</b>	Yellow Emulsion	<b>Odor Threshold</b>	Not determined
<b>Color</b>	Pale Yellow		
<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>	
pH	Not determined		
Melting Point/Freezing Point	Not applicable		
Boiling Point/Boiling Range	176 °C / 348.8 °F		
Flash Point	43.33-46.11 °C / 110-115 °F	Tag Closed Cup	
Evaporation Rate	Not applicable		
Flammability (Solid, Gas)	Not determined		
Upper Flammability Limits	Not established		
Lower Flammability Limit	Not established		
Vapor Pressure	Not established		
Vapor Density	Not established		
Specific Gravity	0.90	(1=Water)	
Water Solubility	Emulsifier		
Solubility in Other Solvents	Not determined		
Partition Coefficient	Not determined		
Autoignition Temperature	Not determined		
Decomposition Temperature	Not determined		
Kinematic Viscosity	Not determined		
Dynamic Viscosity	Not determined		
Explosive Properties	Not determined		
Oxidizing Properties	Not determined		

## 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions.

**Chemical Stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Hazardous Polymerization**

Hazardous polymerization does not occur.

**Conditions to Avoid**

Heat, flames and sparks.

**Incompatible Materials**

Strong oxidizing agents.

**Hazardous Decomposition Products**

None known based on information supplied.

**11. TOXICOLOGICAL INFORMATION****Information on Likely Routes of Exposure****Product Information****Eye Contact**

Direct contact with eyes may cause temporary irritation.

**Skin Contact**

Causes skin irritation. May be harmful in contact with skin.

**Inhalation**

May cause irritation of respiratory tract.

**Ingestion**

May be harmful if swallowed. Potential for aspiration if swallowed.

**Component Information**

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
d-Limonene 5989-27-5	= 4400 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	-

**Information on Physical, Chemical and Toxicological Effects****Symptoms**

Please see section 4 of this SDS for symptoms.

**Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure****Carcinogenicity**

The table below indicates whether each agency has listed any ingredient as a carcinogen. However, the product as a whole has not been tested.

Chemical Name	ACGIH	IARC	NTP	OSHA
d-Limonene 5989-27-5		Group 3		X

*IARC (International Agency for Research on Cancer)**Group 3 IARC components are "not classifiable as human carcinogens"**OSHA (Occupational Safety and Health Administration of the US Department of Labor)**X - Present***Aspiration Hazard**

May be fatal if swallowed and enters airways.

**Numerical Measures of Toxicity**

Not determined

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
d-Limonene 5989-27-5		0.619 - 0.796: 96 h Pimephales promelas mg/L LC50 flow-through 35: 96 h Oncorhynchus mykiss mg/L LC50		

### Persistence and Degradability

Not determined

### Bioaccumulation

Not determined

### Mobility

Not determined

### Other Adverse Effects

Not determined

## 13. DISPOSAL CONSIDERATIONS

### Waste Treatment Methods

#### **Disposal of Wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

#### **Contaminated Packaging**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Chemical Name	California Hazardous Waste Status
d-Limonene 5989-27-5	Toxic

## 14. TRANSPORT INFORMATION

### Note

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

### DOT

<b>UN/ID No</b>	NA1993
<b>Proper Shipping Name</b>	Combustible liquid, n.o.s. (Contains terpene hydrocarbons)
<b>Hazard Class</b>	Combustible liquid
<b>Packing Group</b>	III

### IATA

<b>UN/ID No</b>	NA1993
<b>Proper Shipping Name</b>	Combustible liquid, n.o.s. (Contains terepene hydrocarbons)
<b>Hazard Class</b>	Combustible liquid
<b>Packing Group</b>	III

**IMDG**

<b>UN/ID No</b>	NA1993
<b>Proper Shipping Name</b>	Combustible liquid, n.o.s. (Contains terpene hydrocarbons)
<b>Hazard Class</b>	Combustible liquid
<b>Packing Group</b>	III

**15. REGULATORY INFORMATION****International Inventories**

Not Determined

**Legend:***TSCA - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List**EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances**ENCS - Japan Existing and New Chemical Substances**IECSC - China Inventory of Existing Chemical Substances**KECL - Korean Existing and Evaluated Chemical Substances**PICCS - Philippines Inventory of Chemicals and Chemical Substances***US Federal Regulations****SARA 313**

Not determined

**US State Regulations****U.S. State Right-to-Know Regulations**

Not Determined

**16. OTHER INFORMATION****NFPA****Health Hazards****Flammability****Instability****Special Hazards**

0

2

0

Not determined

**HMIS****Health Hazards****Flammability****Physical Hazards****Personal Protection**

1

2

0

Not determined

**Revision Date**

10-October-2014

**Revision Note**

New format

**Disclaimer**

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**End of Safety Data Sheet**



## MATERIAL SAFETY DATA SHEET

### STEEL PRODUCTS

ORIGINAL ISSUE DATE: 5/8/03

REVISED: 5/20/03

I . IDENTIFICATION		WIRE PRODUCTS			
PRODUCT NAME:		STEEL SCREWS			
STEEL PRODUCTS:					
WIRE & WIRE PRODUCTS					
COMMON NAME(S): SAME					
II . INGREDIENTS AND RECOMMENDED OCCUPATIONAL EXPOSURE LIMITS					
Note: steel products under normal conditions do not present an inhalation					
BASEMETAL & METALLIC COATINGS			% WT.	EXPOSURE LIMITS	
CHEMICAL	SYMBOL			OSHA PEL	ACGIH TLV
All Products:					
Iron	Fe				
Galvanized			95.0	10.0 mg/M³	5.0 mg/M³
Products:				fume	fume
Zinc	Zn		3.0	5.0 mg/M³	5.0 mg/M³

SEE ANNEX 1 FOR BALANCE OF INGREDIENTS. SEE ANNEX 3 FOR ANIL COATINGS.

### SECTION 313 – SUPPLIER NOTIFICATION

This product contains threshold concentrations of the following toxic chemicals subjects to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to Know Act of 1986(40CFR372):

Chromium, Manganese, Nickel and Zinc(Galvanized Coating Only) in the amounts noted above and on ANNEX 1.

This information should be included in all MSDS's that are copied and distributed for this material.

### III. PHYSICAL DATA

SPECIFIC GRAVITY(H=0>1):	7.85	SOLUBILITY IN WATER:	NONE
BOILING POINT(Iron):	4950°F	EVAPORATION RATE	
		(Butyl Acetate=1):	N/A
MELTING POINT(Base Metal):	2400°F	VOPOR PRESSURE(mm Hg):	N/A
MELTING POINT(Metallic Coating):	800°F	VOPOR DENSITY(Air 1):	N/A
APPEARANCE:	Metallic Grey	ODOR:	NONE

### VI. FIRE AND EXPLOSION HAZARD DATA

Steel products in the solid state present no fire or explosion hazard.

### V. REACTIVITY DATA

Stable under normal conditions of use, storage and transport. Will react with strong acid to liberate hydrogen. At temperatures above the melting point, may liberate fumes containing oxides of iron & alloying elements.





## MATERIAL SAFETY DATA SHEET

### STEEL PRODUCTS

STEEL PRODUCTS-

ORIGINAL ISSUE DATE: 5/8/03

REVISED: \_\_\_\_\_

#### TYPICAL LEVELS OF TRACE OR RESIDUAL ELEMENTS IN STEELS

All steel products are alloys which consist primarily of iron(generally 95 %). However, other elements which are either added intentionally or present as contaminants or residuals may also occur in these products at trace of low level concentration(generally <1.0%). These elements may include the following:

ALLOYING & RESIDUAL ELEMENTS			% WT.	EXPOSURE LIMITS	
CHEMICAL	SYMBOL			OSHA PEL	ACGIH TLV
Aluminum	Al		0.01-0.06	total 15.0 mg/M <sup>3</sup> respirable 5.0 mg/M <sup>3</sup>	fume 0.05mg/M <sup>3</sup>
Antimony	Sb		<0.005	0.5 mg/M <sup>3</sup>	0.5 mg/M <sup>3</sup>
(1) Arsenic	As		0.002-0.009	0.01 mg/M <sup>3</sup>	0.2 mg/M <sup>3</sup>
Boron	B		0.0002-0.004	total 10.0 mg/M <sup>3</sup> respirable 5.0 mg/M <sup>3</sup>	10.0 mg/M <sup>3</sup> 2.0 mg/M <sup>3</sup>
Calcium	Ca		0.0001-0.002	5.0 mg/M <sup>3</sup>	
Carbon	C		0.05-0.84	NONE	NONE
(1) Chromium	Cr		0.01-0.10	1.0 mg/M <sup>3</sup>	0.5 mg/M <sup>3</sup>
Cobalt	Co		<0.011	0.05 mg/M <sup>3</sup>	0.05mg/M <sup>3</sup>
Copper	Cu		<0.25	fume 0.1 mg/M <sup>3</sup>	fume 0.2mg/M <sup>3</sup>
Lead	Pb		<0.002	0.05 mg/M <sup>3</sup>	0.15mg/M <sup>3</sup>
Manganese	Mn		0.4-1.2	fume 1.0 mg/M <sup>3</sup>	fume 1.0mg/M <sup>3</sup>
Molybdenum	Mo		0.01-0.06	total 10.0 mg/M <sup>3</sup> respirable 5.0 mg/M <sup>3</sup>	10.0mg/M <sup>3</sup>
(1) Nickel	Ni		0.01-0.10	1.0 mg/M <sup>3</sup>	1.0mg/M <sup>3</sup>
Phosphorous	P		<0.04	0.1 mg/M <sup>3</sup>	0.1mg/M <sup>3</sup>
Silicon	Si		<0.30	total 10.0 mg/M <sup>3</sup> respirable 5.0 mg/M <sup>3</sup>	10.0mg/M <sup>3</sup>
Sulfur	S		<0.05	SO <sub>2</sub> 5.0 mg/M <sup>3</sup>	SO <sub>2</sub> 5.0mg/M <sup>3</sup>
Tin	Sn		<0.03	2.0 mg/M <sup>3</sup>	2.0mg/M <sup>3</sup>
Titanium	Ti		0.02-0.04	total 10.0 mg/M <sup>3</sup> respirable 5.0 mg/M <sup>3</sup>	10.0 mg/M <sup>3</sup>
Vanadium	V		0.001-0.03	fume 0.05 mg/M <sup>3</sup>	fume 0.05 mg/M <sup>3</sup>

(1) Recognized to have human carcinogenic or co-carcinogenic potential; included on IARC & NTP listings.

## Safety Data Sheet

# 2%-4% ANTIMONIAL LEAD USED IN ANCHORS; CALK-IN (ANCHOR SLEEVE), FIBERPLUG (LINER), SCRU-LEAD (ANCHOR BODY)

Powered by



A global vision of prevention



### 1. Identification

Product identifier	2%-4% ANTIMONIAL LEAD USED IN ANCHORS; CALK-IN (ANCHOR SLEEVE), FIBERPLUG (LINER), SCRUI-LEAD (ANCHOR BODY)
Product code	2%-4% Antimonial Lead
Other means of identification	None.
Recommended use of the chemical and restrictions on use	Anchor.
Manufacturer	Powers Fasteners, Inc. 2 Powers Lane Brewsters, NY, USA 10509 Tel. 800-524-3244 Fax 877-871-1965 <a href="http://www.powers.com">www.powers.com</a> <a href="mailto:info@powers.com">info@powers.com</a>
Emergency phone number	Chemtrec : 1-800-424-9300 (Within Continental USA); Chemtrec : 703-527-3887 (Outside USA).

### 2. Hazard identification

Summary	Use only in well ventilated area. Avoid breathing dust and fume. Avoid contact with skin, eyes and clothing. Do not ingest. If ingested consult physician immediately and show this Safety Data Sheet. Wear eye protection, gloves and other protective clothing that are adapted to the task being performed and the risks involved.
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#### WHMIS 2015/OSHA HCS 2012/GHS



Germ cell mutagenicity (Category 2)  
Carcinogenicity (Category 2)  
Reproductive toxicity (Category 1)  
Specific target organ toxicity, repeated exposure (Category 1)

#### DANGER

H360: May damage fertility or the unborn child  
H372: Causes damage to organs through prolonged or repeated exposure  
H351: Suspected of causing cancer  
H341: Suspected of causing genetic defects  
P101: If medical advice is needed, have product container or label at hand.  
P201: Obtain special instructions before use.  
P202: Do not handle until all safety precautions have been read and understood.  
P260: Do not breathe dusts and fumes.  
P264: Wash face, hands and any exposed skin thoroughly after handling.  
P270: Do not eat, drink or smoke when using this product.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves, protective clothing and eye protection.

P314: Get Medical advice/attention if you feel unwell.

P405: Store locked up.

P501: Dispose of contents and container to a licensed chemical disposal agency in accordance with local, regional and national regulations.

### 3. Composition/information on ingredients

Common name	CAS	Weight % content
Lead	7439-92-1	96 - 98 %
Antimony	7440-36-0	2 - 4 %

### 4. First-aid measures

<b>Inhalation</b>	Move person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen by trained personnel. If a problem develops or persists, seek medical attention.
<b>Skin contact</b>	Wash skin with warm water and mild soap. Remove contaminated clothing and wash before reuse. If a problem develops or persists, seek medical attention.
<b>Eye contact</b>	Flush with water for at least 15 minutes. Remove contact lenses. Hold eyelids apart to rinse properly. If a problem develops or persists, seek medical attention.
<b>Ingestion</b>	DO NOT induce vomiting, unless recommended by medical personnel. Never give anything by mouth if victim is unconscious or convulsing. If a problem develops or persists, seek medical attention.
<b>Other</b>	No information available.
<b>Symptoms</b>	May cause redness and slight irritation of the skin and to eyes.
<b>Notes to the physician</b>	Treat symptomatically.

### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	ABC fire extinguishing, dried powder, water spray, carbon dioxide (CO <sub>2</sub> ), chemical foam.
<b>Specific hazards arising from the chemical</b>	Not flammable.
<b>Special protective equipment</b>	Firefighters must wear self contained breathing apparatus with full face mask. Firefighting suit may not be efficient against chemicals.
<b>Special protective actions for fire-fighters</b>	Water spray can be used to cool equipment exposed to heat and flame.

### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Do not touch spilled material. Make sure to wear personal protective equipment mentioned in this Safety Data Sheet.



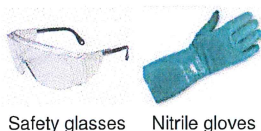
<b>Environmental precautions</b>	Do not allow material to contaminate ground water system. For a large spillage, consult the Department of Environment or the relevant authorities.
<b>Methods and materials for containment and cleaning up</b>	Ventilate well the area. Avoid generating dusty conditions. Pick up and transfer to properly labelled containers. Dispose via a licensed waste disposal contractor.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Use in well ventilated area. Avoid breathing dust and fume. Avoid contact with skin, eyes and clothing. Wear eye protection, gloves and other protective clothing that are adapted to the task being performed and the risks involved. Training the workers on the potential health hazards associated with the product vapor, dust or fume is important. Secondary inhalation exposures could occur when cleaning equipment, or when removing or laundering the clothing. Generally speaking, working cleanly and following basic precautionary measures will greatly minimize the potential for harmful exposure to this product under normal use conditions. Do not eat, do not drink and do not smoke during use. Keep containers tightly closed when not used. Keep away from heat and open flame. Keep away from incompatibles materials. After use, wash hands with soap and water. Wash contaminated clothing before reuse.
<b>Conditions for safe storage, including any incompatibilities</b>	Store tightly close and in properly labelled container. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Store away from incompatible materials (see section 10). Always keep in containers made in the same materials as the supply container.
<b>Storage temperature</b>	

## 8. Exposure controls/personal protection

Immediately Dangerous to Life or Health	Antimony: 50 mg/m3.		
Lead	TWA (8h)	0.05 mg/m³	ACGIH , BC, ON, OSHA, RSST
Antimony	TWA (8h)	0.5 mg/m³	ACGIH , BC, ON, OSHA, RSST
Appropriate engineering controls	Provide sufficient mechanical (general and/or local exhaust) to keep the airborne concentrations of dust below their respective occupational exposure limits.		
Individual protection measures			
Eye	Safety glasses. If risk of contact with eyes wear chemical splash goggles.		
Hands	Wear nitrile or neoprene gloves. Wear leather gloves. Gloves must only be worn on clean hands. Wash gloves with water before removing them. After using gloves, hands should be washed and dried thoroughly. Before using, user should confirm impermeability. Discard gloves that show tears, pinholes, or signs of wear.		
Skin	Personal protective equipment for the body should be selected based on the task being performed and the risks involved. Wear normal work clothing covering arms and legs as required by employer code.		
Respiratory	A respirator is not required in a well-ventilated area. Respiratory protection equipment (PPE) must be selected, fitted, maintained and inspected in accordance with regulations and CSA Standard Z 94.4 and approved by NIOSH / MSHA. In case of insufficient ventilation or in confined or enclosed space and for an assigned protection factor (APF) up to 10 times the exposure limit: wear a half mask respirator with appropriate cartridges fitted with P100 filters. For an APF until maximum 100 times of exposure limit, wear a full face respirator mask with appropriate cartridges and P100 filters.		
Feet	Wear safety shoes.		



Safety glasses    Nitrile gloves

## 9. Physical and chemical properties

<b>Physical state</b>	Solid	<b>Flammability</b>	Non-flammable.
<b>Colour</b>	Dark gray	<b>Flammability limits</b>	N/Ap.
<b>Odour</b>	Odourless	<b>Flash point</b>	N/Ap.
<b>Odour threshold</b>	N/Av.	<b>Auto-ignition temperature</b>	N/Ap.
<b>pH</b>	N/Ap.	<b>Sensibility to electrostatic charges</b>	No
<b>Melting point</b>	252 to 360 °C (485.6 to 680 °F)	<b>Sensibility aux sparks and/or friction</b>	No
<b>Freezing point</b>	252 to 360 °C (485.6 to 680 °F)	<b>Vapour density</b>	N/Ap. (Air = 1)
<b>Boiling point</b>	1380 °C (2516 °F)	<b>Relative density</b>	11.37 kg/L (Water = 1)
<b>Solubility</b>	Insoluble	<b>Partition coefficient n-octanol/water</b>	N/Ap.
<b>Evaporation rate</b>	N/Ap.	<b>Decomposition temperature</b>	N/Av.
<b>Vapour pressure</b>	N/Ap.	<b>Viscosity</b>	N/Ap.
<b>Percent Volatile</b>	<0.01%	<b>Molecular mass</b>	N/Ap.
N/Av.: Not Available    N/Ap.: Not Applicable    Und.: Undetermined    N/E: Not Established			

## 10. Stability and reactivity

<b>Reactivity</b>	No information available for this product.
<b>Chemical stability</b>	Stable under normal use conditions.
<b>Possibility of hazardous reactions (including polymerizations)</b>	Hazardous polymerization will not occur under recommended storage.
<b>Conditions to avoid</b>	Avoid contact with incompatible materials. Do not use in area without adequate ventilation.
<b>Incompatible materials</b>	Strong acids, strong oxidizing agents (such as nitric acid, perchloric acid, peroxides, chlorates and perchlorates).
<b>Hazardous decomposition products</b>	Under normal conditions of storage and use, hazardous decomposition products should not be produced.



## 11. Toxicological information


<b>Numerical measures of toxicity</b>	<p>Lead Ingestion &gt;2000 mg/kg Rat LD50</p> <p>Antimony Ingestion 7000 mg/kg Rat LD50</p> <p>Inhalation &gt;5.2 mg/l/4h Rat LC50</p> <p>Skin &gt;8300 mg/kg Rabbit LD50</p>
<b>Likely routes of exposure</b>	Skin, eyes, inhalation, ingestion.
<b>Delayed, immediate and chronic effects</b>	<p><b>Eye contact</b> May cause redness and slight irritation of the eyes. Eye Irritation, Rabbit: tests performed with each ingredient of this mixture gave not irritating results.</p> <p><b>Skin contact</b> May cause redness and slight irritation of the skin. The mechanical friction can increase skin irritation. Skin Irritation, Rabbit : tests performed with each ingredient of this mixture gave not irritating results.</p> <p><b>Inhalation</b> Inhalation of dust or fume can cause nose, throat and respiratory tract irritation. Prolonged exposure may cause liver, kidney, lung and blood forming organs damages.</p> <p><b>Ingestion</b> Swallow a large amount of this product may cause abdominal distress, which can rapidly lead to a systemic toxicity.</p> <p><b>Respiratory or skin sensitization</b> Ingredients present at levels greater than or equal to 0.1% of this product are skin or respiratory sensitizers.</p> <p><b>IRAC/NTP Classification</b> <b>Common name IRAC NTP</b>  Plomb 2B R  IARC : 1- Carcinogenic; 2A- Probably carcinogenic; 2B- Possibly carcinogenic.  NTP : K- Known to be carcinogens; R- Reasonably anticipated to be carcinogens.</p> <p><b>Carcinogenicity</b> Contains an ingredient possibly carcinogenic to humans (Group 2B, IARC). Prolonged or repeated inhalation of dust or fume increase the risk of cancer hazard.</p> <p><b>Teratogenicity</b> There are relationships between leads compounds exposure with neonatal developmental disorder of cognitive function, and also with the increase of miscarriage.</p> <p><b>Mutagenicity</b> There are contradicting results about the chromosome aberration in the peripheral blood lymphocytes from people who are engaged in lead-related work. However, leads compounds are known to cause mutations in both non-reproductive (somatic) cells and reproductive (germ) cells.</p> <p><b>Reproductive toxicity</b> Exposure to leads compounds are known to cause some effects in the sperm formation in men and also some effects on fertility in women.</p> <p><b>Specific target organ toxicity - repeated exposure</b> The blood-forming organs (bone marrow, spleen, lymphatic system). kidneys, peripheral nervous system, central nervous system, cardiovascular system, immune system, respiratory system.</p>
<b>Interactive effects</b>	No information available for this product.
<b>Other information</b>	The oral and skin acute toxicity estimates (ATE) of the mixture were calculated to be greater than 2000 mg/kg. These values are not classified according to WHMIS 2015 and OSHA HCS 2012.

## 12. Ecological information

<b>Ecological toxicity</b>	<p>Fish - Rainbow trout - <i>Salmo gairdneri</i> - fresh water LC50 1.17 mg/L; 96h (Lead/Plomb)</p> <p>Aquatic Invertebrate - <i>Daphnia magna</i> EC50 0.45 mg/L; 48h (Lead/Plomb)</p> <p>Green Algae EC50 2.66 mg/L; 96h (Lead/Plomb)</p>
<b>Persistence</b>	Persistent in the environment.
<b>Degradability</b>	The term biodegradability, as such, is not applicable to inorganic compounds.
<b>Bioaccumulative potential</b>	Bioaccumulation of lead occurs in aquatic and terrestrial animals and plants, but very little bioaccumulation occurs in the food chain.

<b>Mobility in soil</b>	Mobility of metallic lead between ecological compartments is low.
<b>Other adverse effects</b>	This chemical does not deplete the ozone layer.

### 13. Disposal considerations

<b>Container</b> 	Important! Prevent waste generation. Use in full. Metals can be reprocessed (recycled) everywhere there is a recovery program. Dispose via a licensed waste disposal contractor. Observe all federal, state/provincial and municipal regulations. If necessary consult the Department of Environment or the relevant authorities.
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### 14. Transport information

<b>UN Number</b>	UN
<b>UN Proper Shipping Name</b>	Not regulated by TDG (Canada) and 49 CFR DOT (USA).
<b>Environmental hazards</b>	Contains marine pollutant.
<b>Special precautions for user</b>	No information available for this product.
<b>TDG - Transportation of Dangerous Goods (Canada)</b>	
<b>Transport hazard class(es)</b>	Not regulated
<b>Packing group</b>	
<b>Emergency response guidebook 2012</b>	
<b>IMO/IMDG - International Maritime Transport</b>	
<b>Classification</b>	Not available
<b>IATA - International Air Transport Association</b>	
<b>Classification</b>	Not regulated
These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. In addition, if a domestic exemption exists, it is the responsibility of the shipper to define the application of it.	

### 15. Regulatory information

<b>Other regulations</b>	<p>UNITED STATE OF AMERICA:</p> <ul style="list-style-type: none"> <li>- Toxic Substance Control Act (TSCA) : All ingredients are listed in the TSCA Inventory or otherwise comply with TSCA requirements.</li> <li>- EPCRA Section 313 Toxic Chemicals: Lead (and its compounds). Antimony (CAS no 7440-36-0).</li> <li>- CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act): Lead (and its compounds). Antimony (CAS no 7440-36-0).</li> <li>- Clean Water Act (CWA) Priority Pollutants: Lead (and its compounds). Antimony (CAS no 7440-36-0).</li> <li>- Clean Air Act (CAA) 111: Lead (and its compounds).</li> <li>- California Proposition 65: Contains ingredients that can cause cancer according to the state of California.</li> </ul>
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Lead (and its compounds).

This product contains chemicals known to the State of California to cause birth defects or other reproductive harm.

Lead (and its compounds).

CANADA :

- Canada DSL and NDSL:

All ingredients are listed in the Domestic Substances List (DSL).

- Canadian National Pollutant Release Inventory Substances (NPRI):

Lead (and its compounds).

Antimony (and its compounds).

