
‡

CertainTeed
SAINT-GOBAIN

## Safety Data Sheet

## Product identifier

**Product Name** • **COMMERCIAL INSULATION – SUSTAINABLE INSULATION ™**

**Synonyms** • CertainPro™ Thermal Foil Faced Batts; CertaPro™ AcoustaBlanket™ Black; CertaPro™ AcoustaBoard™ Black; CertaPro™ AcoustaTherm™ Batts (Unfaced & Kraft-Faced); CertaPro™ Partition Batts; CertaPro™ Thermal Extended Flange Batts (FSK, White PSK Faced); CertaPro™ Thermal FSK-25 Faced Batts; CertaPro™ Thermal Kraft Faced Batts

**Product Code** • CT 10161-3

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

**Recommended use** • Fiber Glass Insulation

## Details of the supplier of the safety data sheet

**Manufacturer** • CertainTeed Corporation

P.O. Box 860
Valley Forge, PA 19482-0101
United States
www.certainteed.com
CertainTeed - EHS@saint-gobain.com

**Telephone (General)** • 610-341-7000

## Emergency telephone number

**Manufacturer** • (800) 424-9300 - Chemtrec

**Manufacturer** • (703) 527-3887 - Outside of the U.S. Chemtrec

**Product Literature Code** • 30-45-058

**Key to abbreviations**

‡ = HMIS is a registered trademark of the American Coatings Association

# Section 2: Hazard Identification

## United States (US)

**According to OSHA 29 CFR 1910.1200 HCS**

## Classification of the substance or mixture

**OSHA HCS 2012** • Classification criteria not met

## 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.

## Canada
**According to WHMIS**

### Classification of the substance or mixture
**WHMIS**
- Classification criteria not met

### Label elements
**WHMIS**
- No label element(s) required

### Other hazards
**WHMIS**
- In Canada, the product mentioned above is not considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

### Other information
- Hearing Conservation: Some blowing machines used to install blown-in products create elevated sound levels which may affect workers' hearing. Use of hearing protection by workers exposed above 85 dB(A) as an 8-hour TWA is recommended. This product may cause temporary irritation to the upper respiratory system, eyes, and skin. Avoid inhalation, skin and eye contact as temporary irritation may occur. Wear appropriate personal protective equipment as described in Section 8.

*See Section 12 for Ecological Information.*

## Section 3 - Composition/Information on Ingredients

### Substances
- Material does not meet the criteria of a substance.

### Mixtures

| Hazardous Components | | | | | |
|---|---|---|---|---|---|
| **Chemical Name** | **Identifiers** | **%(weight)** | **LD50/LC50** | **Classifications According to Regulation/Directive** | **Comments** |
| Glass, oxide, chemicals | **CAS:**65997-17-3 **EC Number:**266-046-0 | 78% TO 97% | NDA | **OSHA HCS 2012:** Not Classified - Classification criteria not met | NDA |
| Asphalt | **CAS:**8052-42-4 **UN:**NA1999 **EINECS:**232-490-9 | 0% TO 17% | Ingestion/Oral-Rat LD50 • >5000 mg/kg Inhalation-Rat LC50 • >94.4 mg/m³ | **OSHA HCS 2012:** Eye Irrit. 2; Skin Irrit. 2; STOT SE 3: Resp. Irrit.; Carc. 2; - Classifications are related to fumes. | Cured in the final product - no exposure is expected |
| *(Proprietary Ingredient)* | *Proprietary* | 3% TO 9% | NDA | **OSHA HCS 2012:** Skin Irrit. 2; Skin Sens. 1; Eye Irrit. 2; STOT SE 3: Resp. Irrit. | Component is xured in final product - no exposure is expected. |

| | | | | | |
|---|---|---|---|---|---|
| Hydrotreated heavy paraffinic petroleum distillate (highly refined) | **CAS:**64742-54-7 **EC Number:**265-157-1 | 0.5% TO 1.5% | NDA | **OSHA HCS 2012:** Not Classified - Data Lacking | NDA |
| Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | **CAS:**64742-65-0 **EC Number:**265-169-7 | 0.5% TO 1.5% | NDA | **OSHA HCS 2012:** Not Classified - Data Lacking | NDA |
| Acetic acid, vinyl ester, polymer | NDA | < 11% | Ingestion/Oral-Rat LD50 • >25 g/kg | **OSHA HCS 2012:** Not Classified - Data Lacking | NDA |
| Acetic acid ethenyl ester, polymer with ethene | NDA | < 7% | Ingestion/Oral-Rat LD50 • >2500 mg/kg | **OSHA HCS 2012:** Data Lacking - Not Classified | NDA |

*See Section 11 for Toxicological Information.*

## Section 4: First-Aid Measures

### Description of first aid measures

**Inhalation**
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing.

**Skin**
- IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.

**Eye**
- 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.

**Ingestion**
- Consult a physician if unusual reaction is noted. Product is not intended nor is it likely to be ingested or eaten.

### 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**
- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

*See Section 2 for Potential Health Effects.*

## Section 5: Fire-Fighting Measures

### Extinguishing media

**Suitable Extinguishing Media**
- LARGE FIRE: Water spray, fog or regular foam.
  SMALL FIRES: Dry chemical, $CO_2$, water spray or regular foam.

**Unsuitable Extinguishing Media**
- None known.

### Special hazards arising from the substance or mixture

**Unusual Fire and Explosion Hazards**
- Material is non-combustible and is not expected to pose a fire or explosion hazard.

**Hazardous Combustion Products**
- No data available

### Advice for firefighters

- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.
  Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection.
  Wear positive pressure self-contained breathing apparatus (SCBA).

## Section 6 - Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures

**Personal Precautions**

- Wear appropriate protective equipment including respiratory protection as conditions warrant. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate enclosed areas.

**Emergency Procedures**

- As an immediate precautionary measure, isolate spill or leak area for at least 25 meters (75 feet) in all directions. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area) Stay upwind. Keep out of low areas. Keep unauthorized personnel away. Ventilate closed spaces before entering.

### Environmental precautions

- No special precautions necessary.

### Methods and material for containment and cleaning up

**Containment/Clean-up Measures**

- SMALL SPILLS: Take up with sand or other non-combustible absorbent material and place into containers for later disposal.
  LARGE SPILLS: Dike far ahead of spill for later disposal.

### Reference to other sections

- Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

## Section 7 - Handling and Storage

### Precautions for safe handling

**Handling**

- Do not breathe dust from this material. Keep this product from heat, sparks, or open flame. Use this product with adequate ventilation. Always wash work clothes separately from other clothing. Wipe out the washer or sink to prevent loose glass fibers from getting on other clothing. Wash thoroughly after handling. Use personal protective equipment as described in Section 8.

### Conditions for safe storage, including any incompatibilities

**Storage**

- Store in a well-ventilated place. Keep container tightly closed.

## Section 8 - Exposure Controls/Personal Protection

### Control parameters

| Exposure Limits/Guidelines | | | | | | |
|---|---|---|---|---|---|---|
| | **Result** | **ACGIH** | **Canada British Columbia** | **Canada Manitoba** | **Canada New Brunswick** | **Canada Northwest Territories** |
| Asphalt (8052-42-4) | TWAs | 0.5 mg/m3 TWA (fume, inhalable fraction, as benzene soluble aerosol) | 0.5 mg/m3 TWA (inhalable fume, as Benzene-soluble aerosol) | 0.5 mg/m3 TWA (fume, inhalable fraction, as Benzene soluble aerosol) | 5 mg/m3 TWA (petroleum fumes) | 5 mg/m3 TWA (Petroleum fumes) |

| | | | | | | |
|---|---|---|---|---|---|---|
| | STELs | Not established | Not established | Not established | Not established | 10 mg/m3 STEL (Petroleum fumes) |
| Silicon (7440-21-3) | TWAs | Not established | 10 mg/m3 TWA (total dust); 3 mg/m3 TWA (respirable fraction) | Not established | 10 mg/m3 TWA | 5 mg/m3 TWA (respirable mass); 10 mg/m3 TWA (total mass) |
| Glass, oxide, chemicals as Glass wool fiber | TWAs | 1 fiber/cm3 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)<br><br>*as Glass wool fiber* | 1 fibre/cm3 TWA (fibres >5 µm, with an aspect ratio of >=3:1, as determined by the membrane filter method at 400-450 times magnification (4 mm objective), using phase-contrast illumination, listed under Synthetic vitreous fibres)<br><br>*as Glass wool fiber* | 1 fiber/cm3 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)<br><br>*as Glass wool fiber* | 1 fibre/cm3 TWA (fibres >5 µm with a diameter <3 µm, aspect ratio >5:1)<br><br>*as Glass wool fiber* | 3 fibre/cm3 TWA (with a diameter <=3.5 µm and a length >=10 µm); 5 mg/m3 TWA (total mass)<br><br>*as Glass wool fiber* |

**Exposure Limits/Guidelines (Con't.)**

| | Result | Canada Nova Scotia | Canada Nunavut | Canada Ontario | Canada Quebec | Canada Yukon |
|---|---|---|---|---|---|---|
| Asphalt (8052-42-4) | TWAs | 0.5 mg/m3 TWA (fume, inhalable fraction, as Benzene soluble aerosol) | 5 mg/m3 TWA (Petroleum fumes) | 0.5 mg/m3 TWA (fume, inhalable, as Benzene-soluble aerosol) | 5 mg/m3 TWAEV (fume) | 5 mg/m3 TWA (fume) |
| | STELs | Not established | 10 mg/m3 STEL (Petroleum fumes) | Not established | Not established | 10 mg/m3 STEL (fume) |
| Silicon (7440-21-3) | TWAs | Not established | 5 mg/m3 TWA (respirable mass); 10 mg/m3 TWA (total mass) | 10 mg/m3 TWA (total dust) | 10 mg/m3 TWAEV (containing no Asbestos and <1% Crystalline silica, total dust) | 30 mppcf TWA; 10 mg/m3 TWA |
| | STELs | Not established | Not established | Not established | Not established | 20 mg/m3 STEL |
| Glass, oxide, chemicals as Glass wool fiber | TWAs | 1 fiber/cm3 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)<br><br>*as Glass wool fiber* | 3 fibre/cm3 TWA (with a diameter <=3.5 µm and a length >=10 µm); 5 mg/m3 TWA (total mass)<br><br>*as Glass wool fiber* | 1 fibre/cm3 TWA (length >5 µm, aspect ratio >=3:1, as determined by the membrane filter method at 400-450 times magnification (4-mm objective), using phase-contrast illumination, respirable, listed under Synthetic Vitreous Fibres (Man Made Mineral Fibres))<br><br>*as Glass wool fiber* | 1 fibre/cm3 TWAEV (respirable, listed under Fibres - Artificial vitreous mineral fibres)<br><br>*as Glass wool fiber* | 30 mppcf TWA; 10 mg/m3 TWA (respirable mass)<br><br>*as Glass wool fiber* |

**Exposure Limits/Guidelines (Con't.)**

| | Result | NIOSH | OSHA | United States - California |
|---|---|---|---|---|
| Asphalt | TWAs | Not established | Not established | 5 mg/m3 PEL (fume) |

| | | | | |
|---|---|---|---|---|
| (8052-42-4) | Ceilings | 5 mg/m3 Ceiling (fume, 15 min) | Not established | Not established |
| Silicon (7440-21-3) | TWAs | 10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust) | 15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction) | 5 mg/m3 PEL (respirable fraction, listed under Particulates not otherwise regulated); 10 mg/m3 PEL (total dust, listed under Particulates not otherwise regulated) |
| Glass, oxide, chemicals as Glass wool fiber | TWAs | 3 fiber/cm3 TWA (fibers <= 3.5 µm in diameter and >= 10 µm in length); 5 mg/m3 TWA (total)<br><br>*as Glass wool fiber* | Not established | 5 mg/m3 PEL (respirable fraction, listed under Particulates not otherwise regulated); 10 mg/m3 PEL (total dust, listed under Particulates not otherwise regulated)<br><br>*as Glass wool fiber* |

### Exposure Control Notations

**Canada British Columbia**

•Asphalt (8052-42-4): **Carcinogens:** (IARC Category 2B - Possible Human Carcinogen (fume)) | **Designated Substances:** (IARC Category 2B - Possible Human Carcinogen (fume))

**Canada Manitoba**

•Asphalt (8052-42-4): **Carcinogens:** (A4 Not Classifiable as a Human Carcinogen (fume, Coal tar-free))

•Glass, oxide, chemicals as Glass wool fiber: **Carcinogens:** (A3 Confirmed Animal Carcinogen with Unknown Relevance to Humans (listed under Synthetic vitreous fibers))

**Canada New Brunswick**

•Asphalt (8052-42-4): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen (fumes))

•Glass, oxide, chemicals as Glass wool fiber: **Carcinogens:** (A3 - Animal Carcinogen)

**Canada Nova Scotia**

•Asphalt (8052-42-4): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen (fume, Coal tar-free))

•Glass, oxide, chemicals as Glass wool fiber: **Carcinogens:** (A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans (listed under Synthetic vitreous fibers))

**ACGIH**

•Asphalt (8052-42-4): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen (fume, coal tar-free))

•Glass, oxide, chemicals as Glass wool fiber: **Carcinogens:** (A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans (listed under Synthetic vitreous fibers))

### Exposure Limits Supplemental

**ACGIH**

•Asphalt (8052-42-4): **BEIs:** (Medium: urine Time: end of shift at end of workweek Parameter: 1-Hydroxypyrene with hydrolysis (nonquantitative)) | **TLV Basis - Critical Effects:** (eye and upper respiratory tract irritation (fume))

## Exposure controls

**Engineering Measures/Controls**

- Avoid spread of fiber glass dust. Provide general and/or local exhaust ventilation to control airborne dust levels below exposure limits.

**Personal Protective Equipment**

**Pictograms**

- 

**Respiratory**

- Wear NIOSH-certified respirators when handling and applying fiber glass insulation

products in accordance with established exposure guidelines - If the exposure is less than 10 times the exposure guildline wear 1/2 mask respirator, N95 or higher, such as 3M brand #8210, #8511 or #8233. If the exposure is less than 50 times the exposure guideline wear a full face respirator, N100 or higher, such as 3M brand 6000 or 7000 series.

**Eye/Face**
- Safety glasses with side shields should be worn at a minimum. In dusty environments chemical goggles should be worn.

**Hands**
- Leather or cotton gloves may be worn to prevent skin contact and irritation.

**Skin/Body**
- Work clothing sufficient to prevent all skin contact should be worn, such as overalls, long sleeves and cap.

**General Industrial Hygiene Considerations**
- Wash hands, face and other potentially exposed areas immediately after handling material (especially before eating, drinking, or smoking). Decontaminate all protective equipment after use.

**Key to abbreviations**

PEL = Permissible Exposure Level determined by the Occupational Safety and Health Administration (OSHA)

STEL = Short Term Exposure Limits are based on 15-minute exposures

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

ACGIH = American Conference of Governmental Industrial Hygiene

NIOSH = National Institute of Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

## Section 9 - Physical and Chemical Properties

### Information on Physical and Chemical Properties

| | | | |
|---|---|---|---|
| **Material Description** | | | |
| **Physical Form** | Solid | **Appearance/Description** | Fibers assembled into blankets or loose fill. The blankets may be faced with kraft, aluminum foil or other facings. |
| **Color** | Tan | **Odor** | Faint sweet odor. |
| **Taste** | No data available. | **Particulate Type** | Data lacking |
| **Particulate Size** | Data lacking | **Aerosol Type** | Data lacking |
| **Odor Threshold** | Data lacking | **Physical and Chemical Properties** | Data lacking |
| **General Properties** | | | |
| **Boiling Point** | Data lacking | **Melting Point** | 2200 F(1204.4444 C) |
| **Decomposition Temperature** | Data lacking | **Heat of Decomposition** | Data lacking |
| **pH** | Data lacking | **Specific Gravity/Relative Density** | 2.5 Water=1 |
| **Density** | 20.8625 lbs/gal | **Bulk Density** | Data lacking |
| **Water Solubility** | Slightly Soluble | **Solvent Solubility** | Data lacking |
| **Viscosity** | Data lacking | **Explosive Properties** | Data lacking |
| **Oxidizing Properties:** | Data lacking | | |
| **Volatility** | | | |
| **Vapor Pressure** | Data lacking | **Vapor Density** | Data lacking |
| **Evaporation Rate** | Data lacking | **VOC (Wt.)** | Data lacking |
| **VOC (Vol.)** | Data lacking | **Volatiles (Wt.)** | Data lacking |
| **Volatiles (Vol.)** | Data lacking | | |

| | | | |
|---|---|---|---|
| **Flammability** | | | |
| **Flash Point** | Not relevant | **UEL** | Not relevant |
| **LEL** | Not relevant | **Autoignition** | Data lacking |
| **Self-Accelerating Decomposition Temperature (SADT)** | Data lacking | **Heat of Combustion (ΔHc)** | Data lacking |
| **Burning Time** | Data lacking | **Flame Duration** | Data lacking |
| **Flame Height** | Data lacking | **Flame Extension** | Data lacking |
| **Ignition Distance** | Data lacking | **Flammability (solid, gas)** | Data lacking |
| **Environmental** | | | |
| **Half-Life** | Data lacking | **Octanol/Water Partition coefficient** | Data lacking |
| **Coefficient of water/oil distribution** | Data lacking | **Bioaccumulation Factor** | Data lacking |
| **Bioconcentration Factor** | Data lacking | **Biochemical Oxygen Demand BOD/BOD5** | Data lacking |
| **Chemical Oxygen Demand** | Data lacking | **Persistence** | Data lacking |
| **Degradation** | Data lacking | | |

## Section 10: Stability and Reactivity

### Reactivity

- No dangerous reaction known under conditions of normal use.

### Chemical stability

- Stable under normal conditions of use.

### Possibility of hazardous reactions

- Hazardous polymerization not indicated.

### Conditions to avoid

- Keep away from heat, ignition sources and incompatible materials.

### Incompatible materials

- Hydrofluoric acid.

### Hazardous decomposition products

- Hazardous decomposition may occur generating toxic fumes/vapors, oxides of carbon (COx), oxides of nitrogen (NOx).

## Section 11 - Toxicological Information

### Information on toxicological effects

| Component Name | CAS | Data |
|---|---|---|
| Acetic acid, vinyl ester, polymer (< 11%) | 9003-20-7 | **Acute Toxicity:** orl-rat LD50:>25 gm/kg |
| Acetic acid ethenyl ester, polymer with ethene (< 7%) | 24937-78-8 | **Acute Toxicity:** Ingestion/Oral-Rat LD50 • >2500 mg/kg |

| GHS Properties | Classification |
|---|---|

| | |
|---|---|
| **Acute toxicity** | **OSHA HCS 2012** • Classification criteria not met |
| **Aspiration Hazard** | **OSHA HCS 2012** • Classification criteria not met |
| **Carcinogenicity** | **OSHA HCS 2012** • Classification criteria not met |
| **Germ Cell Mutagenicity** | **OSHA HCS 2012** • Classification criteria not met |
| **Respiratory sensitization** | **OSHA HCS 2012** • Classification criteria not met |
| **Serious eye damage/Irritation** | **OSHA HCS 2012** • Classification criteria not met |
| **Skin corrosion/Irritation** | **OSHA HCS 2012** • Classification criteria not met |
| **Skin sensitization** | **OSHA HCS 2012** • Classification criteria not met |
| **STOT-RE** | **OSHA HCS 2012** • Classification criteria not met |
| **STOT-SE** | **OSHA HCS 2012** • Classification criteria not met |
| **Toxicity for Reproduction** | **OSHA HCS 2012** • Classification criteria not met |

**Route(s) of entry/exposure**
- Inhalation, Skin, Eye, Ingestion

**Medical Conditions Aggravated by Exposure**
- Skin/Dermal Lungs .

## Potential Health Effects

### Inhalation

**Acute (Immediate)**
- The dust from this material may cause respiratory irritation.

**Chronic (Delayed)**
- Use of these products has not been shown to cause cancer in humans. Fiber glass wool is a possible cancer hazard. Fiber glass wool has caused cancer in animals but has not produced cancer by inhalation.