#### WHMIS 1988



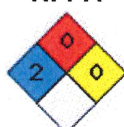
D2A

Class D2A : Very toxic material causing other toxic effects

#### HMIS



#### NFPA



## 16. Other information


Date (YYYY-MM-DD)	Powers Fasteners, Inc. 2015-09-03
Version	01
Other information	<p>REFERENCES:</p> <ul style="list-style-type: none"><li>- Haz-Map, Information on Hazardous Chemicals and Occupational Diseases, <a href="http://hazmap.nlm.nih.gov/index.php">http://hazmap.nlm.nih.gov/index.php</a></li><li>- TOXNET Databases, Toxicology Data Network, NIH U.S. National Library of Medicine, <a href="http://toxnet.nlm.nih.gov/">http://toxnet.nlm.nih.gov/</a></li><li>- Service du répertoire toxicologique de la Commission de la santé et de la sécurité du travail (CSST), <a href="http://www.reptox.csst.qc.ca">http://www.reptox.csst.qc.ca</a></li><li>- NIOSH Pocket Guide to Chemical Hazards, Centers for Disease Control and Prevention, NIOSH Publications, 2007, <a href="http://www.cdc.gov/niosh/npg/npg.html">http://www.cdc.gov/niosh/npg/npg.html</a></li><li>- Database, Institut National de Recherche et de Sécurité, <a href="http://www.inrs.fr/accueil/produits/bdd.html">http://www.inrs.fr/accueil/produits/bdd.html</a></li></ul> <p>ACGIH: American Conference of Governmental Industrial Hygienists AIHA: American Industrial Hygiene Association HMIS: Hazardous Materials Identification System NFPA: National Fire Protection Association OSHA: Occupational Safety and Health Administration (USA) NIOSH: National Institute for Occupational Safety and Health NTP: National Toxicology Program RSST: Règlement sur la santé et la sécurité du travail (Québec) GHS: Globally Harmonized System IARC: International Agency for Research on Cancer IDLH: Immediately Dangerous to Life or Health STEL: Short Term Exposure Limit (15 min) TWA: Time Weighted Averages WHMIS: Workplace Hazardous Materials Information System</p>



To the best of our knowledge, the information contained herein is accurate. However, neither Préventis System nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.



## SAFETY DATA SHEET

Section 1. Identification		
Product Identifier:	<b>Exterior Fiber-Cement (Medium Density)</b> – Includes all Generation 6 HZ5 and HZ10 products with the following product names: HardiePlank® lap siding, HardiePanel® vertical siding, HardieSoffit® panel, HardieSoffit®, Beaded Porch Panel, HardieShingle® siding, HardieShingle® notched panels, HardieShingle® individual shingles, Hardie® Reveal™ Panel, 7/16” HardieTrim® boards	
Manufacturer Name, Address and Phone Number:	James Hardie Building Products 231 S. LaSalle Street, Suite 2000 Chicago, IL 60604 1-800-942-7343 (1-800-9HARDIE)	
Emergency Phone Number:	1-800-942-7343 (1-800-9HARDIE)	
Recommended Use:	Exterior Fiber-Cement (Medium Density) is used as an external wall cladding	
Restrictions on Use:	None known	
Section 2. Hazards Identification		
GHS Classification:	Carcinogenity, Category 1A Target Organ Systemic Toxicity Repeated Exposure, Category 1	
GHS Label Element(s): Symbol		
Signal Word	DANGER	
Hazard Statement(s)	May cause cancer if dust from product is inhaled  Causes damage to lungs and respiratory system through prolonged or repeated inhalation of dust from product	
Precautionary Statement(s)	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust from product. Wash hands and face thoroughly after handling. Use personal protective equipment as required. If exposed or concerned: Get medical advice. If shortness of breath or other health concerns develop after exposure to dust from the product, seek medical attention. Dispose of product in accordance with local, state and national regulations. If there are no applicable regulations, dispose of in a secure landfill, or in a way that will not expose others to dust.	
Section 3. Composition / Information on Ingredients		
CAS#	Chemical Ingredient	%
14808-60-7	Crystalline Silica (Quartz)	30-45%
65997-15-1	Calcium Silicate (Hydrate)	35-65%



471-34-1	Calcium Carbonate	<30%
N/A	Calcium Aluminum Silicate (Hydrate)	<20%
9004-34-6	Cellulose	<15%
1333-86-4	Carbon Black	<1%
<b>Section 4. First Aid Measures</b>		
Inhalation	Acute effects – Dust may cause irritation of the nose, throat and airways, resulting in coughing and sneezing. Certain susceptible individuals may experience wheezing (spasms of the bronchial airways) upon inhaling dust during cutting, rebating, drilling, routing, sawing, crushing or otherwise abrading fiber cement, and when cleaning up, disposing of or moving the dust.	
	Chronic effects – Repeated or prolonged over exposures to crystalline silica can cause silicosis (scarring of the lung) and increases the risk of bronchitis, tuberculosis, lung cancer, renal disease, and scleroderma (a disease affecting the connective tissue of the skin, joints, blood vessels, and internal organs.) Some studies suggest that cigarette smoking increases the risk of silicosis, bronchitis and lung cancer in persons also exposed to crystalline silica.	
	Acute silicosis – A sub-chronic disease associated with acute, massive silica exposure, is a rapidly progressive, incurable lung disease that is typically fatal. Symptoms include, but are not limited to, shortness of breath, cough, fever, weight loss and chest pain. Such exposure may cause pneumoconiosis and pulmonary fibrosis.	
	Required treatment – If inhalation of dust occurs, remove to fresh air. If shortness of breath or wheezing develops, seek medical attention.	
Skin	Dust may cause irritation of the skin from friction but cannot be absorbed through intact skin.	
	If skin contact occurs, wash with mild soap and water. Contact physician if irritation persists or later develops.	
Eyes	Dust may irritate the eyes from mechanical abrasion causing watering or redness.	
	If eye contact occurs, remove contact lenses (if applicable). Flush with running water or saline for at least 15 minutes. Seek medical attention if redness persists or if visual changes occur.	
Ingestion	Ingestion is unlikely under normal conditions of use, but swallowing the dust from the product may result in irritation or damage to the mouth and gastrointestinal tract due to alkalinity of dust.	
	If ingestion occurs, dilute by drinking large amounts of water. Do	



	not induce vomiting. Seek medical attention. If unconscious, loosen tight clothing and lay the person on his/her left side. Give nothing by mouth to an individual who is not alert and conscious.
<b>Section 5. Fire-Fighting Measures</b>	
James Hardie® fiber-cement products are neither flammable nor explosive	
Suitable extinguishing techniques:	Appropriate extinguishing techniques for surrounding fire should be used.
Fire-fighting equipment:	Fire fighting personnel should wear normal protective equipment and positive self-contained breathing apparatus.
Special hazards arising from the substance or mixture:	James Hardie® fiber-cement products are neither flammable nor explosive. Hazardous reactions will not occur under normal conditions. Fight fire with normal precautions from a reasonable distance.
<b>Section 6. Accidental Release Measures</b>	
Emergency procedures:	No special precautions are necessary in the event of an accidental release. The following precautions apply to spills or releases of dust generated during cutting, rebating, drilling, routing, sawing, crushing or otherwise abrading fiber cement.
Protective equipment:	<p>Good housekeeping practices are necessary for cleaning up areas where spills or leaks have occurred. Take measures to either eliminate or minimize the creation of dust. Respirable dust and silica levels should be monitored regularly.</p> <p>Wherever possible, practices likely to generate dust should be controlled with engineering such as local exhaust ventilation, dust suppression through containment (e.g. wetting loose dust), enclosure, or covers.</p> <p>Use respiratory protection as described in Section 8.</p>
Proper methods of containment and clean-up:	A fine water spray should be used to suppress dust when sweeping (dry sweeping should not be attempted). Vacuuming with an industrial vacuum cleaner outfitted with a high-efficiency particulate (HEPA) filter is preferred to sweeping. Dispose of product in accordance with local, state and national regulations. If there are no applicable regulations, dispose of in a secure landfill, or in a way that will not expose others to dust.
<b>Section 7. Handling and Storage</b>	
Precautions of safe handling and storage:	Fiber-cement boards in their intact state do not present a health hazard. The controls below apply to dust generated from the boards by cutting, rebating, drilling, routing, sawing, crushing or otherwise abrading fiber cement, and when cleaning up, disposing of or moving the dust.



	<p>James Hardie® recommended best practices for handling fiber-cement:</p> <p>Keep exposure to dust as low as reasonably possible. Respirable crystalline silica limits are specified by OSHA and MSHA and identified in Section 8 of this MSDS. Exposure to respirable (fine) silica dust depends on a variety of factors, including activity rate (e.g. cutting rate), method of handling (e.g. electric shears), environmental conditions (e.g. weather conditions, workstation orientation) and control measures used.</p> <p>Wherever possible, practices likely to generate dust should be carried out in well ventilated areas (e.g. outside). The work practices and engineering controls set out in Section 8 should be followed to reduce silica exposures.</p> <p>Keep away from reactive products. Do not store near food, beverages or smoking materials. Avoid spilling and creating dust. Maintain appropriate dust controls during handling. Use appropriate respiratory protection during handling as described in Section 8.</p>		
Incompatibilities:	Hydrofluoric acid will dissolve silica and can generate silicon tetrafluoride, a corrosive gas. Contact with strong oxidizing agents such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride or oxygen difluoride may cause fires and /or explosions. Furthermore, limestone is incompatible with acids and ammonium salts.		
Section 8. Exposure Controls / Personal Protection			
OSHA Permissible Exposure Standards (PEL): Exposures shall not exceed an 8-hour time weighted average (TWA) limit as stated in 29 CFR 1910.1000 Table Z-3 for mineral dusts, expressed in million particles per cubic feet (Mppcf) and/or milligrams per cubic meter (mg/m³). The American Conference of Governmental Industrial Hygienists Threshold Limit Values (TLV are that organization's recommended exposure limits based on an 8-hour TWA.			
	TLV mg/m³	PEL Mppsf	PEL mg/m³
Crystalline Silica (Quartz) (Respirable)	0.025 mg/m³ —	250 %SiO + 5	10 mg/m³ %SiO + 2
Quartz (Total Dust)	—	—	30 mg/m³ %SiO + 2
Calcium Carbonate (Total Dust) (Respirable)	10 mg/m³ —	— —	15 mg/m³ 5 mg/m³
Calcium Silicate (Total Dust) (Respirable)	— —	— —	15 mg/m³ 5 mg/m³
Nuisance Dust (Not Otherwise Specified) (Total Dust) (Respirable)	10 mg/m³ (inhalable) 3 mg/m³	50 15	15 mg/m³ 5 mg/m³
Cellulose (Total) (Respirable)	— —	— —	15 mg/m³ 5 mg/m³
Carbon Black	3.5 mg/m³	—	3.5 mg/m³



**Other limits recommended:** The National Institute of Occupational Safety and Health (NIOSH) also has a Recommended Exposure Limit (REL) of 0.05 mg/m<sup>3</sup> for respirable crystalline silica, based on a 10-hour time-weighted average.

**Engineering Controls**

Personal protection when handling products that may generate silica dust: (1) follow James Hardie® instructions and best practices to reduce or limit the release of dust; (2) warn others in the area to avoid the dust; (3) when using mechanical saw or high-speed cutting tools, work outdoors and use dust collection equipment, and (4) if no other dust controls are available, wear a NIOSH-approved dust mask or respirator (e.g. N95 dust mask).

During clean-up, use a well-maintained vacuum and filter appropriate for capturing fine (respirable) dust or use wet cleanup methods—never dry sweep.

Cutting Outdoors	<ol style="list-style-type: none"><li>1. Position cutting station so that wind will blow dust away from user or others in working area and allow for ample dust dissipation</li><li>2. Use one of the following methods based on the required cutting rate and job-site conditions: BEST<ul style="list-style-type: none"><li>• Score and snap using carbide-tipped scoring knife or utility knife</li><li>• Fiber-cement shears (electric or pneumatic)</li></ul>BETTER<ul style="list-style-type: none"><li>• Dust reducing circular saw equipped with Hardieblade™ saw blade and HEPA vacuum extraction</li></ul>GOOD (for low to moderate cutting only)<ul style="list-style-type: none"><li>• Dust reducing circular saw with Hardieblade™ saw blade</li></ul></li></ol>
Cutting Indoors	<ul style="list-style-type: none"><li>• Cut only using score and snap method or with fiber-cement shears (manual, electric or pneumatic)</li><li>• Position cutting station in well-ventilated area to allow for dust dissipation</li></ul>
Sanding / Rebating / Drilling / Other Machining	If sanding, rebating, drilling or other machining is necessary, you should always wear a NIOSH-approved dust mask or respirator (e.g. N-95) and warn others in the immediate area.
Clean-Up	During clean-up of dust and debris, NEVER dry sweep as it may excite silica dust particles into the user's breathing area. Instead, wet debris down with a fine mist to suppress dust during sweeping, or use a HEPA vacuum to collect particles.
Important Notes	<ol style="list-style-type: none"><li>1. For maximum protection (lowest respirable dust production), James Hardie® recommends always using "Best"-level cutting methods where feasible</li><li>2. NEVER use a power saw indoors</li></ol>



	<ol style="list-style-type: none"><li>3. NEVER use a circular saw blade that does not carry the Hardieblade™ saw blade trademark</li><li>4. NEVER dry sweep – use wet suppression methods or HEPA vacuum</li><li>5. NEVER use a grinder or continuous rim diamond blade for cutting</li><li>6. ALWAYS follow tool manufacturer's safety recommendations</li></ol>
<b>Personal Protective Equipment</b>	
<ul style="list-style-type: none"><li>• <b>Respiratory</b> – If respirators are selected, use and maintain in accordance with ANSI Standard (Z88.2) for particulate respirators. Select respirators based on the level of exposure to crystalline silica as measured by dust sampling. Use respirators that offer protection to the highest concentrations of crystalline silica if the actual concentrations are unknown. Put in place a respiratory protection and monitoring program that complies with MSHA or OSHA (e.g. 29CFR1910.134) standards, which include provisions for a user training program, respirator repair and cleaning, respirator fit-testing and other requirements. Comply with all other applicable federal and state laws.</li><li>• <b>Eye</b> – When cutting material, dust resistant safety goggles / glasses should be worn and used in compliance with ANSI Standard Z87.1 and applicable OSHA (e.g. 29CFR1910.133) standards.</li><li>• <b>Skin</b> – Loose comfortable clothing should be worn. Direct skin contact with dust and debris should be avoided by wearing long sleeved shirts and long trousers, a cap or hat, and gloves. Work clothes should be washed regularly.</li></ul>	
<b>Section 9. Physical and Chemical Properties</b>	
Appearance and odor: Solid gray boards with varying dimensions according to product. Some product may have a surface coat of water-based acrylic paint or acrylic sealer	
Vapor Pressure: Not relevant	Flash Point: Not relevant
Specific Gravity: Not relevant	Autoignition Temperature: Not relevant
Flammability Limits: Not relevant	Volatility: Not relevant
Boiling Point: Not relevant	Solubility in water: Not relevant
Melting Point: Not relevant	Evaporation rate: Not applicable
<b>Section 10. Stability and Reactivity</b>	
Stability:	Crystalline silica and limestone are stable under ordinary conditions
Conditions to Avoid:	Excessive dust generation during storage and handling
Materials to Avoid:	Hydrofluoric acid will dissolve silica and can generate silicon tetrafluoride, a corrosive gas. Contact with strong oxidizing agents such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride or oxygen difluoride may cause fires and /or explosions. Furthermore, limestone is incompatible with acids and ammonium salts.
<b>Section 11. Toxicological Information</b>	
Routes of exposure:	Fiber-cement is not toxic in its intact form. The following applies to dust that may be generated during cutting, rebating, drilling, routing, sawing, crushing or otherwise abrading fiber cement.



Related symptoms:	<p>Repeated and prolonged overexposures to dust containing crystalline silica can cause silicosis (scarring of the lung) and increases the risk of bronchitis, tuberculosis, lung cancer, renal disease and scleroderma (a disease affecting the connective tissue of the skin, joints, blood vessels and internal organs). Some studies suggest that cigarette smoking increases the risk of silicosis, bronchitis, and lung cancer in persons also exposed to crystalline silica. Acute silicosis is a rapidly progressive, incurable lung disease that is typically fatal. Symptoms include, but are not limited to: shortness of breath, cough, fever, weight loss and chest pain. Such exposure may cause pneumoconiosis and pulmonary fibrosis.</p> <p>The following relates to health effects of cellulose: Based on limited animal research, it is possible that repeated chronic inhalation exposure to cellulose fiber dust over time may lead to inflammation and scarring of the lung in humans. Precautions taken for crystalline silica dust will protect against cellulose.</p> <p>Medical conditions generally aggravated by exposure – Pulmonary function may be reduced by inhalation of respirable crystalline silica and / or cellulose. If lung scarring occurs, such scarring could aggravate other lung conditions such as asthma, emphysema, pneumonia or restrictive lung diseases. Lung scarring from crystalline silica may also increase risks to pulmonary tuberculosis.</p> <p>Smoking – some studies suggest that cigarette smoking increases the risk of occupational respiratory diseases, including silica-related respiratory diseases.</p>
Acute and chronic effects:	<ul style="list-style-type: none"><li>• Acute toxicity – not classified</li><li>• Skin corrosion / irritation – not classified</li><li>• Serious eye damage / irritation – not classified</li><li>• Respiratory or skin sensitization – not classified</li><li>• Germ cell mutagenicity – not classified</li><li>• Carcinogenity – may cause cancer if dust from product is inhaled</li><li>• Specific target organ toxicity (repeated exposure) – causes damage to lungs and respiratory system through prolonged or repeated inhalation of dust from product</li></ul>
Carcinogenity:	<p>California Proposition 65 Warning: This product contains chemicals known to the State of California to cause cancer</p> <p>International Agency for Research on Cancer (IARC): Crystalline silica inhaled in the forms of quartz or cristobalite from occupational sources is carcinogenic to humans</p> <p>Carbon black is possibly carcinogenic to humans</p>





	The National Toxicology Program (NTP): NTP has concluded that respirable crystalline silica is a known human carcinogen LD50 (Silicon dioxide): Rat oral >22,500 mg / kg Mouse oral > 10,500 mg/kg
<b>Section 12. Ecological Information</b>	
There is a very limited amount of ecological data available on the effects of releases that may occur from this product being released into the environment. Clean up of the spilled product would not be expected to leave any hazardous material that could cause a significant adverse impact. There is a limited amount of ecological data available on crystalline silica, primarily because it is a naturally occurring mineral. An adequate representation of these data is beyond the scope of this document.	
<b>Section 13. Disposal Considerations</b>	
Dispose of material as inert, non-metallic mineral in conformance with local, state and federal regulations. Crystalline silica and limestone is not a RCRA hazardous waste.	
<b>Section 14. Transport Information</b>	
There are no special requirements for storage and transport	
UN No:	None allocated
Dangerous goods class:	None allocated
Hazchem code:	None allocated
Poisons schedule:	None allocated
Packing group:	Not applicable
Label:	Not a DOT hazardous material. Local regulations may apply
<b>Section 15. Regulatory Information</b>	
DOT hazard classification:	None
Placard requirement:	Not a DOT hazardous material. Local placarding regulations may apply
California Proposition 65:	<b>Warning: Airborne particles of respirable size of crystalline silica are known to the State of California to cause cancer.</b>
CERCLA hazardous substance (40CFR Part 302):	<b>Listed substance: No</b> <b>Unlisted substance: No</b> <b>Reportable quantity (RQ): None</b> <b>Characteristic(s): Not applicable</b> <b>RCRA waste number: Not applicable</b>
SARA. Title III. Sections 302 / 303 (40CFR part 355 – Emergency Planning and Notification):	<b>Extremely hazardous substance: No</b>
SARA. Title III. Section 311 / 312 (40CFR part 370 – Hazardous Chemical Reporting: Community Right-To-Know):	<b>Acute: Yes</b> <b>Chronic: Yes</b> <b>Fire: No</b> <b>Pressure: No</b> <b>Reactivity: No</b>

**231 S. LaSalle Street, Suite 2000  
Chicago, IL 60604****Date of Issue: 06/01/15**

SARA. Title III. Section 313 (40CFR part 372 – Toxic Chemical Release Reporting: Community Right-To-Know	<b>Not a RCRA hazardous waste</b>										
TSCA Inventory List:	<b>Yes</b>										
TSCA 8(d):	<b>No</b>										
<b>Section 16. Other Information</b>											
Prepared by Jeff Fry	<b>Issue Date: 06/01/15</b>										
<div>Read label before use</div> <div><b>FIBER CEMENT</b> Contains: Crystalline Silica (quartz) 10-30% Calcium Silicate (hydrate) 10-60% Cellulose fiber&lt;10%]</div> <div><b>DANGER</b> May cause cancer if dust from product is inhaled. Causes damage to lungs and respiratory system through prolonged or repeated inhalation of dust from product.</div> <div><table border="1"><thead><tr><th>Prevention</th><th>Response:</th><th>Storage:</th><th>Disposal:</th></tr></thead><tbody><tr><td>Refer to the product Safety Data Sheet before use. Do not handle until all safety precautions have been read and understood.  Do not breathe dust from the product. Do not eat, drink or smoke when using this product. Wear personal protective equipment, as specified below.</td><td>Wash hands and face thoroughly after handling. If exposed or concerned: Get medical advice. If shortness of breath or other health concerns develop after exposure to dust from the product, seek medical attention.</td><td>Fiber cement is not a health hazard when handled or stored in its original, unaltered condition</td><td>Dispose of product in accordance with local, state and national regulations. If there are no applicable regulations, dispose of in a secure landfill, or in a way that will not expose others to dust.</td></tr></tbody></table></div> <div>The hazard associated with fiber cement arises from the crystalline silica present in dust generated by activities such as cutting, rebating, drilling, routing, sawing, crushing, or otherwise abrading fiber cement, and when cleaning up, disposing of or moving dust. When doing any of these activities in a manner that generates dust: (1) follow James Hardie instructions and best practices to reduce or limit the release of dust; (2) warn others in the area to avoid dust; (3) work outdoors and use appropriate vacuum dust collection when using mechanical saws or other high speed cutting tools; (4) wear a dust mask or respirator that meets applicable national regulations, as specified below.  During clean-up, use a well maintained vacuum and filter appropriate for capturing respirable fine dust or use wet cleanup methods - never dry sweep.  If using a dust mask or respirator, always use a NIOSH-approved dust mask or respirator (e.g., the N 95 dust mask).  <b>WARNING:</b> This product contains a chemical known to the State of California to cause cancer. For more information go to <a href="http://www.P65Warnings.ca.gov/product">www.P65Warnings.ca.gov/product</a>.  James Hardie Building Products, Inc. 231 S. LaSalle St., Suite 2000 Chicago, IL 60604 USA <b>1-888-JHARDIE</b> <a href="http://www.jameshardie.com">www.jameshardie.com</a> <a href="http://www.jhsafesite.com">www.jhsafesite.com</a></div>				Prevention	Response:	Storage:	Disposal:	Refer to the product Safety Data Sheet before use. Do not handle until all safety precautions have been read and understood.  Do not breathe dust from the product. Do not eat, drink or smoke when using this product. Wear personal protective equipment, as specified below.	Wash hands and face thoroughly after handling. If exposed or concerned: Get medical advice. If shortness of breath or other health concerns develop after exposure to dust from the product, seek medical attention.	Fiber cement is not a health hazard when handled or stored in its original, unaltered condition	Dispose of product in accordance with local, state and national regulations. If there are no applicable regulations, dispose of in a secure landfill, or in a way that will not expose others to dust.
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This form has been prepared to meet current Federal OSHA hazard communication regulations and is offered without any warranty or guarantee of any type. James Hardie Building Products cannot control the use of its products, and therefore specifically disclaims liability and responsibility arising from the use, misuse and alteration of its products.