### Skin

**Acute (Immediate)**
- Temporary irritation of the skin may occur in some individuals.

**Chronic (Delayed)**
- Data lacking.

### Eye

**Acute (Immediate)**
- Contact with the eyes may cause irritation due to the abrasive action of the dust. Not expected to cause prolonged or significant eye irritation. Material is dusty and may scratch the surface of the eye.

**Chronic (Delayed)**
- Data lacking.

### Ingestion

**Acute (Immediate)**
- Unlikely. Contact physician if unusual reaction is noted.

**Chronic (Delayed)**
- Data lacking.

**Carcinogenic Effects**
- This product contains glass wool insulation fibers. Following a thorough review of all the medical-scientific data available at a meeting in October 2001, the IARC panel lowered the classification for glass wool insulation fibers from a Group 2B classification ("possibly carcinogenic to humans") to a Group 3 classification ("not classifiable as to carcinogenicity to humans"). According to IARC, there is "no evidence of increased risks of lung cancer or of mesothelioma from occupational exposures during manufacturing of these materials, and inadequate evidence overall of any cancer risk." This product contains petroleum asphalt. Asphalt fumes arise from hot asphalt. Asphalt fumes (CAS # 8052-42-4): In 1985/87, IARC (International Agency for Research on Cancer) concluded the following: (a) Bitumens are not classifiable as to their carcinogenicity to humans (Group 3). (b) Extracts of steam- and air-refined bitumens are possibly carcinogenic to humans (Group 2B). IARC found that evidence for carcinogenicity from animal studies was: inadequate for undiluted air-refined bitumens; limited for steam-refined and cracking residue bitumens; sufficient for extracts of steam-refined and air-refined bitumen. IARC found that human evidence for carcinogenicity of asphalt fumes was inadequate. Studies of roofers indicated an excess of cancers; however, IARC concluded that, since roofers may be exposed also to coal-tar pitches and other materials, "the excess cancer risk cannot be attributed specifically to bitumens." In 1994, a published review of 20 epidemiology studies of

asphalt workers and roofers agreed with IARC, that current human evidence is inadequate for the carcinogenicity of asphalt fumes in humans. Trace amounts of polynuclear aromatic hydrocarbons (PAHs) may be present in some asphalts and can be released upon excessive heating, which results in thermal cracking of the asphalt compounds. Some of these PAHs have been identified as having the potential to induce carcinogenic and reproductive health effects.

| Carcinogenic Effects | | | |
|---|---|---|---|
| | CAS | IARC | NTP |
| Asphalt | 8052-42-4 | Group 2B-Possible Carcinogen | Not established |
| Acetic acid, vinyl ester, polymer | 9003-20-7 | Group 3-Not Classifiable | Not established |
| Glass, oxide, chemicals as Glass wool fiber | NDA | Group 3-Not Classifiable | Reasonably Anticipated to be Human Carcinogen |

**Key to abbreviations**
TC = Toxic Concentration
LD = Lethal Dose

## Section 12 - Ecological Information

### Toxicity

- Binder-coated fiber glass is hydrophobic, therefore, no adverse environmental effects would be expected if this product were accidentally released in the water or soil. No harm to fish or wildlife would be caused by this product.

### Persistence and degradability

- Material data lacking.

### Bioaccumulative potential

- Material data lacking.

### Mobility in Soil

- Material data lacking.

### Other adverse effects

**Ecological Fate**

- Material data lacking.

### Other Information

- CertainTeed's residential fiber glass insulation batts meet GREENGUARD Emission Standards. CertainTeed's certification confirms compliance with GREENGUARD Emission Standards, which are based on criteria used by the State of Washington, the U.S. Environmental Protection Agency (EPA), OSHA and the World Health Organization for total particulate and Volatile Organic Compounds (VOC) emissions. Additionally, CertainTeed's residential fiber glass insulation products meet the following emission criteria: California Section CA1350 material specification for schools and offices; OSHA Purchase Specification; State of Washington; EPA; and Proposed State of California. CertainTeed's residential fiber glass insulations also meet the EPA Recovered Material Guideline for recycled content.

## 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

| | 14.1 UN number | 14.2 UN proper shipping name | 14.3 Transport hazard class(es) | 14.4 Packing group | 14.5 Environmental hazards |
|---|---|---|---|---|---|
| **DOT** | NDA | Not Regulated | NDA | NDA | NDA |
| **TDG** | NDA | Not Regulated | NDA | NDA | NDA |

**Special precautions for user**

- None known.

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

- Not relevant.

## Section 15 - Regulatory Information

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

**SARA Hazard Classifications**

- None

| State Right To Know | | | | |
|---|---|---|---|---|
| **Component** | **CAS** | **MA** | **NJ** | **PA** |
| Glass, oxide, chemicals | 65997-17-3 | Yes | No | Yes |
| Asphalt | 8052-42-4 | Yes | Yes | Yes |
| *Proprietary* | NDA | No | No | No |
| Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | No | No | No |
| Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | No | No | No |
| Silicon | 7440-21-3 | Yes | Yes | Yes |
| Citric acid | 77-92-9 | No | No | No |
| 3-aminopropyltrimethoxysilane | 13822-56-5 | No | No | No |
| Acetic acid, vinyl ester, polymer | 9003-20-7 | No | No | No |
| Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | No | No | No |

| Inventory | | | | |
|---|---|---|---|---|
| **Component** | **CAS** | **Canada DSL** | **Canada NDSL** | **TSCA** |
| Glass, oxide, chemicals | 65997-17-3 | Yes | No | Yes |
| Asphalt | 8052-42-4 | Yes | No | Yes |
| *Proprietary* | NDA | No | No | No |
| Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | Yes | No | Yes |
| Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | Yes | No | Yes |
| Silicon | 7440-21-3 | Yes | No | Yes |
| Citric acid | 77-92-9 | Yes | No | Yes |
| 3-aminopropyltrimethoxysilane | 13822-56-5 | Yes | No | Yes |
| Acetic acid, vinyl ester, polymer | 9003-20-7 | Yes | No | Yes |
| Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | Yes | No | Yes |

## Canada

### Labor

**Canada - WHMIS - Classifications of Substances**

| | | | |
|---|---|---|---|
| • 3-aminopropyltrimethoxysilane | 13822-56-5 | 0.0012% TO 0.0036% | B3 |
| • Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| • Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| • Silicon | 7440-21-3 | 0.03% TO 0.45% | B4 |
| • Citric acid | 77-92-9 | 0.039% TO 0.3% | E (including 40%) |
| • Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| • Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |
| • Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Uncontrolled product according to WHMIS classification criteria (listed under Glass wool); D2A (listed under Mineral wool fiber) |
| • Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |

**Canada - WHMIS - Ingredient Disclosure List**

| | | | |
|---|---|---|---|
| • 3-aminopropyltrimethoxysilane | 13822-56-5 | 0.0012% TO 0.0036% | Not Listed |
| • Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| • Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| • Silicon | 7440-21-3 | 0.03% TO 0.45% | Not Listed |
| • Citric acid | 77-92-9 | 0.039% TO 0.3% | 1 % |
| • Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| • Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |
| • Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| • Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |

## Environment

**Canada - 2004 NPRI (National Pollutant Release Inventory)**

| | | | |
|---|---|---|---|
| • 3-aminopropyltrimethoxysilane | 13822-56-5 | 0.0012% TO 0.0036% | Not Listed |
| • Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| • Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| • Silicon | 7440-21-3 | 0.03% TO 0.45% | Not Listed |
| • Citric acid | 77-92-9 | 0.039% TO 0.3% | Not Listed |
| • Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| • Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |
| • Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| • Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |

**Canada - 2005 NPRI (National Pollutant Release Inventory)**

| | | | |
|---|---|---|---|
| • 3-aminopropyltrimethoxysilane | 13822-56-5 | 0.0012% TO 0.0036% | Not Listed |
| • Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| • Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| • Silicon | 7440-21-3 | 0.03% TO 0.45% | Not Listed |

| | | | |
|---|---|---|---|
| • Citric acid | 77-92-9 | 0.039% TO 0.3% | Not Listed |
| • Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| • Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |
| • Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| • Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |

**Canada - CEPA - Greenhouse Gases Subject to Mandatory Reporting**

| | | | |
|---|---|---|---|
| • 3-aminopropyltrimethoxysilane | 13822-56-5 | 0.0012% TO 0.0036% | Not Listed |
| • Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| • Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| • Silicon | 7440-21-3 | 0.03% TO 0.45% | Not Listed |
| • Citric acid | 77-92-9 | 0.039% TO 0.3% | Not Listed |
| • Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| • Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |
| • Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| • Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |

**Canada - CEPA - Priority Substances List**

| | | | |
|---|---|---|---|
| • 3-aminopropyltrimethoxysilane | 13822-56-5 | 0.0012% TO 0.0036% | Not Listed |
| • Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| • Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| • Silicon | 7440-21-3 | 0.03% TO 0.45% | Not Listed |
| • Citric acid | 77-92-9 | 0.039% TO 0.3% | Not Listed |
| • Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| • Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |

| | | | |
|---|---|---|---|
| • Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| • Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |

## United States

### Labor

**U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals**

| | | | |
|---|---|---|---|
| • 3-aminopropyltrimethoxysilane | 13822-56-5 | 0.0012% TO 0.0036% | Not Listed |
| • Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| • Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| • Silicon | 7440-21-3 | 0.03% TO 0.45% | Not Listed |
| • Citric acid | 77-92-9 | 0.039% TO 0.3% | Not Listed |
| • Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| • Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |
| • Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| • Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |

**U.S. - OSHA - Specifically Regulated Chemicals**

| | | | |
|---|---|---|---|
| • 3-aminopropyltrimethoxysilane | 13822-56-5 | 0.0012% TO 0.0036% | Not Listed |
| • Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| • Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| • Silicon | 7440-21-3 | 0.03% TO 0.45% | Not Listed |
| • Citric acid | 77-92-9 | 0.039% TO 0.3% | Not Listed |
| • Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| • Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |
| • Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| • Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |

## Environment

### U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

| | | | |
|---|---|---|---|
| • 3-aminopropyltrimethoxysilane | 13822-56-5 | 0.0012% TO 0.0036% | Not Listed |
| • Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| • Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| • Silicon | 7440-21-3 | 0.03% TO 0.45% | Not Listed |
| • Citric acid | 77-92-9 | 0.039% TO 0.3% | Not Listed |
| • Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| • Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |
| • Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | (including mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers [or other mineral derived fibers] of average diameter 1 µm or less) |
| • Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |

### U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

| | | | |
|---|---|---|---|
| • 3-aminopropyltrimethoxysilane | 13822-56-5 | 0.0012% TO 0.0036% | Not Listed |
| • Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| • Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| • Silicon | 7440-21-3 | 0.03% TO 0.45% | Not Listed |
| • Citric acid | 77-92-9 | 0.039% TO 0.3% | Not Listed |
| • Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| • Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |
| • Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| • Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |

### U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities

| | | | |
|---|---|---|---|
| • 3-aminopropyltrimethoxysilane | 13822-56-5 | 0.0012% TO 0.0036% | Not Listed |
| • Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| • Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |

| | | | |
|---|---|---|---|
| • Silicon | 7440-21-3 | 0.03% TO 0.45% | Not Listed |
| • Citric acid | 77-92-9 | 0.039% TO 0.3% | Not Listed |
| • Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| • Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |
| • Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| • Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |

**U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs**

| | | | |
|---|---|---|---|
| • 3-aminopropyltrimethoxysilane | 13822-56-5 | 0.0012% TO 0.0036% | Not Listed |
| • Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| • Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| • Silicon | 7440-21-3 | 0.03% TO 0.45% | Not Listed |
| • Citric acid | 77-92-9 | 0.039% TO 0.3% | Not Listed |
| • Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| • Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |
| • Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| • Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |

**U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs**

| | | | |
|---|---|---|---|
| • 3-aminopropyltrimethoxysilane | 13822-56-5 | 0.0012% TO 0.0036% | Not Listed |
| • Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| • Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| • Silicon | 7440-21-3 | 0.03% TO 0.45% | Not Listed |
| • Citric acid | 77-92-9 | 0.039% TO 0.3% | Not Listed |
| • Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| • Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |

| | | | |
|---|---|---|---|
| • Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |
| • Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| • Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |

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## United States - California

### Environment

**U.S. - California - Proposition 65 - Carcinogens List**

| | | | |
|---|---|---|---|
| • 3-aminopropyltrimethoxysilane | 13822-56-5 | 0.0012% TO 0.0036% | Not Listed |
| • Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| • Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| • Silicon | 7440-21-3 | 0.03% TO 0.45% | Not Listed |
| • Citric acid | 77-92-9 | 0.039% TO 0.3% | Not Listed |
| • Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| • Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |
| • Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | carcinogen, initial date 7/1/90 (inhalable and biopersistent) |
| • Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |

**U.S. - California - Proposition 65 - Developmental Toxicity**

| | | | |
|---|---|---|---|
| • 3-aminopropyltrimethoxysilane | 13822-56-5 | 0.0012% TO 0.0036% | Not Listed |
| • Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| • Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| • Silicon | 7440-21-3 | 0.03% TO 0.45% | Not Listed |
| • Citric acid | 77-92-9 | 0.039% TO 0.3% | Not Listed |
| • Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| • Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |
| • Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| • Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |

**U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)**

| | | | |
|---|---|---|---|
| • 3-aminopropyltrimethoxysilane | 13822-56-5 | 0.0012% TO 0.0036% | Not Listed |
| • Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| • Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| • Silicon | 7440-21-3 | 0.03% TO 0.45% | Not Listed |
| • Citric acid | 77-92-9 | 0.039% TO 0.3% | Not Listed |
| • Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| • Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |
| • Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| • Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |

**U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)**

| | | | |
|---|---|---|---|
| • 3-aminopropyltrimethoxysilane | 13822-56-5 | 0.0012% TO 0.0036% | Not Listed |
| • Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| • Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| • Silicon | 7440-21-3 | 0.03% TO 0.45% | Not Listed |
| • Citric acid | 77-92-9 | 0.039% TO 0.3% | Not Listed |
| • Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| • Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |
| • Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| • Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |

**U.S. - California - Proposition 65 - Reproductive Toxicity - Female**

| | | | |
|---|---|---|---|
| • 3-aminopropyltrimethoxysilane | 13822-56-5 | 0.0012% TO 0.0036% | Not Listed |
| • Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| • Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| • Silicon | 7440-21-3 | 0.03% TO 0.45% | Not Listed |

| | | | |
|---|---|---|---|
| • Citric acid | 77-92-9 | 0.039% TO 0.3% | Not Listed |
| • Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| • Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |
| • Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| • Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |

**U.S. - California - Proposition 65 - Reproductive Toxicity - Male**

| | | | |
|---|---|---|---|
| • 3-aminopropyltrimethoxysilane | 13822-56-5 | 0.0012% TO 0.0036% | Not Listed |
| • Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| • Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| • Silicon | 7440-21-3 | 0.03% TO 0.45% | Not Listed |
| • Citric acid | 77-92-9 | 0.039% TO 0.3% | Not Listed |
| • Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| • Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |
| • Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| • Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |

## United States - Pennsylvania

**Labor**

**U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List**

| | | | |
|---|---|---|---|
| • 3-aminopropyltrimethoxysilane | 13822-56-5 | 0.0012% TO 0.0036% | Not Listed |
| • Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| • Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| • Silicon | 7440-21-3 | 0.03% TO 0.45% | Not Listed |
| • Citric acid | 77-92-9 | 0.039% TO 0.3% | Not Listed |
| • Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |

| | | | |
|---|---|---|---|
| • Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |
| • Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| • Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |

**U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances**

| | | | |
|---|---|---|---|
| • 3-aminopropyltrimethoxysilane | 13822-56-5 | 0.0012% TO 0.0036% | Not Listed |
| • Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| • Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| • Silicon | 7440-21-3 | 0.03% TO 0.45% | Not Listed |
| • Citric acid | 77-92-9 | 0.039% TO 0.3% | Not Listed |
| • Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| • Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |
| • Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| • Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |

## United States - Rhode Island

**Labor**

**U.S. - Rhode Island - Hazardous Substance List**

| | | | |
|---|---|---|---|
| • 3-aminopropyltrimethoxysilane | 13822-56-5 | 0.0012% TO 0.0036% | Not Listed |
| • Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| • Asphalt | 8052-42-4 | 0% TO 17% | Toxic; Flammable |
| • Silicon | 7440-21-3 | 0.03% TO 0.45% | Toxic |
| • Citric acid | 77-92-9 | 0.039% TO 0.3% | Not Listed |
| • Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| • Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| • Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |
| • Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Toxic |
| • Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |

## Other Information

- WARNING: This product contains a chemical known to the State of California to cause cancer.

## Section 16 - Other Information

| | |
|---|---|
| **Last Revision Date** | • 26/July/2012 |
| **Preparation Date** | • 21/April/2010 |
| **Other Information** | • For reference to the acronyms/definitions used in this MSDS please visit www.certainteed.com. |
| **Disclaimer/Statement of Liability** | • Reasonable care has been taken in the preparation of this information, but the supplier gives no warranty of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the purchaser will make his own tests to determine the quality and suitability of the product. Supplier expressly disclaims any and all liability for incidental and/or consequential property damage arising out of the use of this product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights. Read the Material Safety Data Sheet before handling product. |

**Key to abbreviations**

NDA = No Data Available

# SAFETY DATA SHEET

## Section 1: Identification

**1.1 Product identifier:**

**GlasRoc® Sheathing**
**GlasRoc® Sheathing Type X**

**1.2 Recommended Uses:**

Exterior sheathing used in the construction of buildings.

Restrictions on use: None identified

**1.3 Details of the supplier of the Safety Data Sheet:**

CertainTeed Gypsum, Inc.
20 Moores Road
Malvern, PA 19355
Web Site: www.certainteed.com

CertainTeed Gypsum Canada, Inc.
2424 Lakeshore Road West,
Mississauga, Ontario, Canada
L5J 1K4
Web Site: www.certainteed.com

**1.4 Emergency telephone number:**

In case of an emergency call Team-1 Environmental Services Inc.
1-800-32 SPILL; 1-800-327-7455 (24 hrs)

## Section 2: Hazards Identification

**2.1 GHS Classification:**

Not classified under any GHS hazard classes.

**2.2 Label elements:**

Not classified

**2.3 Other hazards:**

Solid composite article. CertainTeed GlasRoc® Sheathing products do not present an inhalation, ingestion, or contact health hazard unless subjected to mechanical processing which may result in the generation of exposed glass fibers, inhalable dust or airborne particulate.

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.

## Section 3: Composition/Information on Ingredients

| Chemical Name | CAS No. | Wt.% |
|---|---|---|
| Calcium sulfate | 10101-41-4 | 89-96 |
| Continuous filament glass mat | 65997-17-3 | 1 - 2 |

## Section 4: First Aid Measures

**4.1 Description of first aid measures:**

**Inhalation:** If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If exposed or concerned: Get medical advice/attention.

**Eye Contact:** If in eyes: rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If irritation persists get medical advice/attention. DO NOT attempt to manually remove anything stuck to the eye.

**Skin Contact:** 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.

**Ingestion:** If irritation or discomfort occurs, obtain medical attention immediately.

# SAFETY DATA SHEET

**4.2 Most important symptoms / effects acute and delayed:**

**Inhalation:** High concentrations of dust from cutting or abrading may cause coughing and mild, temporary irritation by mechanical action.
Heavy prolonged industrial exposure to high airborne concentrations of dust may cause impaired lung function. Chronic bronchitis, pulmonary fibrosis and respiratory tract lesions have also been reported with high level inhaled dust exposures.

**Eye Contact:** Particles may cause irritation as an abrasive in the eye.

**Skin Contact:** Prolonged skin contact may be abrasive to the skin.

**Ingestion:** Swallowing is not expected under normal conditions of use. If swallowed, may cause gastrointestinal problems.