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## SAFETY DATA SHEET

Section 1. Identification		
Product Identifier:	<b>Exterior Fiber-Cement (Low Density)</b> – Includes all Generation 6 HZ5 and HZ10 products with the following product names: HardieTrim® board, HardieTrim® Fascia board, HardieTrim® Crown Moulding, HardieTrim® XLD, HardieTrim® Flex board, HardieTrim® Batten, HardieTrim® BHT, HardieTrim® 5/4 board	
Manufacturer Name, Address and Phone Number:	James Hardie Building Products 231 S. LaSalle Street, Suite 2000 Chicago, IL 60604 1-800-942-7343 (1-800-9HARDIE)	
Emergency Phone Number:	1-800-942-7343 (1-800-9HARDIE)	
Recommended Use:	Exterior Fiber-Cement (Low Density) is used as external wall cladding accessories	
Restrictions on Use:	None known	
Section 2. Hazards Identification		
GHS Classification:	Carcinogenity, Category 1A Target Organ Systemic Toxicity Repeated Exposure, Category 1	
GHS Label Element(s): Symbol		
Signal Word	DANGER	
Hazard Statement(s)	May cause cancer if dust from product is inhaled  Causes damage to lungs and respiratory system through prolonged or repeated inhalation of dust from product	
Precautionary Statement(s)	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust from product. Wash hands and face thoroughly after handling. Use personal protective equipment as required. If exposed or concerned: Get medical advice. If shortness of breath or other health concerns develop after exposure to dust from the product, seek medical attention. Dispose of product in accordance with local, state and national regulations. If there are no applicable regulations, dispose of in a secure landfill, or in a way that will not expose others to dust.	
Section 3. Composition / Information on Ingredients		
CAS#	Chemical Ingredient	%
14808-60-7	Crystalline Silica (Quartz)	15-30%
65997-15-1	Calcium Silicate (Hydrate)	35-65%



471-34-1	Calcium Carbonate	<30%
N/A	Calcium Aluminum Silicate (Hydrate)	<20%
9004-34-6	Cellulose	<15%
1333-86-4	Carbon Black	<1%
Section 4. First Aid Measures		
Inhalation	Acute effects – Dust may cause irritation of the nose, throat and airways, resulting in coughing and sneezing. Certain susceptible individuals may experience wheezing (spasms of the bronchial airways) upon inhaling dust during cutting, rebating, drilling, routing, sawing, crushing or otherwise abrading fiber cement, and when cleaning up, disposing of or moving the dust.	
	Chronic effects – Repeated or prolonged over exposures to crystalline silica can cause silicosis (scarring of the lung) and increases the risk of bronchitis, tuberculosis, lung cancer, renal disease, and scleroderma (a disease affecting the connective tissue of the skin, joints, blood vessels, and internal organs.) Some studies suggest that cigarette smoking increases the risk of silicosis, bronchitis and lung cancer in persons also exposed to crystalline silica.	
	Acute silicosis – A sub-chronic disease associated with acute, massive silica exposure, is a rapidly progressive, incurable lung disease that is typically fatal. Symptoms include, but are not limited to, shortness of breath, cough, fever, weight loss and chest pain. Such exposure may cause pneumoconiosis and pulmonary fibrosis.	
	Required treatment – If inhalation of dust occurs, remove to fresh air. If shortness of breath or wheezing develops, seek medical attention.	
Skin	Dust may cause irritation of the skin from friction but cannot be absorbed through intact skin.	
	If skin contact occurs, wash with mild soap and water. Contact physician if irritation persists or later develops.	
Eyes	Dust may irritate the eyes from mechanical abrasion causing watering or redness.	
	If eye contact occurs, remove contact lenses (if applicable). Flush with running water or saline for at least 15 minutes. Seek medical attention if redness persists or if visual changes occur.	
Ingestion	Ingestion is unlikely under normal conditions of use, but swallowing the dust from the product may result in irritation or damage to the mouth and gastrointestinal tract due to alkalinity of dust.	
	If ingestion occurs, dilute by drinking large amounts of water. Do	



	not induce vomiting. Seek medical attention. If unconscious, loosen tight clothing and lay the person on his/her left side. Give nothing by mouth to an individual who is not alert and conscious.
<b>Section 5. Fire-Fighting Measures</b>	
James Hardie® fiber-cement products are neither flammable nor explosive	
Suitable extinguishing techniques:	Appropriate extinguishing techniques for surrounding fire should be used.
Fire-fighting equipment:	Fire fighting personnel should wear normal protective equipment and positive self-contained breathing apparatus.
Special hazards arising from the substance or mixture:	James Hardie® fiber-cement products are neither flammable nor explosive. Hazardous reactions will not occur under normal conditions. Fight fire with normal precautions from a reasonable distance.
<b>Section 6. Accidental Release Measures</b>	
Emergency procedures:	No special precautions are necessary in the event of an accidental release. The following precautions apply to spills or releases of dust generated during cutting, rebating, drilling, routing, sawing, crushing or otherwise abrading fiber cement.
Protective equipment:	<p>Good housekeeping practices are necessary for cleaning up areas where spills or leaks have occurred. Take measures to either eliminate or minimize the creation of dust. Respirable dust and silica levels should be monitored regularly.</p> <p>Wherever possible, practices likely to generate dust should be controlled with engineering such as local exhaust ventilation, dust suppression through containment (e.g. wetting loose dust), enclosure, or covers.</p> <p>Use respiratory protection as described in Section 8.</p>
Proper methods of containment and clean-up:	A fine water spray should be used to suppress dust when sweeping (dry sweeping should not be attempted). Vacuuming with an industrial vacuum cleaner outfitted with a high-efficiency particulate (HEPA) filter is preferred to sweeping. Dispose of product in accordance with local, state and national regulations. If there are no applicable regulations, dispose of in a secure landfill, or in a way that will not expose others to dust.
<b>Section 7. Handling and Storage</b>	
Precautions of safe handling and storage:	Fiber-cement boards in their intact state do not present a health hazard. The controls below apply to dust generated from the boards by cutting, rebating, drilling, routing, sawing, crushing or otherwise abrading fiber cement, and when cleaning up, disposing of or moving the dust.



	<p>James Hardie® recommended best practices for handling fiber-cement:</p> <p>Keep exposure to dust as low as reasonably possible. Respirable crystalline silica limits are specified by OSHA and MSHA and identified in Section 8 of this MSDS. Exposure to respirable (fine) silica dust depends on a variety of factors, including activity rate (e.g. cutting rate), method of handling (e.g. electric shears), environmental conditions (e.g. weather conditions, workstation orientation) and control measures used.</p> <p>Wherever possible, practices likely to generate dust should be carried out in well ventilated areas (e.g. outside). The work practices and engineering controls set out in Section 8 should be followed to reduce silica exposures.</p> <p>Keep away from reactive products. Do not store near food, beverages or smoking materials. Avoid spilling and creating dust. Maintain appropriate dust controls during handling. Use appropriate respiratory protection during handling as described in Section 8.</p>		
Incompatibilities:	Hydrofluoric acid will dissolve silica and can generate silicon tetrafluoride, a corrosive gas. Contact with strong oxidizing agents such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride or oxygen difluoride may cause fires and /or explosions. Furthermore, limestone is incompatible with acids and ammonium salts.		
Section 8. Exposure Controls / Personal Protection			
OSHA Permissible Exposure Standards (PEL): Exposures shall not exceed an 8-hour time weighted average (TWA) limit as stated in 29 CFR 1910.1000 Table Z-3 for mineral dusts, expressed in million particles per cubic feet (Mppcf) and/or milligrams per cubic meter (mg/m³). The American Conference of Governmental Industrial Hygienists Threshold Limit Values (TLV are that organization's recommended exposure limits based on an 8-hour TWA.			
	TLV mg/m³	PEL Mppsf	PEL mg/m³
Crystalline Silica (Quartz) (Respirable)	0.025 mg/m³ —	250 %SiO + 5	10 mg/m³ %SiO + 2
Quartz (Total Dust)	—	—	30 mg/m³ %SiO + 2
Calcium Carbonate (Total Dust) (Respirable)	10 mg/m³ —	— —	15 mg/m³ 5 mg/m³
Calcium Silicate (Total Dust) (Respirable)	— —	— —	15 mg/m³ 5 mg/m³
Nuisance Dust (Not Otherwise Specified) (Total Dust) (Respirable)	10 mg/m³(inhalable) 3 mg/m³	50 15	15 mg/m³ 5 mg/m³
Cellulose (Total) (Respirable)	— —	— —	15 mg/m³ 5 mg/m³
Carbon Black	3.5 mg/m³	—	3.5 mg/m³



**Other limits recommended:** The National Institute of Occupational Safety and Health (NIOSH) also has a Recommended Exposure Limit (REL) of 0.05 mg/m<sup>3</sup> for respirable crystalline silica, based on a 10-hour time-weighted average.

**Engineering Controls**

Personal protection when handling products that may generate silica dust: (1) follow James Hardie<sup>®</sup> instructions and best practices to reduce or limit the release of dust; (2) warn others in the area to avoid the dust; (3) when using mechanical saw or high-speed cutting tools, work outdoors and use dust collection equipment, and (4) if no other dust controls are available, wear a NIOSH-approved dust mask or respirator (e.g. N95 dust mask).

During clean-up, use a well-maintained vacuum and filter appropriate for capturing fine (respirable) dust or use wet cleanup methods—never dry sweep.

Cutting Outdoors	<ol style="list-style-type: none"><li>1. Position cutting station so that wind will blow dust away from user or others in working area and allow for ample dust dissipation</li><li>2. Use one of the following methods based on the required cutting rate and job-site conditions: BEST<ul style="list-style-type: none"><li>• Score and snap using carbide-tipped scoring knife or utility knife</li><li>• Fiber-cement shears (electric or pneumatic)</li></ul>BETTER<ul style="list-style-type: none"><li>• Dust reducing circular saw equipped with Hardieblade<sup>™</sup> saw blade and HEPA vacuum extraction</li></ul>GOOD (for low to moderate cutting only)<ul style="list-style-type: none"><li>• Dust reducing circular saw with Hardieblade<sup>™</sup> saw blade</li></ul></li></ol>
Cutting Indoors	<ul style="list-style-type: none"><li>• Cut only using score and snap method or with fiber-cement shears (manual, electric or pneumatic)</li><li>• Position cutting station in well-ventilated area to allow for dust dissipation</li></ul>
Sanding / Rebating / Drilling / Other Machining	If sanding, rebating, drilling or other machining is necessary, you should always wear a NIOSH-approved dust mask or respirator (e.g. N-95) and warn others in the immediate area.
Clean-Up	During clean-up of dust and debris, NEVER dry sweep as it may excite silica dust particles into the user's breathing area. Instead, wet debris down with a fine mist to suppress dust during sweeping, or use a HEPA vacuum to collect particles.
Important Notes	<ol style="list-style-type: none"><li>1. For maximum protection (lowest respirable dust production), James Hardie<sup>®</sup> recommends always using "Best"-level cutting methods where feasible</li><li>2. NEVER use a power saw indoors</li></ol>





	<ol style="list-style-type: none"><li>3. NEVER use a circular saw blade that does not carry the Hardieblade™ saw blade trademark</li><li>4. NEVER dry sweep – use wet suppression methods or HEPA vacuum</li><li>5. NEVER use a grinder or continuous rim diamond blade for cutting</li><li>6. ALWAYS follow tool manufacturer's safety recommendations</li></ol>
<b>Personal Protective Equipment</b>	
<ul style="list-style-type: none"><li>• <b>Respiratory</b> – If respirators are selected, use and maintain in accordance with ANSI Standard (Z88.2) for particulate respirators. Select respirators based on the level of exposure to crystalline silica as measured by dust sampling. Use respirators that offer protection to the highest concentrations of crystalline silica if the actual concentrations are unknown. Put in place a respiratory protection and monitoring program that complies with MSHA or OSHA (e.g. 29CFR1910.134) standards, which include provisions for a user training program, respirator repair and cleaning, respirator fit-testing and other requirements. Comply with all other applicable federal and state laws.</li><li>• <b>Eye</b> – When cutting material, dust resistant safety goggles / glasses should be worn and used in compliance with ANSI Standard Z87.1 and applicable OSHA (e.g. 29CFR1910.133) standards.</li><li>• <b>Skin</b> – Loose comfortable clothing should be worn. Direct skin contact with dust and debris should be avoided by wearing long sleeved shirts and long trousers, a cap or hat, and gloves. Work clothes should be washed regularly.</li></ul>	
<b>Section 9. Physical and Chemical Properties</b>	
Appearance and odor: Solid gray boards with varying dimensions according to product. Some product may have a surface coat of water-based acrylic paint or acrylic sealer	
Vapor Pressure: Not relevant	Flash Point: Not relevant
Specific Gravity: Not relevant	Autoignition Temperature: Not relevant
Flammability Limits: Not relevant	Volatility: Not relevant
Boiling Point: Not relevant	Solubility in water: Not relevant
Melting Point: Not relevant	Evaporation rate: Not applicable
<b>Section 10. Stability and Reactivity</b>	
Stability:	Crystalline silica and limestone are stable under ordinary conditions
Conditions to Avoid:	Excessive dust generation during storage and handling
Materials to Avoid:	Hydrofluoric acid will dissolve silica and can generate silicon tetrafluoride, a corrosive gas. Contact with strong oxidizing agents such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride or oxygen difluoride may cause fires and /or explosions. Furthermore, limestone is incompatible with acids and ammonium salts.
<b>Section 11. Toxicological Information</b>	
Routes of exposure:	Fiber-cement is not toxic in its intact form. The following applies to dust that may be generated during cutting, rebating, drilling, routing, sawing, crushing or otherwise abrading fiber cement.



Related symptoms:	<p>Repeated and prolonged overexposures to dust containing crystalline silica can cause silicosis (scarring of the lung) and increases the risk of bronchitis, tuberculosis, lung cancer, renal disease and scleroderma (a disease affecting the connective tissue of the skin, joints, blood vessels and internal organs). Some studies suggest that cigarette smoking increases the risk of silicosis, bronchitis, and lung cancer in persons also exposed to crystalline silica. Acute silicosis is a rapidly progressive, incurable lung disease that is typically fatal. Symptoms include, but are not limited to: shortness of breath, cough, fever, weight loss and chest pain. Such exposure may cause pneumoconiosis and pulmonary fibrosis.</p> <p>The following relates to health effects of cellulose: Based on limited animal research, it is possible that repeated chronic inhalation exposure to cellulose fiber dust over time may lead to inflammation and scarring of the lung in humans. Precautions taken for crystalline silica dust will protect against cellulose.</p> <p>Medical conditions generally aggravated by exposure – Pulmonary function may be reduced by inhalation of respirable crystalline silica and / or cellulose. If lung scarring occurs, such scarring could aggravate other lung conditions such as asthma, emphysema, pneumonia or restrictive lung diseases. Lung scarring from crystalline silica may also increase risks to pulmonary tuberculosis.</p> <p>Smoking – some studies suggest that cigarette smoking increases the risk of occupational respiratory diseases, including silica-related respiratory diseases.</p>
Acute and chronic effects:	<ul style="list-style-type: none"><li>• Acute toxicity – not classified</li><li>• Skin corrosion / irritation – not classified</li><li>• Serious eye damage / irritation – not classified</li><li>• Respiratory or skin sensitization – not classified</li><li>• Germ cell mutagenicity – not classified</li><li>• Carcinogenity – may cause cancer if dust from product is inhaled</li><li>• Specific target organ toxicity (repeated exposure) – causes damage to lungs and respiratory system through prolonged or repeated inhalation of dust from product</li></ul>
Carcinogenity:	<p>California Proposition 65 Warning: This product contains chemicals known to the State of California to cause cancer</p> <p>International Agency for Research on Cancer (IARC): Crystalline silica inhaled in the forms of quartz or cristobalite from occupational sources is carcinogenic to humans</p> <p>Carbon black is possibly carcinogenic to humans</p>



	The National Toxicology Program (NTP): NTP has concluded that respirable crystalline silica is a known human carcinogen LD50 (Silicon dioxide): Rat oral >22,500 mg / kg Mouse oral > 10,500 mg/kg
<b>Section 12. Ecological Information</b>	
There is a very limited amount of ecological data available on the effects of releases that may occur from this product being released into the environment. Clean up of the spilled product would not be expected to leave any hazardous material that could cause a significant adverse impact. There is a limited amount of ecological data available on crystalline silica, primarily because it is a naturally occurring mineral. An adequate representation of these data is beyond the scope of this document.	
<b>Section 13. Disposal Considerations</b>	
Dispose of material as inert, non-metallic mineral in conformance with local, state and federal regulations. Crystalline silica and limestone is not a RCRA hazardous waste.	
<b>Section 14. Transport Information</b>	
There are no special requirements for storage and transport	
UN No:	None allocated
Dangerous goods class:	None allocated
Hazchem code:	None allocated
Poisons schedule:	None allocated
Packing group:	Not applicable
Label:	Not a DOT hazardous material. Local regulations may apply
<b>Section 15. Regulatory Information</b>	
DOT hazard classification:	None
Placard requirement:	Not a DOT hazardous material. Local placarding regulations may apply
California Proposition 65:	<b>Warning: Airborne particles of respirable size of crystalline silica are known to the State of California to cause cancer.</b>
CERCLA hazardous substance (40CFR Part 302):	<b>Listed substance: No</b> <b>Unlisted substance: No</b> <b>Reportable quantity (RQ): None</b> <b>Characteristic(s): Not applicable</b> <b>RCRA waste number: Not applicable</b>
SARA. Title III. Sections 302 / 303 (40CFR part 355 – Emergency Planning and Notification):	<b>Extremely hazardous substance: No</b>
SARA. Title III. Section 311 / 312 (40CFR part 370 – Hazardous Chemical Reporting: Community Right-To-Know):	<b>Acute: Yes</b> <b>Chronic: Yes</b> <b>Fire: No</b> <b>Pressure: No</b> <b>Reactivity: No</b>



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TSCA Inventory List:	<b>Yes</b>										
TSCA 8(d):	<b>No</b>										
<b>Section 16. Other Information</b>											
Prepared by Jeff Fry	<b>Issue Date: 06/01/15</b>										
<p>Read label before use</p> <p><b>FIBER CEMENT</b> Contains: Crystalline Silica (quartz) 10-30% Calcium Silicate (hydrate) 10-60% Cellulose fiber&lt;10%]</p> <p><b>DANGER</b> May cause cancer if dust from product is inhaled. Causes damage to lungs and respiratory system through prolonged or repeated inhalation of dust from product.</p> <table border="1"><thead><tr><th>Prevention</th><th>Response:</th><th>Storage:</th><th>Disposal:</th></tr></thead><tbody><tr><td>Refer to the product Safety Data Sheet before use. Do not handle until all safety precautions have been read and understood.  Do not breathe dust from the product. Do not eat, drink or smoke when using this product. Wear personal protective equipment, as specified below.</td><td>Wash hands and face thoroughly after handling. If exposed or concerned: Get medical advice. If shortness of breath or other health concerns develop after exposure to dust from the product, seek medical attention.</td><td>Fiber cement is not a health hazard when handled or stored in its original, unaltered condition</td><td>Dispose of product in accordance with local, state and national regulations. If there are no applicable regulations, dispose of in a secure landfill, or in a way that will not expose others to dust.</td></tr></tbody></table> <p>The hazard associated with fiber cement arises from the crystalline silica present in dust generated by activities such as cutting, rebating, drilling, routing, sawing, crushing, or otherwise abrading fiber cement, and when cleaning up, disposing of or moving dust. When doing any of these activities in a manner that generates dust: (1) follow James Hardie instructions and best practices to reduce or limit the release of dust; (2) warn others in the area to avoid dust; (3) work outdoors and use appropriate vacuum dust collection when using mechanical saws or other high speed cutting tools; (4) wear a dust mask or respirator that meets applicable national regulations, as specified below.</p> <p>During clean-up, use a well maintained vacuum and filter appropriate for capturing respirable fine dust or use wet cleanup methods - never dry sweep.</p> <p>If using a dust mask or respirator, always use a NIOSH-approved dust mask or respirator (e.g., the N 95 dust mask).</p> <p><b>WARNING:</b> This product contains a chemical known to the State of California to cause cancer. For more information go to <a href="http://www.P65Warnings.ca.gov/product">www.P65Warnings.ca.gov/product</a>.</p> <p>James Hardie Building Products, Inc. 231 S. LaSalle St., Suite 2000 Chicago, IL 60604 USA <b>1-888-JHARDIE</b> <a href="http://www.jameshardie.com">www.jameshardie.com</a> <a href="http://www.jhsafesite.com">www.jhsafesite.com</a></p>				Prevention	Response:	Storage:	Disposal:	Refer to the product Safety Data Sheet before use. Do not handle until all safety precautions have been read and understood.  Do not breathe dust from the product. Do not eat, drink or smoke when using this product. Wear personal protective equipment, as specified below.	Wash hands and face thoroughly after handling. If exposed or concerned: Get medical advice. If shortness of breath or other health concerns develop after exposure to dust from the product, seek medical attention.	Fiber cement is not a health hazard when handled or stored in its original, unaltered condition	Dispose of product in accordance with local, state and national regulations. If there are no applicable regulations, dispose of in a secure landfill, or in a way that will not expose others to dust.
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# MATERIAL SAFETY DATA SHEET



## Fiberglass Panels

MSDS Name: Marlite FRP Panels

MSDS Date: 5-3-06

Page Number: 1 of 2

### SECTION I – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Marlite FRP Fiberglass Reinforced Polyester Panels  
CAS Number: Mixture  
Chemical Name: N/A  
Chemical Family: Polymerized Polymers  
Company Identification: Marlite, PO Box 250, Dover, OH 44622 Phone: 330-343-6621 Fax: 330-343-7296

### SECTION II – COMPOSITION, INFORMATION ON INGREDIENTS

	Threshold Limit
Nuisance Dust (from cutting or machining)	10 mg/m <sup>3</sup>

### SECTION III – HAZARD IDENTIFICATION

Stability - Stable  
Incompatible Materials - N/A  
Hazardous Decomposition Products - Co, Co<sup>2</sup>  
Hazardous Polymerization - Will Not Occur

Signs and Symptoms of Exposure - Mechanical Skin and Upper Respiratory Tract Irritation Possible From Dust.

Medical Conditions Generally Aggravated by Exposure - N/A

Chemical Listed as Carcinogen or Potential Carcinogen:

National Toxicology Program - No

I.A.R.C. Monographs - No

OSHA - No

### SECTION IV – FIRST AID MEASURES

Emergency and First Aid Procedures - Primary Route(s) of Entry: Inhalation, Skin Contact

Inhalation - Remove to Fresh Air

Eyes - Flush for 15 minutes. Medical Attention as Needed.

Skin - Wash With Soap and Water

Ingestion - N/A

### SECTION V – FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA:

Water, spray, or foam

FIRE FIGHTING PROCEDURES:

Firefighters should wear approved self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS - None

### SECTION VI – PERSONAL PROTECTION

Respiratory Protection (specific type) - NIOSH Approved Protective Mask That Covers Mouth and Nose When Cutting or Machining.

Ventilation - Control Dust When Cutting or Machining

Protective Gloves - Dust/Abrasive Resistant

Eye Protection - Safety Glasses or Goggles

Other Protective Clothing or Equipment - N/A

### SECTION VII – PHYSICAL & CHEMICAL PROPERTIES

Boiling Point - N/A

Specific Gravity (H<sub>2</sub>O=1) - 1.6-1.8

Percent Volatile by Volume (%) - None

MSDS Name: Marlite FRP Panels

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Solubility In Water - Not Soluble

Appearance and Odor - Rigid Sheet, No Odor

Flash Point - N/A

Flammable Limits in Air % by Volume - N/A

Lower - N/A

Upper - N/A

Extinguisher Media – Water, spray, or foam

Special Fire Fighting Procedures – Firefighters should wear self-contained breathing apparatus

Unusual Fire and Explosion Hazards - None

#### **SECTION VIII - SPECIAL PRECAUTIONS AND SPILL / LEAK PROCEDURES**

Precautions for Handling and Storage - Keep Away From Open Flames.

Other Precautions - None

Steps To Be Taken In Case Material Is Released or Spilled - N/A

Waste Disposal Methods - Dispose per Solid Waste Regulations.

#### **SECTION IX – OTHER INFORMATION**

##### **DISCLAIMER:**

While the information and recommendations set forth herein are believed to be accurate as of the data hereof, Marlite makes no warranty, express or implied, with respect thereto and disclaims all liability from reliance thereon.



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# Safety Data Sheet

## SEISMIC COLORSEAL

**Preparation Date** March 15, 2015      **Revision Date** May 31, 2015

### 1. Identification of the Substance / Preparation

<b>Product identifier</b>	<b>SEISMIC COLORSEAL</b>
<b>Other identifier or names</b>	COS Foam
<b>UN ID number</b>	None
<b>Manufacturer Address</b>	EMSEAL LLC 120 Carrier Drive Toronto, Ontario M9W 5R1 Canada
<b>Company Phone</b>	(508) 836-0280 M-F 9am - 5pm
<b>Emergency Phone</b>	CHEMTREC (800) 424-9300 (24 Hours)
<b>CHEMTREC International Phone</b>	+1 703-527-3887 (24 Hours)

### 2. Hazardous Identification

<b>Hazardous Classification</b>	This product is not classified as hazardous when used as intended.
<b>Signal Word</b>	None
<b>Pictograms</b>	None
<b>Emergency Overview:</b>	No emergency requirements.

### 3. Composition / Information on Ingredients

**EMSEAL SEISMIC COLORSEAL is composed of polyurethane foam impregnated with a proprietary solid acrylic polymer bonded to a fully cured silicone sealant. It is classified as Non-Hazardous.**

**NOTE: Silicone facing is fully cured. The composition of the silicone in its liquid state is comprised of the following:**

<b>Chemical Name</b>	<b>CAS #</b>	<b>% by Weight</b>
Titanium Dioxide	13463-67-7	1 - 5
Methylvinyl bis(N-thylacetamido) silane	87855-59-2	1 - 5
Antimony nickel titanium oxide yellow	8007-18-9	1 - 5
Dimethyl, methylhydrogen siloxane, dehydrogenated reaction with hydroxydiethylamine	68952-53-4	1 - 5
Carbon black	1333-86-4	0.1 - 1
Quartz	14808-60-7	0.1 - 1
Cobalt titanate green spinel	68186-85-6	0.1 - 1
N-ethylacetamide	625-50-3	0.1 - 1
Octamethylcyclotetrasiloxane	556-67-2	0.1 - 1





## 4. First Aid Measures

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- 4.1 EYES:** Flush with water for at least 15 minutes, and call physician if problems persist.
- 4.2 SKIN:** Product may leave a sticky residue, and mild irritation if prolonged exposure. Scrub with soapy water until adhesive is removed.
- 4.3 INGESTION:** Do not eat – call physician if ingested.

## 5. Fire-fighting Measures

---

- 5.2 FLAMMABILITY:** Slight. Material can support an open flame or smoldering ignition. The foam can melt while burning which can contribute fire to spread.
- 5.2 FLASH POINT:** Unknown.
- 5.3 AUTO-IGNITION TEMPERATURE:** Unknown.
- 5.4 EXTINGUISHING MEDIA:** Large volumes of water, or ABC chemical may be appropriate for initial control or small volumes of impregnated foam.
- 5.5 HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon di/mon oxides will be formed as well as other noxious and toxic fumes upon combustion – do not breath combustion products.

## 6. Accidental Release Measures

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If material is unusable pick up pieces and dispose of in accordance with local regulations; material and all components are non-toxic and normal landfill will most often be acceptable.

## 7. Handling and Storage

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Store in original packaging below 35°C. There are no special handling instructions.

## 8. Exposure Controls / Personal Protection

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- 8.1 RESPIRATORY PROTECTION:** Not required
- 8.2 EYE PROTECTION:** Not required
- 8.3 SKIN PROTECTION:** Gloves of any material are suitable if desired, but not required. No other protection is required.