**4.3 Indication of any immediate medical attention and special treatment needed:**

Not applicable

## Section 5: Firefighting Measures

**5.1 Extinguishing media:**

Use water and other extinguishing media appropriate to the surrounding fire conditions.

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

Product is not flammable and does not support combustion.
Under fire conditions products of combustion may include polymer fragments, nitrogen oxides, sulfur oxides, carbon monoxide and carbon dioxide.
Calcium sulfate may decompose into corrosive calcium oxide and oxides of sulfur at about 1450°C (2642°F).

**5.3 Advice for firefighters:**

As for any fire, evacuate the area and fight the fire from a safe distance. Firefighters must wear full protective equipment including self-contained breathing apparatus with chemical protection clothing when firefighters are exposed to decomposition products from this material.

## Section 6: Accidental Release Measures

**6.1 Personal precautions, protective equipment and emergency procedures:**

Wear protective gloves and clothing to prevent skin contact.

**6.2 Environmental precautions:**

Prevent releases into the environment.

**6.3 Methods and material for containment and cleaning up:**

Pick up or scoop spilled material and place in an appropriate container for re-use or disposal.

## Section 7: Handling and Storage

**7.1 Precautions for safe handling:**

Minimize dust generation and accumulation.
Avoid breathing dusts.
Wear protective gloves.
Wear eye protection when cutting and sanding.

**7.2 Conditions for safe storage, including any incompatibilities:**

Store in dry condition, protected from weather and out of direct sunlight.
KEEP OUT OF REACH OF CHILDREN. Store product flat.

## Section 8: Exposure Controls / Personal Protection

**8.1 Control parameters:**

**Occupational Exposure Limits:** Consult local authorities for acceptable exposure limits.

| Ingredient | ACGIH TLV (8-hr. TWA) | U.S. OSHA PEL (8-hr. TWA) | Ontario (Canada) TWAEV |
|---|---|---|---|

# SAFETY DATA SHEET

| | | | |
|---|---|---|---|
| Calcium sulfate | 10 mg/m$^3$ (inhalable fraction) | 15 mg/m$^3$ (total dust);<br>5 mg/m$^3$ (respirable fraction) | Refer to ACGIH TLV |
| Fiberglass Mat – Synthetic Vitreous Fibers | 5 mg/m$^3$ (inhalable)<br>1 f/cc (respirable fibers) | 15 mg/m$^3$ (total dust);<br>5 mg/m$^3$ (respirable fraction) | 5 mg/m$^3$ (inhalable)<br>1 f/cc (Respirable fibers: length > 5µm; aspect ratio ≥3:1) |

# SAFETY DATA SHEET

## Section 8: Exposure Controls / Personal Protection, continued

**8.2 Exposure controls:**

**Engineering Controls:** General ventilation is adequate for application of product in its original form. If airborne particulates are generated, monitor dust concentrations in air and provide local exhaust ventilation when any exposure guideline is exceeded.

**Personal Protection:** If engineering controls and work practices are not effective in controlling exposure to this material or if adverse health symptoms are experienced, then wear suitable personal protection equipment including approved respiratory protection. Have appropriate equipment available for use in emergencies such as spills or fire.

**Eye/Face Protection:** Wear safety glasses or goggles.

**Skin Protection:** Wear protective gloves and clothing. Launder contaminated clothing before re-wearing.

**Respiratory Protection:** When dust concentrations in air exceed the occupational exposure guidelines, always take the following precautions:

- Wear a NIOSH approved dust respirator.
- Maintain adequate ventilation and air circulation.
- Warn others in the area.

A respiratory protection program that meets the regulatory requirement, such as OSHA's 29 CFR 1910.134, ANSI Z88.2 or Canadian Standards Association (CSA) Standard Z94.4, must be followed whenever workplace conditions warrant a respirator's use.

**Other Protection:** Do not eat, drink or smoke in work areas. Wash hands thoroughly after handling this material.

## Section 9: Physical and Chemical Properties

| **9.1 Information on basic physical and chemical properties:** | |
|---|---|
| **Appearance:** | Solid. Boards with white core and surface coatings. |
| **Odor:** | Odorless |
| **Odor threshold:** | Not applicable |
| **pH:** | Not applicable |
| **Melting point/freezing point:** | Not applicable |
| **Initial boiling point and boiling range:** | Not applicable |
| **Flash point:** | Not applicable |
| **Flammability:** | Not flammable or combustible |
| **Auto-ignition temperature:** | Not applicable |
| **Upper/lower flammability or explosive limits:** | Not applicable |
| **Explosive properties:** | Not applicable |
| **Oxidising properties:** | Not applicable |
| **Sensitivity to mechanical impact:** | Not applicable |
| **Sensitivity to static discharge:** | Not available |
| **Evaporation rate:** | Not applicable |
| **Vapor pressure:** | Not applicable |
| **Vapor density:** | Not applicable |
| **Relative density:** | 2.30-2.37 (water = 1) |
| **Solubility (ies):** | Insoluble in water |
| **Partition coefficient (n-octanol/water):** | Not applicable |
| **Decomposition temperature:** | >300°C (573°F) for binders and polymer coating |
| **Viscosity:** | Not applicable |

# SAFETY DATA SHEET

## Section 10: Stability and Reactivity

**10.1 Reactivity:**
Not classified for reactivity hazards.

**10.2 Chemical Stability:**
Stable at normal ambient and anticipated storage and handling conditions.

**10.3 Possibility of Hazardous Reactions:**
None known.

**10.4 Conditions to Avoid:**
Not available

**10.5 Incompatible Materials:**
None known.

**10.6 Hazardous Decomposition Products:**
Thermal decomposition of polymer coating at >300°C (573°F) may release trace amounts of acetaldehyde and /or formaldehyde gas.

## Section 11: Toxicological Information

**11.1 Information on toxicological effects:**

**Likely routes of exposure**
Skin contact

**Acute toxicity**

**Inhalation:** Data not available. None of the component substances are toxic or harmful by inhalation.

**Ingestion:** Data not available. None of the component substances are toxic or harmful if swallowed.

**Skin:** Not absorbed through the skin.

**Acute toxicity data:**
Acute Toxicology data are not available for this solid article.

**Skin corrosion / irritation**
Data not available. Contact with glass fibers released from this product can be irritating to the skin.

**Serious eye damage / irritation**
Particulates in the eye may cause irritation by mechanical action.

**STOT (Specific Target Organ Toxicity) – Single exposure**
Data not available. Inhaling high concentrations of dust, during installation of product, may cause coughing and mild, temporary irritation.

**STOT (Specific Target Organ Toxicity) – Repeated exposure**
Data not available.

**Aspiration hazard**
Does not meet criteria for classification for aspiration toxicity.

**Sensitization - respiratory and/or skin**
Not known to be a skin or respiratory sensitizer.

**Carcinogenicity**
Occupational exposures to Synthetic vitreous glass fibers were evaluated for carcinogenicity by ACGIH: (American Conference of Governmental Industrial Hygienists) as A4: Not Classifiable as a Human Carcinogen and by IARC: (International Agency for Research on Cancer) in Group 3: The agent is not classifiable as to its carcinogenicity in humans.

# SAFETY DATA SHEET

## Section 11: Toxicological Information, continued

**Reproductive toxicity**

**Development of offspring:** Data not available

**Sexual function and fertility:** Data not available

**Effects on or via lactation:** Data not available

**Germ cell mutagenicity**

Data not available

**Interactive effects**

Data not available

## Section 12: Ecological Information

**12.1 Toxicity:**

Ecotoxicity data are not available.

**12.2 Persistence and degradability:**

Not available

**12.3 Bioaccumulative potential:**

Not available

**12.4 Mobility in soil:**

Not available

**12.5 Other adverse effects:**

Not available

## Section 13: Disposal Considerations

**13.1 Disposal methods:**

Do NOT discharge into any sewers, on the ground or into any body of water.
Store material for disposal as indicated in Section 7 Handling and Storage.
The required hazard evaluation of the waste and compliance with the applicable hazardous waste laws are the responsibility of the user. Dispose of contents/container in accordance with local, regional, national and international regulations.

## Section 14: Transport Information

**14.1 UN Number**

Not regulated by international transport regulations (IMDG, UN Model Regulations).

**14.2 UN proper shipping name**

Not applicable

**14.3 Transport hazard class(es)**

Not applicable

**14.4 Packing group**

Not applicable

**14.5 Environmental hazards**

Not available

**14.6 Special precautions for user**

Not available

**14.7 U.S. Hazardous Materials Regulation (DOT 49CFR):**

Not regulated

**14.8 Canada Transportation of Dangerous Goods (TDG) Regulations:**

Not regulated

# SAFETY DATA SHEET

## Section 15: Regulatory Information

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:**
**Analytical results for hazardous substances:**

Crystalline silica, quartz (14808-60-7): None detected in NIOSH method 7500 of bulk sample by XRD.

Asbestos fibers: None detected in Asbestos fibers analysis by polarized light microscopy (EPA/600/R-93/116 & EPA/600/M4-82-020)

**USA**

**OSHA:**

Not considered a hazardous chemical by the OSHA Hazard Communication Standard 29 CFR1910.1200 (2012).

**TSCA Status:**

Substances are listed on the TSCA inventory or are exempt.

**Canada**

This product has been classified in accordance with the hazard criteria of the *Controlled Products Regulations* and the SDS contains all the information required by the *Controlled Products Regulations* (WHMIS 1988).

**WHMIS Classification:**

WHMIS 1988: Not controlled.
WHMIS 2015: Not classified in any WHMIS hazard class.

**NSNR Status:**

Component substances are listed on the on the DSL or are exempt.

## Section 16: Other Information

**Revision date:**

June 19, 2015

**References and sources for data:**

CCOHS, Cheminfo
RTECS, Registry of Toxic Effects of Chemical Substances
NIOSH, Pocket Guide to Chemical Hazards.

**Methods for classification:**

USA: Haz Com Standard 29 CFR 1910.1200 (2012)
Canada: Controlled Products Regulations WHMIS 1988/ Hazardous Products Regulations WHMIS 2015.
UNECE, Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

**Legend to abbreviations:**

ACGIH – American Conference of Governmental Industrial Hygienists
GHS- Globally Harmonized System for Classification and Labeling.
OEL– Occupational exposure limit
OSHA - Occupational Safety and Health Administration
TWA – Time weighted average
TLV - Threshold Limit Value
WHMIS – Workplace Hazardous Materials Information System.

**Additional information:**

Information listed is believed to be accurate but not warranted or guaranteed.

CertainTeed
SAINT-GOBAIN

# (Material) Safety Data Sheet

‡

## Section 1 - Product and Company Identification

**Material Name** ▪ **Residential Building Insulation - Sustainable Insulation™**

**MSDS No.** ▪ CT10144-7

**Product Description** ▪ Fiber Glass Insulation.

**Product Use** ▪ Acoustical & Thermal Insulation.

**Synonyms** ▪ Basement Wall Insulation; Building Insulation (Unfaced & Kraft Faced); Commercial Blanket; Commercial Board Insulation; EverTherm; EZR Fiber Glass Insulation™; Flame-Resistant Class A (PSK-25); Flame-Resistant Class A (PSK-25) Fiber Glass Building Insulation; Foil-Faced Building Insulation; Masonry Wall Batts; Noise Reducer™ Sound Batts; Sound Batts; SpeedyR™; UltraTherm® Blowing Insulation

**Manufacturer** ▪ CertainTeed Corporation
750 E. Swedesford Road
P.O. Box 860Valley Forge, PA19482-0105
United States
www.certainteed.com/insulation
CertainTeed - EHS@saint-gobain.com

**Telephone**

**General** ▪ 610-341-7000

***Emergency*** ▪ 800-527-3887

**Preparation Date** ▪ 10/15/2004

**Last Revision Date** ▪ 06/22/2012

**Literature Code** 30-45-002

**Key to abbreviations**

‡ = HMIS is a registered trademark of the American Coatings Association

## Section 2 - Hazards Identification

**EMERGENCY OVERVIEW**

**DANGER**

**Causes eye irritation. Causes mild skin irritation. May cause cancer via Inhalation. May cause damage to organs through prolonged or repeated exposure .**

**Prevention** Do not breathe dust, fume, gas, mist, vapours and/or spray. Wash thoroughly after handling. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.

**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. IF exposed or concerned: Get medical advice/attention. IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention.

**Storage/Disposal** Store locked up. Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

*This product may cause temporary irritation to the upper respiratory system, eyes, and skin. Avoid inhalation, skin and eye contact as temporary irritation may occur. Wear appropriate personal protective equipment as described in Section 8.*

**Physical Form** ▪ Solid

**Color** ▪ Tan

**Odor** ▪ Faint sweet odor.

**OSHA** ▪ Irritant, Carcinogen

**WHMIS**
- Class D - Poisonous and Infectious Materials - Division 2 - Subdivision A, Class D - Poisonous and Infectious Materials - Division 2 - Subdivision B
- 

**EU**
- None

**GHS**
- Specific Target Organ Toxicity Repeated Exposure - Category 2, Skin Corrosion/Irritation - Category 3, Serious Eye Damage, Eye Irritation - Category 2B, Carcinogenicity - Category 1B

**Route Of Entry**
- Inhalation, Skin, Eye, Ingestion/Oral

**Target Organs**
- Skin/Dermal, Lungs

**Medical Conditions Aggravated by Exposure**
- Skin/Dermal, Lungs

**Potential Health Effects**

**Inhalation**

**Acute (Immediate)**
- The dust from this material may cause respiratory irritation.

**Chronic (Delayed)**
- Fiber glass wool is a possible cancer hazard. Fiber glass wool has caused cancer in animals but has not produced cancer by inhalation in humans. Use of these products has not been shown to cause cancer in humans.

**Skin**

**Acute (Immediate)**
- May cause irritation.

**Chronic (Delayed)**
- No data available.

**Eye**

**Acute (Immediate)**
- Contact with the eyes may cause irritation due to the abrasive action of the dust. Not expected to cause prolonged or significant eye irritation. Material is dusty and may scratch the surface of the eye.

**Chronic (Delayed)**
- No data available.

**Ingestion**

**Acute (Immediate)**
- Unlikely. Contact physician if unusual reaction is noted.

**Chronic (Delayed)**
- No data available.

**Carcinogenic Effects**
- This product contains glass wool insulation fibers. Following a thorough review of all the medical-scientific data available at a meeting in October 2001, the IARC panel lowered the classification for glass wool insulation fibers from a Group 2B classification ("possibly carcinogenic to humans") to a Group 3 classification ("not classifiable as to carcinogenicity to humans"). According to IARC, there is "no evidence of increased risks of lung cancer or of mesothelioma from occupational exposures during manufacturing of these materials, and inadequate evidence overall of any cancer risk." This product contains petroleum asphalt. Asphalt fumes arise from hot asphalt. Asphalt fumes (CAS # 8052-42-4): In 1985/87, IARC (International Agency for Research on Cancer) concluded the following: (a) Bitumens are not classifiable as to their carcinogenicity to humans (Group 3). (b) Extracts of steam- and air-refined bitumens are possibly carcinogenic to humans (Group 2B). IARC found that evidence for carcinogenicity from animal studies was: inadequate for undiluted air-refined bitumens; limited for steam-refined and cracking residue bitumens; sufficient for extracts of steam-refined and air-refined bitumen. IARC found that human evidence for carcinogenicity of asphalt fumes was inadequate. Studies of roofers indicated an excess of cancers; however, IARC concluded that, since roofers may be exposed also to coal-tar pitches and other materials, "the excess cancer risk cannot be attributed specifically to bitumens." In 1994, a published review of 20 epidemiology studies of asphalt workers and roofers agreed with IARC, that current human evidence is inadequate for the carcinogenicity of asphalt fumes in humans. Trace amounts of polynuclear aromatic hydrocarbons (PAHs) may be present in some asphalts and can be released upon excessive heating, which results in thermal

cracking of the asphalt compounds. Some of these PAHs have been identified as having the potential to induce carcinogenic and reproductive health effects.

| Carcinogenic Effects | | | |
|---|---|---|---|
| | CAS | IARC | NTP |
| Asphalt | 8052-42-4 | Group 2B-Possible Carcinogen | Not Established |
| Acetic acid, vinyl ester, polymer | 9003-20-7 | Group 3-Not Classifiable | Not Established |
| Glass, oxide, chemicals as Glass wool fiber | NDA | Group 3-Not Classifiable | Reasonably Anticipated to be Human Carcinogen |

**Other Information**

- Hearing Conservation: Some blowing machines used to install blown-in products create elevated sound levels which may affect workers' hearing. Use of hearing protection by workers exposed above 85 dB(A) as an 8-hour TWA is recommended.

*See Section 12 for Ecological Information.*

## Section 3 - Composition/Information on Ingredients

| Hazardous Components | | | | | | |
|---|---|---|---|---|---|---|
| Chemical Name | CAS | %(wt) | UN;EINECS | LD50/LC50 | EU R & S Phrases | Other |
| Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | | NDA | NDA | NDA |
| Asphalt | 8052-42-4 | 0% TO 17% | NA1999, 232-490-9 | Ingestion/Oral-Rat LD50 · >5000 mg/kgInhalation-Rat LC50 · >94.4 mg/m³ | NDA | NDA |
| *Proprietary* | *Proprietary* | 3% TO 9% | *Proprietary* | NDA | NDA | NDA |
| Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | 265-157-1 | NDA | Carc.Cat.2; R45 | NDA |
| **Non-Hazardous Components** | | | | | | |
| Chemical Name | CAS | %(wt) | UN;EINECS | LD50/LC50 | EU R & S Phrases | Other |
| Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | 265-169-7 | NDA | Carc.Cat.2; R45 | NDA |
| Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | NDA | Ingestion/Oral-Rat LD50 · >25 g/kg | NDA | NDA |
| Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | NDA | Ingestion/Oral-Rat LD50 · >2500 mg/kg | NDA | NDA |

Under United States Regulations (29 CFR 1900.1200 - Hazard Communication Standard), this product is considered hazardous. In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS). According to the Globally Harmonized Standard for Classification and Labeling (GHS) this product is considered hazardous.

*See Section 11 for Toxicological Information.*

## Section 4 - First Aid Measures

**Inhalation**

- Remove to fresh air immediately and notify medical personnel and supervisor.

**Skin**

- After contact with skin, take off immediately all contaminated clothing and wash immediately with plenty of soap and water. If irritation develops and persists, get medical attention.