## 9. Physical and Chemical Properties

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- 9.1 APPEARANCE:** Dark grey / charcoal colored foam and colored silicone with product identifying packaging.
- 9.2 ODOR:** Slight characteristic odor.
- 9.3 PERCENT SOLIDS BY WEIGHT:** 100%
- 9.4 PHYSICAL STATE:** Solid
- 9.5 PERCENT VOLATILE:** <1% wt/wt
- 9.6 DENSITY:** 0.4g/cm<sup>3</sup>
- 9.7 DECOMPOSITION:** > 300°C
- 9.8 SOLUBILITY IN WATER:** None



## **10. Stability and Reactivity**

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Stable under normal conditions – avoid temperatures in excess of 300°C, strong acids and bases, and open flame.

## **11. Toxicological Information**

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Unknown.

## **12. Ecological Information**

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Unknown

## **13. Disposal Considerations**

---

No known hazard. Dispose of in accordance with local regulations; material and all components are non-toxic and disposal in normal landfill will most often be acceptable.

## **14. Transportation Information**

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Not hazardous – safe for non-hazardous shipping.

## **15. Regulatory Information**

---

Unknown.

## **16. Other Information**

---

No other information provided.

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## Safety Data Sheet

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**Document Group:** 31-5638-7  
**Issue Date:** 08/19/14

**Version Number:** 3.00  
**Supersedes Date:** 03/25/13

### SECTION 1: Identification

#### 1.1. Product identifier

3M™ Smoke and Sound Sealant SS 100

#### 1.2. Recommended use and restrictions on use

##### Recommended use

Smoke and Sound acoustical sealant used to seal gaps and voids in non-rated construction

#### 1.3. Supplier's details

**MANUFACTURER:** 3M  
**DIVISION:** Industrial Adhesives and Tapes Division  
**ADDRESS:** 3M Center, St. Paul, MN 55144-1000, USA  
**Telephone:** 1-888-3M HELPS (1-888-364-3577)

#### 1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

### SECTION 2: Hazard identification

#### 2.1. Hazard classification

Skin Corrosion/Irritation: Category 2.

Skin Sensitizer: Category 1A.

Carcinogenicity: Category 1A.

Specific Target Organ Toxicity (single exposure): Category 1.

#### 2.2. Label elements

##### Signal word

Danger

##### Symbols

Exclamation mark | Health Hazard |

##### Pictograms



### **Hazard Statements**

Causes skin irritation.  
May cause an allergic skin reaction.  
May cause cancer.

Causes damage to organs:  
cardiovascular system |  
nervous system |  
kidney/urinary tract |  
respiratory system |

### **Precautionary Statements**

#### **General:**

Keep out of reach of children.  
If medical advice is needed, have product container or label at hand.

#### **Prevention:**

Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Do not breathe dust/fume/gas/mist/vapors/spray.  
Wear protective gloves.  
Do not eat, drink or smoke when using this product.  
Wash thoroughly after handling.  
Contaminated work clothing must not be allowed out of the workplace.

#### **Response:**

IF ON SKIN: Wash with plenty of soap and water.  
If skin irritation or rash occurs: Get medical advice/attention.  
Take off contaminated clothing and wash it before reuse.  
IF exposed: Call a POISON CENTER or doctor/physician.  
IF exposed or concerned: Get medical advice/attention.  
Specific treatment (see Notes to Physician on this label).

#### **Storage:**

Store locked up.

#### **Disposal:**

Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

#### **Notes to Physician:**

This product contains ethylene glycol. Effects of oral ethylene glycol poisoning can be divided into three stages which generally occur over a time-course of hours to days following ingestion: Stage 1 (neurological effects), stage 2 (cardiopulmonary effects) and stage 3 (renal effects). If ethylene glycol poisoning is confirmed, intravenous (IV) administration of ethanol should be considered. Additional pharmacologic and supportive care should be based on the treating physician's judgement.

#### **2.3. Hazards not otherwise classified**

None.

10% of the mixture consists of ingredients of unknown acute oral toxicity.  
31% of the mixture consists of ingredients of unknown acute dermal toxicity.  
38% of the mixture consists of ingredients of unknown acute inhalation toxicity.

## **SECTION 3: Composition/information on ingredients**

<b>Ingredient</b>	<b>C.A.S. No.</b>	<b>% by Wt</b>
Calcium Carbonate	1317-65-3	40 - 70 Trade Secret *
Polymer NJTS Reg. No. 04499600-7189	Trade Secret*	10 - 30 Trade Secret *
Acrylic Emulsion	70677-00-8	5 - 10 Trade Secret *
Water	7732-18-5	5 - 10 Trade Secret *
Mineral Spirits	64742-88-7	5 - 10 Trade Secret *
Plasticizer	27138-31-4	1 - 5 Trade Secret *
Ethylene Glycol	107-21-1	1 - 5 Trade Secret *
Titanium Dioxide	13463-67-7	1 - 5 Trade Secret *
Ethyl Hydroxyethyl Cellulose	9004-58-4	0.5 - 1.5 Trade Secret *
Quartz Silica	14808-60-7	0.1 - 1 Trade Secret *
5-Chloro-2-Methyl-4-Isothiazoline-3-one	26172-55-4	< 0.1 Trade Secret *
2-Methyl-4-Isothiazoline-3-one	2682-20-4	< 0.1 Trade Secret *
2-Octyl-3(2H)-Isothiazolone	26530-20-1	< 0.1 Trade Secret *

NJTS or NJTSRN: New Jersey Trade Secret Registry Number.

\*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### **Inhalation:**

Remove person to fresh air. If you feel unwell, get medical attention.

#### **Skin Contact:**

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

#### **Eye Contact:**

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

#### **If Swallowed:**

Rinse mouth. If you feel unwell, get medical attention.

### 4.2. Most important symptoms and effects, both acute and delayed

See Section 11.1. Information on toxicological effects.

### 4.3. Indication of any immediate medical attention and special treatment required

This product contains ethylene glycol. Effects of oral ethylene glycol poisoning can be divided into three stages which generally occur over a time-course of hours to days following ingestion: Stage 1 (neurological effects), stage 2 (cardiopulmonary effects) and stage 3 (renal effects). If ethylene glycol poisoning is confirmed, intravenous (IV) administration of ethanol should be considered. Additional pharmacologic and supportive care should be based on the treating physician's judgement.

## SECTION 5: Fire-fighting measures

### 5.1. Suitable extinguishing media

Use a fire fighting agent suitable for the surrounding fire.

**5.2. Special hazards arising from the substance or mixture**

None inherent in this product.

**5.3. Special protective actions for fire-fighters**

No special protective actions for fire-fighters are anticipated.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Ventilate the area with fresh air. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

**6.2. Environmental precautions**

Avoid release to the environment.

**6.3. Methods and material for containment and cleaning up**

Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue. Seal the container. Dispose of collected material as soon as possible.

**SECTION 7: Handling and storage****7.1. Precautions for safe handling**

Keep out of reach of children. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Use personal protective equipment (gloves, respirators, etc.) as required.

**7.2. Conditions for safe storage including any incompatibilities**

Store away from oxidizing agents.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Occupational exposure limits**

<b>Ingredient</b>	<b>C.A.S. No.</b>	<b>Agency</b>	<b>Limit type</b>	<b>Additional Comments</b>
Ethylene Glycol	107-21-1	ACGIH	CEIL(as aerosol):100 mg/m3	A4: Not class. as human carcin
Ethylene Glycol	107-21-1	CMRG	CEIL(as vapor and aerosol):100 mg/m3	
Calcium Carbonate	1317-65-3	OSHA	TWA(as total dust):15 mg/m3;TWA(respirable fraction):5 mg/m3	
Titanium Dioxide	13463-67-7	ACGIH	TWA:10 mg/m3	A4: Not class. as human carcin
Titanium Dioxide	13463-67-7	CMRG	TWA(as respirable dust):5 mg/m3	
Titanium Dioxide	13463-67-7	OSHA	TWA(as total dust):15 mg/m3	
Quartz Silica	14808-60-7	ACGIH	TWA(respirable fraction):0.025 mg/m3	A2: Suspected human carcin.
Quartz Silica	14808-60-7	OSHA	TWA concentration(as total dust):0.3 mg/m3;TWA	

			concentration(respirable):0.1 mg/m3(2.4 millions of particles/cu. ft.)	
5-Chloro-2-Methyl-4-Isothiazoline-3-one	26172-55-4	CMRG	TWA:0.076 mg/m3;STEL:0.23 mg/m3	Sensitizer
2-Methyl-4-Isothiazoline-3-one	2682-20-4	CMRG	TWA:1.5 mg/m3;STEL:4.5 mg/m3	Sensitizer
Mineral Spirits	64742-88-7	CMRG	TWA:100 ppm	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

## 8.2. Exposure controls

### 8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

### 8.2.2. Personal protective equipment (PPE)

#### Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Safety Glasses with side shields

#### Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.

Gloves made from the following material(s) are recommended: Polymer laminate

#### Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors

For questions about suitability for a specific application, consult with your respirator manufacturer.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

<b>General Physical Form:</b>	Solid
<b>Specific Physical Form:</b>	Paste
<b>Odor, Color, Grade:</b>	White paste with low odor
<b>Odor threshold</b>	No Data Available
<b>Melting point</b>	No Data Available
<b>Flash Point</b>	No flash point
<b>Flammability (solid, gas)</b>	Not Classified



Flammable Limits(LEL)	<i>Not Applicable</i>
Flammable Limits(UEL)	<i>Not Applicable</i>
Density	1.45 g/ml
Specific Gravity	1.45 [Ref Std: WATER=1]
Solubility- non-water	<i>No Data Available</i>
Partition coefficient: n-octanol/ water	<i>No Data Available</i>
Autoignition temperature	<i>Not Applicable</i>
Decomposition temperature	<i>No Data Available</i>
Volatile Organic Compounds	< 15 % weight
VOC Less H2O & Exempt Solvents	< 250 g/l

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

This material is considered to be non reactive under normal use conditions.

### 10.2. Chemical stability

Stable.

### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

### 10.4. Conditions to avoid

None known.

### 10.5. Incompatible materials

Strong oxidizing agents

### 10.6. Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	Not Specified
Carbon dioxide	Not Specified

## SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

### 11.1. Information on Toxicological effects

#### Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

#### Inhalation:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May cause target organ effects after inhalation.

**Skin Contact:**

Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, dryness, cracking, blistering, and pain.  
Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

**Eye Contact:**

Contact with the eyes during product use is not expected to result in significant irritation.

**Ingestion:**

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

May cause target organ effects after ingestion.

**Target Organ Effects:****Single exposure may cause:**

Cardiac Effects: Signs/symptoms may include irregular heartbeat (arrhythmia), changes in heart rate, damage to heart muscle, heart attack, and may be fatal.

Neurological Effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and/or changes in blood pressure and heart rate.

Respiratory Effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish colored skin (cyanosis), sputum production, changes in lung function tests, and/or respiratory failure.

Kidney/Bladder Effects: Signs/symptoms may include changes in urine production, abdominal or lower back pain, increased protein in urine, increased blood urea nitrogen (BUN), blood in urine, and painful urination.

**Carcinogenicity:**

Contains a chemical or chemicals which can cause cancer.

<b><u>Ingredient</u></b>	<b><u>C.A.S. No.</u></b>	<b><u>Class Description</u></b>	<b><u>Regulation</u></b>
SILICA, CRYST AIRRESP	14808-60-7	Known human carcinogen	National Toxicology Program Carcinogens
Quartz Silica	14808-60-7	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
Titanium Dioxide	13463-67-7	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

**Toxicological Data**

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

**Acute Toxicity**

<b><u>Name</u></b>	<b><u>Route</u></b>	<b><u>Species</u></b>	<b><u>Value</u></b>
Overall product	Dermal		No data available; calculated ATE > 5,000 mg/kg
Overall product	Inhalation-Vapor(4 hr)		No data available; calculated ATE > 50 mg/l
Overall product	Ingestion		No data available; calculated ATE > 5,000 mg/kg
Calcium Carbonate	Dermal	Rat	LD50 > 2,000 mg/kg
Calcium Carbonate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 3.0 mg/l
Calcium Carbonate	Ingestion	Rat	LD50 6,450 mg/kg
Polymer NJTS Reg. No. 04499600-7189	Ingestion	Rat	LD50 > 2,000 mg/kg
Mineral Spirits	Inhalation-Vapor		LC50 estimated to be 20 - 50 mg/l
Mineral Spirits	Dermal	Rabbit	LD50 > 3,000 mg/kg
Mineral Spirits	Ingestion	Rat	LD50 > 5,000 mg/kg
Plasticizer	Dermal	Rat	LD50 > 2,000 mg/kg
Plasticizer	Inhalation-Dust/Mist	Rat	LC50 > 200 mg/l

	(4 hours)		
Plasticizer	Ingestion	Rat	LD50 3,295 mg/kg
Titanium Dioxide	Dermal	Rabbit	LD50 > 10,000 mg/kg
Titanium Dioxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 6.82 mg/l
Titanium Dioxide	Ingestion	Rat	LD50 > 10,000 mg/kg
Ethylene Glycol	Ingestion	Human	LD50 1,600 mg/kg
Ethylene Glycol	Inhalation-Dust/Mist (4 hours)	Other	LC50 estimated to be 5 - 12.5 mg/l
Ethylene Glycol	Dermal	Rabbit	9,530 mg/kg
Ethyl Hydroxyethyl Cellulose	Ingestion	Rat	LD50 > 10,000 mg/kg
Quartz Silica	Dermal		LD50 estimated to be > 5,000 mg/kg
Quartz Silica	Ingestion		LD50 estimated to be > 5,000 mg/kg
2-Methyl-4-Isothiazoline-3-one	Dermal	Rabbit	LD50 87 mg/kg
5-Chloro-2-Methyl-4-Isothiazoline-3-one	Dermal	Rabbit	LD50 87 mg/kg
2-Methyl-4-Isothiazoline-3-one	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.33 mg/l
2-Methyl-4-Isothiazoline-3-one	Ingestion	Rat	LD50 40 mg/kg
5-Chloro-2-Methyl-4-Isothiazoline-3-one	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.33 mg/l
5-Chloro-2-Methyl-4-Isothiazoline-3-one	Ingestion	Rat	LD50 40 mg/kg

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

Name	Species	Value
Calcium Carbonate	Rabbit	No significant irritation
Polymer NJTS Reg. No. 04499600-7189	Rabbit	Minimal irritation
Mineral Spirits	Rabbit	Irritant
Plasticizer	Rabbit	No significant irritation
Titanium Dioxide	Rabbit	No significant irritation
Ethylene Glycol	Rabbit	Minimal irritation
Ethyl Hydroxyethyl Cellulose		Minimal irritation
Quartz Silica		No significant irritation
2-Methyl-4-Isothiazoline-3-one	Rabbit	Corrosive
5-Chloro-2-Methyl-4-Isothiazoline-3-one	Rabbit	Corrosive

**Serious Eye Damage/Irritation**

Name	Species	Value
Calcium Carbonate	Rabbit	No significant irritation
Polymer NJTS Reg. No. 04499600-7189		Mild irritant
Mineral Spirits	Rabbit	No significant irritation
Plasticizer	Rabbit	No significant irritation
Titanium Dioxide	Rabbit	No significant irritation
Ethylene Glycol	Rabbit	Mild irritant
Ethyl Hydroxyethyl Cellulose		Mild irritant
2-Methyl-4-Isothiazoline-3-one	Rabbit	Corrosive
5-Chloro-2-Methyl-4-Isothiazoline-3-one	Rabbit	Corrosive

**Skin Sensitization**

Name	Species	Value
Mineral Spirits	Guinea pig	Not sensitizing
Plasticizer	Guinea pig	Not sensitizing
Titanium Dioxide	Human and animal	Not sensitizing
Ethylene Glycol	Human	Some positive data exist, but the data are not sufficient for classification
2-Methyl-4-Isothiazoline-3-one	Human and	Sensitizing

	animal	
5-Chloro-2-Methyl-4-Isothiazoline-3-one	Human and animal	Sensitizing

### Photosensitization

Name	Species	Value
2-Methyl-4-Isothiazoline-3-one	Human and animal	Not sensitizing
5-Chloro-2-Methyl-4-Isothiazoline-3-one	Human and animal	Not sensitizing

### Respiratory Sensitization

Name	Species	Value
------	---------	-------

### Germ Cell Mutagenicity

Name	Route	Value
Mineral Spirits	In vivo	Not mutagenic
Mineral Spirits	In Vitro	Some positive data exist, but the data are not sufficient for classification
Plasticizer	In Vitro	Not mutagenic
Titanium Dioxide	In Vitro	Not mutagenic
Titanium Dioxide	In vivo	Not mutagenic
Ethylene Glycol	In Vitro	Not mutagenic
Ethylene Glycol	In vivo	Not mutagenic
Quartz Silica	In Vitro	Some positive data exist, but the data are not sufficient for classification
Quartz Silica	In vivo	Some positive data exist, but the data are not sufficient for classification
2-Methyl-4-Isothiazoline-3-one	In vivo	Not mutagenic
2-Methyl-4-Isothiazoline-3-one	In Vitro	Some positive data exist, but the data are not sufficient for classification
5-Chloro-2-Methyl-4-Isothiazoline-3-one	In vivo	Not mutagenic
5-Chloro-2-Methyl-4-Isothiazoline-3-one	In Vitro	Some positive data exist, but the data are not sufficient for classification

### Carcinogenicity

Name	Route	Species	Value
Mineral Spirits	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Mineral Spirits	Inhalation	Human and animal	Some positive data exist, but the data are not sufficient for classification
Titanium Dioxide	Ingestion	Multiple animal species	Not carcinogenic
Titanium Dioxide	Inhalation	Rat	Carcinogenic
Ethylene Glycol	Ingestion	Multiple animal species	Not carcinogenic
Quartz Silica	Inhalation	Human and animal	Carcinogenic
2-Methyl-4-Isothiazoline-3-one	Dermal	Mouse	Not carcinogenic
2-Methyl-4-Isothiazoline-3-one	Ingestion	Rat	Not carcinogenic
5-Chloro-2-Methyl-4-Isothiazoline-3-one	Dermal	Mouse	Not carcinogenic
5-Chloro-2-Methyl-4-Isothiazoline-3-one	Ingestion	Rat	Not carcinogenic

### Reproductive Toxicity

### Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Calcium Carbonate	Ingestion	Not toxic to development	Rat	NOAEL 625 mg/kg/day	prematuring & during gestation
Mineral Spirits	Inhalation	Not toxic to development	Rat	NOAEL 2.4 mg/l	during organogenesis
Plasticizer	Ingestion	Not toxic to female reproduction	Rat	NOAEL 500 mg/kg/day	2 generation
Plasticizer	Ingestion	Not toxic to male reproduction	Rat	NOAEL 400 mg/kg/day	2 generation
Plasticizer	Ingestion	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 1,000 mg/kg/day	during gestation
Ethylene Glycol	Ingestion	Not toxic to female reproduction	Multiple animal species	NOAEL 1,000 mg/kg/day	2 years
Ethylene Glycol	Ingestion	Not toxic to male reproduction	Multiple animal species	NOAEL 1,000 mg/kg/day	2 years
Ethylene Glycol	Dermal	Some positive developmental data exist, but the data are not sufficient for classification	Mouse	NOAEL 3,549 mg/kg/day	during organogenesis
Ethylene Glycol	Ingestion	Some positive developmental data exist, but the data are not sufficient for classification	Mouse	LOAEL 750 mg/kg/day	during organogenesis
Ethylene Glycol	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Mouse	NOAEL 1,000 mg/kg/day	during organogenesis
2-Methyl-4-Isothiazoline-3-one	Ingestion	Not toxic to female reproduction	Rat	NOAEL 10 mg/kg/day	2 generation
2-Methyl-4-Isothiazoline-3-one	Ingestion	Not toxic to male reproduction	Rat	NOAEL 10 mg/kg/day	2 generation
2-Methyl-4-Isothiazoline-3-one	Ingestion	Not toxic to development	Rat	NOAEL 15 mg/kg/day	during organogenesis
5-Chloro-2-Methyl-4-Isothiazoline-3-one	Ingestion	Not toxic to female reproduction	Rat	NOAEL 10 mg/kg/day	2 generation
5-Chloro-2-Methyl-4-Isothiazoline-3-one	Ingestion	Not toxic to male reproduction	Rat	NOAEL 10 mg/kg/day	2 generation
5-Chloro-2-Methyl-4-Isothiazoline-3-one	Ingestion	Not toxic to development	Rat	NOAEL 15 mg/kg/day	during organogenesis

### Target Organ(s)

#### Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Calcium Carbonate	Inhalation	respiratory system	All data are negative	Rat	NOAEL 0.812 mg/l	90 minutes
Mineral Spirits	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Mineral Spirits	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
Mineral Spirits	Inhalation	nervous system	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL 6.5 mg/l	4 hours
Ethylene Glycol	Ingestion	heart   nervous system   kidney and/or bladder   respiratory system	Causes damage to organs	Human	NOAEL Not available	poisoning and/or abuse
Ethylene Glycol	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse

Ethylene Glycol	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	poisoning and/or abuse
2-Methyl-4-Isothiazoline-3-one	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
5-Chloro-2-Methyl-4-Isothiazoline-3-one	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Calcium Carbonate	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Mineral Spirits	Inhalation	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 4.6 mg/l	6 months
Mineral Spirits	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 1.9 mg/l	13 weeks
Mineral Spirits	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL 0.6 mg/l	90 days
Mineral Spirits	Inhalation	bone, teeth, nails, and/or hair   blood   liver   muscles	All data are negative	Rat	NOAEL 5.6 mg/l	12 weeks
Mineral Spirits	Inhalation	heart	All data are negative	Multiple animal species	NOAEL 1.3 mg/l	90 days
Plasticizer	Ingestion	hematopoietic system   liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 2,500 mg/kg/day	90 days
Titanium Dioxide	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 0.010 mg/l	2 years
Titanium Dioxide	Inhalation	pulmonary fibrosis	All data are negative	Human	NOAEL Not available	occupational exposure
Ethylene Glycol	Ingestion	kidney and/or bladder   vascular system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 200 mg/kg/day	2 years
Ethylene Glycol	Ingestion	heart   hematopoietic system   liver   immune system   muscles	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,000 mg/kg/day	2 years
Ethylene Glycol	Ingestion	respiratory system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 12,000 mg/kg/day	2 years
Ethylene Glycol	Ingestion	skin   endocrine system   bone, teeth, nails, and/or hair   nervous system   eyes	All data are negative	Multiple animal species	NOAEL 1,000 mg/kg/day	2 years
Quartz Silica	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure

**Aspiration Hazard**

Name	Value
Mineral Spirits	Aspiration hazard

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

**SECTION 12: Ecological information****Ecotoxicological information**

<u>Test Organism</u>	<u>Test Type</u>	<u>Result</u>
Water flea, Daphnia magna	48 hours Effect Level 50%	96.5 mg/l

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

**Chemical fate information**

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

**SECTION 13: Disposal considerations****13.1. Disposal methods**

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

**EPA Hazardous Waste Number (RCRA):** Not regulated

**SECTION 14: Transport Information**

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

**SECTION 15: Regulatory information****15.1. US Federal Regulations**

Contact 3M for more information.

**311/312 Hazard Categories:**

Fire Hazard - No    Pressure Hazard - No    Reactivity Hazard - No    Immediate Hazard - Yes    Delayed Hazard - Yes

**Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):**

<u>Ingredient</u>	<u>C.A.S. No</u>	<u>% by Wt</u>
Ethylene Glycol	107-21-1	1 - 5

**15.2. State Regulations**

Contact 3M for more information.

**California Proposition 65**

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>Classification</u>
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SILICA, CRYSTALLINE (AIRBORNE  
PARTICLES OF RESPIRABLE SIZE)  
Titanium Dioxide

None

Carcinogen

13463-67-7

Carcinogen

WARNING: This product contains a chemical known to the State of California to cause cancer.

### 15.3. Chemical Inventories

The components of this product are in compliance with the new substance notification requirements of CEPA.

The components of this product are in compliance with the chemical notification requirements of TSCA.

Contact 3M for more information.

### 15.4. International Regulations

Contact 3M for more information.

**This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.**

## SECTION 16: Other information

### NFPA Hazard Classification

**Health:** 2 **Flammability:** 0 **Instability:** 0 **Special Hazards:** None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

**Document Group:** 31-5638-7  
**Issue Date:** 08/19/14

**Version Number:** 3.00  
**Supersedes Date:** 03/25/13

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## SAFETY DATA SHEET



# AC-20<sup>®</sup> +Silicone

## 1. PRODUCT IDENTIFICATION

### IDENTIFICATION of the SUBSTANCE or PREPARATION

<u>TRADE NAME (AS LABELED):</u>	AC-20 <sup>®</sup> +Silicone
<u>PRODUCT DESCRIPTION:</u>	Acrylic Latex Sealant
<u>CHEMICAL NAME/CLASS:</u>	Acrylic Latex
<u>OTHER MEANS OF IDENTIFICATION/SYNONYMS</u>	AC-20; AC-20 Acrylic Latex Plus Silicone
<u>RELEVANT USE:</u>	Sealant
<u>USES ADVISED AGAINST:</u>	Other Than Relevant Use

### COMPANY/UNDERTAKING IDENTIFICATION:

<u>SUPPLIER/MANUFACTURER'S NAME:</u>	Pecora Corporation
<u>ADDRESS:</u>	165 Wambold Road, Harleysville, PA 19438
<u>EMERGENCY PHONE:</u>	800-424-9300 (CHEMTREC, 24-hours)
<u>BUSINESS PHONE:</u>	215-723-6051 (Mon–Fri, 8 AM–5 PM ET)

<u>PREPARATION DATE:</u>	February 20, 2009
<u>REVISION DATE:</u>	July 1, 2014

This product is sold for commercial use. This SDS has been developed to address safety concerns of those individuals working with bulk quantities of this material, as well as those of potential users of this product in industrial/occupational settings. ALL United States Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalent Standards, and Canadian WHMIS [Controlled Products Regulations] and the Global Harmonization Standard required information is included in appropriate sections based on the U.S. ANSI Z400.1-2008 format. This product has been classified in accordance with the hazard criteria of the countries listed above.