**Eye**

- Do no rub or scratch your eyes. Immediately flush eyes with plenty of water for at

| | |
|---|---|
| | least 15 minutes and notify medical personnel and supervisor. |
| **Ingestion** | ▪ Unlikely. Consult physician if unusual reaction is noted. |

*See Section 2 for Potential Health Effects.*

## Section 5 - Fire Fighting Measures

| | |
|---|---|
| **Extinguishing Media** | ▪ Use that which is applicable to surrounding fire. |
| **Unsuitable Extinguishing Media** | ▪ None known. |
| **Firefighting Procedures** | ▪ Fire fighters should avoid inhaling any combustion products. Firefighters should wear full-face, self contained breathing apparatus and impervious protective clothing. |
| **Unusual Fire and Explosion Hazards** | ▪ Does not support combustion. These products contain a cured binder and various facings which contain retardant systems to reduce the possibility of fire. Use of plasma or other type of cutting tool may cause the release of toxic fumes and smoke. Facings on these products may burn. Do not leave facing exposed when working close to an open flame. If burned, the materials could release toxic fumes. |
| **Hazardous Combustion Products** | ▪ If burned, the materials could release toxic fumes and smoke. The binder and kraft facings combustion products include carbon-dioxide, hydrogen chloride, carbon monoxide and molecular fragments of hydrocarbon particles, carbon-hydrogen-nitrogen and nitrogen-oxygen compounds. Comparative animal inhalation toxicity studies of combustion products on a number of CertainTeed fiber glass insulation products found the insulation products to be no more toxic than wood based on incapacitation and mortality. |
| **Protection of Firefighters** | ▪ Wear full structural fire fighting protective clothing. |

## Section 6 - Accidental Release Measures

| | |
|---|---|
| **Personal Precautions** | ▪ Avoid contact with skin and eyes during clean-up. |
| **Emergency Procedures** | ▪ Persons not wearing appropriate protective equipment should be excluded from area of spill until clean-up has been completed. Ventilate the contaminated area. |
| **Environmental Precautions** | ▪ No data available |
| **Containment/Clean-up Measures** | ▪ Vacuum dust deposits. Do not use compressed air for clean-up. Avoid generating dust. |
| **Prohibited Materials** | ▪ None known.<br>No data available. |

## Section 7 - Handling and Storage

| | |
|---|---|
| **Handling** | ▪ Do not breathe dust from this material. Keep this product from heat, sparks, or open flame. Use this product with adequate ventilation. Always wash work clothes separately from other clothing. Wipe out the washer or sink to prevent loose glass fibers from getting on other clothing. Wash thoroughly after handling. Use personal protective equipment as described in Section 8. |
| **Storage** | ▪ Store in a dry place and under cover to protect product. |
| **Special Packaging Materials** | ▪ None known. |
| **Incompatible Materials or Ignition Sources** | ▪ None known. |
| **Other Information** | ▪ No data available. |

## Section 8 - Exposure Controls/Personal Protection

**Personal Protective Equipment Pictograms**

- 

**Respiratory**

- Wear NIOSH-certified respirators when handling and applying fiber glass insulation products in accordance with established exposure guidelines - If the exposure is less than 10 times the exposure guild line wear 1/2 mask respirator, N95 or higher, such as 3M brand #8210, #8511 or #8233. If the exposure is less than 50 times the exposure guideline wear a full face respirator, N100 or higher, such as 3M brand 6000 or 7000 series.

**Eye/Face**

- Safety glasses with side shields should be worn at a minimum. In dusty environments chemical goggles should be worn.

**Hands**

- Work clothing sufficient to prevent all skin contact should be worn, such as overalls, long sleeves and cap.

**Skin/Body**

- No skin protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid skin contact.

**General Industrial Hygiene Considerations**

- Wash hands, face and other potentially exposed areas immediately after handling material (especially before eating, drinking, or smoking). Decontaminate all protective equipment after use.

**Engineering Measures/Controls**

- Avoid spread of fiber glass dust. Provide general and/or local exhaust ventilation to control airborne dust levels below exposure limits.

**Exposure Limits/Guidelines**

| | Result | ACGIH | Mexico | NIOSH | United States - California |
|---|---|---|---|---|---|
| Asphalt (8052-42-4) | STELs | Not established | 10 mg/m3 STEL | Not established | Not established |
| | TWAs | 0.5 mg/m3 TWA (as benzene soluble aerosol, fume, inhalable fraction) | 5 mg/m3 TWA | Not established | 5 mg/m3 PEL (fume) |
| | Ceilings | Not established | Not established | 5 mg/m3 Ceiling (fume, 15 min) | Not established |
| Glass, oxide, chemicals as Glass wool fiber | TWAs | 1 fiber/cm3 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)<br><br>*as Glass wool fiber* | Not established | 3 fibers/cm3 TWA (fibers <= 3.5 µm in diameter and >= 10 µm in length); 5 mg/m3 TWA (total)<br><br>*as Glass wool fiber* | 10 mg/m3 PEL (total dust); 5 mg/m3 PEL (respirable fraction)<br><br>*as Glass wool fiber* |

**Exposure Control Notations**

**Mexico**

- Asphalt (8052-42-4):**Carcinogens:**A4 - Not classifiable as a human carcinogen

**ACGIH**

- Asphalt (8052-42-4):**Carcinogens:**A4 - Not Classifiable as a Human Carcinogen (fume, coal tar-free)
- Glass, oxide, chemicals as Glass wool fiber:**Carcinogens:**A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

**Exposure Limits Supplemental**

**ACGIH**

**Exposure Limits Supplemental**

▪ Asphalt (8052-42-4):**BEIs:**Medium: urine Time: end of shift at end of workweek Parameter: 1-Hydroxypyrene with hydrolysis (nonquantitative)**| TLV Basis - Critical Effects:**eye and upper respiratory tract irritation (fume)

## Section 9 - Physical and Chemical Properties

**Physical Form**
- Solid

**Appearance/Description**
- Fibers assembled into blankets or loose fill. The blankets may be faced with kraft, aluminum foil or other facings.

| | | | |
|---|---|---|---|
| **Color**: Tan | | **Odor**: Faint sweet odor. | |
| **Taste**: No data available. | | **Odor Threshold**: NDA | |
| **Boiling Point:** | NDA | **Vapor Pressure:** | NDA |
| **Melting Point:** | 2200 F(1204.4444 C) | **Vapor Density:** | NDA |
| **Specific Gravity:** | 2.5 | **Evaporation Rate:** | NDA |
| **Density:** | 0.51 – 1.34 lb(s)/ft³ | **VOC (Wt.):** | NDA |
| **Bulk Density:** | NDA | **VOC (Vol.):** | NDA |
| **pH:** | NDA | **Volatiles (Wt.):** | NDA |
| **Water Solubility:** | Slightly Soluble | **Volatiles (Vol.):** | NDA |
| **Solvent Solubility:** | NDA | **Flash Point:** | NDA |
| **Viscosity:** | NDA | **Flash Point Test Type:** | NDA |
| **Half-Life:** | NDA | **UEL:** | NDA |
| **Octanol/Water Partition coefficient:** | NDA | **LEL:** | NDA |
| **Coefficient of water/oil distribution:** | NDA | **Autoignition:** | NDA |
| **Bioaccumulation Factor:** | NDA | **Bioconcentration Factor:** | NDA |
| **Biochemical Oxygen Demand BOD/BOD5:** | NDA | **Chemical Oxygen Demand:** | NDA |
| **Persistence:** | NDA | **Degradation:** | NDA |

## Section 10 - Stability and Reactivity

**Stability**
- Stable under normal conditions of use.

**Hazardous Polymerization**
- Hazardous polymerization not indicated.

**Conditions to Avoid**
- Keep away from heat, ignition sources and incompatible materials.

**Incompatible Materials**
- Hydrofluoric acid.

**Hazardous Decomposition Products**
- Hazardous decomposition may occur generating toxic fumes/vapors, oxides of carbon (COx), oxides of nitrogen (NOx).
  No data available.

## Section 11 - Toxicological Information

Temporary irritation may be observed in the upper respiratory system, eyes, and skin. This product has not been tested as a separate entity. Therefore, the hazards must be evaluated on the basis of the individual ingredients, and those hazards must be assumed to be additive in the absence of complete information.

| Component Name | Concentration | CAS | Data |
|---|---|---|---|
| Acetic acid, vinyl ester, polymer | < 11% | 9003-20-7 | Acute Toxicity: ; orl-rat LD50:>25 gm/kg |
| Acetic acid ethenyl ester, polymer with | < 7% | 24937-78- | Acute Toxicity: ; Ingestion/Oral-Rat LD50 · >2500 mg/kg |

| Component Name | Concentration | CAS | Data |
|---|---|---|---|
| ethene | | 8 | |
| Glass, oxide, chemicals | 78% TO 97% | 65997-17-3 | Acute Toxicity: ; ihl-ham TCLo:30 mg/m3/6H/13W-I; ihl-ham TCLo:30 mg/m3/6H/78W-I; ihl-rat TCLo:16 mg/m3/6H/13W-I<br>Mutagen: ; mnt-ham:lng 2 ug/cm2; oms-ham:ovr 10 mg/L; oms-hmn:fbr 10 mg/L<br>Tumorigen/Carcinogen: ; imp-rat TDLo:200 mg/kg |
| Asphalt | 0% TO 17% | 8052-42-4 | Acute Toxicity: ; orl-rat LD50:>5000 mg/kg; ihl-rat LC50:>94.4 mg/m3; ihl-rat TCLo:100 mg/m3/6H/14W-I |

Following a thorough review of all of the medical-scientific data available at a meeting in October 2001, the IARC panel lowered the classification for glass wool insulation fibers from a Group 2B classification ("possibly carcinogenic to humans") to a Group 3 classification ("not classifiable as to carcinogenicity to humans"). According to IARC, there is "no evidence of increased risks of lung cancer or of mesothelioma...from occupational exposures during the manufacture of these materials, and inadequate evidence overall of any cancer risk."

**Key to abbreviations**

TC = Toxic Concentration

LD = Lethal Dose

## Section 12 - Ecological Information

**Ecological Fate**
- No data available.

**Persistence/Degradability**
- Binder-coated fiber glass is hydrophobic, therefore, no adverse environmental effects would be expected if this product were accidentally released in the water or soil. No harm to fish or wildlife would be caused by this product.

**Bioaccumulation Potential**
- No data available.

**Mobility in Soil**
- Binder-coated fiber glass is hydrophobic, therefore, no adverse environmental effects would be expected if this product were accidentally released in the water or soil. No harm to fish or wildlife would be caused by this product.

This product is not manufactured with, nor does it contain any Class I Ozone depleting chemicals as defined by EPA in Title VI of the Clean Air Act Amendments of 1990 40 CFR Part 82, Protection of Stratospheric Ozone. This product is not classified as a hazardous air pollutant in Title III Clean Air Act of 1990. CertainTeed's residential fiber glass insulation batts meet GREENGUARD Emission Standards. CertainTeed's certification confirms compliance with GREENGUARD Emission Standards, which are based on criteria used by the State of Washington, the U.S. Environmental Protection Agency (EPA), OSHA and the World Health Organization for total particulate and Volatile Organic Compounds (VOC) emissions, including formaldehyde. Additionally, CertainTeed's residential fiber glass insulation products meet the following emission criteria: California Section CA1350 material specification for schools and offices; OSHA Purchase Specification; State of Washington; EPA; and Proposed State of California. CertainTeed's residential fiber glass insulations also meet the EPA Recovered Material Guideline for recycled content.

## Section 13 - Disposal Considerations

**Product**
- Dispose of waste material in an approved landfill in accordance with federal, state, and local regulations. If you are unsure of the regulations, contact your Public Health Department, or the local office of the Environmental Protection Agency (EPA). See Section 7 for Handling Procedures; see Section 8 for Personal Protective Equipment recommendations.

**Packaging**
- No data available.

No data available.

## Section 14 - Transportation Information

**DOT - United States - Department of Transportation**
**Shipping Name:**Not Regulated

**TDG - Canada - Transport of Dangerous Goods**
**Shipping Name:**Not Regulated

**IMO/IMDG –International Maritime Transport**
**Shipping Name:**Not Regulated

## Section 15 - Regulatory Information

**SARA Hazard Classifications** ▪ Acute, Chronic

| State Right To Know | | | | |
|---|---|---|---|---|
| **Component** | **CAS** | **MA** | **NJ** | **PA** |
| Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | No | No | No |
| Acetic acid, vinyl ester, polymer | 9003-20-7 | No | No | No |
| Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | No | No | No |
| Glass, oxide, chemicals | 65997-17-3 | Yes | No | Yes |
| Asphalt | 8052-42-4 | Yes | Yes | Yes |
| Proprietary | NDA | No | No | No |
| Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | No | No | No |

| Inventory | | | | |
|---|---|---|---|---|
| **Component** | **CAS** | **Canada DSL** | **Canada NDSL** | **TSCA** |
| Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | Yes | No | Yes |
| Acetic acid, vinyl ester, polymer | 9003-20-7 | Yes | No | Yes |
| Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | Yes | No | Yes |
| Glass, oxide, chemicals | 65997-17-3 | Yes | No | Yes |
| Asphalt | 8052-42-4 | Yes | No | Yes |
| Proprietary | NDA | No | No | No |
| Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | Yes | No | Yes |

**Canada**

**Labor**

**Canada - WHMIS - Classifications of Substances**

| | | | |
|---|---|---|---|
| ▪ Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Uncontrolled product according to WHMIS classification criteria; D2A |
| ▪ Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |

| | | | |
|---|---|---|---|
| ▪ Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| ▪ Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| ▪ Glass, oxide, chemicals | | 78% TO 97% | Uncontrolled product according to WHMIS classification criteria; D2A |

**Canada - WHMIS - Ingredient Disclosure List**

| | | | |
|---|---|---|---|
| ▪ Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| ▪ Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| ▪ Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| ▪ Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| ▪ Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |

**Environment**

**Canada - CEPA - Priority Substances List**

| | | | |
|---|---|---|---|
| ▪ Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| ▪ Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| ▪ Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| ▪ Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| ▪ Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |

**Canada British Columbia**

**Environment**

**Canada - British Columbia - Ozone Depleting Substances**

| | | | |
|---|---|---|---|
| ▪ Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| ▪ Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| ▪ Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| ▪ Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| ▪ Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |

**Canada Manitoba**

**Environment**

**Canada - Manitoba - Ozone Depleting Substances and Other Halocarbons - Class 1**

| | | | |
|---|---|---|---|
| ▪ Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| ▪ Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |

| | | | |
|---|---|---|---|
| ▪ Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| ▪ Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| ▪ Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |
| **Canada - Manitoba - Ozone Depleting Substances and Other Halocarbons - Class 2** | | | |
| ▪ Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| ▪ Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| ▪ Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| ▪ Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| ▪ Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |

**Canada Nova Scotia**

| | | | |
|---|---|---|---|
| **Environment** | | | |
| **Canada - Nova Scotia - Ozone Layer Protection Regulations** | | | |
| ▪ Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| ▪ Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| ▪ Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| ▪ Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| ▪ Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |

**Canada Ontario**

| | | | |
|---|---|---|---|
| **Environment** | | | |
| **Canada - Ontario - Airborne Contaminant Reporting - Table 2A** | | | |
| ▪ Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| ▪ Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| ▪ Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| ▪ Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| ▪ Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |
| **Canada - Ontario - Airborne Contaminant Reporting - Table 2B** | | | |
| ▪ Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| ▪ Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| ▪ Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| ▪ Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO | Not Listed |

| | | | |
|---|---|---|---|
| | | 1.5% | |
| ▪ Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| ▪ Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |
| **Canada - Ontario - Ozone Depleting Substances - Solvents - Class 1** | | | |
| ▪ Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| ▪ Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| ▪ Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| ▪ Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| ▪ Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |
| **Canada - Ontario - Ozone Depleting Substances - Solvents - Class 2** | | | |
| ▪ Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| ▪ Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| ▪ Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| ▪ Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| ▪ Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |
| **Canada - Ontario - Ozone Depleting Substances - Solvents - Class 3** | | | |
| ▪ Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| ▪ Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| ▪ Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| ▪ Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| ▪ Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |

**Canada Yukon**

| | | | |
|---|---|---|---|
| **Environment** | | | |
| **Canada - Yukon - Ozone Depleting Substances and Other Halocarbons** | | | |
| ▪ Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| ▪ Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| ▪ Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| ▪ Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| ▪ Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |

**Mexico**

**Other**

**Mexico - Hazard Classifications**

| | | | |
|---|---|---|---|
| ▪ Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| ▪ Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| ▪ Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| ▪ Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| ▪ Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |

**Mexico - Regulated Substances**

| | | | |
|---|---|---|---|
| ▪ Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| ▪ Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| ▪ Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| ▪ Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| ▪ Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |

**United States**

**Labor**

**U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals**

| | | | |
|---|---|---|---|
| ▪ Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| ▪ Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| ▪ Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| ▪ Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| ▪ Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |

**U.S. - OSHA - Specifically Regulated Chemicals**

| | | | |
|---|---|---|---|
| ▪ Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| ▪ Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| ▪ Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| ▪ Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| ▪ Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |

**Environment**

**U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants**

| | | |
|---|---|---|
| ▪ Glass, oxide, chemicals as Glass wool fiber | 78% TO | (includes mineral fiber emissions from facilities |

| | | | |
|---|---|---|---|
| | | 97% | manufacturing or processing glass, rock, or slag fibers [or other mineral derived fibers] of average diameter 1 µm or less) |
| ▪ Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| ▪ Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| ▪ Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| ▪ Glass, oxide, chemicals | | 78% TO 97% | (includes mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers [or other mineral derived fibers] of average diameter 1 µm or less) |

**U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities**

| | | | |
|---|---|---|---|
| ▪ Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| ▪ Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| ▪ Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| ▪ Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| ▪ Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |

**U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities**

| | | | |
|---|---|---|---|
| ▪ Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| ▪ Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| ▪ Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| ▪ Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| ▪ Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |

**United States - California**

**Environment**

**U.S. - California - Proposition 65 - Carcinogens List**

| | | | |
|---|---|---|---|
| ▪ Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | carcinogen, initial date 7/1/90 (airborne particles of respirable size) |
| ▪ Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| ▪ Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| ▪ Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| ▪ Glass, oxide, chemicals | | 78% TO 97% | carcinogen, initial date 7/1/90 (airborne particles of respirable size) |

**U.S. - California - Proposition 65 - Developmental Toxicity**

| | | | |
|---|---|---|---|
| ▪ Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| ▪ Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| ▪ Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| ▪ Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| ▪ Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |
| **U.S. - California - Proposition 65 - Reproductive Toxicity - Female** | | | |
| ▪ Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| ▪ Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| ▪ Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| ▪ Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| ▪ Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |
| **U.S. - California - Proposition 65 - Reproductive Toxicity - Male** | | | |
| ▪ Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| ▪ Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| ▪ Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| ▪ Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| ▪ Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |

**United States - Massachusetts**

**United States - New Jersey**

**United States - Pennsylvania**

| | | | |
|---|---|---|---|
| **Labor** | | | |
| **U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List** | | | |
| ▪ Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| ▪ Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| ▪ Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| ▪ Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| ▪ Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |
| **U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances** | | | |
| ▪ Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Not Listed |
| ▪ Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |

| | | | |
|---|---|---|---|
| ▪ Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| ▪ Asphalt | 8052-42-4 | 0% TO 17% | Not Listed |
| ▪ Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| ▪ Glass, oxide, chemicals | 65997-17-3 | 78% TO 97% | Not Listed |

**United States - Rhode Island**

**Labor**

**U.S. - Rhode Island - Hazardous Substance List**

| | | | |
|---|---|---|---|
| ▪ Glass, oxide, chemicals as Glass wool fiber | | 78% TO 97% | Toxic |
| ▪ Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic (severe solvent-refiningand/or hydrotreatment) | 64742-65-0 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid ethenyl ester, polymer with ethene | 24937-78-8 | < 7% | Not Listed |
| ▪ Asphalt | 8052-42-4 | 0% TO 17% | Toxic; Flammable |
| ▪ Hydrotreated heavy paraffinic petroleum distillate (highly refined) | 64742-54-7 | 0.5% TO 1.5% | Not Listed |
| ▪ Acetic acid, vinyl ester, polymer | 9003-20-7 | < 11% | Not Listed |
| ▪ Glass, oxide, chemicals | | 78% TO 97% | Toxic |

**Additional Regulatory Information**

- WARNING: This product contains a chemical known to the State of California to cause cancer.

## Section 16 - Other Information

**Last Revision Date**
- 06/22/2012

**Preparation Date**
- 10/15/2004

**Acronyms/Definitions**
- For reference to the acronyms/definitions used in this MSDS please visit www.certainteed.com.

**Disclaimer/Statement of Liability**
- Reasonable care has been taken in the preparation of this information, but the supplier gives no warranty of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the purchaser will make his own tests to determine the quality and suitability of the product. Supplier expressly disclaims any and all liability for incidental and/or consequential property damage arising out of the use of this product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights. Read the Material Safety Data Sheet before handling product.