## 2. HAZARD IDENTIFICATION

**GLOBAL HARMONIZATION LABELING AND CLASSIFICATION:** This product has been classified per GHS Standards.

Classification: Carcinogenic Cat. 1B, Germ Cell Mutagen Cat. 1B, Acute Oral Toxicity Cat. 5, Eye Irritation Cat. 2B, Skin Irritation Cat. 3

Signal Word: Warning

Hazard Statement Codes: H350, H340, H303, H316, H320

Precautionary Statement Codes: P201, P202, P264, P280, P308 + P313, P332 + P313, P305 + P351 + P338, P337 + P313, P405, P501

Hazard Symbols/Pictogram: GHS08



### EMERGENCY OVERVIEW:

PHYSICAL DESCRIPTION: This product is a smooth paste with an acrylic odor that comes in a variety of colors.

HEALTH HAZARDS: CAUTION! May cause eye, skin, and respiratory tract irritation, especially if exposure is prolonged. May be harmful if ingested. Contains compound that have shown carcinogenic and mutagenic effects. Contains a trace compound (Crystalline Silica), a known human carcinogen by inhalation of particles.

FLAMMABILITY HAZARD: This product is combustible and can ignite if exposed to high temperature or direct flame.

REACTIVITY HAZARD: This product is not reactive.

ENVIRONMENTAL HAZARD: This product has not been tested for environmental impact. This product contains a compound that can cause chronic aquatic toxicity.

### HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS<sup>®</sup>)

<b>Health</b>	<b>2*</b>
<b>Flammability</b>	<b>1</b>
<b>Physical Hazard</b>	<b>0</b>

See Section 16 for definitions of ratings

0 = Minimal

3 = Serious

1 = Slight

4 = Severe

2 = Moderate

\* = Chronic

HMIS<sup>®</sup> is a registered trademark of the National Paint and Coatings Association.

CANADIAN WHMIS SYMBOLS: Not applicable.

U.S. OSHA REGULATORY STATUS: This material has a classification under the Global Harmonization Standard, as applied under OSHA regulations, as given earlier in this Section.

### 3. COMPOSITION and INFORMATION ON INGREDIENTS

Chemical Name	CAS #	W/W%	GHS Classification Hazard Statements
Calcium Carbonate	1317-65-3	30.0-60.0	SELF CLASSIFICATION Classification: Not Applicable
Proprietary Acrylic Polymer Emulsion		25.0-45.0	SELF CLASSIFICATION Classification: Not Applicable
Proprietary Benzoate Esters		7.0-10.0	SELF CLASSIFICATION Classification: Not Applicable
Mineral Spirits	8052-41-3	1.0-3.0	SELF CLASSIFICATION Classification: Carcinogenic Cat. 1B, Mutagenic Cat. 1B, Aspiration Toxicity Cat. 1 Hazard Statement Codes: H350, H340, H304
Quartz	14808-60-7	0.01-0.2	SELF CLASSIFICATION Classification: Carcinogenic Cat. 1B Hazard Statement Codes: H350
The following are pigments that can be in the product, depending on coloration:			
Carbon Black	1333-86-4	0.0-5.0	SELF CLASSIFICATION Classification: Not Applicable
Titanium Dioxide	13463-67-7	0.0-5.0	SELF CLASSIFICATION Classification: Not Applicable
Proprietary Orange Pigment		0.0-1.0	SELF CLASSIFICATION Classification: Not Applicable
Proprietary Red Pigment		0.0-1.0	SELF CLASSIFICATION Classification: Not Applicable
Proprietary Yellow Pigment		0.0-1.0	SELF CLASSIFICATION Classification: Not Applicable
Water and other components. Each of the other components is present in less than 1 percent concentration (0.1% concentration for potential carcinogens, reproductive toxins, respiratory tract sensitizers, and mutagens).		Balance	Classification: Not Applicable

See Section 16 for full text of classification

### 4. FIRST-AID MEASURES

**PROTECTION OF FIRST AID RESPONDERS:** Rescuers should not attempt to retrieve victims of exposure to this material without adequate personal protective equipment. Rescuers should be taken for medical attention, if necessary.

**DESCRIPTION OF FIRST AID MEASURES:** Remove victim(s) to fresh air, as quickly as possible. Only trained personnel should administer supplemental oxygen and/or cardio-pulmonary resuscitation, if necessary. Remove and isolate contaminated clothing and shoes. Seek immediate medical attention. Take copy of label and SDS to physician or other health professional with victim(s).

**Inhalation:** If dusts of this material are inhaled, remove victim to fresh air. If necessary, use artificial respiration to support vital functions.

**Skin Exposure:** If the material contaminates the skin, immediately begin decontamination with running water. Minimum flushing is for 20 minutes. Do not interrupt flushing. Remove exposed or contaminated clothing, taking care not to contaminate eyes. Victim must seek immediate medical attention.

**Eye Exposure:** If this product enters the eyes, open victim's eyes while under gently running water. Use sufficient force to open eyelids. Have victim "roll" eyes. Minimum flushing is for 20 minutes. Do not interrupt flushing.

**Ingestion:** If this material is swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. DO NOT INDUCE VOMITING, unless directly by medical personnel. Have victim rinse mouth with water or give several cupfuls of water, if conscious. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or unable to swallow. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain an open airway and prevent aspiration.

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** Dermatitis or other pre-existing skin disorders may be aggravated by exposure to this product.

**INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT IF NEEDED:** Treat symptoms and eliminate exposure.

### 5. FIRE-FIGHTING MEASURES

**FLASH POINT:** > 93°C (> 200°F) **AUTOIGNITION:** Unknown.

**FLAMMABLE LIMITS IN AIR:** Unknown.

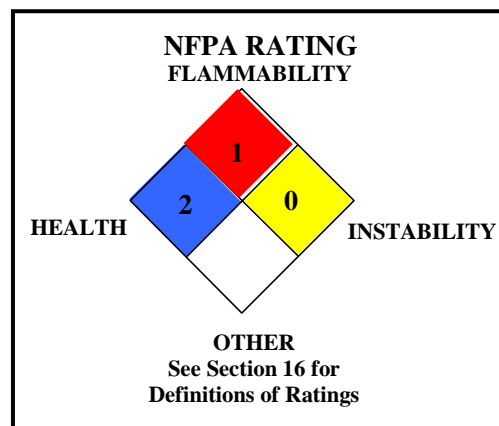
**EXTINGUISHING MEDIA:**

**SUITABLE EXTINGUISHING MEDIA:** Use extinguishing material suitable to the surrounding fire, including foam, halon, carbon dioxide and dry chemical.

**UNSUITABLE EXTINGUISHING MEDIA:** None known.

**PROTECTION OF FIREFIGHTERS:**

**SPECIAL HAZARDS ARISING FROM THE SUBSTANCE:** This product is combustible and can be ignited when exposed to its flashpoint. Not sensitive to mechanical impact under normal conditions. Not sensitive to static discharge under normal conditions. Closed containers may develop pressure and rupture in event of fire.



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## 5. FIRE-FIGHTING MEASURES (Continued)

**SPECIAL PROTECTIVE ACTIONS FOR FIRE-FIGHTERS:** Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Move containers from fire area if it can be done without risk to personnel. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

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## 6. ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS AND EMERGENCY PROCEDURES:** An accidental release can result in a fire. Uncontrolled releases should be responded to by trained personnel using pre-planned procedures. Proper protective equipment should be used. Eliminate any possible sources of ignition, and provide maximum explosion-proof ventilation. Use only non-sparking tools and equipment during the response. The atmosphere must at least 19.5 percent Oxygen before non-emergency personnel can be allowed in the area without Self-Contained Breathing Apparatus and fire protection.

**PERSONAL PROTECTIVE EQUIPMENT:** Responders should wear the level of protection appropriate to the type of chemical released, the amount of the material spilled, and the location where the incident has occurred.

**Small Spills:** For releases of 1 drum or less, Level D Protective Equipment (gloves, chemical resistant apron, boots, and eye protection) should be worn.

**Large Spills:** Minimum Personal Protective Equipment should be rubber gloves, rubber boots, face shield, and Tyvek suit. Minimum level of personal protective equipment for releases in which the level of oxygen is less than 19.5% or is unknown must be **Level B: triple-gloves (rubber gloves and nitrile gloves over latex gloves), chemical resistant suit, fire-retardant clothing and boots, hard hat, and Self-Contained Breathing Apparatus.**

**METHODS FOR CLEAN-UP AND CONTAINMENT:**

**All Spills:** Access to the spill area should be restricted. Spread should be limited by gently covering the spill with polypads. Scrape up or pick-up spilled material, placing in suitable containers. Absorb any residual on appropriate material, such as sand. All contaminated absorbents and other materials should be placed in an appropriate container and seal. Do not mix with wastes from other materials. Dispose of in accordance with applicable Federal, State, and local procedures (see Section 13, Disposal Considerations). Dispose of recovered material and report spill per regulatory requirements. Remove all residue before decontamination of spill area. Clean spill area with soap and copious amounts of water.

**ENVIRONMENTAL PRECAUTIONS:** Minimize use of water to prevent environmental contamination. Prevent spill or rinsate from contaminating storm drains, sewers, soil or groundwater. Place all spill residues in a suitable container and seal. Do not discharge effluent containing this product into streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

**OTHER INFORMATION:** U.S. regulations may require reporting of spills of this material that reach surface waters if a sheen is formed. If necessary, the toll-free phone number for the US Coast Guard National Response Center is 1-800-424-8802.

**REFERENCE TO OTHER SECTIONS:** See information in Section 8 (Exposure Controls – Personal Protection) and Section 13 (Disposal Considerations) for additional information.

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## 7. HANDLING and STORAGE

**PRECAUTIONS FOR SAFE HANDLING:** As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat or drink while handling this material. Avoid contact with eyes, skin, and clothing. Avoid breathing fumes, dusts, vapors or mist. Do not taste or swallow. Use only with adequate ventilation. Keep away from heat and flame. In the event of a spill, follow practices indicated in Section 6: ACCIDENTAL RELEASE MEASURES.

**CONDITIONS FOR SAFE STORAGE:** This product is stable under ordinary conditions of handling, use and storage. Store containers in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. Store away from incompatible materials (see Section 10: STABILITY AND REACTIVITY). Keep container tightly closed when not in use. Inspect all incoming containers before storage, to ensure containers are properly labeled and not damaged. To prolong shelf life, store at temperatures below 26°C (80°F).

**PRODUCT END USE:** This product is used as a sealant. Follow all industry standards for use of this product.

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## 8. EXPOSURE CONTROLS - PERSONAL PROTECTION

**EXPOSURE LIMITS/CONTROL PARAMETERS:**

**Ventilation and Engineering Controls:** Use with adequate ventilation to ensure exposure levels are maintained below the limits provided below.

**Occupational/Workplace Exposure Limits/Guidelines:**

Chemical Name	CAS #	Guideline	Value
Calcium Carbonate	1317-65-3	OSHA PEL TWA  NIOSH REL TWA	15 mg/m <sup>3</sup> total dust 5 mg/m <sup>3</sup> respirable fraction 10 mg/m <sup>3</sup> total dust 5 mg/m <sup>3</sup> respirable fraction
Acrylic Polymer	Proprietary	NE	NE
Carbon Black	1333-86-4	ACGIH TLV TWA OSHA PEL TWA NIOSH REL TWA DFG MAK TWA	3.5 mg/m <sup>3</sup> (inhalable fraction) 3.5 mg/m <sup>3</sup> 3.5 mg/m <sup>3</sup> (0.1 in the presence of PAHs, as PAHs: 10-hr TWA) As inhalable dust

NE = Not Established. See Section 16 for Definitions of Terms Used.

## 8. EXPOSURE CONTROLS - PERSONAL PROTECTION (Continued)

### EXPOSURE LIMITS/CONTROL PARAMETERS (continued):

Occupational/Workplace Exposure Limits/Guidelines (continued):

Chemical Name	CAS #	Guideline	Value
Crystalline Silica	14808-60-7	ACGIH TLV TWA OSHA PEL TWA NIOSH REL TWA	0.025 mg/m <sup>3</sup> Respirable Fraction 30 mg/m <sup>3</sup> / % SiO <sub>2</sub> + 2 Total Dust; 10 mg/m <sup>3</sup> / % SiO <sub>2</sub> + 2 Respirable Fraction 0.05 mg/m <sup>3</sup> (Respirable Dust)
Mineral Spirits	8052-41-3	ACGIH TLV TWA OSHA PEL TWA NIOSH REL TWA NIOSH REL STEL	525 mg/m <sup>3</sup> 2900 mg/m <sup>3</sup> 350 mg/m <sup>3</sup> 1800 mg/m <sup>3</sup> (15 min.)
Titanium Dioxide	13463-67-7	ACGIH TLV TWA OSHA PEL TWA NIOSH REL DFG MAK TWA	10 mg/m <sup>3</sup> 15 mg/m <sup>3</sup> total dust Lowest feasible concentration (LOQ 0.2 mg/m <sup>3</sup> ) 1.5 mg/m <sup>3</sup> respirable fraction Pregnancy Risk Group C

NE = Not Established. See Section 16 for Definitions of Terms Used.

**PERSONAL PROTECTIVE EQUIPMENT (PPE):** *The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132, including the Respiratory Protection Standard (29 CFR 1910.134), Eye Protection Standard 29 CFR 1910.13, the Hand Protection Standard 29 CFR 1910.138, and the Foot Protection Standard 29 CFR 1910.136), equivalent standards of Canada (including the Canadian CSA Respiratory Standard Z94.4-93-02, the CSA Eye Protection Standard Z94.3-M1982, Industrial Eye and Face Protectors and the Canadian CSA Foot Protection Standard Z195-M1984, Protective Footwear). Please reference applicable regulations and standards for relevant details.*

**Eye/Face Protection:** Use approved safety goggles or safety glasses. If necessary, refer to appropriate regulations and standards.

**Skin Protection:** Wear chemical impervious gloves (e.g., Nitrile or Neoprene). Use triple gloves for spill response. If necessary, refer to appropriate regulations and standards.

**Body Protection:** Use body protection appropriate for task (e.g., lab coat, coveralls, Tyvek suit). If necessary, refer to the OSHA Technical Manual (Section VII: Personal Protective Equipment) or appropriate Standards of Canada. If a hazard of injury to the feet exists due to falling objects, rolling objects, where objects may pierce the soles of the feet or where employee's feet may be exposed to electrical hazards, use foot protection, as described in appropriate regulations and standards.

**Respiratory Protection:** If mists or sprays from this product are created during use, use appropriate respiratory protection. If necessary, use only respiratory protection authorized in appropriate regulations. Oxygen levels below 19.5% are considered IDLH by OSHA. In such atmospheres, use of a full-facepiece pressure/demand SCBA or a full facepiece, supplied air respirator with auxiliary self-contained air supply is required under appropriate regulations and standards.

## 9. PHYSICAL and CHEMICAL PROPERTIES

**FORM:** Smooth paste.

**MOLECULAR WEIGHT:** Mixture.

**ODOR:** Acrylic

**SPECIFIC GRAVITY:** 1.56

**RELATIVE VAPOR DENSITY (air = 1):** Heavier than air.

**SOLUBILITY IN WATER:** Soluble.

**MELTING/FREEZING POINT:** < 0°C (< 32°F)

**VOC (less water and exempt):** <35 g/L

**FLASH POINT:** > 93°C (> 200°F)

**pH:** 7.0-7.5

**FLAMMABLE LIMITS (in air by volume, %):** Lower: Not established; Upper: Not established.

**COEFFICIENT OF OIL/WATER DISTRIBUTION (PARTITION COEFFICIENT):** Not established.

**HOW TO DETECT THIS SUBSTANCE (IDENTIFYING PROPERTIES):** The appearance of this product may act as an identifying property in the event of an accidental release.

**COLOR:** Variety of colors.

**MOLECULAR FORMULA:** Mixture.

**ODOR THRESHOLD:** Not available.

**VAPOR PRESSURE, mm Hg @ 20°C:** Not established.

**EVAPORATION RATE (BuAc = 1):** < 1

**OTHER SOLUBILITIES:** Not available.

**BOILING POINT:** Not established.

**WEIGHT % VOC:** 0.1–0.9%

**AUTOIGNITION TEMPERATURE:** Not established.

## 10. STABILITY and REACTIVITY

**CHEMICAL STABILITY:** Stable under normal circumstances of use and handling. Product cures upon contact with air.

**CONDITIONS TO AVOID:** Avoid contact with incompatible chemicals and exposure to extreme temperatures.

**INCOMPATIBLE MATERIALS:** This product is not compatible with strong acids.

**HAZARDOUS DECOMPOSITION PRODUCTS:** *Combustion:* Thermal decomposition of this product can generate dusts, irritating fumes, and toxic gases (e.g., carbon, titanium and iron oxides, depending on formulation). *Hydrolysis:* None known.

**POSSIBILITY OF HAZARDOUS REACTIONS/POLYMERIZATION:** This product is not expected to undergo hazardous polymerization, decomposition, condensation, or self-reactivity. Product slowly cures upon contact with air.

## 11. TOXICOLOGICAL INFORMATION

**POTENTIAL HEALTH EFFECTS:** The most significant routes of occupational exposure are inhalation and contact with skin and eyes.

The symptoms of exposure to this product are as follows:

**Contact with Skin or Eyes:** Contact may mildly irritate the skin and cause redness and discomfort. Prolonged or repeated skin contact may cause dermatitis (dry, red skin). Eye contact may cause redness, pain, and tearing.

## 11. TOXICOLOGICAL INFORMATION (Continued)

### POTENTIAL HEALTH EFFECTS (continued):

**Skin Absorption:** The components of this product are not known to be absorbed through intact skin.

**Ingestion:** If the product is swallowed, it may mildly irritate the mouth, throat, and other tissues of the gastro-intestinal system and may cause nausea, vomiting, and diarrhea.

**Inhalation:** Exposure to vapors of this product generated during curing, or dusts of this product generated during use after curing may mildly irritate the respiratory tract and cause coughing and sneezing.

**Injection:** Accidental injection of this product (e.g. puncture with a contaminated object) may cause burning, redness, and swelling in addition to the wound.

**Target Organs:** Acute: Skin, eyes. Chronic: Skin.

**Chronic Effects:** Prolonged or repeated skin contact may cause dermatitis (dry, red skin). Possible carcinogenic and mutagenic effects due to Mineral Spirits component.

**TOXICITY DATA:** There are currently no toxicity data available for this product; the following toxicology information is available for components greater than 1% in concentration. Due to large amount of data for components, only Human data, Irritancy data, LD50 Oral-Rat, LD50 Oral-Mouse, LD50 Skin-Rat, LD50 Skin-Rabbit, LC50 Inhalation-Rat, LC50 Inhalation-Mouse and select reproductive toxicity data are provided in this SDS. Contact Pecora for information on additional data.

#### **CALCIUM CARBONATE:**

Skin Irritancy (rabbit) = 500 mg/24 hours; moderate

Eye Irritancy (rabbit) = 750 µg/24 hours; severe

LD<sub>50</sub> (oral, rat) = 6450 mg/k

#### **ACRYLIC POLYMER:**

Patch test on human volunteers did not demonstrate sensitization properties.

#### **CARBON BLACK:**

Mutation in microorganisms (*Salmonella typhimurium*, bacteria) = 1 mg/plate

DNA adduct (inhalation, mouse) = 6200 µg/m<sup>3</sup>/16 hours/12 weeks/intermittent

#### **MINERAL SPIRITS:**

Standard Draize Test (Eye-Human) 100 ppm: Mild

#### **MINERAL SPIRITS (continued):**

Standard Draize Test (Eye-Rabbit) 500 mg/24 hours: Moderate

LC<sub>50</sub> (Inhalation-Rat) > 1400 ppm/8 hours

#### **TITANIUM DIOXIDE:**

Standard Draize Test (Skin-Human) 300 µg/3 days-intermittent: Mild

DNA Damage (Human Lung) 100 µg/plate

DNA Damage (Human Lung) 20 µg/disk/4 hours

Sister Chromatid Exchange (Human Lymphocyte) 2 µmol/L/72 hours

Micronucleus Test (Human Lymphocyte) 5 µmol/L/72 hours

DNA Inhibition (Hamster Lung) 500 mg/L

**CARCINOGENIC POTENTIAL:** The following table summarizes the carcinogenicity listing for the components of this product. "NO" indicates that the substance is not considered to be or suspected to be a carcinogen by the listed agency, see section 16 for definitions of other ratings.

CHEMICAL	EPA	IARC	NTP	NIOSH	ACGIH	OSHA	PROP 65
Calcium Carbonate	No	No	No	No	No	No	No
Carbon Black	No	2B	No	Ca	A3	No	Yes (airborne, unbound particles of respirable size)
Quartz	No	1	K	Ca	A2	No	Yes
Mineral Spirits	3	No	No	No	No	No	No
Titanium Dioxide	No	2B	No	Ca	A3	No	No

IARC-1: Carcinogenic to humans. IARC Group 2B: Possibly carcinogenic to humans. IARC-3: Unclassifiable as to Carcinogenicity in Humans. NIOSH-Ca: Potential occupational carcinogen, with no further categorization. NTP-K: Known to be a human carcinogen. ACGIH TLV-A3: Confirmed Animal Carcinogen with Unknown Relevance to Humans.

**IRRITANCY OF PRODUCT:** This product may mildly irritate contaminated tissue, especially if contact is prolonged. Eye irritation may be more pronounced.

**SENSITIZATION TO THE PRODUCT:** The components of this product are not known to be human skin or respiratory sensitizers.

**TOXICOLOGICAL SYNERGISTIC PRODUCTS:** None known.

**REPRODUCTIVE TOXICITY INFORMATION:** This product has not been tested for reproductive toxicity. The following information is available for some components.

**Mutagenicity:** The components of this product are not reported to produce mutagenic effects in humans. Animal or microorganism data for components are as follows: Titanium dioxide was not mutagenic to *Salmonella typhimurium* TA1535, TA1537, TA1538, TA97, TA98 or TA100 or to *Escherichia coli* WP2, either in the presence or absence of an exogenous metabolic system from the livers of uninduced and Aroclor-induced rats, mice and Syrian hamsters. Positive results for Carbon Black have been obtained in somatic cells following live animal inhalation exposure.

**Embryotoxicity:** The components of this product are not reported to produce embryotoxic effects in humans.

**Teratogenicity:** The components of this product are not reported not expected to produce teratogenic effects in humans.

**Reproductive Toxicity:** The components of this product are not reported to produce reproductive toxicity in humans.

**BIOLOGICAL EXPOSURE INDICES (BEIs):** There are no BEI's established for any component of this product at this time.

## 12. ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

**MOBILITY:** This product has not been tested for mobility in soil.

**PERSISTENCE AND BIODEGRADABILITY:** This product has not been tested for persistence or biodegradability.

**BIO-ACCUMULATION POTENTIAL:** This product has not been tested for bio-accumulation potential.

**ECOTOXICITY:** This product has not been tested for aquatic or animal toxicity. All release to terrestrial, atmospheric and aquatic environments should be avoided.

**OTHER ADVERSE EFFECTS:** This material is not expected to have any ozone depletion potential.

**ENVIRONMENTAL EXPOSURE CONTROLS:** Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways.

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### 13. DISPOSAL CONSIDERATIONS

PREPARING WASTES FOR DISPOSAL: As supplied, this product would not be a hazardous waste as defined by U.S. federal regulation (40 CFR 261) if discarded or disposed. State and local regulations may differ from federal regulations. The generator of the waste is responsible for proper waste determination and management.

U.S. EPA WASTE NUMBER: Not applicable.

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### 14. TRANSPORTATION INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION: This product is NOT classified as Dangerous Goods, per U.S. DOT regulations, under 49 CFR 172.101.

TRANSPORT CANADA TRANSPORTATION OF DANGEROUS GOODS REGULATIONS: This product is NOT classified as Dangerous Goods, per regulations of Transport Canada.

INTERNATIONAL AIR TRANSPORT ASSOCIATION SHIPPING INFORMATION (IATA): This product is NOT classified as dangerous goods, per the International Air Transport Association.

INTERNATIONAL MARITIME ORGANIZATION SHIPPING INFORMATION (IMO): This product is not classified as dangerous goods, per the International Maritime Organization.

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### 15. REGULATORY INFORMATION

ADDITIONAL U.S. REGULATIONS:

U.S. SARA Reporting Requirements: No component of this product is subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act.

U.S. SARA Hazard Categories (Section 311/312, 40 CFR 370-21): ACUTE: Yes; CHRONIC: Yes; FIRE: No; REACTIVE: No; SUDDEN RELEASE: No

U.S. TSCA Inventory Status: All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

U.S. CERCLA Reportable Quantity (RQ): Not applicable.

U.S. Clean Air Act (CA 112r) Threshold Quantity (TQ): Not applicable.

Other U.S. Federal Regulations: Not applicable.

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65): Carbon Black (airborne, unbound particles of respirable size) is found on the Proposition 65 List of chemicals known to the state to cause cancer. Due to the form of the product, the Proposition 65 warning is not applicable to the Carbon Black in this product. The trace Quartz component (airborne, unbound particles of respirable size) is found on the Proposition 65 List of chemicals known to the state to cause cancer. Due to the form of the product, the Proposition 65 warning is not applicable to the Quartz in this product.

ADDITIONAL CANADIAN REGULATIONS:

Canadian DSL/NDL Inventory Status: The components of this product are listed on the DSL Inventory.

Canadian Environmental Protection Act (CEPA) Priorities Substances Lists: No component of this product is on the CEPA Priorities Substances Lists.

Canadian WHMIS Regulations: This product is classified as a Controlled Product, Hazard Class D2B (Immediate Acute Toxicity/Irritation, Limited Evidence of Carcinogenic and Mutagenic Effect) as per the Controlled Product Regulations.