**End of CT 10144-7**

# Safety Data Sheet (SDS)

Date Prepared/Revised: 9/17/2014 Version no.: 01 Supersedes: (-)

## 1.) Identification of the Mixture and of the Company

Product identifier**: CLEAR MARKING COAT**

Product name: **200 CLEAR MARKING COAT**

Relevant identified uses of the substance: Aervoe Clear Coat will protect and increase the color fastness of all marking and striping paints, and other painted coatings
Uses advised against: Poorly ventilated areas

| | |
|---|---|
| CAS No: | **Not Applicable (mixture)** |
| EC No: | **Not Applicable (mixture)** |
| Index No: | **Not Applicable (mixture)** |
| Manufacturer/Supplier: | **Aervoe Industries Incorporated** |
| Street address/P.O. Box: | **1100 Mark Circle** |
| Country ID/Postcode/Place | **Gardnerville, Nevada 89410** |
| Telephone number: | **001 (0) 1-775-782-0100** |
| e-mail: | **mailbox@aervoe.com** |
| National contact: | **Aervoe Industries Incorporated** |
| For Product Information: | 00**1 (0) 1-800-227-0196** |
| Emergency telephone number: | **001 (0) 1-800-424-9300 (CHEMTREC – 24 hrs)** |
| | **English Language Service** |

## 2. Hazards identification

**Classifications**

Physical Hazards: Aerosol - Category 1
Flam. Gas. 1
Press. Gas
Flam. Liq. 2
Flam. Liq. 3

Health Hazards:
Car 1B
Muta 1B
Asp Tox. 1
Eye Irrit. - 2
STOT SE3

Environmental Hazards: N/AV

**Labeling**

Signal Word: Danger

Date Prepared/Revised: 9/17/2014 Version no.: 01 Supersedes: (-)

Hazard Statements:

H220 – Extremely flammable gas
H222 – Extremely flammable aerosol
H225 – Highly flammable liquid and vapour.
H226 – Flammable liquid and vapour.
H229 - Pressurized container: may burst if heated
H304 – May be fatal if swallowed and enters airways.
H319 – Causes serious eye irritation.
H336 – May cause drowsiness or dizziness.
H340 – May cause genetic defects
H350 – May cause cancer

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
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
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray
P262 - Do not get in eyes, on skin, or on clothing
P264 - Wash … thoroughly after handling
P280 - Wear protective gloves/eye protection/face protection

P303+P361+P353 - If on skin or hair, remove/takeoff immediately all contaminated clothing. Rinse skin with water/shower.
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50ºC/122ºF
P501 - Dispose of contents/container in accordance with local/regional/national/international regulation

Symbols/Pictograms:

## 3. Composition / Information on Ingredients

**Composition**

| Chemical | Synonyms | CAS Number | EINECS | Weight | Hazard Category | H-Code |
|---|---|---|---|---|---|---|

| | | | Number | Percent | | |
|---|---|---|---|---|---|---|
| Acetone | Propanone | 67-64-1 | 200-662-2 | 30-60% | Flam. Liq. 2<br>Eye Irrit. 2<br>STOT SE 3 | H225,<br>H319,<br>H336 |
| Hydrocarbon Propellant | LPG | 68476-86-8 | 270-705-8 | 10-30% | Press. Gas<br>Flam. Gas 1<br>Carc. 1B<br>Muta. 1B | H220<br>H350<br>H340 |
| Aliphatic Petroleum Distillates | Solvent Naphtha | 64742-89-8 | 265-192-2 | 3-7% | Carc. 1B<br>Muta. 1B<br>Asp. Tox. 1 | H350<br>H340<br>H304 |
| n-Methyl-2-Propanol Acetate | 2-Methoxy-1-Methylethyl Acetate | 108-65-6 | 203-603-9 | 1-5% | Flam. Liq. 3 | H226 |
| n-Butyl Acetate | n-Butyl Ester | 123-86-4 | 204-658-1 | 1-5% | Flam. Liq. 3<br>STOT SE 3 | H226<br>H336 |
| Methyl Ethyl Ketone | M.E.K. | 78-93-3 | 201-159-0 | 1-5% | Flam. Liq. 2<br>Eye Irrit. 2<br>STOT SE 3 | H225<br>H319<br>H336 |
| Ethyl Acetate | Ethyl Ethanoate | 141-78-6 | 205-500-4 | 1-5% | Flam. Liq. 2<br>Eye Irrit. 2<br>STOT SE 3 | H225<br>H319<br>H336 |

**Other Product Information**

Chemical Identity: Mixture

## 4.) First Aid Measures

**General Advice:** If symptoms persist, always call a doctor.

**Inhalation First Aid:** Remove victim to fresh air and provide oxygen if breathing is difficult. If not breathing, give artificial respiration, preferably mouth to mouth. Get medical attention immediately.

**Skin Contact First Aid:** Wash with soap and water. Remove contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse.

**Eye Contact First Aid:** If contact with eyes, immediately flush eyes with plenty of water for at least 15 minutes, while holding eyelids open. Get medical attention immediately.

**Ingestion First Aid:** If swallowed, wash out mouth with water provided the person is conscious. Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**Most Important Symptoms/Effects:** Exposure may cause slight irritation to the skin, eyes, and respiratory tract. Excessive exposure may cause central nervous system effects.

Date Prepared/Revised: 9/17/2014 Version no.: 01 Supersedes: (-)

## 5. Fire Fighting Measures

| | |
|---|---|
| Flammable Properties: | Aerosol |
| Auto Ignition Temperature: | Not Available |
| Suitable extinguishing media: | Carbon dioxide, dry chemical, water spray. |
| Unsuitable extinguishing media: | None known |
| Special hazards arising from the substance or mixture: | None known |
| Hazardous combustion products: | Carbon dioxide, Carbon monoxide |
| Fire & Explosion Hazards: | Closed Containers may rupture due to the buildup of pressure from extreme temperatures. |
| Precautions for fire-fighters: | Use water spray to cool containers exposed to heat or fire to prevent pressure build up. In the event of a fire, wear full protective clothing and NIOSH- approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode. |

## 6. Accidental Release Measures

**PERSONAL PRECAUTIONARY MEASURES:**

1) Follow personal protective equipment recommendations found in section 8.
2) Maintain adequate ventilation.

**SPILL CLEAN-UP PROCEDURES:**

1.) Evacuate unprotected personnel from the area.
2.) Remove sources of ignition if safe to do so.
3.) Pickup spilled materials using non-sparking tools and place in an appropriate container for disposal.
4.) Contain spill to prevent material from entering sewage or ground water systems.
5.) Always dispose of waste materials in accordance with all EU, National and Local Regulations.

## 7. Handling and Storage

**Handling**:

Flammable Aerosol, use in a well ventilated area.
Do not use near sources of ignition.
Do not to eat, drink and smoke while working with this material.
Wash hands after use.

**Conditions for safe storage, including any incompatibilities:**

Store out of direct sunlight.
Storage Temperature: 32° to 120°F (0° to 49°C).
No known incompatibilities.

## 8. Exposure Controls / Personal Protection

**Appropriate engineering controls:**

Ensure adequate ventilation. A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits.
Keep away from sources of ignition.
Take precautionary measures against static discharge.

**Personal Protection:**
Eye & face protection devices such as safety glasses, safety goggles or face shield are recommended.

**Skin protection**
Wear the appropriate protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

**Respiratory protection:**
Use only in an adequately ventilated area. For unknown vapor concentrations use a positive-pressure, pressure-demand, self-contained breathing apparatus (SCBA).

| Hazardous Ingredient | CAS Number | ACGIH TLV (TWA) | ACGIH TLV (STEL) | OSHA PEL (TWA) | OSHA PEL (STEL) |
|---|---|---|---|---|---|
| Acetone | 67-64-1 | 500ppm | 750ppm | 1000ppm | N/AV |
| Hydrocarbon Propellant | 68476-86-8 | N/AV | N/AV | N/AV | N/AV |
| Aliphatic Petroleum Distillates | 64742-89-8 | N/AV | N/AV | N/AV | N/AV |
| n-Methyl-2-Propanol Acetate | 108-65-6 | N/AV | N/AV | N/AV | N/AV |
| n-Butyl Acetate | 123-86-4 | 150ppm | 200ppm | 150ppm | N/AV |
| Methyl Ethyl Ketone | 78-93-3 | 200ppm | 300ppm | 200ppm | N/AV |
| ethyl acetate | 141-78-6 | 400ppm | N/AV | 400ppm | N/AV |

***Values are based on the 2014 Guide to Occupational Exposure Values by ACGIH**

## 9. Information on Basic Physical and Chemical Properties

| | |
|---|---|
| Appearance: Clear | Odor: Ketone odor |
| Odor Threshold: N/AV | pH: Not Applicable (solvent Base) |
| Melting Point: N/AV | Freezing Point: N/AV |
| Initial Boiling Point: N/AV | Boiling Point Range: N/AV |
| Flash Point: <0° F (-18° C) | Evaporation Rate: Faster than n-Butyl Acetate |
| Flammability Solid/Gas: Flammable gas | LEL: 1% UEL: 15% |
| Vapor Pressure: N/AV | Vapor Density: Heavier Than Air |
| Relative Density: N/AV | Solubility: Negligible |
| Partition Coefficient: n-octanol/ water: N/AV | Auto-ignition Temperature: N/AV |
| Decomposition Temperature: N/AV | Viscosity: N/AV |
| Explosive Properties: N/AV | Oxidizing Properties: N/AV |

Date Prepared/Revised: 9/17/2014 Version no.: 01 Supersedes: (-)

## 10. Stability & Reactivity

Possibility of hazardous reactions: Hazardous polymerization will not occur under normal conditions
Chemical stability: Stable under normal conditions
Conditions to avoid: Heat and ignition sources
Incompatible materials: Strong Oxidizing Agents
Hazardous decomposition products: Will not occur

## 11. Toxicological Information

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. Repeated overexposure can also damage kidneys, lungs, liver, heart and blood

Routes of exposure: Eyes, skin, ingestion, and/or inhalation

| | |
|---|---|
| Acute toxicological data: | (Acetone) Acute oral LD50: 5800mg/kg(rat)<br>(Acetone) LC50: 21000 ppm / 8 hr (rat) |
| Eye irritation data: | N/AV |
| Skin irritation/sensitization/absorption data: | N/AV |
| Reproductive toxicity data: | N/AV |
| Mutagenicity data: | Muta 1B |
| Symptoms associated with physical contact: | N/AV |
| Acute/chronic effects from short/long term exposure: | Irritating to skin. Prolonged/repeated contact may cause defatting of the skin which can lead to dermatitis. Not expected to be a skin sensitizer. |

Known reportable carcinogens via the following agencies:

| | |
|---|---|
| NTP: | N/AV |
| IARC: | IARC3:Classification not possible from current data |
| OSHA: | TLV-A4 |

* Petroleum distillates may contain chemical carcinogens in limited quantities (< 0.01%). These quantities are determined by the supplier/fraction/purity of the distillate during the manufacturing process. Chemicals that may be present within distillates are listed on California's prop 65 list such as ETHYLBENZENE, BENZENE, and TOLUENE.

## 12. Ecological Information

Ecotoxicity: **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**

## 13. Disposal Considerations

**Waste Disposal:** Dispose of material in accordance with EU, national and local requirements. For proper disposal of used material, an assessment must be completed to determine the proper and permissible waste management options permitted under applicable rules, regulations and/or laws governing your location.
**Product / Packaging disposal:** Dispose of packaging in accordance with federal, state and local requirements, regulations and/or laws governing your location.

## 14. Transportation Information

**US DOT**

| UN Number | Proper Shipping Name | Hazard Class | Packing Group | Marine Pollutant | Special Provisions |
|---|---|---|---|---|---|
| UN1950 | Aerosols | 2.1 | Not Applicable | Not Applicable | Reference 49 CFR 172.101 |

**IMDG**

| UN Number | Proper Shipping Name | Hazard Class | Packing Group | Marine Pollutant | Special Provisions |
|---|---|---|---|---|---|
| UN1950 | Aerosols | 2.1 | Not Applicable | Not Applicable | Reference IMDG code part 3 |

**IATA:**

| UN Number | Proper Shipping Name | Hazard Class | Packing Group | Marine Pollutant | Special Provisions |
|---|---|---|---|---|---|
| UN1950 | Aerosols, Flammable | 2.1 | Not Applicable | Not Applicable | Reference IATA Dangerous Goods Regulation |

## 15. Regulatory Information

**Workplace classification:**
This product is considered hazardous under the OSHA Hazard Communication Standard (29 CFR

1910.1200). The Occupational Safety and Health Administration's interpretation of the product's hazard to workers.

**SARA Title 3:**

Section 311/312 Categorizations (40 CFR 372): This product is a hazardous chemical under 29 CFR 1910.1200, and is categorized as an immediate and delayed health, and flammability physical hazard. Superfund Amendment and Reauthorization Act (SARA) category. SARA requires reporting any spill of any hazardous substance.

**TSCA status:** All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

**WHMIS:** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the (M)SDS contains all of the information required by the CPR.

**PROP 65 (CA):** WARNING: This product may contain chemicals know to the state of California to cause cancer, birth defects or other reproductive harm.

## 16. Other Information

This SDS has been completed in accordance with GHS Rev04 (2011): U.S OSHA, CMA, ANSI, Canadian WHMIS standards, and European Directives.

Date of Preparation/Revision: 9/17/2014
Supersedes: (-)

To the best of our knowledge, the information contained herein is believed to be accurate. However, the above data does not imply any guarantee or warranty of any kind, expressed or implied. The final determination of the suitability of any material is the sole responsibility of the user. All materials made present un-known hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee these are the only hazards existing.

# Material Safety Data Sheet

**DOW CHEMICAL CANADA ULC**

**Product name: FROTH-PAK™ 620 AF HFC CLASS A ISO Spray Polyurethane Foam**

**Issue Date:** 11/20/2014

**Print Date:** 11/21/2014

DOW CHEMICAL CANADA ULC 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:** FROTH-PAK™ 620 AF HFC CLASS A ISO Spray Polyurethane Foam

**Recommended use of the chemical and restrictions on use**
**Identified uses:** Component(s) for the manufacture of urethane polymers.

**COMPANY IDENTIFICATION**
DOW CHEMICAL CANADA ULC
SUITE 2100
450 - 1ST STREET S.W.
CALGARY AB T2P 5H1
CANADA

**For MSDS Updates and Product Information:** 800-258-2436
**Prepared by:** Prepared for use in Canada by EH&S, Hazard Communications.
**Revision Date:** 11/20/2014
**Print Date:** 11/21/2014

**Customer Information Number:** 800-258-2436
SDSQuestion@dow.com

**EMERGENCY TELEPHONE NUMBER**
**24-Hour Emergency Contact:** 989-636-4400
**Local Emergency Contact:** 613-996-6666

## 2. HAZARDS IDENTIFICATION

**Emergency Overview**

**Appearance**

| | |
|---|---|
| Physical state | Liquefied gas |
| Color | Brown |
| **Odor** | Musty |

| | |
|---|---|
| **Hazard Summary** | **WARNING!!**<br>May cause allergic skin reaction.<br>May cause allergic respiratory reaction.<br>May cause lung injury.<br>May cause eye irritation.<br>May cause skin irritation.<br>Vapor reduces oxygen available for breathing.<br>May cause central nervous system effects.<br>May cause anesthetic effects.<br>May cause respiratory tract irritation.<br>Toxic fumes may be released in fire situations.<br>May react with water.<br>Elevated temperatures can cause hazardous polymerization.<br>Material reacts slowly with water, releasing carbon dioxide which can cause pressure buildup and rupture of closed containers.<br>Elevated temperatures accelerate this reaction.<br>Isolate area.<br>Keep upwind of spill.<br>Stay out of low areas.<br>Contents under pressure. |

**Potential Health Effects**

**Eyes:** May cause moderate eye irritation.
May cause slight temporary corneal injury.

**Skin:** Prolonged contact may cause skin irritation with local redness.
May stain skin.
Prolonged skin contact is unlikely to result in absorption of harmful amounts.
Skin contact may cause an allergic skin reaction.
Animal studies have shown that skin contact with isocyanates may play a role in respiratory sensitization.

**Inhalation:** In confined or poorly ventilated areas, vapor can easily accumulate and can cause unconsciousness and death due to displacement of oxygen.
Excessive exposure may cause irritation to upper respiratory tract (nose and throat) and lungs.
May cause pulmonary edema (fluid in the lungs.)
Effects may be delayed.
Decreased lung function has been associated with overexposure to isocyanates.
Excessive exposure may increase sensitivity to epinephrine and increase myocardial irritability (irregular heartbeats).
May cause central nervous system effects.
Symptoms of excessive exposure may be anesthetic or narcotic effects; dizziness and drowsiness may be observed.
May cause allergic respiratory reaction.
MDI concentrations below the exposure guidelines may cause allergic respiratory reactions in individuals already sensitized.
Asthma-like symptoms may include coughing, difficult breathing and a feeling of tightness in the chest.
Occasionally, breathing difficulties may be life threatening.

**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.

Observations in animals include:
Gastrointestinal irritation.
Based on physical properties, not likely to be an aspiration hazard.

**Chronic Exposure:** Tissue injury in the upper respiratory tract and lungs has been observed in laboratory animals after repeated excessive exposures to MDI/polymeric MDI aerosols.
Lung tumors have been observed in laboratory animals exposed to respirable aerosol droplets of MDI/Polymeric MDI (6 mg/m3) for their lifetime. Tumors occurred concurrently with respiratory irritation and lung injury. Current exposure guidelines are expected to protect against these effects reported for MDI.
In laboratory animals, MDI/polymeric MDI did not cause birth defects; other fetal effects occurred only at high doses which were toxic to the mother.
Contains component(s) which did not cause birth defects in animals; other fetal effects occurred only at doses toxic to the mother.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical nature:** Construction and composite applications
This product is a mixture.

| Component | CASRN | Weight percent | |
|---|---|---|---|
| Diphenylmethane Diisocyanate, isomers and homologues | 9016-87-9 | >= 60.0 - <= 100.0 % | Hazardous components |
| 4,4' -Methylenediphenyl diisocyanate | 101-68-8 | 30.0 - 60.0 % | Hazardous components |
| 1,1,1,2-Tetrafluoroethane | 811-97-2 | >= 5.0 - <= 10.0 % | |

*Note*
Note: CAS 101-68-8 is an MDI isomer that is part of CAS 9016-87-9.

## 4. FIRST AID MEASURES

**Description of first aid measures**
**General advice:** 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.

**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.

**Skin contact:** Remove material from skin immediately by washing with soap and plenty of water. Remove contaminated clothing and shoes while washing. Seek medical attention if irritation persists. Wash clothing before reuse. An MDI skin decontamination study demonstrated that cleaning very soon after exposure is important, and that a polyglycol-based skin cleanser or corn oil may be more effective than soap and water. Discard items which cannot be decontaminated, including leather

articles such as shoes, belts and watchbands. Suitable emergency safety shower facility should be available in work area.

**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. Suitable emergency eye wash facility should be immediately available.

**Ingestion:** If swallowed, seek medical attention. 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:** Excessive exposure may aggravate preexisting asthma and other respiratory disorders (e.g. emphysema, bronchitis, reactive airways dysfunction syndrome). Maintain adequate ventilation and oxygenation of the patient. May cause respiratory sensitization or asthma-like symptoms. Bronchodilators, expectorants and antitussives may be of help. Treat bronchospasm with inhaled beta2 agonist and oral or parenteral corticosteroids. Respiratory symptoms, including pulmonary edema, may be delayed. Persons receiving significant exposure should be observed 24-48 hours for signs of respiratory distress. If you are sensitized to diisocyanates, consult your physician regarding working with other respiratory irritants or sensitizers. Exposure may increase "myocardial irritability". Do not administer sympathomimetic drugs such as epinephrine unless absolutely necessary. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

## 5. FIREFIGHTING MEASURES

**Suitable extinguishing media:** Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.

**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. Combustion products may include and are not limited to: Nitrogen oxides. Isocyanates. Hydrogen fluoride. Hydrogen cyanide. Carbon monoxide. Carbon dioxide.

**Unusual Fire and Explosion Hazards:** Product reacts with water. Reaction may produce heat and/or gases. This reaction may be violent. Container may rupture from gas generation in a fire situation. Vaporizes quickly at room temperature. Vapors are heavier than air and may travel a long distance and accumulate in low lying areas. Dense smoke is emitted when burned without sufficient oxygen.

**Advice for firefighters**
**Fire Fighting Procedures:** Keep people away. Isolate fire and deny unnecessary entry. Stay upwind. Keep out of low areas where gases (fumes) can accumulate. Water is not recommended, but may be applied in large quantities as a fine spray when other extinguishing agents are not available. 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. Use water spray to cool fire-exposed containers and fire-affected zone until fire is out.

**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.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:** Isolate area. Keep unnecessary and unprotected personnel from entering the area. Keep personnel out of low areas. Keep personnel out of confined or poorly ventilated areas. Keep upwind of spill. Spilled material may cause a slipping hazard. Ventilate area of leak or spill. Confined space entry procedures must be followed before entering the area. If available, use foam to smother or suppress. Refer to section 7, Handling, for additional precautionary measures. See Section 10 for more specific information. 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. Absorb with materials such as: Dirt. Vermiculite. Sand. Clay. Do NOT use absorbent materials such as: Cement powder (Note: may generate heat). Collect in suitable and properly labeled open containers. Do not place in sealed containers. Suitable containers include: Metal drums. Plastic drums. Polylined fiber pacs. Wash the 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 ventilation to prevent vapor exposure. Contact your supplier for clean-up assistance. See Section 13, Disposal Considerations, for additional information.

## 7. HANDLING AND STORAGE

**Precautions for safe handling:** Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated contact with skin. Avoid breathing vapor. Use with adequate ventilation. Wash thoroughly after handling. Keep container tightly closed. Do not enter confined spaces unless adequately ventilated. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

Spills of these organic materials on hot fibrous insulations may lead to lowering of the autoignition temperatures possibly resulting in spontaneous combustion.

**Conditions for safe storage:** Store in a dry place. Protect from atmospheric moisture. Do not store product contaminated with water to prevent potential hazardous reaction. See Section 10 for more

specific information. Additional storage and handling information on this product may be obtained by calling your sales or customer service contact.

**Storage stability**

| Storage temperature: | Storage Period: |
|---|---|
| 15 - 27 °C | 6 Month |

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

Exposure limits are listed below, if they exist.

| Component | Regulation | Type of listing | Value/Notation |
|---|---|---|---|
| Diphenylmethane Diisocyanate, isomers and homologues | CA AB OEL | TWA | 0.07 mg/m3 0.005 ppm |
| | CA BC OEL | TWA | 0.005 ppm |
| | CA BC OEL | C | 0.01 ppm |
| | CA BC OEL | TWA | SKIN, SEN |
| | CA BC OEL | C | Sens |
| 4,4' -Methylenediphenyl diisocyanate | ACGIH | TWA | 0.005 ppm |
| | CA AB OEL | TWA | 0.05 mg/m3 0.005 ppm |
| | CA BC OEL | TWA | 0.005 ppm |
| | CA BC OEL | C | 0.01 ppm |
| | CA BC OEL | TWA | SKIN, SEN |
| | CA QC OEL | TWAEV | 0.051 mg/m3 0.005 ppm |
| | CA BC OEL | C | SKIN, SEN |
| | CA QC OEL | TWAEV | SKIN, SEN |
| | CA ON OEL | TWA | 0.005 ppm |
| | CA ON OEL | C | 0.02 ppm |
| 1,1,1,2-Tetrafluoroethane | US WEEL | TWA | 1,000 ppm |

Consult local authorities for recommended exposure limits.

**Exposure controls**

**Engineering controls:** Use only with adequate ventilation. Local exhaust ventilation may be necessary for some operations. Provide general and/or local exhaust ventilationto control airborne levels below the exposure guidelines. Exhaust systems should be designed to move the air away from the source of vapor/aerosol generation and people working at this point. The odor and irritancy of this material are inadequate to warn of excessive exposure. Lethal concentrations may exist in areas with poor ventilation.

**Individual protection measures**

**Eye/face protection:** Use chemical goggles.

**Skin protection**

**Hand protection:** Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Butyl rubber. Polyethylene. Chlorinated polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Examples of acceptable glove barrier materials include: Viton. Neoprene. Polyvinyl chloride ("PVC" or "vinyl"). Nitrile/butadiene rubber ("nitrile" or "NBR"). 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.
**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:** Atmospheric levels should be maintained below the exposure guideline. When atmospheric levels may exceed the exposure guideline, use an approved air-purifying respirator equipped with an organic vapor sorbent and a particle filter. 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). For emergency response or for situations where the atmospheric level is unknown, use an approved positive-pressure self-contained breathing apparatus or positive-pressure air line with auxiliary self-contained air supply. In confined or poorly ventilated areas, use an approved self-contained breathing apparatus or positive pressure air line with auxiliary self-contained air supply.
The following should be effective types of air-purifying respirators: Organic vapor cartridge with a particulate pre-filter.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| **Appearance** | |
| **Physical state** | Liquefied gas |
| **Color** | Brown |
| **Odor** | Musty |
| **Odor Threshold** | No test data available |
| **pH** | *Not applicable* |
| **Melting point/range** | No test data available |
| **Freezing point** | No test data available |
| **Boiling point (760 mmHg)** | No test data available |
| **Flash point** | **closed cup** Not applicable, Gas |
| **Evaporation Rate (Butyl Acetate = 1)** | No test data available |
| **Flammability (solid, gas)** | No |
| **Lower explosion limit** | No test data available |
| **Upper explosion limit** | No test data available |
| **Vapor Pressure** | 225 lb/in2 at 54 °C Container is under pressure. |
| **Relative Vapor Density (air = 1)** | No test data available |
| **Relative Density (water = 1)** | 1.24 at 25 °C / 25 °C *Estimated.* |
| **Water solubility** | insoluble, reacts, evolution of CO2 |
| **Partition coefficient: n-octanol/water** | no data available |
| **Auto-ignition temperature** | No test data available |
| **Decomposition temperature** | No test data available |
| **Kinematic Viscosity** | No test data available |
| **Explosive properties** | Not explosive |
| **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.

## 10. STABILITY AND REACTIVITY

**Reactivity:** no data available

**Chemical stability:** Stable under recommended storage conditions. See Storage, Section 7.

**Possibility of hazardous reactions:** Can occur.

**Conditions to avoid:** Elevated temperatures can cause container to vent and/or rupture. 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:** Avoid contact with: Acids. Alcohols. Amines. Ammonia. Bases. Metal compounds. Strong oxidizers. Diisocyanates react with many materials and the rate of reaction increases with temperature as well as increased contact; these reactions can become 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. Avoid unintended contact with polyols. The reaction of polyols and isocyanates generate heat.

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

## 11. TOXICOLOGICAL INFORMATION

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

**Acute toxicity**

**Acute oral toxicity**

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. Observations in animals include: Gastrointestinal irritation.

As product: Single dose oral LD50 has not been determined.
LD50, rat, > 2,000 mg/kg Estimated.

**Acute dermal toxicity**

Prolonged skin contact is unlikely to result in absorption of harmful amounts.

As product: The dermal LD50 has not been determined.
LD50, rabbit, > 2,000 mg/kg Estimated.

**Acute inhalation toxicity**

In confined or poorly ventilated areas, vapor can easily accumulate and can cause unconsciousness and death due to displacement of oxygen. Excessive exposure may cause irritation to upper respiratory tract (nose and throat) and lungs. May cause pulmonary edema (fluid in the lungs.) Effects may be delayed. Decreased lung function has been associated with overexposure to isocyanates. Excessive exposure may increase sensitivity to epinephrine and increase myocardial irritability (irregular heartbeats). May cause central nervous system effects. Symptoms of excessive exposure may be anesthetic or narcotic effects; dizziness and drowsiness may be observed.
As product: The LC50 has not been determined.

**Skin corrosion/irritation**
Prolonged contact may cause skin irritation with local redness.
May stain skin.

**Serious eye damage/eye irritation**
May cause moderate eye irritation.
May cause slight temporary corneal injury.

**Sensitization**
Skin contact may cause an allergic skin reaction.
Animal studies have shown that skin contact with isocyanates may play a role in respiratory sensitization.

May cause allergic respiratory reaction.
MDI concentrations below the exposure guidelines may cause allergic respiratory reactions in individuals already sensitized.
Asthma-like symptoms may include coughing, difficult breathing and a feeling of tightness in the chest. Occasionally, breathing difficulties may be life threatening.

**Specific Target Organ Systemic Toxicity (Single Exposure)**
May cause respiratory irritation.
Route of Exposure: Inhalation

**Specific Target Organ Systemic Toxicity (Repeated Exposure)**
Tissue injury in the upper respiratory tract and lungs has been observed in laboratory animals after repeated excessive exposures to MDI/polymeric MDI aerosols.

**Carcinogenicity**
Lung tumors have been observed in laboratory animals exposed to respirable aerosol droplets of MDI/Polymeric MDI (6 mg/m3) for their lifetime. Tumors occurred concurrently with respiratory irritation and lung injury. Current exposure guidelines are expected to protect against these effects reported for MDI.

**Teratogenicity**
In laboratory animals, MDI/polymeric MDI did not cause birth defects; other fetal effects occurred only at high doses which were toxic to the mother. Contains component(s) which did not cause birth defects in animals; other fetal effects occurred only at doses toxic to the mother.

**Reproductive toxicity**
No relevant data found.

**Mutagenicity**

Genetic toxicity data on MDI are inconclusive. MDI was weakly positive in some in vitro studies; other in vitro studies were negative. Animal mutagenicity studies were predominantly negative.

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

**COMPONENTS INFLUENCING TOXICOLOGY:**

**Diphenylmethane Diisocyanate, isomers and homologues**

**Acute inhalation toxicity**
LC50, rat, 4 Hour, dust/mist, 0.49 mg/l

For similar material(s): 2,4'-Diphenylmethane diisocyanate (CAS 5873-54-1). LC50, rat, 4 Hour, dust/mist, 0.31 mg/l

For similar material(s): 4,4'-Methylenediphenyl diisocyanate (CAS 101-68-8). LC50, rat, 1 Hour, dust/mist, 2.24 mg/l

**4,4' -Methylenediphenyl diisocyanate**

**Acute inhalation toxicity**
LC50, rat, 1 Hour, dust/mist, 2.24 mg/l

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

**Acute inhalation toxicity**
LC50, rat, 4 Hour, vapour, > 1,500 mg/l

## 12. ECOLOGICAL INFORMATION

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

**Toxicity**

**Diphenylmethane Diisocyanate, isomers and homologues**

**Acute toxicity to fish**
The measured ecotoxicity is that of the hydrolyzed product, generally under conditions maximizing production of soluble species.
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).
Based on information for a similar material:
LC50, Danio rerio (zebra fish), static test, 96 Hour, > 1,000 mg/l, OECD Test Guideline 203 or Equivalent

**Acute toxicity to aquatic invertebrates**
Based on information for a similar material:
EC50, Daphnia magna (Water flea), static test, 24 Hour, > 1,000 mg/l, OECD Test Guideline 202 or Equivalent

**Acute toxicity to algae/aquatic plants**
Based on information for a similar material:
NOEC, Desmodesmus subspicatus (green algae), static test, 72 Hour, Growth rate inhibition, 1,640 mg/l, OECD Test Guideline 201 or Equivalent

**Toxicity to bacteria**
Based on information for a similar material:
EC50, activated sludge, static test, 3 Hour, Respiration rates., > 100 mg/l

**Toxicity to soil-dwelling organisms**
EC50, Eisenia fetida (earthworms), Based on information for a similar material:, 14 d, > 1,000 mg/kg

**Toxicity to terrestrial plants**
EC50, Avena sativa (oats), Growth inhibition, 1,000 mg/l
EC50, Lactuca sativa (lettuce), Growth inhibition, 1,000 mg/l

**4,4' -Methylenediphenyl diisocyanate**

**Acute toxicity to fish**
The measured ecotoxicity is that of the hydrolyzed product, generally under conditions maximizing production of soluble species.
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).
Based on information for a similar material:
LC50, Danio rerio (zebra fish), static test, 96 Hour, > 1,000 mg/l, OECD Test Guideline 203 or Equivalent

**Acute toxicity to aquatic invertebrates**
Based on information for a similar material:
EC50, Daphnia magna (Water flea), static test, 24 Hour, > 1,000 mg/l, OECD Test Guideline 202 or Equivalent

**Acute toxicity to algae/aquatic plants**
Based on information for a similar material:
NOEC, Desmodesmus subspicatus (green algae), static test, 72 Hour, Growth rate inhibition, 1,640 mg/l, OECD Test Guideline 201 or Equivalent

**Toxicity to bacteria**
Based on information for a similar material:
EC50, activated sludge, static test, 3 Hour, Respiration rates., > 100 mg/l

**Toxicity to soil-dwelling organisms**
EC50, Eisenia fetida (earthworms), Based on information for a similar material:, 14 d, > 1,000 mg/kg

**Toxicity to terrestrial plants**
EC50, Avena sativa (oats), Growth inhibition, 1,000 mg/l
EC50, Lactuca sativa (lettuce), Growth inhibition, 1,000 mg/l

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

**Acute toxicity to fish**
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).
LC50, Oncorhynchus mykiss (rainbow trout), semi-static test, 96 Hour, 450 mg/l

**Acute toxicity to aquatic invertebrates**
EC50, Daphnia magna (Water flea), 48 Hour, 980 mg/l

**Toxicity to bacteria**
EC50, Pseudomonas putida, static test, 6 Hour, Growth inhibition, > 730 mg/l

**Persistence and degradability**

**Diphenylmethane Diisocyanate, isomers and homologues**
**Biodegradability:** In the aquatic and terrestrial environment, material reacts with water forming predominantly insoluble polyureas which appear to be stable. In the atmospheric environment, material is expected to have a short tropospheric half-life, based on calculations and by analogy with related diisocyanates.
10-day Window: Not applicable
**Biodegradation:** 0 %
**Exposure time:** 28 d
**Method:** OECD Test Guideline 302C or Equivalent

**4,4' -Methylenediphenyl diisocyanate**
**Biodegradability:** In the aquatic and terrestrial environment, material reacts with water forming predominantly insoluble polyureas which appear to be stable. In the atmospheric environment, material is expected to have a short tropospheric half-life, based on calculations and by analogy with related diisocyanates.
10-day Window: Not applicable
**Biodegradation:** 0 %
**Exposure time:** 28 d
**Method:** OECD Test Guideline 302C or Equivalent

**1,1,1,2-Tetrafluoroethane**
**Biodegradability:** Material is expected to biodegrade very slowly (in the environment). Fails to pass OECD/EEC tests for ready biodegradability.
10-day Window: Fail
**Biodegradation:** 4 %
**Exposure time:** 28 d
**Method:** OECD Test Guideline 301D or Equivalent

**Theoretical Oxygen Demand:** 0.47 mg/mg

**Photodegradation**
**Test Type:** Half-life (indirect photolysis)
**Sensitizer:** Radicaux OH
**Atmospheric half-life:** 1,700 d
**Method:** Estimated.

**Bioaccumulative potential**

**Diphenylmethane Diisocyanate, isomers and homologues**
**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3). Reacts with water. In the aquatic and terrestrial environment, movement is expected to be limited by its reaction with water forming predominantly insoluble polyureas.
**Bioconcentration factor (BCF):** 92 Cyprinus carpio (Carp) 28 d

**4,4' -Methylenediphenyl diisocyanate**

**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3). Reacts with water. In the aquatic and terrestrial environment, movement is expected to be limited by its reaction with water forming predominantly insoluble polyureas.
**Bioconcentration factor (BCF):** 92 Cyprinus carpio (Carp) 28 d

**1,1,1,2-Tetrafluoroethane**
**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).
**Partition coefficient: n-octanol/water(log Pow):** 1.68 Estimated.

**Mobility in soil**

**Diphenylmethane Diisocyanate, isomers and homologues**
In the aquatic and terrestrial environment, movement is expected to be limited by its reaction with water forming predominantly insoluble polyureas.

**4,4' -Methylenediphenyl diisocyanate**
In the aquatic and terrestrial environment, movement is expected to be limited by its reaction with water forming predominantly insoluble polyureas.

**1,1,1,2-Tetrafluoroethane**
Potential for mobility in soil is high (Koc between 50 and 150).
**Partition coefficient(Koc):** 97 Estimated.

## 13. DISPOSAL CONSIDERATIONS

**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: Incinerator or other thermal destruction device. As a service to its customers, Dow can provide names of information resources to help identify waste management companies and other facilities which recycle, reprocess or manage chemicals or plastics, and that manage used drums. Telephone Dow's Customer Information Group at 1-800-258-2436 or 1-989-832-1556 (U.S.), or 1-800-331-6451 (Canada) for further details.

## 14. TRANSPORT INFORMATION

**TDG**

| | |
|---|---|
| **Proper shipping name** | CHEMICAL UNDER PRESSURE, N.O.S.(FLUORINATED HYDROCARBONS) |
| **UN number** | UN 3500 |
| **Class** | 2.2 |
| **Packing group** | |

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

| | |
|---|---|
| **Proper shipping name** | CHEMICAL UNDER PRESSURE, N.O.S.(FLUORINATED HYDROCARBONS) |
| **UN number** | UN 3500 |
| **Class** | 2.2 |
| **Packing group** | |
| **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):**

| | |
|---|---|
| **Proper shipping name** | Chemical under pressure, n.o.s.(FLUORINATED HYDROCARBONS) |
| **UN number** | UN 3500 |
| **Class** | 2.2 |
| **Packing group** | |

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.

## 15. REGULATORY INFORMATION

**Hazardous Products Act Information: CPR Compliance**
This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**Hazardous Products Act Information: WHMIS Classification**
**Hazards**

| | |
|---|---|
| A | Compressed Gas |
| D2A | Respiratory Tract Sensitizer |
| D2B | Eye or Skin Irritant |
| D2B | Skin Sensitizer |

**Canadian Domestic Substances List (DSL) (DSL)**
All substances contained in this product are listed on the Canadian Domestic Substances List (DSL) or are not required to be listed.

## 16. OTHER INFORMATION

**Revision**

Identification Number: 101194148 / A208 / Issue Date: 11/20/2014 / Version: 5.0
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) |
| C | ceiling limit |
| CA AB OEL | Canada. Alberta, Occupational Health and Safety Code (table 2: OEL) |
| CA BC OEL | Canada. British Columbia OEL |
| CA ON OEL | Ontario Table of Occupational Exposure Limits made under the Occupational Health and Safety Act. |
| CA QC OEL | Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants |
| Sens | Sensitizer |
| SKIN, SEN | Absorbed via Skin, Sensitizer |
| TWA | 8-hour time weighted average |
| TWAEV | Time-weighted average exposure value |
| 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.

DOW CHEMICAL CANADA ULC 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 Sealant

## 1. PRODUCT NAME
FROTH-PAK™ Foam Sealant

## 2. MANUFACTURER
The Dow Chemical Company
Dow Building Solutions
200 Larkin Center, 1605 Joseph Drive
Midland, MI 48674
1-866-583-BLUE (2583)
Fax 1-989-832-1465

Dow Chemical Canada ULC
Dow Building Solutions
450 – 1st St. SW, Suite 2100
Calgary, AB T2P 5H1
1-866-583-BLUE (2583) (English)
1-800-363-6210 (French)

dowbuildingsolutions.com

## 3. PRODUCT DESCRIPTION
FROTH-PAK™ Foam Sealant is a two-component, quick-cure polyurethane foam that fills cavities, penetrations and cracks. FROTH-PAK™ Foam Sealant is a chemically cured foam, significantly reducing curing time. It dispenses, expands and becomes tack-free in seconds. The product will skin over in 30–40 seconds and will cure in minutes.*

### Basic Use
FROTH-PAK™ Foam Sealant can be used in interior or exterior commercial, residential, agricultural, industrial and institutional settings.** If used in an exterior setting, a coating must be applied for ultraviolet (UV) protection.

Typical commercial applications include spray polyurethane foam roof repair and sealing roof perimeters and parapet walls. Residential uses include:
- Roof and wall junctions
- Wall and attic penetrations
- Electrical, mechanical and plumbing penetrations
- Other gaps, cracks or crevices in the building envelope

### Sizes
FROTH-PAK™ Foam Sealant is typically sold as a complete kit that includes pressurized "A" and "B" cylinders, plus dispensing gun/hose assembly and accessories. FROTH-PAK™ Foam Sealant is also available in refillable, returnable tanks for applications requiring a large amount of foam, such as poultry houses. See Table 1 for size and yield information.