ADDITIONAL MEXICAN REGULATIONS:

Mexican Workplace Regulations (NOM-018-STPS-2000): This product is not classified as hazardous.

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### 16. OTHER INFORMATION

WARNINGS (per ANSI Z129.1): WARNING! MAY CAUSE EYE, SKIN, AND RESPIRATORY TRACT IRRITATION, ESPECIALLY IF EXPOSURE IS PROLONGED. CONTAINS COMPOUND WITH POTENTIAL CARCINOGENIC AND MUTAGENIC EFFECT. CONTAINS SUSPECT CARCINOGEN AND MUTAGEN. CONTAINS TRACE AMOUNT OF CRYSTALLINE SILICA, A KNOWN HUMAN CARCINOGEN BY INHALATION. Avoid contact with eyes, skin, and clothing. Avoid breathing fumes, dusts, vapors or mist. Do not taste or swallow. Wash thoroughly after handling. Keep container tightly closed. Use only with adequate ventilation. Keep away from heat and flame. Wear gloves, eye protection, respiratory protection, and appropriate body protection. FIRST-AID: In case of contact, immediately flush skin and eyes with plenty of water. Remove contaminated clothing and shoes. Get medical attention if irritation develops or persists. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If swallowed, do not induce vomiting. Get medical attention. IN CASE OF FIRE: Use water fog, foam, dry chemical, or CO<sub>2</sub>. IN CASE OF SPILL: Absorb spilled product with polypads or other suitable absorbing material. Place all spill residue in an appropriate container and seal. Dispose of in accordance with U.S. Federal, State, and local hazardous waste disposal regulations and those of Canada.

## 16. OTHER INFORMATION (Continued)

**GLOBAL HARMONIZATION LABELING AND CLASSIFICATION:** Classified in accordance with the Global Harmonization Standard.

**Classification:** Carcinogenic Category 1B, Germ Cell Mutagen Category 1B, Acute Oral Toxicity Category 5, Eye Irritation Category 2B, Skin Irritation Category 3

**Signal Word:** Warning

**Hazard Statements:** H350: May cause cancer. H340: May cause genetic effects. H303: May be harmful if ingested. H316: Causes mild skin irritation. H320: Causes eye irritation.

**Precautionary Statements:**

**Prevention:** P201: Obtain special instructions before use. P202: Do not handle until all safety precautions have been read and understood. P264: Wash thoroughly after handling. P280: Wear protective gloves/protective clothing/eye protection/face protection.

**Response:** P308 + P313: IF exposed or concerned: Get medical advice/attention. P332 + P313: If skin irritation occurs, get medical attention. P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. P337 + P313: If eye irritation persists: Get medical advice/attention.

**Storage:** P405: Store locked up.

**Disposal:** P501: Dispose of contents/containers in accordance with all local, regional, national and international regulations.

**Hazard Symbols/Pictogram:** GHS08

### **DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES**

The information presented in this Material Safety Data Sheet is presented in good faith based on data believed to be accurate as of the date this Material Safety Data Sheet was prepared. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED ABOVE, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE. In no case shall the descriptions, information, data or designs provided be considered a part of our terms and conditions of sale.

All materials may present hazards and should be used with caution. Because many factors may affect processing or application/use, we recommend that you make tests to determine the suitability of a product for your particular purpose prior to use. No responsibility is assumed for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices or applicable federal, state, or local laws or regulations. The information provided above, and the product, are furnished on the condition that the person receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use. In addition, no authorization is given nor implied to practice any patented invention without a license.

**REFERENCES AND DATA SOURCES:** Contact the supplier for information.

**METHODS OF EVALUATING INFORMATION FOR THE PURPOSE OF CLASSIFICATION:** Bridging principles were used to classify this product.

**REVISION DETAILS:** February 2012: Up-date and revise entire SDS to include current GHS requirements. May 2012: Up-date for formulation change. December 2012: Revision due to formula change. April 2014: Addition of missing GHS Symbol.

**DATE OF PRINTING**

July 1, 2014

### **DEFINITIONS OF TERMS**

A large number of abbreviations and acronyms appear on a SDS. Some of these, which are commonly used, include the following:

#### **KEY ACRONYMS:**

**CHEMTREC:** Chemical Transportation Emergency Center, a 24-hour emergency information and/or emergency assistance to emergency responders.

**CEILING LEVEL:** The concentration that shall not be exceeded during any part of the working exposure.

**DFG MAKs:** Federal Republic of Germany Maximum Concentration Values in the workplace. Exposure limits are given as TWA (Time-Weighted Average) or PEAK (short-term exposure) values.

**DFG MAK Germ Cell Mutagen Categories:** **1:** Germ cell mutagens that have been shown to increase the mutant frequency in the progeny of exposed humans. **2:** Germ cell mutagens that have been shown to increase the mutant frequency in the progeny of exposed mammals. **3A:** Substances that have been shown to induce genetic damage in germ cells of human or animals, or which produce mutagenic effects in somatic cells of mammals *in vivo* and have been shown to reach the germ cells in an active form. **3B:** Substances that are suspected of being germ cell mutagens because of their genotoxic effects in mammalian somatic cell *in vivo*; in exceptional cases, substances for which there are no *in vivo* data, but that are clearly mutagenic *in vitro* and structurally related to known *in vivo* mutagens. **4:** Not applicable (Category 4 carcinogenic substances are those with non-genotoxic mechanisms of action. By definition, germ cell mutagens are genotoxic. Therefore, a Category 4 for germ cell mutagens cannot apply. At some time in the future, it is conceivable that a Category 4 could be established for genotoxic substances with primary targets other than DNA [e.g. purely aneugenic substances] if research results make this seem sensible.) **5:** Germ cell mutagens, the potency of which is considered to be so low that, provided the MAK value is observed, their contribution to genetic risk for humans is expected not to be significant.

**DFG MAK Pregnancy Risk Group Classification:** **Group A:** A risk of damage to the developing embryo or fetus has been unequivocally demonstrated. Exposure of pregnant women can lead to damage of the developing organism, even when MAK and BAT (Biological Tolerance Value for Working Materials) values are observed. **Group B:** Currently available information indicates a risk of damage to the developing embryo or fetus must be considered to be probable. Damage to the developing organism cannot be excluded when pregnant women are exposed, even when MAK and BAT values are observed. **Group C:** There is no reason to fear a risk of damage to the developing embryo or fetus when MAK and BAT values are observed. **Group D:** Classification in one of the groups A-C is not yet possible because, although the data available may indicate a trend, they are not sufficient for final evaluation.

#### **KEY ACRONYMS (continued):**

**IDLH:** Immediately Dangerous to Life and Health. This level represents a concentration from which one can escape within 30-minutes without suffering escape-preventing or permanent injury.

**LOQ:** Limit of Quantitation.

**NE:** Not Established. When no exposure guidelines are established, an entry of NE is made for reference.

**NIC:** Notice of Intended Change.

**NIOSH CEILING:** The exposure that shall not be exceeded during any part of the workday. If instantaneous monitoring is not feasible, the ceiling shall be assumed as a 15-minute TWA exposure (unless otherwise specified) that shall not be exceeded at any time during a workday.

**NIOSH RELs:** NIOSH's Recommended Exposure Limits.

**PEL:** OSHA's Permissible Exposure Limits. This exposure value means exactly the same as a TLV, except that it is enforceable by OSHA. The OSHA Permissible Exposure Limits are based in the 1989 PELs and the June, 1993 Air Contaminants Rule (Federal Register: 58: 35338-35351 and 58: 40191). Both the current PELs and the vacated PELs are indicated. The phrase, "Vacated 1989 PEL" is placed next to the PEL that was vacated by Court Order.

**SKIN:** Used when there is a danger of cutaneous absorption.

#### **KEY ACRONYMS (continued):**

**STEL:** Short Term Exposure Limit, usually a 15-minute time-weighted average (TWA) exposure that should not be exceeded at any time during a workday, even if the 8-hr TWA is within the TLV-TWA, PEL-TWA or REL-TWA.

**TLV:** Threshold Limit Value. An airborne concentration of a substance that represents conditions under which it is generally believed that nearly all workers may be repeatedly exposed without adverse effect. The duration must be considered, including the 8-hour.

**TWA:** Time Weighted Average exposure concentration for a conventional 8-hr (TLV, PEL) or up to a 10-hr (REL) workday and a 40-hr workweek.

**WEEL:** Workplace Environmental Exposure Limits from the AIHA.

#### **HAZARD RATINGS:**

#### **HAZARDOUS MATERIALS IDENTIFICATION SYSTEM HAZARD**

**RATINGS:** This rating system was developed by the National Paint and Coating Association and has been adopted by industry to identify the degree of chemical hazards.

## DEFINITIONS OF TERMS (Continued)

### HAZARDOUS MATERIALS IDENTIFICATION SYSTEM HAZARD RATINGS (continued):

**HEALTH HAZARD: 0 Minimal Hazard:** No significant health risk, irritation of skin or eyes not anticipated. *Skin Irritation:* Essentially non-irritating. Mechanical irritation may occur. PII or Draize = 0. *Eye Irritation:* Essentially non-irritating, minimal effects clearing in < 24 hours. Mechanical irritation may occur. Draize = 0. *Oral Toxicity LD<sub>50</sub> Rat:* > 5000 mg/kg. *Dermal Toxicity LD<sub>50</sub> Rat or Rabbit:* > 2000 mg/kg. *Inhalation Toxicity 4-hrs LC<sub>50</sub> Rat:* > 20 mg/L. **1 Slight Hazard:** Minor reversible injury may occur; may irritate the stomach if swallowed; may defat the skin and exacerbate existing dermatitis. *Skin Irritation:* Slightly or mildly irritating. PII or Draize > 0 < 5. *Eye Irritation:* Slightly to mildly irritating, but reversible within 7 days. Draize > 0 ≤ 25. *Oral Toxicity LD<sub>50</sub> Rat:* > 500–5000 mg/kg. *Dermal Toxicity LD<sub>50</sub> Rat or Rabbit:* > 1000–2000 mg/kg. *Inhalation Toxicity LC<sub>50</sub> 4-hrs Rat:* > 2–20 mg/L. **2 Moderate Hazard:** Temporary or transitory injury may occur; prolonged exposure may affect the CNS. *Skin Irritation:* Moderately irritating; primary irritant; sensitizer. PII or Draize ≥ 5, with no destruction of dermal tissue. *Eye Irritation:* Moderately to severely irritating; reversible corneal opacity; corneal involvement or irritation clearing in 8–21 days. Draize = 26–100, with reversible effects. *Oral Toxicity LD<sub>50</sub> Rat:* > 50–500 mg/kg. *Dermal Toxicity LD<sub>50</sub> Rat or Rabbit:* > 200–1000 mg/kg. *Inhalation Toxicity LC<sub>50</sub> 4-hrs Rat:* > 0.5–2 mg/L. **3 Serious Hazard:** Major injury likely unless prompt action is taken and medical treatment is given; high level of toxicity; corrosive. *Skin Irritation:* Severely irritating and/or corrosive; may cause destruction of dermal tissue, skin burns, and dermal necrosis. PII or Draize > 5–8, with destruction of tissue. *Eye Irritation:* Corrosive, irreversible destruction of ocular tissue; corneal involvement or irritation persisting for more than 21 days. Draize > 80 with effects irreversible in 21 days. *Oral Toxicity LD<sub>50</sub> Rat:* > 1–50 mg/kg. *Dermal Toxicity LD<sub>50</sub> Rat or Rabbit:* > 20–200 mg/kg. *Inhalation Toxicity LC<sub>50</sub> 4-hrs Rat:* > 0.05–0.5 mg/L. **4 Severe Hazard:** Life-threatening; major or permanent damage may result from single or repeated exposure; extremely toxic; irreversible injury may result from brief contact. *Skin Irritation:* Not appropriate. Do not rate as a 4, based on skin irritation alone. *Eye Irritation:* Not appropriate. Do not rate as a 4, based on eye irritation alone. *Oral Toxicity LD<sub>50</sub> Rat:* ≤ 1 mg/kg. *Dermal Toxicity LD<sub>50</sub> Rat or Rabbit:* ≤ 20 mg/kg. *Inhalation Toxicity LC<sub>50</sub> 4-hrs Rat:* ≤ 0.05 mg/L.

**FLAMMABILITY HAZARD: 0 Minimal Hazard:** Materials that will not burn in air when exposure to a temperature of 815.5°C (1500°F) for a period of 5 minutes. **1 Slight Hazard:** Materials that must be pre-heated before ignition can occur. Material requires considerable pre-heating, under all ambient temperature conditions before ignition and combustion can occur. This usually includes the following: Materials that will burn in air when exposed to a temperature of 815.5°C (1500°F) for a period of 5 minutes or less; Liquids, solids and semisolids having a flash point at or above 93.3°C (200°F) (i.e. OSHA Class IIIB); and Most ordinary combustible materials (e.g. wood, paper, etc.). **2 Moderate Hazard:** Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur. Materials in this degree would not, under normal conditions, form hazardous atmospheres in air, but under high ambient temperatures or moderate heating may release vapor in sufficient quantities to produce hazardous atmospheres with air. This usually includes the following: Liquids having a flash-point at or above 37.8°C (100°F); Solid materials in the form of course dusts that may burn rapidly but that generally do not form explosive atmospheres; Solid materials in a fibrous or shredded form that may burn rapidly and create flash fire hazards (e.g. cotton, sisal, hemp); and Solids and semisolids (e.g. viscous and slow flowing as asphalt) that readily give off flammable vapors. **3 Serious Hazard:** Liquids and solids that can be ignited under almost all ambient temperature conditions. Materials in this degree produce hazardous atmospheres with air under almost all ambient temperatures, or, unaffected by ambient temperature, are readily ignited under almost all conditions. This usually includes the following: Liquids having a flash point below 22.8°C (73°F) and having a boiling point at or above 38°C (100°F) and those liquids having a flash point at or above 22.8°C (73°F) and below 37.8°C (100°F) (i.e. OSHA Class IB and IC); Materials that on account of their physical form or environmental conditions can form explosive mixtures with air and are readily dispersed in air (e.g., dusts of combustible solids, mists or droplets of flammable liquids); and Materials that burn extremely rapidly, usually by reason of self-contained oxygen (e.g. dry nitrocellulose and many organic peroxides). **4 Severe Hazard:** Materials that will rapidly or completely vaporize at atmospheric pressure and normal ambient temperature or that are readily dispersed in air, and that will burn readily. This usually includes the following: Flammable gases; Flammable cryogenic materials; Any liquid or gaseous material that is liquid while under pressure and has a flash point below 22.8°C (73°F) and a boiling point below 37.8°C (100°F) (i.e. OSHA Class IA); and Materials that ignite spontaneously when exposed to air at a temperature of 54.4°C (130°F) or below (pyrophoric).

**PHYSICAL HAZARD: 0 Water Reactivity:** Materials that do not react with water. *Organic Peroxides:* Materials that are normally stable, even under fire conditions and will not react with water. *Explosives:* Substances that are Non-Explosive. *Compressed Gases:* No Rating. *Pyrophorics:* No Rating. *Oxidizers:* No 0 rating. *Unstable Reactives:* Substances that will not polymerize, decompose, condense, or self-react. **1 Water Reactivity:** Materials that change or decompose upon exposure to moisture. *Organic Peroxides:* Materials that are normally stable, but can become unstable at high temperatures and pressures. These materials may react with water, but will not release energy violently. *Explosives:* Division 1.5 & 1.6 explosives. Substances that are very insensitive explosives or that do not have a mass explosion hazard. *Compressed Gases:* Pressure below OSHA definition. *Pyrophorics:* No Rating. *Oxidizers:* Packaging Group III oxidizers; Solids: any material that in either concentration tested, exhibits a mean burning time less than or equal to the mean burning time of a 3:7 potassium bromate/cellulose mixture and the criteria for Packing Group I and II are not met. Liquids: any material that exhibits a mean pressure rise time less than or equal to the pressure rise time of a 1:1 nitric acid (65%)/cellulose mixture and the criteria for Packing Group I and II are not met. *Unstable Reactives:* Substances that may decompose condense, or self-react, but only under conditions of high temperature and/or pressure and have little or no potential to cause significant heat generation or explosion hazard. Substances that readily undergo hazardous polymerization in the absence of inhibitors. **2 Water Reactivity:** Materials that may react violently with water. *Organic Peroxides:* Materials that, in themselves, are normally unstable and will readily undergo violent chemical change, but will not detonate. These materials may also react violently with water. *Explosives:* Division 1.4 explosives. Explosive substances where the explosive effects are largely confined to the package and no projection of fragments of appreciable size or range are expected. An external fire must not cause virtually instantaneous explosion of almost the entire contents of the package. *Compressed Gases:* Pressurized and meet OSHA definition but < 514.7 psi absolute at 21.1°C (70°F) [500 psig]. *Pyrophorics:* No Rating. *Oxidizers:* Packing Group II oxidizers. Solids: any material that, either in concentration tested, exhibits a mean burning time of less than or equal to the mean burning time of a 2:3 potassium bromate/cellulose mixture and the criteria for Packing Group I are not met. Liquids: any material that exhibits a mean pressure rise time less than or equal to the pressure rise of a 1:1 aqueous sodium chlorate solution (40%)/cellulose mixture and the criteria for Packing Group I are not met.

### HAZARDOUS MATERIALS IDENTIFICATION SYSTEM HAZARD RATINGS (continued):

**PHYSICAL HAZARD (continued): 2 (continued): Reactives:** Substances that may polymerize, decompose, condense, or self-react at ambient temperature and/or pressure, but have a low potential (or low risk) for significant heat generation or explosion. Substances that readily form peroxides upon exposure to air or oxygen at room temperature. **3 Water Reactivity:** Materials that may form explosive reactions with water. *Organic Peroxides:* Materials that are capable of detonation or explosive reaction, but require a strong initiating source or must be heated under confinement before initiation; or materials that react explosively with water. *Explosives:* Division 1.3 explosives. Explosive substances that have a fire hazard and either a minor blast hazard or a minor projection hazard or both, but do not have a mass explosion hazard. *Compressed Gases:* Pressure ≥ 514.7 psi absolute at 21.1°C (70°F) [500 psig]. *Pyrophorics:* No Rating. *Oxidizers:* Packing Group I oxidizers. Solids: any material that, in either concentration tested, exhibits a mean burning time less than the mean burning time of a 3:2 potassium bromate/cellulose mixture. Liquids: any material that spontaneously ignites when mixed with cellulose in a 1:1 ratio, or which exhibits a mean pressure rise time less than the pressure rise time of a 1:1 perchloric acid (50%)/cellulose mixture. *Unstable Reactives:* Substances that may polymerize, decompose, condense, or self-react at ambient temperature and/or pressure and have a moderate potential (or moderate risk) to cause significant heat generation or explosion. **4 Water Reactivity:** Materials that react explosively with water without requiring heat or confinement. *Organic Peroxides:* Materials that are readily capable of detonation or explosive decomposition at normal temperature and pressures. *Explosives:* Division 1.1 & 1.2 explosives. Explosive substances that have a mass explosion hazard or have a projection hazard. A mass explosion is one that affects almost the entire load instantaneously. *Compressed Gases:* No Rating. *Pyrophorics:* Add to the definition of Flammability 4. *Oxidizers:* No 4 rating. *Unstable Reactives:* Substances that may polymerize, decompose, condense, or self-react at ambient temperature and/or pressure and have a high potential (or high risk) to cause significant heat generation or explosion. *Pyrophorics:* Add to the definition of Flammability 4. *Oxidizers:* No 4 rating. *Unstable Reactives:* Substances that may polymerize, decompose, condense, or self-react at ambient temperature and/or pressure and have a high potential (or high risk) to cause significant heat generation or explosion.

### NATIONAL FIRE PROTECTION ASSOCIATION HAZARD RATINGS

**HEALTH HAZARD: 0** Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials. Gases and vapors with an LC<sub>50</sub> for acute inhalation toxicity greater than 10,000 ppm. Dusts and mists with an LC<sub>50</sub> for acute inhalation toxicity greater than 200 mg/L. Materials with an LD<sub>50</sub> for acute dermal toxicity greater than 2000 mg/kg. Materials with an LD<sub>50</sub> for acute oral toxicity greater than 2000 mg/kg. Materials essentially non-irritating to the respiratory tract, eyes, and skin. **1** Materials that, under emergency conditions, can cause significant irritation. Gases and vapors with an LC<sub>50</sub> for acute inhalation toxicity greater than 5,000 ppm but less than or equal to 10,000 ppm. Dusts and mists with an LC<sub>50</sub> for acute inhalation toxicity greater than 10 mg/L but less than or equal to 200 mg/L. Materials with an LD<sub>50</sub> for acute dermal toxicity greater than 1000 mg/kg but less than or equal to 2000 mg/kg. Materials that slightly to moderately irritate the respiratory tract, eyes and skin. Materials with an LD<sub>50</sub> for acute oral toxicity greater than 500 mg/kg but less than or equal to 2000 mg/kg. **2** Materials that, under emergency conditions, can cause temporary incapacitation or residual injury. Gases with an LC<sub>50</sub> for acute inhalation toxicity greater than 3,000 ppm but less than or equal to 5,000 ppm. Any liquid whose saturated vapor concentration at 20°C (68°F) is equal to or greater than one-fifth its LC<sub>50</sub> for acute inhalation toxicity, if its LC<sub>50</sub> is less than or equal to 5000 ppm and that does not meet the criteria for either degree of hazard 3 or degree of hazard 4. Dusts and mists with an LC<sub>50</sub> for acute inhalation toxicity greater than 2 mg/L but less than or equal to 10 mg/L. Materials with an LD<sub>50</sub> for acute dermal toxicity greater than 200 mg/kg but less than or equal to 1000 mg/kg. Compressed liquefied gases with boiling points between -30°C (-22°F) and -55°C (-66.5°F) that cause severe tissue damage, depending on duration of exposure. Materials that are respiratory irritants. Materials that cause severe, but reversible irritation to the eyes or are lachrymators. Materials that are primary skin irritants or sensitizers. Materials whose LD<sub>50</sub> for acute oral toxicity is greater than 50 mg/kg but less than or equal to 500 mg/kg. **3** Materials that, under emergency conditions, can cause serious or permanent injury. Gases with an LC<sub>50</sub> for acute inhalation toxicity greater than 1,000 ppm but less than or equal to 3,000 ppm. Any liquid whose saturated vapor concentration at 20°C (68°F) is equal to or greater its LC<sub>50</sub> for acute inhalation toxicity, if its LC<sub>50</sub> is less than or equal to 3000 ppm and that does not meet the criteria for degree of hazard 4. Dusts and mists with an LC<sub>50</sub> for acute inhalation toxicity greater than 0.5 mg/L but less than or equal to 2 mg/L. Materials with an LD<sub>50</sub> for acute dermal toxicity greater than 40 mg/kg but less than or equal to 200 mg/kg. Materials that are corrosive to the respiratory tract. Materials that are corrosive to the eyes or cause irreversible corneal opacity. Materials corrosive to the skin. Cryogenic gases that cause frostbite and irreversible tissue damage. Compressed liquefied gases with boiling points below -55°C (-66.5°F) that cause frostbite and irreversible tissue damage. Materials with an LD<sub>50</sub> for acute oral toxicity greater than 5 mg/kg but less than or equal to 50 mg/kg. **4** Materials that, under emergency conditions, can be lethal. Gases with an LC<sub>50</sub> for acute inhalation toxicity less than or equal to 1,000 ppm. Any liquid whose saturated vapor concentration at 20°C (68°F) is equal to or greater than ten times its LC<sub>50</sub> for acute inhalation toxicity, if its LC<sub>50</sub> is less than or equal to 1000 ppm. Dusts and mists whose LC<sub>50</sub> for acute inhalation toxicity is less than or equal to 0.5 mg/L. Materials whose LD<sub>50</sub> for acute dermal toxicity is less than or equal to 40 mg/kg. Materials whose LD<sub>50</sub> for acute oral toxicity is less than or equal to 5 mg/kg.

**FLAMMABILITY HAZARD: 0** Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand. Materials that will not burn in air when exposed to a temperature of 816°C (1500°F) for a period of 5 minutes in according with Annex D of NFPA 704. **1** Materials that must be preheated before ignition can occur. Materials in this degree require considerable preheating, under all ambient temperature conditions, before ignition and combustion can occur: Materials that will burn in air when exposed to a temperature of 816°C (1500°F) for a period of 5 minutes in according with Annex D of NFPA 704. Liquids, solids, and semisolids having a flash point at or above 93.4°C (200°F) (i.e. Class IIIB liquids). Liquids with a flash point greater than 35°C (95°F) that do not sustain combustion when tested using the *Method of Testing for Sustained Combustibility*, per 49 CFR 173, Appendix H or the UN *Recommendations on the Transport of Dangerous Goods, Model Regulations* (current edition) and the related *Manual of Tests and Criteria* (current edition). Liquids with a flash point greater than 35°C (95°F) in a water-miscible solution or dispersion with a water non-combustible liquid/solid content of more than 85% by weight. Liquids that have no fire point when tested by ASTM D 92, *Standard Test Method for Flash and Fire Points by Cleveland Open Cup*, up to the boiling point of the liquid or up to a temperature at which the sample being tested shows an obvious physical change. Combustible pellets with a representative diameter of greater than 2 mm (10 mesh). Most ordinary combustible materials. Solids containing greater than 0.5% by weight of a flammable or combustible solvent are rated by the closed cup flash point of the solvent.