**TABLE 1: SIZES AND THEORETICAL YIELDS FOR FROTH-PAK™ FOAM SEALANT**

| Product | Theoretical Yield,[1] Board ft ($m^3$) |
|---|---|
| ***Kits*** | |
| FROTH-PAK™ 12 | 12 (0.03) |
| FROTH-PAK™ 120 | 120 (0.28) |
| **FROTH-PAK™ 200** | 200 (0.46) |
| FROTH-PAK™ 620 | 620 (1.46) |
| ***Refillable Cylinders*** | |
| FROTH-PAK™ 17 (gal) | 2060 (4.85) |
| FROTH-PAK™ 27 (gal) | 3240 (7.65) |
| FROTH-PAK™ 60 (gal) | 6860 (16.2) |
| FROTH-PAK™ 120 (gal) | 15430 (36.4) |
| FROTH-PAK™ 350 (gal) | 43890 (103.6) |

[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.

## 4. TECHNICAL DATA
### Applicable Standards
#### ASTM International
- C518 – Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus
- C273 – Standard Test Method for Shear Properties of Sandwich Core Materials
- 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
- D2126 – Standard Test Method for Response of Rigid Cellular Plastics to Thermal and Humid Aging
- D2842 – Standard Test Method for Water Absorption of Rigid Cellular Plastics
- E96 – Standard Test Methods for Water Vapor Transmission of Materials
- C203 – Standard Test Methods for Breaking Load and Flexural Properties of Block-Type Thermal Insulation

### Physical Properties
FROTH-PAK™ Foam Sealant exhibits the typical properties and characteristics indicated in Table 2 when tested as represented.

### Fire Information
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 (116°C).

### Code Compliances
FROTH-PAK™ Foam Sealant complies with the following codes:
- CCMC 13447-L
- Underwriters Laboratories, Inc. (UL) Classified, see Classification Certificate R13655

Contact your Dow sales representative or local authorities for code requirements and related acceptances.

* Actual cure time will depend on temperature, foam thickness, the specific nozzle used, etc.
** For rim/band joist applications, use FROTH-PAK™ Foam Insulation (available in U.S. only) to meet building code specifications.

## 5. INSTALLATION

Complete operating instructions are provided with each FROTH-PAK™ Foam Sealant 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.

### Safety and Conditions of Use

- Read the instructions and (Material) Safety Data Sheet ((M)SDS) carefully before use.
- FROTH-PAK™ spray polyurethane foam contains isocyanate, hydrofluorocarbon blowing agent and polyol. Do not breathe vapor or spray. Use only in well-ventilated areas. 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. 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 (116°C).
- Re-entry allowed after only 1 hour*

Visit dowbuildingsolutions.com or contact a local Dow representative for more specific instructions.

### TABLE 2: TYPICAL PHYSICAL PROPERTIES OF FROTH-PAK™ FOAM SEALANT

These properties are typical but do not constitute specifications.

| Property and Test Method | Value[1] |
|---|---|
| Flame Spread/Smoke Developed,[2] ASTM E84/UL 723 @ 4" wide by 2" thick | 25/105 |
| Nominal Density, ASTM D1622, lb/ft$^3$ | 1.75 |
| Thermal Resistance[3] per inch, ASTM C518, ft2•h•°F/Btu, R-value, min. | |
| Initial | 6.6 |
| Aged LTTR measured at 2" thick | 5.5 |
| Aged LTTR measured at 1" thick | 5.3 |
| Water Vapor Permeance, ASTM E96, perm @ 1" thick | 3.13 |
| Water Absorption, ASTM D2842, % by volume | 5.44 |
| Air Permeability, ASTM E2178 air leakage at 1" thick, l/min @ 75 Pa | 0 |
| Air Permeability, ASTM E283 air leakage at 0.5" thick, ft3/min•ft$^2$ @ 75 Pa | 0 |
| Dimensional Stability, ASTM D2126, % volume change | |
| 158°F/100% RH @ 1 wk | 0.70 |
| 158°F/100% RH @ 2 wks | -0.06 |
| -40°F/amb RH @ 1 wk | 0.02 |
| -40°F/amb RH @ 2 wks | 0.36 |
| Compressive Strength, ASTM D1621, lb/in$^2$, parallel | 23.4 |
| Flexural Strength, ASTM C203, lb/in$^2$, parallel | 22.7 |
| Tensile Strength, ASTM D1623, lb/in$^2$, parallel | 36 |
| Shear Strength, ASTM C273, lb/in$^2$, parallel | 12.7 |
| Maximum Service Temperature, °F | 240 |

[1] Values may differ for FROTH-PAK™ 12 and specialty kits. Contact a Dow representative for more information.
[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.

## 6. AVAILABILITY

FROTH-PAK™ Foam Insulation is distributed through an extensive network. For more information, call:
1-800-232-2436 (English)
1-800-565-1255 (French)

## 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 Sealant. Technical personnel are available to assist.
For technical assistance, call:
1-866-583-BLUE (2583) (English)
1-800-363-6210 (French)

## 10. FILING SYSTEMS

dowbuildingsolutions.com


**In the U.S.**
**The Dow Chemical Company**
Dow Building Solutions
200 Larkin Center, 1605 Joseph Drive
Midland, MI 48674

**In Canada**
**Dow Chemical Canada ULC**
Dow Building Solutions
450 – 1st St. SW, Suite 2100
Calgary, AB T2P 5H1

**Technical Information**
1-866-583-2583 (English)
1-800-363-6210 (French)
**Sales Information**
1-800-232-2436 (English)
1-800-565-1255 (French)

**www.dowbuildingsolutions.com**
**www.sprayfoamatdow.com**





Form No. 179-05044X-0614 CDP
178-00582X-0614 CDP

# Material Safety Data Sheet
**The Dow Chemical Company**



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) SPF MX 2030 POLYOL 55gal

**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:** Natural
**Physical State:** Liquid.
**Odor:** Amine.
**Hazards of product:**

WARNING! Causes eye irritation. May cause skin irritation. May be harmful if inhaled. Harmful if swallowed. Vapor reduces oxygen available for breathing. May cause anesthetic effects. May cause central nervous system effects; may cause respiratory tract irritation. Isolate area. Keep upwind of spill.

### 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 severe 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:** Prolonged contact may cause skin irritation with local redness.
**Skin Absorption:** Prolonged skin contact is unlikely to result in absorption of harmful amounts. Massive contact with damaged skin or of material sufficiently hot to burn skin may result in absorption of potentially lethal amounts.
**Skin Sensitization:** For the minor component(s): Skin contact may cause an allergic skin reaction in a small proportion of individuals.
**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. Excessive exposure may increase sensitivity to epinephrine and increase myocardial irritability (irregular heartbeats). Symptoms of excessive exposure may be anesthetic or narcotic effects; dizziness and drowsiness may be observed.
**Ingestion:** Ingestion of quantities (approximately 65 mL (2 oz.) for diethylene glycol or 100 mL (3 oz.) for ethylene glycol) has caused death in humans. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury. The data presented are for the following material: Diethylene glycol. May cause nausea and vomiting. May cause abdominal discomfort or diarrhea. Excessive exposure may cause central nervous system effects, cardiopulmonary effects (metabolic acidosis), and kidney failure.
**Aspiration hazard:** Based on physical properties, not likely to be an aspiration hazard.
**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. Contains component(s) which have been reported to cause effects on the following organs in humans: Kidney. Contains component(s) which have been reported to cause effects on the following organs in animals: Liver. Respiratory tract. Heart.
**Cancer Information:** For the minor component(s): Findings from a chronic skin painting study by NTP include liver tumors in mice. Mechanistic studies indicate that tumor formation is of questionable relevance to humans.
**Birth Defects/Developmental Effects:** Diethylene glycol has caused toxicity to the fetus and some birth defects at maternally toxic, high doses in animals. Other animal studies have not reproduced birth defects even at much higher doses that caused severe maternal toxicity. Contains component(s) which did not cause birth defects in animals; other fetal effects occurred only at doses toxic to the mother.
**Reproductive Effects:** Diethylene glycol did not interfere with reproduction in animal studies except at very high doses.

## 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 % |
| Diethylene glycol | 111-46-6 | >= 5.0 - <= 10.0 % |
| 2-(2-Hydroxyethoxy)ethyl-2-hydroxypropyl-3,4,5,6-tetrabromo phthalate | 20566-35-2 | >= 3.0 - <= 7.0 % |
| Oxirane, 2-methyl-, polymer with oxirane, ether with 2,6-bis[[bis-(2-hydroxyethyl)amino]methyl]-4-branched nonylphenol | 940912-28-7 | >= 1.0 - <= 5.0 % |
| N,N-Dimethylcyclohexylamine | 98-94-2 | >= 1.0 - <= 5.0 % |
| Tris(dimethylamino)propyl amine | 33329-35-0 | >= 1.0 - <= 5.0 % |
| Triethanolamine | 102-71-6 | >= 1.0 - <= 5.0 % |
| 1-Methyl-1H-imidazole | 616-47-7 | >= 1.0 - <= 5.0 % |

| 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 % |
| Diethylene glycol | 111-46-6 | >= 5.0 - <= 10.0 % |
| 2-(2-Hydroxyethoxy)ethyl-2-hydroxypropyl-3,4,5,6-tetrabromo phthalate | 20566-35-2 | >= 3.0 - <= 7.0 % |
| Oxirane, 2-methyl-, polymer with oxirane, ether with 2,6-bis[[bis-(2-hydroxyethyl)amino]methyl]-4-branched nonylphenol | 940912-28-7 | >= 1.0 - <= 5.0 % |
| N,N-Dimethylcyclohexylamine | 98-94-2 | >= 1.0 - <= 5.0 % |
| Tris(dimethylamino)propyl amine | 33329-35-0 | >= 1.0 - <= 5.0 % |
| Triethanolamine | 102-71-6 | >= 1.0 - <= 5.0 % |
| 1-Methyl-1H-imidazole | 616-47-7 | >= 1.0 - <= 5.0 % |

## 4. First-aid measures

### Description of first aid measures

**General advice:** 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.
**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.
**Skin Contact:** Immediately flush skin with water while removing contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Destroy contaminated leather items such as shoes, belts, and watchbands. Suitable emergency safety shower facility should be immediately available.
**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. Suitable emergency eye wash facility should be immediately available.
**Ingestion:** Do not induce vomiting. Seek medical attention immediately. If person is fully conscious give 1 cup or 8 ounces (240 ml) of water. If medical advice is delayed and if an adult has swallowed several ounces of chemical, then give 3-4 ounces (1/3-1/2 Cup) (90-120 ml) of hard liquor such as 80 proof whiskey. For children, give proportionally less liquor at a dose of 0.3 ounce (1 1/2 tsp.) (8 ml) liquor for each 10 pounds of body weight, or 2 ml per kg body weight [e.g., 1.2 ounce (2 1/3 tbsp.) for a 40 pound child or 36 ml for an 18 kg child].

### 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), no additional symptoms and effects are anticipated.

### Indication of immediate medical attention and special treatment needed
Maintain adequate ventilation and oxygenation of the patient. If burn is present, treat as any thermal burn, after decontamination. Due to structural analogy and clinical data, this material may have a mechanism of intoxication similar to ethylene glycol. On that basis, treatment similar to ethylene glycol intoxication may be of benefit. In cases where several ounces (60 - 100 ml) have been ingested, consider the use of ethanol and hemodialysis in the treatment. Consult standard literature for details of treatment. If ethanol is used, a therapeutically effective blood concentration in the range of 100 - 150 mg/dl may be achieved by a rapid loading dose followed by a continuous intravenous infusion. Consult standard literature for details of treatment. 4-Methyl pyrazole (Antizol®) is an effective blocker of alcohol dehydrogenase and should be used in the treatment of ethylene glycol (EG), di- or triethylene glycol (DEG, TEG), ethylene glycol butyl ether (EGBE), or methanol intoxication if available.

Fomepizole protocol (Brent, J. et al., New England Journal of Medicine, Feb. 8, 2001, 344:6, p. 424-9): loading dose 15 mg/kg intravenously, follow by bolus dose of 10 mg/kg every 12 hours; after 48 hours, increase bolus dose to 15 mg/kg every 12 hours. Continue fomepizole until serum methanol, EG, DEG, TEG or EGBE are undetectable. The signs and symptoms of poisoning include anion gap metabolic acidosis, CNS depression, renal tubular injury, and possible late stage cranial nerve involvement. Respiratory symptoms, including pulmonary edema, may be delayed. Persons receiving significant exposure should be observed 24-48 hours for signs of respiratory distress. In severe poisoning, respiratory support with mechanical ventilation and positive end expiratory pressure may be required. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. 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 (glaucopsia) 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.

## 5. Fire Fighting Measures

### Suitable extinguishing media

Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.
**Extinguishing Media to Avoid:** Do not use direct water stream. May spread fire.

### 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. Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide. Hydrogen halides.
**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.

### Advice for firefighters

**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.

## 6. Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures:** Isolate area. Only trained and properly protected personnel must be involved in clean-up operations. Keep unnecessary and unprotected personnel from entering the area. Keep personnel out of confined or poorly ventilated areas. Keep upwind of spill. Spilled material may cause a slipping hazard. Ventilate area of leak or spill. Confined space entry procedures must be followed before entering the area. 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.

**Methods and materials for containment and cleaning up:** Contain spilled material if possible. Absorb with materials such as: Dirt. Sand. Collect in suitable and properly labeled containers. Wash the spill site with water. See Section 13, Disposal Considerations, for additional information.

## 7. Handling and Storage

### Handling

**General Handling:** Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Do not swallow. Avoid breathing vapor. Use with adequate ventilation. Keep container closed. Do not enter confined spaces unless adequately ventilated. This material is hygroscopic in nature. 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

Store in a dry place. Avoid prolonged exposure to heat and air. Protect from atmospheric moisture. Blowing agent may migrate from product and accumulate in some storage situations. Elevated temperatures can cause pressure buildup in closed containers due to the release of blowing agents. 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.

| Storage Period: | Storage temperature: |
|---|---|
| 3 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/m3 300 ppm |
| **Diethylene glycol** | AIHA WEEL | TWA | 10 mg/m3 |
| **N,N-Dimethylcyclohexylamine** | Dow IHG | TWA | 1 ppm SKIN |
| **Triethanolamine** | ACGIH | TWA | 5 mg/m3 |

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. If exposure causes eye discomfort, use a full-face respirator.

**Skin Protection:** When prolonged or frequently repeated contact could occur, use protective clothing chemically resistant to this material. Selection of specific items such as faceshield, boots, apron, or full-body suit will depend on the task. When handling hot material, protect skin from thermal burns as well as from skin absorption.

**Hand protection:** Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. If hands are cut or scratched, use gloves chemically resistant to this material even for brief exposures. Use gloves with insulation for thermal protection, when needed. 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:** Avoid ingestion of even very small amounts; do not consume or store food or tobacco in the work area; wash hands and face 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

| | |
|---|---|
| **Appearance** | |
| **Physical State** | Liquid. |
| **Color** | Natural |
| **Odor** | Amine. |
| **Odor Threshold** | No test data available |
| **pH** | No test data available |
| **Melting Point** | Not applicable to liquids |
| **Freezing Point** | No test data available |
| **Boiling Point (760 mmHg)** | No test data available. |
| **Flash Point - Closed Cup** | 100 °C (212 °F) *Calculated* |
| **Evaporation Rate (Butyl Acetate = 1)** | No test data available |
| **Flammability (solid, gas)** | Not applicable to liquids |
| **Flammable Limits In Air** | **Lower**: No test data available<br>**Upper**: No test data available |
| **Vapor Pressure** | 69 psi @ 55 °C *Estimated.* |
| **Vapor Density (air = 1)** | No test data available |
| **Specific Gravity (H2O = 1)** | 1.206 *ASTM D891* |
| **Solubility in water (by weight)** | No test data available |

| | |
|---|---|
| **Partition coefficient, n-octanol/water (log Pow)** | No data available for this product. See Section 12 for individual component data. |
| **Autoignition Temperature** | No test data available |
| **Decomposition Temperature** | No test data available |
| **Kinematic Viscosity** | 375 cSt @ 25 °C *ASTM D4878* |
| **Explosive properties** | Not explosive |
| **Oxidizing properties** | No |

## 10. Stability and Reactivity

### Reactivity
No dangerous reaction known under conditions of normal use.

### Chemical stability
Stable under recommended storage conditions. See Storage, Section 7.

### Possibility of hazardous reactions
Polymerization will not occur by itself.

**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 decomposition products
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**
As product: Single dose oral LD50 has not been determined.
The data presented are for the following material: Diethylene glycol. Estimated. Lethal Dose, Human, adult 2 Ounces
**Dermal**
As product: The dermal LD50 has not been determined.
Based on information for component(s): Estimated. LD50, Rabbit > 2,000 mg/kg
**Inhalation**
As product: The LC50 has not been determined.

### Eye damage/eye irritation
May cause severe eye irritation. May cause severe 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 corrosion/irritation
Prolonged contact may cause skin irritation with local redness.

### Sensitization
**Skin**
For the minor component(s): Skin contact may cause an allergic skin reaction in a small proportion of individuals.
**Respiratory**

No relevant data found.

### 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. Contains component(s) which have been reported to cause effects on the following organs in humans: Kidney. Contains component(s) which have been reported to cause effects on the following organs in animals: Liver. Respiratory tract. Heart.

### Chronic Toxicity and Carcinogenicity

For the minor component(s): Findings from a chronic skin painting study by NTP include liver tumors in mice. Mechanistic studies indicate that tumor formation is of questionable relevance to humans. Diethylene glycol has been tested for carcinogenicity in animal studies and is not believed to pose a carcinogenic risk to man.

### Developmental Toxicity

Diethylene glycol has caused toxicity to the fetus and some birth defects at maternally toxic, high doses in animals. Other animal studies have not reproduced birth defects even at much higher doses that caused severe maternal toxicity. Contains component(s) which did not cause birth defects in animals; other fetal effects occurred only at doses toxic to the mother.

### Reproductive Toxicity

Diethylene glycol did not interfere with reproduction in animal studies except at very high doses.

### Genetic Toxicology

Genetic toxicity studies on tested components were predominantly negative. Contains component(s) which were negative in some animal genetic toxicity studies and positive in others.

## 12. Ecological Information

### Toxicity

Data for Component: **1,4-Benzenedicarboxylic Acid, Dimethyl Ester, manuf. of, by-products from, Polymers with Diethylene Glycol**

For similar material(s): 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).

Data for Component: **Phenol, polymer with formaldehyde , propylene oxide and ethylene oxide**

Material is slightly toxic to aquatic organisms on an acute basis (LC50/EC50 between 10 and 100 mg/L in the most sensitive species tested).

**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, static, 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 aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

**Fish Acute & Prolonged Toxicity**

LC50, golden orfe (Leuciscus idus), static, 48 h: 2,140 mg/l

**Aquatic Invertebrate Acute Toxicity**

EC50, water flea Daphnia magna, static, 48 h, immobilization: 350 mg/l

**Aquatic Plant Toxicity**
EC50, Desmodesmus subspicatus (green algae), Growth rate inhibition, 72 h: 900 mg/l
**Toxicity to Micro-organisms**
EC50, OECD 209 Test; activated sludge, Respiration inhibition, 30 min: > 2,985 mg/l

Data for Component: **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), flow-through, 96 h: 75,200 mg/l
**Aquatic Invertebrate Acute Toxicity**
EC50, water flea Daphnia magna, 48 h, immobilization: 48,900 mg/l
**Aquatic Plant Toxicity**
EC50, green alga Pseudokirchneriella subcapitata (formerly known as Selenastrum capricornutum), biomass growth inhibition, 96 h: > 100 mg/l
**Toxicity to Micro-organisms**
EC50, OECD 209 Test; activated sludge, 3 h: > 1,000 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: **Oxirane, 2-methyl-, polymer with oxirane, ether with 2,6-bis[[bis-(2-hydroxyethyl)amino]methyl]-4-branched nonylphenol**

Based on information for a similar material: Material is highly toxic to aquatic organisms on an acute basis (LC50/EC50 between 0.1 and 1 mg/L in the most sensitive species tested).