## DEFINITIONS OF TERMS (Continued)

### NATIONAL FIRE PROTECTION ASSOCIATION HAZARD RATINGS (continued):

**FLAMMABILITY HAZARD (continued): 0 (continued): 2** Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur. Materials in this degree would not under normal conditions form hazardous atmospheres with air, but under high ambient temperatures or under moderate heating could release vapor in sufficient quantities to produce hazardous atmospheres with air. Liquids having a flash point at or above 37.8°C (100°F) and below 93.4°C (200°F) (i.e. Class II and Class IIIA liquids.) Solid materials in the form of powders or coarse dusts of representative diameter between 420 microns (40 mesh) and 2 mm (10 mesh) that burn rapidly but that generally do not form explosive mixtures with air. Solid materials in fibrous or shredded form that burn rapidly and create flash fire hazards, such as cotton, sisal, and hemp. Solids and semisolids that readily give off flammable vapors. Solids containing greater than 0.5% by weight of a flammable or combustible solvent are rated by the closed cup flash point of the solvent. **3** Liquids and solids that can be ignited under almost all ambient temperature conditions. Materials in this degree produce hazardous atmospheres with air under almost all ambient temperatures or, though unaffected by ambient temperatures, are readily ignited under almost all conditions. Liquids having a flash point below 22.8°C (73°F) and having a boiling point at or above 37.8°C (100°F) and those liquids having a flash point at or above 22.8°C (73°F) and below 37.8°C (100°F) (i.e. Class IB and IC liquids). Materials that on account of their physical form or environmental conditions can form explosive mixtures with air and are readily dispersed in air. Flammable or combustible dusts with representative diameter less than 420 microns (40 mesh). Materials that burn with extreme rapidity, usually by reason of self-contained oxygen (e.g. dry nitrocellulose and many organic peroxides). Solids containing greater than 0.5% by weight of a flammable or combustible solvent are rated by the closed cup flash point of the solvent. **4** Materials that will rapidly or completely vaporize at atmospheric pressure and normal ambient temperature or that are readily dispersed in air and will burn readily. Flammable gases. Flammable cryogenic materials. Any liquid or gaseous materials that is liquid while under pressure and has a flash point below 22.8°C (73°F) and a boiling point below 37.8°C (100°F) (i.e. Class IA liquids). Materials that ignite when exposed to air. Solids containing greater than 0.5% by weight of a flammable or combustible solvent are rated by the closed cup flash point of the solvent.

**INSTABILITY HAZARD: 0** Materials that in themselves are normally stable, even under fire conditions. Materials that have an instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) below 0.01 W/mL. Materials that do not exhibit an exotherm at temperatures less than or equal to 500°C (932°F) when tested by differential scanning calorimetry. **1** Materials that in themselves are normally stable, but that can become unstable at elevated temperatures and pressures. Materials that have an instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) at or above 0.01 W/mL and below 10 W/mL. **2** Materials that readily undergo violent chemical change at elevated temperatures and pressures. Materials that have an instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) at or above 10 W/mL and below 100W/mL. **3** Materials that in themselves are capable of detonation or explosive decomposition or explosive reaction, but that require a strong initiating source or that must be heated under confinement before initiation. Materials that have an estimated instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) at or above 100 W/mL and below 1000 W/mL. Materials that are sensitive to thermal or mechanical shock at elevated temperatures and pressures. **4** Materials that in themselves are readily capable of detonation or explosive decomposition or explosive reaction at normal temperatures and pressures. Materials that are sensitive to localized thermal or mechanical shock at normal temperatures and pressures. Materials that have an estimated instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) of 1000 W/mL or greater.

### FLAMMABILITY LIMITS IN AIR:

Much of the information related to fire and explosion is derived from the National Fire Protection Association (NFPA). **Flash Point:** Minimum temperature at which a liquid gives off sufficient vapor to form an ignitable mixture with air near the surface of the liquid or within the test vessel used. **Autoignition Temperature:** Minimum temperature of a solid, liquid, or gas required to initiate or cause self-sustained combustion in air with no other source of ignition. **LEL:** Lowest concentration of a flammable vapor or gas/air mixture that will ignite and burn with a flame. **UEL:** Highest concentration of a flammable vapor or gas/air mixture that will ignite and burn with a flame.

### TOXICOLOGICAL INFORMATION:

**Human and Animal Toxicology:** Possible health hazards as derived from human data, animal studies, or from the results of studies with similar compounds are presented. **LD<sub>50</sub>:** Lethal Dose (solids & liquids) that kills 50% of the exposed animals. **LC<sub>50</sub>:** Lethal Concentration (gases) that kills 50% of the exposed animals. **ppm:** Concentration expressed in parts of material per million parts of air or water. **mg/m<sup>3</sup>:** Concentration expressed in weight of substance per volume of air. **mg/kg:** Quantity of material, by weight, administered to a test subject, based on their body weight in kg. **TDLo:** Lowest dose to cause a symptom. **TCLo:** Lowest concentration to cause a symptom. **TDo, LDLo, and LDo, or TC, TCo, LCLo, and LCo:** Lowest dose (or concentration) to cause lethal or toxic effects. **Cancer Information:** **IARC:** International Agency for Research on Cancer. **NTP:** National Toxicology Program. **RTECS:** Registry of Toxic Effects of Chemical Substances. IARC and NTP rate chemicals on a scale of decreasing potential to cause human cancer with rankings from 1 to 4. Subrankings (2A, 2B, etc.) are also used. **Other Information:** **BEI:** ACGIH Biological Exposure Indices, represent the levels of determinants which are most likely to be observed in specimens collected from a healthy worker who has been exposed to chemicals to the same extent as a worker with inhalation exposure to the TLV.

**REPRODUCTIVE INFORMATION:** A **mutagen** is a chemical that causes permanent changes to genetic material (DNA) such that the changes will propagate through generational lines. An **embryotoxin** is a chemical that causes damage to a developing embryo (i.e. within the first eight weeks of pregnancy in humans), but the damage does not propagate across generational lines. A **teratogen** is a chemical that causes damage to a developing fetus, but the damage does not propagate across generational lines. A **reproductive toxin** is any substance that interferes in any way with the reproductive process.

### ECOLOGICAL INFORMATION:

**EC:** Effect concentration in water. **BCF:** Bioconcentration Factor, which is used to determine if a substance will concentrate in life forms that consume contaminated plant or animal matter. **TLm:** Median threshold limit. **log K<sub>ow</sub>** or **log K<sub>oc</sub>:** Coefficient of Oil/Water Distribution is used to assess a substance's behavior in the environment.

**REGULATORY INFORMATION:** This section explains the impact of various laws and regulations on the material.

### U.S.:

**EPA:** U.S. Environmental Protection Agency. **ACGIH:** American Conference of Governmental Industrial Hygienists, a professional association that establishes exposure limits. **OSHA:** U.S. Occupational Safety and Health Administration. **NIOSH:** National Institute of Occupational Safety and Health, which is the research arm of OSHA. **DOT:** U.S. Department of Transportation. **TC:** Transport Canada. **SARA:** Superfund Amendments and Reauthorization Act. **TSCA:** U.S. Toxic Substance Control Act. **CERCLA:** Comprehensive Environmental Response, Compensation, and Liability Act. Marine Pollutant status according to the DOT; CERCLA or Superfund; and various state regulations. This section also includes information on the precautionary warnings that appear on the material's package label.

### CANADA:

**WHMIS:** Canadian Workplace Hazardous Materials Information System. **TC:** Transport Canada. **DSL/NDL:** Canadian Domestic/Non-Domestic Substances List.

# SAFETY DATA SHEET

## Commercial ABC Dry Chemical (Fire Extinguishing Agent, Pressurized and Non-pressurized)

### 1. IDENTIFICATION

<b>Product Name</b>	Commercial ABC Dry Chemical (Fire Extinguishing Agent, Pressurized and Non-pressurized)
<b>Other Names</b>	Multi-Purpose, Ammonium Phosphate, Monoammonium Phosphate
<b>Recommended use of the chemical and restrictions on use</b>	
<b>Identified uses</b>	Fire Extinguishing Agent
<b>Restrictions on use</b>	Consult applicable fire protection codes
<b>Company Identification</b>	Kidde Residential & Commercial 1016 Corporate Park Drive Mebane, NC 27302 USA
<b>Customer Information Number</b>	(919) 563-5911 (919) 304-8200
<b>Emergency Telephone Number</b>	
<b>CHEMTREC Number</b>	(800) 424-9300 (703) 527-3887 (International)
<b>Issue Date</b>	April 10, 2015
<b>Supersedes Date</b>	February 9, 2015

*Safety Data Sheet prepared in accordance with OSHA's Hazard Communication Standard (29 CFR 1910.1200) and the Globally Harmonized System of Classification and Labelling of Chemicals (GHS)*

### 2. HAZARD IDENTIFICATION

This SDS covers the product listed above as sold in pressurized and non-pressurized containers. GHS classifications for both forms are listed below.

#### GHS Classification – Pressurized

##### **Hazard Classification**

Gas under pressure – Compressed gas

##### **Label Elements**

Hazard Symbols



Signal Word: Warning

##### **Hazard Statements**

Contents under pressure; may explode if heated.



# SAFETY DATA SHEET

## Commercial ABC Dry Chemical (Fire Extinguishing Agent, Pressurized and Non-pressurized)

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## 2. HAZARD IDENTIFICATION

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### Precautionary Statements

#### Prevention

None

#### Response

None

#### Storage

Protect from sunlight.

Store in well-ventilated place.

#### Disposal

None

### GHS Classification: Non - pressurized

### Hazard Classification

This product is classified as not hazardous in accordance with the Globally Harmonized System of Classification and Labelling (GHS).

### Label Elements

Hazard Symbols

None

Signal Word: None

### Hazard Statements

None

### Precautionary Statements

#### Prevention

None

#### Response

None

#### Storage

None

#### Disposal

None

### Other Hazards

Mica may contain small quantities of quartz (crystalline silica) as an impurity. Prolonged exposure to respirable crystalline silica dust at concentrations exceeding the occupational exposure limits may increase the risk of developing a disabling lung disease known as silicosis. IARC found limited evidence for pulmonary carcinogenicity of crystalline silica in humans.

### Specific Concentration Limits

The values listed below represent the percentages of ingredients of unknown toxicity.

Acute oral toxicity < 10%

Acute dermal toxicity < 10%

Acute inhalation toxicity < 10%

Acute aquatic toxicity < 10%

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

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This product is a mixture.

Component	CAS Number	Concentration
Monoammonium Phosphate	7722-76-1	55 - 65%
Ammonium Sulfate	471-34-1	30 - 40%
Mica	12001-26-2	< 5%
Clay	1332-58-7	< 5%
Amorphous Silica	7631-86-9	< 5%
Dye	NA	<1%

**Note:** Pressurized product uses nitrogen or compressed air as the expellant.

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### 4. FIRST- AID MEASURES

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**Description of necessary first-aid measures**

**Eyes**

Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention if soreness or redness persists.

**Skin**

Wash skin thoroughly with soap and water. Obtain medical attention if irritation persists.

**Ingestion**

Dilute by drinking large quantities of water and obtain medical attention.

**Inhalation**

Move victim to fresh air. Obtain medical attention immediately for any breathing difficulty.

**Most important symptoms/effects, acute and delayed**

Aside from the information found under Description of necessary first aid measures (above) and Indication of immediate medical attention and special treatment needed, no additional symptoms and effects are anticipated.

**Indication of immediate medical attention and special treatment needed**

**Notes to Physicians**

Treat symptomatically.

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### 5. FIRE - FIGHTING MEASURES

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**Suitable Extinguishing Media**

This preparation is used as an extinguishing agent and therefore is not a problem when trying to control a fire. Use extinguishing agent appropriate to other materials involved. Keep pressurized containers and surroundings cool with water spray as they may rupture or burst in the heat of a fire.

**Specific hazards arising from the chemical**

Pressurized containers may explode in heat of fire.

**Special Protective Actions for Fire-Fighters**

Wear full protective clothing and self-contained breathing apparatus as appropriate for specific fire conditions.

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**6. ACCIDENTAL RELEASE MEASURES**

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**Personal precautions, protective equipment and emergency procedures**

Wear appropriate protective clothing. Prevent skin and eye contact. Remove leaking container to a safe place. Ventilate the area.

**Environmental Precautions**

Prevent large quantities of the material from entering drains or watercourses.

**Methods and materials for containment and cleaning up**

Sweep up or vacuum and transfer into suitable containers for recovery or disposal.

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**7. HANDLING AND STORAGE**

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**Precautions for safe handling**

Wear appropriate protective clothing. Prevent skin and eye contact.

**Conditions for safe storage**

Pressurized containers should be properly stored and secured to prevent falling or being knocked over. Do not drag, slide or roll pressurized containers. Do not drop pressurized containers or permit them to strike against each other. Never apply flame or localized heat directly to any part of the pressurized or plastic container. Store pressurized and plastic containers away from high heat sources. Storage area should be: - cool - dry - well ventilated - under cover - out of direct sunlight

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

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**Control parameters**

Exposure limits are listed below, if they exist.

**Mica**

ACGIH TLV: 3 mg/m<sup>3</sup> TWA, measured as respirable fraction of the aerosol.

OSHA PEL: 20 mppcf, <1% crystalline silica

**Clay as Kaolin, Respirable Fraction**

ACGIH TLV: 2 mg/m<sup>3</sup> TWA

OSHA PEL: 15 mg/m<sup>3</sup> TWA, total dust

5 mg/m<sup>3</sup> TWA, respirable fraction

**Nuisance Dust Limit**

OSHA PEL: 50 mppcf or 15 mg/m<sup>3</sup> TWA, total dust

15 mppcf or 5 mg/m<sup>3</sup> TWA, respirable fraction

**Appropriate engineering controls**

Use with adequate ventilation. If this product is used in a pressurized system, there should be local procedures for the selection, training, inspection and maintenance of this equipment. When used in large volumes, use local exhaust ventilation.

**Individual protection measures**

**Respiratory Protection**

Not normally required. Use dust mask where dustiness is prevalent, or TLV is exceeded. In oxygen deficient atmospheres, use a self contained breathing apparatus, as an air purifying respirator will not provide protection.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Skin Protection

Gloves

### Eye/Face Protection

Chemical goggles or safety glasses with side shields.

### Body Protection

Normal work wear.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Non- Pressurized

#### Appearance

<b>Physical State</b>	Solid (powder)
<b>Color</b>	Pale Yellow
<b>Odor</b>	Odorless
<b>Odor Threshold</b>	No data available
<b>pH</b>	Not applicable
<b>Specific Gravity</b>	No data available
<b>Boiling Range/Point (°C/F)</b>	Not applicable
<b>Melting Point (°C/F)</b>	No data available
<b>Flash Point (PMCC) (°C/F)</b>	Not flammable
<b>Vapor Pressure</b>	No data available
<b>Evaporation Rate (BuAc=1)</b>	No data available
<b>Solubility in Water</b>	No data available
<b>Vapor Density (Air = 1)</b>	Not applicable
<b>VOC (g/l)</b>	None
<b>VOC (%)</b>	None
<b>Partition coefficient (n-octanol/water)</b>	No data available
<b>Viscosity</b>	No data available
<b>Auto-ignition Temperature</b>	No data available
<b>Decomposition Temperature</b>	No data available
<b>Upper explosive limit</b>	No data available
<b>Lower explosive limit</b>	No data available
<b>Flammability (solid, gas)</b>	No data available

### Expellant - Nitrogen

#### Appearance

<b>Physical State</b>	Compressed gas
<b>Color</b>	Colorless
<b>Odor</b>	None
<b>Odor Threshold</b>	No data available
<b>pH</b>	Not applicable
<b>Specific Gravity</b>	0.075 lb/ft <sup>3</sup> @ 70°F as vapor
<b>Boiling Range/Point (°C/F)</b>	-196°C/-321 °F
<b>Melting Point (°C/F)</b>	No data available
<b>Flash Point (PMCC) (°C/F)</b>	Not flammable
<b>Vapor Pressure</b>	No data available
<b>Evaporation Rate (BuAc=1)</b>	No data available
<b>Solubility in Water</b>	No data available

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

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<b>Vapor Density (Air = 1)</b>	Not applicable
<b>VOC (g/l)</b>	None
<b>VOC (%)</b>	None
<b>Partition coefficient (n-octanol/water)</b>	No data available
<b>Viscosity</b>	Not applicable
<b>Auto-ignition Temperature</b>	No data available
<b>Decomposition Temperature</b>	No data available
<b>Upper explosive limit</b>	Not explosive
<b>Lower explosive limit</b>	Not explosive
<b>Flammability (solid, gas)</b>	Not flammable

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**10. STABILITY AND REACTIVITY**

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**Reactivity**

Pressurized containers may rupture or explode if exposed to heat.

**Chemical Stability**

Stable under normal conditions.

**Possibility of hazardous reactions**

Hazardous polymerization will not occur.

**Conditions to Avoid**

Exposure to direct sunlight - contact with incompatible materials

**Incompatible Materials**

Strong oxidizing agents - strong acids - sodium hypochlorite

**Hazardous Decomposition Products**

Oxides of carbon - ammonia - oxides of phosphorus - nitrogen oxides

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**11. TOXICOLOGICAL INFORMATION**

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**Acute Toxicity**

Monoammonium Phosphate:

Oral LD50 (Rat) 5750 mg/kg

Dermal LD50 (Rabbit) >5000mg/kg

Inhalation LC50 (Rat) 5.1mg/l

Ammonium Sulfate:

Oral LD50 (Rat) 4250 mg/kg

Dermal LD50 (Rabbit) >2000mg/kg

Mica:

Oral LD50 (Rat) >2000 mg/kg

Amorphous Silica:

Oral LD50 (Rat) >5000 mg/kg

Dermal LD50 (Rabbit) >2000mg/kg

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**11. TOXICOLOGICAL INFORMATION**

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Clay:

Oral LD50 (Rat) >5000 mg/kg

Dermal LD50 (Rabbit) >5000mg/kg

Nitrogen

Simple asphyxiant

**Specific Target Organ Toxicity (STOT) – single exposure**

Monoammonium Phosphate: Available data indicates this component is not expected to cause target organ effects after a single exposure.

Ammonium Sulfate: Available data indicates this component is not expected to cause target organ effects after a single exposure.

Nitrogen: Exposure to nitrogen gas at high concentrations can cause suffocation by reducing oxygen available for breathing. Breathing very high concentrations can cause dizziness, shortness of breath, unconsciousness or asphyxiation.

**Specific Target Organ Toxicity (STOT) – repeat exposure**

Monoammonium Phosphate: Available data indicates this component is not expected to cause target organ effects after repeat exposure.

Ammonium Sulfate: Available data indicates this component is not expected to cause target organ effects after repeat exposure.

**Serious Eye damage/Irritation**

Monoammonium Phosphate: Not irritating (rabbit)

Ammonium Sulfate: Not irritating (rabbit)

Mica: Not irritating (rabbit)

**Skin Corrosion/Irritation**

Monoammonium Phosphate: Not irritating in rabbit test study

Ammonium Sulfate: Not irritating (rabbit)

Mica: Not irritating (rabbit)

**Respiratory or Skin Sensitization**

Monoammonium Phosphate: Not skin sensitizing based on test (Mouse local lymphnode assay (LLNA)) on an analogous compound

Ammonium Sulfate: Not sensitizing in Guinea pig maximisation test

**Carcinogenicity**

Mica may contain small quantities of quartz (crystalline silica) as an impurity. Prolonged exposure to respirable crystalline silica dust at concentrations exceeding the occupational exposure limits may increase the risk of developing a disabling lung disease known as silicosis. IARC has classified Silica Dust, Crystalline, in the form of quartz or cristobalite as 1 (carcinogenic to humans).

**Germ Cell Mutagenicity**

Monoammonium Phosphate: Not mutagenic in the mouse lymphoma cells in mammalian cell gene mutation assay

Ammonium Sulfate: Negative results in Ames Test, in vitro mammalian chromosome aberration test, and mammalian cell gene mutation assay.



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**11. TOXICOLOGICAL INFORMATION**

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**Reproductive Toxicity**

Monoammonium Phosphate: Available data indicates this component is not expected to cause reproductive toxicity or birth defects.

Ammonium Sulfate: Available data indicates this component is not expected to cause reproductive toxicity or birth defects.

**Aspiration Hazard**

Not an aspiration hazard.

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**12. ECOLOGICAL INFORMATION**

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**Ecotoxicity**

Monoammonium Phosphate:

LC50 rainbow trout >100 mg/l 96h

LC50 water flea 1790 mg/l 72h (similar substance)

**Mobility in soil**

No relevant studies identified.

**Persistence/Degradability**

No relevant studies identified.

**Bioaccumulative Potential**

No relevant studies identified.

**Other adverse effects**

No relevant studies identified.

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**13. DISPOSAL CONSIDERATIONS**

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**Disposal Methods**

Dispose of container in accordance with all applicable local and national regulations.

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**14. TRANSPORT INFORMATION**

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Safety Data Sheet information is intended to address a specific material and not various forms or states of containment. Specific volumes, pressures or hardware configurations containing such materials can dictate various different hazard classifications for transportation and labelling requirements. Under Federal Regulations only trained and qualified individuals are permitted to label and ship products following the applicable Department of Transportation (DOT), Federal Aviation Administration (FAA), Transport Canada (TC), International Maritime Dangerous Goods (IMDG) or International Air Transport Association (IATA) requirements.

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**15. REGULATORY INFORMATION**

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**United States TSCA Inventory**

This product contains ingredients that are listed on or exempt from listing on the EPA Toxic Substance Control Act Chemical Substance Inventory.



## SAFETY DATA SHEET

### Commercial ABC Dry Chemical (Fire Extinguishing Agent, Pressurized and Non-pressurized)

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#### 15. REGULATORY INFORMATION

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##### Canada DSL Inventory

All ingredients in this product are listed on the Domestic Substance List (DSL) or the Non-Domestic Substance List (NDSL) or are exempt from listing.

##### SARA Title III Sect. 311/312 Categorization: Pressurized

Pressure hazard

##### SARA Title III Sect. 311/312 Categorization: Non-pressurized

None

##### SARA Title III Sect. 313

This product does not contain any chemicals that are listed in Section 313 at or above de minimis concentrations.

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#### 16. OTHER INFORMATION

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##### NFPA Ratings

NFPA Code for Health - 1

NFPA Code for Flammability - 0

NFPA Code for Reactivity - 0

NFPA Code for Special Hazards - None

##### HMIS Ratings

HMIS Code for Health - 1

HMIS Code for Flammability - 0

HMIS Code for Physical Hazard - 0

HMIS Code for Personal Protection - See Section 8

\*Chronic

##### Legend

ACGIH: American Conference of Governmental Industrial Hygienists

CAS#: Chemical Abstracts Service Number

EC50: Effect Concentration 50%

IARC: International Agency for Research on Cancer

LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

N/A: Denotes no applicable information found or available

OSHA: Occupational Safety and Health Administration

PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit

TLV: Threshold Limit Value

TSCA: Toxic Substance Control Act

Revision Date: April 10, 2015

Replaces: February 9, 2015

Changes made: Updated to GHS Classification.

##### Information Source and References

This SDS is prepared by Hazard Communication Specialists based on information provided by internal company references.



**SAFETY DATA SHEET**  
**Commercial ABC Dry Chemical**  
**(Fire Extinguishing Agent, Pressurized and**  
**Non-pressurized)**

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**16. OTHER INFORMATION**

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**Prepared By:** EnviroNet LLC.

The information and recommendations presented in this SDS are based on sources believed to be accurate. Kidde Residential & Commercial assumes no liability for the accuracy or completeness of this information. It is the user's responsibility to determine the suitability of the material for their particular purposes. In particular, we make NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, with respect to such information, and we assume no liability resulting from its use. Users should ensure that any use or disposal of the material is in accordance with applicable Federal, State, and local laws and regulations.

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## Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Reviewed on 05/15/2015

### 1 Identification

**Product identifier-**

**Trade name:** SAFE STRIP

**Product description**

SAFE STRIP is an environmentally preferred paint and resin solvent.

Product Name	Part No.	Packaging	National Stock No.
Safe Strip	0387-55	55 Gal Drum	6850-01-386-8430
Safe Strip	0387-5	5 Gal Pail	6850-01-386-8424
Safe Strip	0387-1	4 x 1 Gal Case	6850-01-386-8428

**Details of the supplier of the safety data sheet**

**Manufacturer Supplier:**

Ecolink

2177 Flintstone Drive, Ste. A

Tucker, GA 30084

www.ecolink.com

800-886-8240 or 770-621-8240 (8-5 EST)

email: info@ecolink.com

**Emergency telephone number:**

Inside the U.S.: 800-535-5053 (INFOTRAC, 24 HOURS)

Outside the U.S.: 352-323-3500 (INFOTRAC, 24 HOURS)

### 2 Hazard(s) identification

**Classification of the substance or mixture**



GHS08 Health hazard

Category 1B H360 May damage fertility or the unborn child



GHS07

Category 2 H315 Causes skin irritation

Category 2A H319 Causes serious eye irritation

STOT SE 3 H335 May cause respiratory irritation

H336 May cause drowsiness or dizziness

Category 4 H227 Combustible liquid

**GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

(Contd. on page 2)

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## Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Reviewed on 05/15/2015

**Trade name: SAFE STRIP**

### Label elements

#### Hazard pictograms



GHS07 GHS08

#### • **Signal word** *Danger*

#### • **Hazard-determining components of labeling:**

*N-methyl-2-pyrrolidone (NMP)*  
*Dipropylene glycol dimethyl ether*

#### • **Hazard statements**

*Combustible liquid.*  
*Causes skin irritation*  
*Causes serious eye irritation.*  
*May damage fertility or the unborn child.*  
*May cause respiratory irritation.*  
*May cause drowsiness or dizziness.*

#### • **Precautionary statements**

*Keep away from flames and hot surfaces. – No smoking.*  
*Avoid breathing fumes, gas, mist, vapors, spray.*  
*Use only outdoors or in a well-ventilated area.*  
*Wear protective gloves, eye protection, face protection.*  
*Wash thoroughly after handling.*  
*Obtain special instructions before use.*  
*Do not handle until all safety precautions have been read and understood.*  
*IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*  
*Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).*  
*IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.*  
*Call a poison center or doctor if you feel unwell.*  
*IF exposed or concerned: Get medical advice/attention*  
*If skin irritation occurs: Get medical advice/attention.*  
*If eye irritation persists: Get medical advice/attention.*  
*In case of fire: Use dry chemical, CO<sub>2</sub>, water spray or alcohol-resistant foam*  
*If on skin: Wash with plenty of water.*  
*Take off contaminated clothing and wash it before reuse.*  
*Store locked up.*  
*Store in a well-ventilated place. Keep container tightly closed.*  
*Dispose of contents/container in accordance with local/regional/national/international regulations.*

#### • **Classification system:** NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme

#### • **NFPA ratings (scale 0 - 4)**



Health = 2  
Fire = 2  
Reactivity = 0

(Contd. on page 3)

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## Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Reviewed on 05/15/2015

**Trade name: SAFE STRIP**

### · HMIS-ratings (scale 0 - 4)

HEALTH	2	Health = *2
FIRE	2	Fire = 2
REACTIVITY	0	Reactivity = 0

· **Hazard(s) not otherwise classified (HNOC):** None known

## 3 Composition/information on ingredients

### · Chemical characterization: Mixtures

· **Description:** Mixture of substances listed below with nonhazardous additions.

### · Dangerous Components:

CAS: 872-50-4	N-methyl-2-pyrrolidone (NMP)	80-90%
RTECS: UY 5790000	Repr. 18, H360; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335; H336	
CAS: 111109-77-4	Di(propylene glycol) dimethyl ether, mixture of isomers	10-20%
	Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335; Flam. Liq. 4, H227	

## 4 First-aid measures

### · Description of first aid measures

· **If inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Do not leave victim un-attended. If breathing is difficult administer oxygen. If unconscious place in a recovery position and seek medical advice. If not breathing, ensure that there is no obstruction to air passage ways and give artificial respiration by trained personnel, immediately seek medical attention. In the event of unconsciousness, apnea or cardiac arrest (no pulse) apply cardiopulmonary resuscitation.

· **In case of skin contact:** Appears to be readily absorbed through the skin however no systematic toxicity is expected from acute dermal exposure. Immediately wash with water and soap and rinse thoroughly. Take off contaminated clothing and shoes immediately, wash before re-use. If skin irritation develops or if ill effect seek medical attention.

· **In case of eye contact:** Remove contact lens and rinse opened eye and under eyelids for at least 15 minutes under running water. If symptoms persist, seek medical attention immediately.

· **If swallowed:** If victim is drowsy or unconscious, place on the left side with head down. If victim is conscious and able to swallow have them to drink water to dilute. Never give anything by mouth if victim is unconscious or having convulsions. This product poses a possible lung aspiration hazard if it is ingested. Induce vomiting only if advised by physician or Poison Control Center. CALL A PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY. If vomiting does occur, have victim lean forward to reduce risk of aspiration.

· **Information for doctor:** This product may cause eye, skin and respiratory tract irritation. High concentrations may cause central nervous system (CNS) depression. Ingestion would likely cause gastrointestinal tract irritation. Skin absorption hazard. **Treatment:** Treat symptomatically. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of patient. There is no specific antidote. Potential danger from aspiration must be weighed against possible oral toxicity when deciding to induce vomiting.

## Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Reviewed on 05/15/2015

**Trade name: SAFE STRIP**

### 5 Fire-fighting measures

- **Suitable extinguishing agents:** **SMALL FIRE** - Use dry chemical, CO2, water spray or regular foam. **LARGE FIRE** - Use water spray, water fog or regular foam. Do not use straight streams.
- **Unsuitable extinguishing media:** Do not use solid water stream
- **Specific hazards during fire fighting:** When heated above flash point flammable vapors release. When mixed with air and exposed to ignition source vapors can burn in open or explode if confined. Vapors may be heavier than air and may travel long distances along the ground before igniting and flashing back to vapor source. Fine sprays/mists may be combustible below normal flash point. Heat may build enough to rupture closed containers.
- **Advice for firefighters** Remove containers from fire area if possible. Fight fire from maximum distance. Cool containers with flooding quantities of water well after fire is out. Prevent run-off from fire fighting to enter drains and all water ways.
- **Protective equipment:** Wear positive pressure self contained breathing apparatus (SCBA). Structural firefighters protective clothing will only provide limited protection.

### 6 Accidental release measures

- **Personal precautions:** Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation. Keep people at a distance and stay upwind. Avoid contact with skin, eyes and clothing. Keep away from ignition sources.
- **Environmental precautions:** Prevent entry into waterways, sewers, basements or confined areas. If product contaminates rivers and/or lakes or drains inform respective authorities. If necessary all contaminated wastewater must be treated in a municipal or industrial wastewater treatment plant before release to surface water. The discharge of treatment plant effluent to rivers and oceans must achieve the dilution ratio needed to reduce exposures to an acceptable level.
- **Methods and material for containment and cleaning up:** Combustible liquid, Eliminate all sources of ignition. All equipment used when handling this product must be grounded. Absorb with liquid-binding material (ie. sand, diatomite, acid binders, universal binders, sawdust). Use non-sparking tools to collect absorbed material. Dike large spills and place materials in salvage containers. Treat all waste as hazardous and dispose using licensed waste removal company.

### 7 Handling and storage

- **Handling:**
- **Advice for safe handling:** Use only in areas provided with appropriate exhaust ventilation. Handle empty containers with care, residue may be combustible and burn if exposed to heat/sparks/open flame. In addition, residual vapor and liquid may also be toxic. Keep container tightly closed when not in use. Wear recommended personal protective equipment. Avoid contact with incompatible agents. Observe precautions pertaining to confined space entry.
- **Information about protection against explosions and fires:**  
Keep away from heat and sources of ignition.
- **Conditions for safe storage, including any incompatibilities**  
Mild or stainless steel containers. Store away from heat, sparks, open flames, strong oxidizing agents and direct sunlight. Keep container tightly closed and properly labeled.

(Contd. on page 5)

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## Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Reviewed on 05/15/2015

Trade name: **SAFE STRIP**

### 8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see section 7.

· **Control parameters**

All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94). Use mechanical (general) ventilation for storage areas. Use appropriate ventilation as required to keep Exposure Limits in Air below TLV & PEL limits. Consult local authorities for acceptable exposure limits.

· **Components with occupational exposure limits:**

**872-50-4 N-methyl-2-pyrrolidone (NMP)**

WEEL Long-term value: 10 ppm (Skin)

· **Ingredients with biological limit values:**

**872-50-4 N-methyl-2-pyrrolidone (NMP)**

BEI 100 mg/L urine end of shift

5-Hydroxy-N-methyl-2-pyrrolidone

· **Exposure controls**

**Engineering measures** - At elevated temperatures special ventilation may be required even if flash point has not been exceeded. Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below recommended exposure limits.

· **Personal protective equipment**

· **General protective and hygienic measures:** The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing and wash before reuse. Wash hands before breaks and at the end of work.

· **Respiratory protection:** No occupational exposure limits have been developed for this material. Not necessary if room is well-ventilated. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators, use respiratory protective device that is independent of circulating air.

· **Protection of hands:**



Protective gloves

Use chemical resistant gloves appropriate to conditions of use.

· **Material of gloves: Butyl rubber gloves.** Other types of solvent resistant gloves, including Nitrile gloves, may be used for intermittent exposure. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

(Contd. on page 6)

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## Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

**Trade name: SAFE STRIP**

### · Eye and face protection:



Tightly sealed goggles including both chemical splash goggles and face shield must be worn when possibility exists for eye contact due to splashing or spraying liquid, airborne particles or vapor. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

### · Skin and Body protection:



When skin contact is possible protective clothing including gloves, apron, sleeves, boots, head and face protection should be worn. Choose body protection according to the amount and concentration of the dangerous substance at the work place. Use PPE this is chemical resistant to the product and prevents skin contact.

## 9 Physical and chemical properties

### · Information on basic physical and chemical properties

#### · General Information

##### · Appearance:

**Form:**

Liquid

**Color:**

Colorless to light yellow

##### · Odor:

Mild, sweet

##### · pH-value:

No Data Available

##### · Boiling point/Boiling range:

202 °C (396 °F)

##### · Flash point:

88 °C (190 °F) Closed Cup

##### · Flammability (solid, gaseous):

Not applicable.

##### · Decomposition temperature:

Not determined.

##### · Autoignition:

473°F (245°C)

##### · Danger of explosion:

Not determined.

##### · Explosion limits:

**Lower:**

~ 1.3 Vol %

**Upper:**

~ 9.5 Vol %

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## Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Reviewed on 05/15/2015

**Trade name: SAFE STRIP**

- **Density @ 77 °F (25 °C):** 1.03 g/cm<sup>3</sup> (8.59 lbs/gal)
- **Relative density** Not determined.
- **Vapor density** > 1 (air=1)
- **Evaporation rate @ 20 °C (68 °F)** 0.03 (nBuAc=1)
- **Solubility in Water:** Completely miscible
- **Partition coefficient (n-octanol/water):** Not determined
- **Viscosity:**
  - Dynamic:** 1.661 mPa.s at 77°F (25°C)
  - Kinematic:** Not determined.
- **Other information** *Hygroscopic. This substance or mixture is not classified as oxidizing.*

### 10 Stability and reactivity

- **Reactivity:** Not classified as a reactivity hazard
- **Chemical stability** Stable under recommended storage conditions.
- **Conditions to avoid:** Heat, sparks, open flame or other ignition sources, oxidizing conditions.
- **Thermal decomposition:** Incomplete combustion may produce carbon monoxide, oxides or compounds of nitrogen and other toxic gases.
- **Hazardous reactions** Not expected to occur. Stable
- **Incompatible materials:** Strong oxidizing agents, strong reducing agents, moisture and humidity
- **Hazardous decomposition products:** Carbon monoxide and nitrogen oxide fumes emitted when heated to decomposition.

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**

**872-50-4 N-methyl-2-pyrrolidone (NMP)**

Oral LD50 4,150 mg/kg (rat)

Dermal LD50 > 5,000 mg/kg (rat)

Inhalation LC50 >5.1 mg/l 4 hrs. (rat)
- **Primary irritant effect:**
- **Skin corrosion/irritation:** Not classified, may cause mild skin irritation
- **Serious eye damage/eye irritation:** Classified. Causes serious eye irritation.
- **Respiratory or Skin sensitization:** Skin sensitization. Based on skin sensitization values, not classified.

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## Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Reviewed on 05/15/2015

**Trade name: SAFE STRIP**

### **Chronic toxicity:**

**Carcinogenicity** - Not classified. This product has had a positive finding in carcinogenic investigation. The findings do not appear to be relevant to classification due to non genotoxic mechanism and the species sensitivity to the liver tumors observed.

**Germ cell mutagenicity** - Not classified. No adverse effect observed.

### **Reproductive toxicity:**

**Effects on fertility/Effects on or via lactation** - Not classified. No adverse effect observed.

**Effects on Development** - Classified. May damage the unborn child.

**Routes of exposure:** Inhalation

**Target Organs:** Respiratory System

**Target Organ Systemic Toxicant - Single Exposure** - Classified. May cause respiratory irritation, may cause dizziness or drowsiness.

**Target Organ Systemic Toxicant - Repeated Exposure** - Based on repeated exposure toxicity values, not classified

**Aspiration Hazard** - Based on physico-chemical values or lack of human evidence, not classified

### **· Carcinogenic categories**

#### **· IARC (International Agency for Research on Cancer)**

Group 1 - Carcinogenic to humans

Group 2A - Probably carcinogenic to humans

Group 2B - Possibly carcinogenic to humans

Group 3 - Not classifiable as to its carcinogenicity to humans

Group 4 - Probably not carcinogenic to humans

None of the ingredients are listed.

#### **· NTP (National Toxicology Program)**

None of the ingredients are listed.

#### **· OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients are listed.

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Reviewed on 05/15/2015

**Trade name: SAFE STRIP****12 Ecological information****· Aquatic toxicity:****872-50-4 N-methyl-2-pyrrolidone (NMP)**

EC50 1.23-1.50 mg/l (Water flea)

**Acute aquatic toxicity** - Based on acute aquatic toxicity values, not classified**Chronic aquatic toxicity** - Not classified based on readily biodegradability and low acute toxicity.**Toxicity to fish** - Acute toxicity to fish is very low**Toxicity to daphnia and other aquatic invertebrates** - Low acute toxicity to aquatic invertebrates**Toxicity to algae** - Low toxicity to algae**Toxicity to bacteria** - Low toxicity to sewage microbes**Toxicity to fish (Chronic toxicity)** - No data available, study scientifically unjustified**Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)** Low chronic toxicity to aquatic invertebrates**· Persistence and degradability 872-50-4 N-methyl-2-pyrrolidone (NMP)****· Behavior in environmental systems:****Biodegradability** - Readily biodegradable.

BOD (Modified MITI Method) = 73% (28 days)

**· Bioaccumulative potential** - No bioaccumulation expected in aquatic organisms**· Mobility in soil****Distribution among environmental compartments - Stability in soil** - no data available, low potential for soil adsorption expected. **Stability in water** - Hydrolysis expected to be very slow. Half-life > 1 year (QSAR calculate value)**· Additional ecological information:****· Results of PBT and vPvB assessment:** Not applicable.**· Other adverse effects** No further relevant information available.

## Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Reviewed on 05/15/2015

**Trade name: SAFE STRIP**

### 13 Disposal considerations

• **Waste treatment methods**

• **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system, water courses or the soil. SAFE STRIP liquid is not considered a RCRA regulated substance. Soils removed during cleaning may affect the hazard classification of your waste stream. If your waste stream remains non- hazardous (you need to check), the waste may be disposed of like used oil (in most states). Comply with applicable local, state or international regulations concerning solid or hazardous waste disposal and/or container disposal. Please call us if you need additional disposal information.

• **Packaging:** Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn or use cutting torch on empty drum. Disposal must be made according to official regulations.

### 14 Transport information

• **UN-Number**

• **DOT, ADR, ADN, IMDG, IATA** Non-Regulated Material

• **UN proper shipping name**

• **DOT, ADR, ADN, IMDG, IATA** Non-Regulated Material

• **Transport hazard class(es)**

• **DOT, ADR, ADN, IMDG, IATA**

• **Class** Non-Regulated Material

• **Packing group**

• **DOT, ADR, IMDG, IATA** Non-Regulated Material

• **Environmental hazards:** Not applicable.

• **Special precautions for user** Not applicable.

• **Transport in bulk according to Annex II of MARPOL73178 and the IBC Code** Not applicable.

### 15 Regulatory information

• **Safety, health and environmental regulations/legislation specific for the substance or mixture**

• **Sara**

• **Section 311/312:**

Based upon available information this material is classified as the following health and/or physical hazards according to Section 311 & 312: Immediate (Acute) health hazard. Fire Hazard

• **Section 313:** This product contains the following chemicals subject to the reporting requirements of SARA Title III, Section 313 and 40 CFR 372

872-50-4 N-methyl-2-pyrrolidone (NMP) Reporting Threshold: 1.0%

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## Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Reviewed on 05/15/2015

**Trade name: SAFE STRIP**

• **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

• **California Proposition 65**

• **Chemicals known to cause cancer:**

None of the ingredients are listed.

• **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed.

• **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed.

• **Chemicals known to cause developmental toxicity:**

872-50-4 N-methyl-2-pyrrolidone (NMP)

• **Carcinogenic categories**

• **EPA (Environmental Protection Agency)**

None of the ingredients are listed.

• **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients are listed.

• **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients are listed.

• **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

• **Hazard pictograms**



GHS07 GHS08

• **Signal word** Danger

• **Hazard-determining components of labeling:**

N-methyl-2-pyrrolidone (NMP)

Di(propylene glycol) dimethyl ether, mixture of isomers

• **Hazard statements**

Combustible liquid.

Causes skin irritation.

Causes serious eye irritation.

May damage fertility or the unborn child.

May cause respiratory irritation.

May cause drowsiness or dizziness.

• **Precautionary statements**

Keep away from flames and hot surfaces. – No smoking.

Avoid breathing dust, fume, gas, mist/vapors/spray.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/eye protection/face protection.

Wear protective gloves.

Wear eye protection / face protection.

Wash thoroughly after handling.

(Contd. on page 12)

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## Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Reviewed on 05/15/2015

**Trade name: SAFE STRIP**

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

• **National regulations:**

The product is subject to be classified according with the latest version of the regulations on hazardous substances.

• **State Right to Know**

CAS: 872-50-4 N-methyl-2-pyrrolidone (NMP) 80-90%

RTECS: UY 5790000 Repr. 18, H360; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335; H336

CAS: 111109-77-4 Dipropylene glycol dimethyl ether 10-20%

Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335; Flam. Liq. 4, H227

All ingredients are listed.

• **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 16 Other information

Ecolink, Inc. believes the information contained herein is accurate. However, Ecolink makes no warranty, expressed or implied, regarding the accuracy of this data or the results to be obtained by the use thereof. Ecolink, Inc. assumes no responsibility for injury from the use of the product described herein.

• **Date of preparation, last revision** 05/15/2015

• **Abbreviations and acronyms:**

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Flam. Liq. 4: Flammable liquids, Hazard Category 4

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

Repr. 1B: Reproductive toxicity, Hazard Category 1B

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

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# SAFETY DATA SHEET

Issue Date 27-May-2015

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Version 1

## 1. IDENTIFICATION

### Product identifier

Product Name

**Dricon® Fire Retardant Treated Wood**

### Other means of identification

Product Code 20002

### Recommended use of the chemical and restrictions on use

Recommended Use Treated Wood.

### Details of the supplier of the safety data sheet

Supplier Address Manufacturer Address

Customers and Licensees of:  
Arch Wood Protection, Inc.  
360 Interstate North Parkway, Suite 450  
Atlanta, GA 30339

### Emergency telephone number

Company Phone Number

24 Hour Emergency Phone Number

Emergency Telephone

## 2. HAZARDS IDENTIFICATION

### Classification

#### OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 3
Serious eye damage/eye irritation	Category 2B
Respiratory sensitization	Category 1
Skin sensitization	Category 1
Carcinogenicity	Category 1A
Reproductive toxicity	Category 1B
Specific target organ toxicity (single exposure)	Category 3

### Label elements

#### Emergency Overview

**Danger**

#### Hazard statements

Causes eye irritation  
May cause cancer  
May damage fertility or the unborn child  
May cause respiratory irritation  
Causes mild skin irritation  
May cause an allergic skin reaction  
May cause allergy or asthma symptoms or breathing difficulties if inhaled



**Physical state** Solid**Odor** No information available**Precautionary Statements - Prevention**

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Use personal protective equipment as required  
Wash face, hands and any exposed skin thoroughly after handling  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

Causes mild skin irritation

Unknown acute toxicity

No information available

**3. COMPOSITION/INFORMATION ON INGREDIENTS****Substance**

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Chemical Name	CAS No.	Weight-%	Trade Secret
Wood and Wood Dust	NOT ASSIGNED	85 - 100	
Boric acid	10043-35-3	0.1 - 1	

**4. FIRST AID MEASURES****Description of first aid measures****General advice**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

**Eye contact**

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Do not rub affected area.

**Skin contact**

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

**Inhalation**

Remove to fresh air. Call a physician immediately. If not breathing, give artificial respiration.

**Ingestion** If swallowed, call a poison control center or physician immediately. If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** See Section 11: TOXICOLOGICAL INFORMATION.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Carbon dioxide (CO<sub>2</sub>). Water spray or fog.

**Unsuitable extinguishing media** Do not use a solid water stream as it may scatter and spread fire.

**Specific hazards arising from the chemical**

No information available.

**Hazardous combustion products** Carbon monoxide. Carbon dioxide (CO<sub>2</sub>). Toxic gas. Nitrogen oxides (NO<sub>x</sub>).

**Explosion data**

**Sensitivity to Mechanical Impact** Warning.

**Sensitivity to Static Discharge** Warning.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Ensure adequate ventilation, especially in confined areas.

**For emergency responders** Use personal protection recommended in Section 8.

**Environmental precautions**

**Environmental precautions** See Section 12: ECOLOGICAL INFORMATION.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Use personal protective equipment as required. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. Clean contaminated surface thoroughly.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling** Do not burn treated wood. Do not use pressure treated chips or sawdust as mulch. Avoid generation of dust. May form combustible dust concentrations in air. Take precautionary

measures against static discharges. Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Do not breathe dust/fume/gas/mist/vapors/spray.

#### **Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Avoid generation of dust.

**Incompatible materials** None known based on information supplied.

### **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### **Control parameters**

##### **Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Wood and Wood Dust NOT ASSIGNED	1.0 mg/m <sup>3</sup> Inhalable, 0.5 mg/m <sup>3</sup> Inhalable Western Red Cedar	15 mg/m <sup>3</sup> Total Dust 5.0 mg/m <sup>3</sup> Respirable Fraction	-
Boric acid 10043-35-3	STEL: 6 mg/m <sup>3</sup> inhalable fraction TWA: 2 mg/m <sup>3</sup> inhalable fraction	-	-

NIOSH IDLH Immediately Dangerous to Life or Health

**Other Information** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

#### **Appropriate engineering controls**

##### **Engineering Controls**

Showers. Eyewash stations. Ventilation: Saw, cut or machine wood outdoors or in well ventilated areas. Due to the explosive potential of dust when suspended in air, precautions should be taken when sawing, sanding, or machining wood or wood products to prevent sparks or other ignition sources. If required, use wet methods and/or explosion suppression systems to reduce generation of dust. Local exhaust ventilation is recommended when sawing, sanding, or machining this product. General dilution ventilation is recommended in processing and storage areas.

#### **Individual protection measures, such as personal protective equipment**

**Eye/face protection** Use safety glasses with side shields or chemical goggles when sawing or cutting treated or untreated wood.

**Skin and body protection** Wear leather gloves. Wear long sleeve shirt, pants, and steel-toed shoes when handling treated or untreated wood.

**Respiratory protection** None normally required. When sawing or cutting treated or untreated wood, wear a NIOSH approved N95 or better dust mask.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Take off all contaminated clothing and wash it before reuse. Avoid contact with skin, eyes or clothing. Wash face, hands and any exposed skin thoroughly after handling.

### **9. PHYSICAL AND CHEMICAL PROPERTIES**

#### **Information on basic physical and chemical properties**

<b>Physical state</b>	Solid	<b>Odor</b>	No information available
<b>Appearance</b>	No information available	<b>Odor threshold</b>	No information available
<b>Color</b>	No information available		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	
Melting point / freezing point	No information available	
Boiling point / boiling range	No information available	
Flash point		
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Relative density	No information available	
Water solubility	No information available	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

**Other Information**

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	No information available

## 10. STABILITY AND REACTIVITY

**Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Extremes of temperature and direct sunlight.

**Incompatible materials**

None known based on information supplied.

**Hazardous Decomposition Products**

None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure****Product Information**

<b>Inhalation</b>	WOOD and WOOD DUST :. May cause cancer. May cause sensitization by inhalation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
<b>Eye contact</b>	WOOD and WOOD DUST :. Irritating to eyes.
<b>Skin contact</b>	WOOD and WOOD DUST :. May cause irritation. May cause allergic skin reaction.

**Ingestion**

WOOD and WOOD DUST :. Harmful if swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Boric acid 10043-35-3	= 2660 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	> 0.16 mg/L ( Rat ) 4 h

**Information on toxicological effects****Symptoms**

No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Carcinogenicity**

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Wood and Wood Dust NOT ASSIGNED	X	Group 1	X	X

*IARC (International Agency for Research on Cancer)**Group 1 - Carcinogenic to Humans**OSHA (Occupational Safety and Health Administration of the US Department of Labor)**X - Present***Numerical measures of toxicity - Product Information**

ATEmix (oral)

ATEmix (dermal)

ATEmix (inhalation-gas)

ATEmix (inhalation-dust/mist)

ATEmix (inhalation-vapor)

**Numerical measures of toxicity****12. ECOLOGICAL INFORMATION****Ecotoxicity****Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

Chemical Name	Partition coefficient
Boric acid 10043-35-3	-0.757

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS****Waste treatment methods****Disposal of wastes**

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). Dispose of in accordance with federal, state and local regulations.

**Contaminated packaging**

No information available.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Boric acid 10043-35-3	Toxic

#### 14. TRANSPORT INFORMATION

<u>DOT</u>	Not regulated
<u>TDG</u>	Not regulated
<u>MEX</u>	Not regulated
<u>ICAO (air)</u>	Not regulated
<u>IATA</u>	Not regulated
<u>IMDG</u>	Not regulated
<u>RID</u>	Not regulated
<u>ADR</u>	Not regulated
<u>ADN</u>	Not regulated

#### 15. REGULATORY INFORMATION

##### International Inventories

TSCA	Complies
DSL/NDL	Complies
EINECS/ELINCS	Complies mply
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

##### Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List  
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
 ENCS - Japan Existing and New Chemical Substances  
 IECSC - China Inventory of Existing Chemical Substances  
 KECL - Korean Existing and Evaluated Chemical Substances  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances  
 AICS - Australian Inventory of Chemical Substances

##### US Federal Regulations

##### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

##### SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	Yes
Sudden release of pressure hazard	No

**Reactive Hazard**

No

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**US State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
Wood and Wood Dust - NOT ASSIGNED	Carcinogen

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Water 7732-18-5	-	-	X
Phosphoric Acid 7664-38-2	X	X	X

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

<b>16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION</b>
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<b><u>NFPA</u></b>	Health hazards 2	Flammability 1	Instability 0	Physical and Chemical Properties -
<b><u>HMIS</u></b>	Health hazards 2	Flammability 1	Physical hazards 0	Personal protection X

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Revision Note

No information available

**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**