**Fish Acute & Prolonged Toxicity**
Based on information for a similar material: LC50, sheepshead minnow (Cyprinodon variegatus), static, 96 h: 17 mg/l
**Aquatic Invertebrate Acute Toxicity**
Based on information for a similar material: LC50, saltwater mysid Mysidopsis bahia, static, 96 h: 2.6 mg/l
**Aquatic Plant Toxicity**
Based on information for a similar material: EbC50, diatom Skeletonema costatum, static, biomass growth inhibition, 96 h: 0.63 mg/l

Data for Component: **N,N-Dimethylcyclohexylamine**

Material is slightly toxic to aquatic organisms on an acute basis (LC50/EC50 between 10 and 100 mg/L in the most sensitive species tested). May increase pH of aquatic systems to > pH 10 which may be toxic to aquatic organisms.

**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
**Toxicity to Micro-organisms**
EC50, DIN 38412; bacteria, 17 h: 206 mg/l

Data for Component: **Tris(dimethylamino)propyl amine**

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: 430 mg/l

Data for Component: **Triethanolamine**

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). May increase pH of aquatic systems to > pH 10 which may be toxic to aquatic organisms.

**Fish Acute & Prolonged Toxicity**
LC50, fathead minnow (Pimephales promelas), flow-through, 96 h: 11,800 mg/l
**Aquatic Invertebrate Acute Toxicity**
EC50, Ceriodaphnia Dubia (water flea), static test, 48 h, immobilization: 609.9 mg/l

**Aquatic Plant Toxicity**
ErC50, alga Scenedesmus sp., static, Growth rate inhibition, 72 h: 512 mg/l
**Toxicity to Micro-organisms**
EC50, OECD 209 Test; activated sludge, 3 h: > 1,000 mg/l
**Aquatic Invertebrates Chronic Toxicity Value**
water flea Daphnia magna, static renewal, 21 d, number of offspring, NOEC: 16 mg/l, LOEC: 31 mg/l

Data for Component: **1-Methyl-1H-imidazole**

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, golden orfe (Leuciscus idus), static, 96 h: 100 - 200 mg/l
**Aquatic Invertebrate Acute Toxicity**
EC50, water flea Daphnia magna, static, 48 h, immobilization: 180 mg/l
**Toxicity to Micro-organisms**
EC50, Not available; activated sludge, 17 h: 1,100 mg/l

## Persistence and Degradability

Data for Component: **1,4-Benzenedicarboxylic Acid, Dimethyl Ester, manuf. of, by-products from, Polymers with Diethylene Glycol**

No relevant data found.

Data for Component: **Phenol, polymer with formaldehyde , propylene oxide and ethylene oxide**

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 | 10 Day Window |
|---|---|---|---|
| 16 % | 28 d | OECD 301B Test | fail |

Data for Component: **1,1,1,3,3 - Pentafluoropropane**

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 | 10 Day Window |
|---|---|---|---|
| 8 % | 28 d | OECD 301D Test | fail |

**Indirect Photodegradation with OH Radicals**

| Rate Constant | Atmospheric Half-life | Method |
|---|---|---|
| 2.97E-14 cm3/s | 360 d | Estimated. |

**Theoretical Oxygen Demand:** 0.60 mg/mg

Data for Component: **Triethyl phosphate**

Material is ultimately biodegradable (reaches > 70% mineralization in OECD test(s) for inherent biodegradability).
**OECD Biodegradation Tests:**

| Biodegradation | Exposure Time | Method | 10 Day Window |
|---|---|---|---|
| > 90 % | 28 d | OECD 302B Test | Not applicable |

**Theoretical Oxygen Demand:** 1.58 mg/mg

Data for Component: **Diethylene glycol**

Material is readily biodegradable. Passes OECD test(s) for ready biodegradability. Material is ultimately biodegradable (reaches > 70% mineralization in OECD test(s) for inherent biodegradability).
**OECD Biodegradation Tests:** Based on analogy.

| Biodegradation | Exposure Time | Method | 10 Day Window |
|---|---|---|---|
| 90 - 100 % | 20 d | OECD 301A Test | pass |
| 82 - 98 % | 28 d | OECD 302C Test | Not applicable |

**Theoretical Oxygen Demand:** 1.51 mg/mg

Data for Component: **2-(2-Hydroxyethoxy)ethyl-2-hydroxypropyl-3,4,5,6-tetrabromo phthalate**

No relevant data found.

**Theoretical Oxygen Demand:** 0.74 mg/mg

Data for Component: **Oxirane, 2-methyl-, polymer with oxirane, ether with 2,6-bis[[bis-(2-hydroxyethyl)amino]methyl]-4-branched nonylphenol**

Most polyols are expected to degrade only slowly in the environment.

Data for Component: **N,N-Dimethylcyclohexylamine**

Material is readily biodegradable. Passes OECD test(s) for ready biodegradability. Material is ultimately biodegradable (reaches > 70% mineralization in OECD test(s) for inherent biodegradability).

**OECD Biodegradation Tests:**

| Biodegradation | Exposure Time | Method | 10 Day Window |
|---|---|---|---|
| 90 - 100 % | 18 d | OECD 301A Test | pass |
| 88 % | 24 d | OECD 302B Test | Not applicable |

**Theoretical Oxygen Demand:** 3.40 mg/mg

Data for Component: **Tris(dimethylamino)propyl amine**

Material is not readily biodegradable according to OECD/EEC guidelines.

**Indirect Photodegradation with OH Radicals**

| Rate Constant | Atmospheric Half-life | Method |
|---|---|---|
| 3.40E-10 cm3/s | 0.031 d | Estimated. |

**Theoretical Oxygen Demand:** 3.41 mg/mg

Data for Component: **Triethanolamine**

Material is readily biodegradable. Passes OECD test(s) for ready biodegradability. Material is ultimately biodegradable (reaches > 70% mineralization in OECD test(s) for inherent biodegradability).

**OECD Biodegradation Tests:**

| Biodegradation | Exposure Time | Method | 10 Day Window |
|---|---|---|---|
| 97 % | 28 d | OECD 301A Test | pass |
| 89 % | 14 d | OECD 302B Test | Not applicable |

**Indirect Photodegradation with OH Radicals**

| Rate Constant | Atmospheric Half-life | Method |
|---|---|---|
| 1.1053E-10 cm3/s | 0.097 d | Estimated. |

**Theoretical Oxygen Demand:** 2.04 mg/mg

Data for Component: **1-Methyl-1H-imidazole**

Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions.

**Indirect Photodegradation with OH Radicals**

| Rate Constant | Atmospheric Half-life | Method |
|---|---|---|
| 3.613E-11 cm3/s | 0.296 d | Estimated. |

**Theoretical Oxygen Demand:** 3.12 mg/mg

## Bioaccumulative potential

Data for Component: **1,4-Benzenedicarboxylic Acid, Dimethyl Ester, manuf. of, by-products from, Polymers with Diethylene Glycol**

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

Data for Component: **Phenol, polymer with formaldehyde , propylene oxide and ethylene oxide**

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

Data for Component: **1,1,1,3,3 - Pentafluoropropane**

**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

**Partition coefficient, n-octanol/water (log Pow):** 1.35 Measured

Data for Component: **Triethyl phosphate**
**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).
**Partition coefficient, n-octanol/water (log Pow):** 0.80 Measured
Data for Component: **Diethylene glycol**
**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).
**Partition coefficient, n-octanol/water (log Pow):** -1.98 Estimated.
**Bioconcentration Factor (BCF):** 100; fish; Measured
Data for Component: **2-(2-Hydroxyethoxy)ethyl-2-hydroxypropyl-3,4,5,6-tetrabromo phthalate**
**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).
**Partition coefficient, n-octanol/water (log Pow):** 3.83 Estimated.
**Bioconcentration Factor (BCF):** 39; fish; Estimated.
Data for Component: **Oxirane, 2-methyl-, polymer with oxirane, ether with 2,6-bis[[bis-(2-hydroxyethyl)amino]methyl]-4-branched nonylphenol**
**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).
**Partition coefficient, n-octanol/water (log Pow):** 0.2 Measured
Data for Component: **N,N-Dimethylcyclohexylamine**
**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).
**Partition coefficient, n-octanol/water (log Pow):** 2.31 Estimated.
Data for Component: **Tris(dimethylamino)propyl amine**
**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).
**Partition coefficient, n-octanol/water (log Pow):** 0.6 Estimated.
Data for Component: **Triethanolamine**
**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).
**Partition coefficient, n-octanol/water (log Pow):** -2.3 Measured
**Bioconcentration Factor (BCF):** < 3.9; common carp (Cyprinus carpio); Measured
Data for Component: **1-Methyl-1H-imidazole**
**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).
**Partition coefficient, n-octanol/water (log Pow):** 0.6 Estimated.

## Mobility in soil

Data for Component: **1,4-Benzenedicarboxylic Acid, Dimethyl Ester, manuf. of, by-products from, Polymers with Diethylene Glycol**
**Mobility in soil:** No data available.
Data for Component: **Phenol, polymer with formaldehyde , propylene oxide and ethylene oxide**
**Mobility in soil:** No relevant data found.
Data for Component: **1,1,1,3,3 - Pentafluoropropane**
**Mobility in soil:** Potential for mobility in soil is medium (Koc between 150 and 500).
**Partition coefficient, soil organic carbon/water (Koc):** 280 Estimated.
**Henry's Law Constant (H):** 6.89E-02 atm*m3/mole; 25 °C Estimated.
Data for Component: **Triethyl phosphate**
**Mobility in soil:** 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.
**Partition coefficient, soil organic carbon/water (Koc):** 48 Estimated.
**Henry's Law Constant (H):** 3.60E-08 atm*m3/mole; 25 °C Measured
Data for Component: **Diethylene glycol**
**Mobility in soil:** 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., Potential for mobility in soil is very high (Koc between 0 and 50).
**Partition coefficient, soil organic carbon/water (Koc):** < 1 Estimated.
**Henry's Law Constant (H):** 7.96E-10 atm*m3/mole; 25 °C Estimated.
**Distribution in Environment: Mackay Level 1 Fugacity Model:**

| Air | Water. | Biota | Soil | Sediment |
|---|---|---|---|---|
| 0.75 % | 99.25 % | 0 % | 0 % | 0 % |

Data for Component: **2-(2-Hydroxyethoxy)ethyl-2-hydroxypropyl-3,4,5,6-tetrabromo phthalate**
**Mobility in soil:** 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.
**Partition coefficient, soil organic carbon/water (Koc):** 10 Estimated.
**Henry's Law Constant (H):** 2.74E-16 atm*m3/mole; 25 °C Estimated.

Data for Component: **Oxirane, 2-methyl-, polymer with oxirane, ether with 2,6-bis[[bis-(2-hydroxyethyl)amino]methyl]-4-branched nonylphenol**

**Mobility in soil:** Expected to be relatively immobile in soil (Koc > 5000).

Data for Component: **N,N-Dimethylcyclohexylamine**

**Mobility in soil:** Potential for mobility in soil is high (Koc between 50 and 150).
**Partition coefficient, soil organic carbon/water (Koc):** 70 Estimated.
**Henry's Law Constant (H):** 2.35E-05 atm*m3/mole; 25 °C Measured

Data for Component: **Tris(dimethylamino)propyl amine**

**Mobility in soil:** Expected to be relatively immobile in soil (Koc > 5000)., 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.
**Partition coefficient, soil organic carbon/water (Koc):** > 5,000 Estimated.
**Henry's Law Constant (H):** 3.01E-14 atm*m3/mole Estimated.

Data for Component: **Triethanolamine**

**Mobility in soil:** Potential for mobility in soil is very high (Koc between 0 and 50).
**Partition coefficient, soil organic carbon/water (Koc):** 10 Estimated.
**Henry's Law Constant (H):** 1.91E-04 atm*m3/mole Measured
**Distribution in Environment: Mackay Level 1 Fugacity Model:**

| Air | Water. | Biota | Soil | Sediment |
|---|---|---|---|---|
| < 1 % | > 99 % | < 1 % | < 1 % | < 1 % |

Data for Component: **1-Methyl-1H-imidazole**

**Mobility in soil:** Potential for mobility in soil is very high (Koc between 0 and 50).
**Partition coefficient, soil organic carbon/water (Koc):** 16 Estimated.
**Henry's Law Constant (H):** 8.01E-05 atm*m3/mole; 25 °C Estimated.

## 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**
**Proper Shipping Name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S
**Technical Name:** oxirane, 2-methyl-, polymer with oxirane, ether with 2,6-bis[[bis-(2-hydroxyethyl)amino]methyl]-4-branched nonylphenol
**Hazard Class:** 9 **ID Number:** UN3082 **Packing Group:** PG III
**Marine pollutant.: Yes**

### ICAO/IATA

**Proper Shipping Name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S
**Technical Name:** oxirane, 2-methyl-, polymer with oxirane, ether with 2,6-bis[[bis-(2-hydroxyethyl)amino]methyl]-4-branched nonylphenol
**Hazard Class:** 9 **ID Number:** UN3082 **Packing Group:** PG III
**Cargo Packing Instruction:** 964
**Passenger Packing Instruction:** 964
**Additional Information**

MARINE POLLUTANT

*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

| | |
|---|---|
| **Immediate (Acute) Health Hazard** | Yes |
| **Delayed (Chronic) Health Hazard** | Yes |
| **Fire Hazard** | No |
| **Reactive Hazard** | No |
| **Sudden Release of Pressure Hazard** | 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:**

The following product components are cited in the Pennsylvania Hazardous Substance List and/or the Pennsylvania Environmental Substance List, and are present at levels which require reporting.

| Component | CAS # | Amount |
|---|---|---|
| Diethylene glycol | 111-46-6 | >= 5.0 - <= 10.0 % |
| Triethanolamine | 102-71-6 | >= 1.0 - <= 5.0 % |

**Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Special Hazardous Substances List:**

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)**

WARNING: This product contains a chemical(s) known to the State of California to cause cancer.

| Component | CAS # | Amount |
|---|---|---|
| 2-Ethyl-1-hexanoic acid | 149-57-5 | <= 0.137 % |

**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.

| Component | CAS # | Amount |
|---|---|---|
| 2-Ethyl-1-hexanoic acid | 149-57-5 | <= 0.137 % |

**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.

## 16. Other Information

### Product Literature
Additional information on this product may be obtained by calling your sales or customer service contact.

### Recommended Uses and Restrictions
Component(s) for the manufacture of urethane polymers. 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.

### Revision
Identification Number: 1041719 / 0000 / Issue Date 07/14/2011 / Version: 3.1
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.*

# *Material Safety Data Sheet*

**JPS Composite Materials Corp. Coated EIFS Glass Fabrics** **MSDS No. 0107**

Date of Preparation: 7/07/98 Revision: 6/10/13

## Section 1 - Chemical Product and Company Identification

**Product/Chemical Name:** Woven Fiberglass Fabric
**Finish Types:** 1093, 1095, 1130, 1143, 1155, 1160, 1165, 1166, 1198, 1343, 1360, 1361, 1367, 1399, 1415, 1424, 1445, 1446, 1460, 1470, 1471, 1483, 1484, 1489, 1499, 1513, 1515, 1516, 1522, 1525, 1526, 1528, 9462, 9723, 9835, 9885, 9983
**Chemical Formula:** **N/A**
**CAS Number:** None
**Other Designations:** Woven Fiberglass Fabric
**General Use:** Industrial
**Manufacturer:** JPS Composite Materials Corp., 101 Slater Road, P.O. Box 242, Slater, SC 29683, Phone 864-836-8011.

## 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

| | OSHA PEL | | ACGIH TLV | | NIOSH REL | | NIOSH |
|---|---|---|---|---|---|---|---|
| **Ingredient** | **TWA** | **STEL** | **TWA** | **STEL** | **TWA** | **STEL** | **IDLH** |
| Continuous Filament Fiberglass | 15 mg/cuM | N/E | 10.0 mg/m$^3$ | 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 ☆☆☆☆☆**

JPS Composite Materials Corp. coated and finished fabrics are stable under normal ambient conditions.

### Potential Health Effects

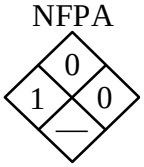
| HMIS | |
|---|---|
| **H** | 1 |
| **F** | 0 |
| **R** | 0 |
| **PPE**† | |
| †Sec. 8 | |

**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 JPS 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)

## 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 for15 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:** NoneSection 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 ($H_2O$=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:** JPS 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 JPS Coated Glass Fabrics can produce oxides of carbon, CO, CO2, 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 conduced 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 7th 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):

**Shipping Name:** Fiberglass Fabric
**Shipping Symbols:** None
**Hazard Class:** None
**ID No.:** None
**Packing Group:** N/A
**Label:** None
**Special Provisions (172.102):** None

**Packaging Authorizations**
**a) Exceptions:** None
**b) Non-bulk Packaging:** None
**c) Bulk Packaging:** None

**Quantity Limitations**
**a) Passenger, Aircraft, or Railcar:** None
**b) Cargo Aircraft Only:** None

**Vessel Stowage Requirements**
**a) Vessel Stowage:** None
**b) Other:** 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

| | | | |
|---|---|---|---|
| **Additional Hazard Rating Systems: NFPA Hazard Rating:** | **Health** | **-** | **1** |
| **.....** | **Flammability** | **-** | **0** |
| **.....** | **Reactivity** | **-** | **0** |
| **.....** | **Unusual Hazards** | **-** | **None** |

**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 JPS Composite Materials Corp. 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. JPS Composite Materials Corp. assumes no legal responsibility for the use or reliance on the data in this MSDS.

# Fire Resistant Mineral Wool Insulation

Version 1.1 Revision Date 03/19/2014 Print Date 08/20/2014

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

| | | |
|---|---|---|
| Trade name | : | TempControl Batts, Sound & Fire Block Batts |
| Chemical nature | : | Mineral Fiber Product |

Manufacturer or supplier's details

| | | |
|---|---|---|
| Company | : | Johns Manville |
| Address | : | P.O. Box 5108<br>Denver, CO USA 80127 |
| Telephone | : | 303-978-2000 8:00AM-5:00PM M-F |
| Emergency telephone number | : | 1-800-424-9300 (Chemtrec, in English) |
| Prepared by | : | productsafety@jm.com |

## SECTION 2. HAZARDS IDENTIFICATION

### GHS Classification

Carcinogenicity : Category 2

### Label elements

Hazard pictograms :

Signal word : Warning

Hazard statements : Suspected of causing 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.
**Response:**
IF exposed or concerned: Get medical advice/ attention.
**Storage:**
Store locked up.
**Disposal:**
Dispose of contents/ container to an approved waste disposal plant.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Mineral Fiber Product

### Hazardous components

| Chemical Name | CAS-No. | Concentration (%) |
|---|---|---|
| Mineral wool fibres | 65997-17-3 | >= 50 - < 70 % |
| non-durable glass wool fiber | | >= 5 - < 10 % |

## SECTION 4. FIRST AID MEASURES

If inhaled : If unconscious place in recovery position and seek medical advice.
If symptoms persist, call a physician.

In case of eye contact : Remove contact lenses.
Protect unharmed eye.
If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.

Protection of first-aiders : Do not leave the victim unattended.

## SECTION 5. FIREFIGHTING MEASURES

Hazardous combustion products : No hazardous combustion products are known

Specific extinguishing methods : Standard procedure for chemical fires.

Special protective equipment for firefighters : Wear self contained breathing apparatus for fire fighting if necessary.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Avoid dust formation.

Methods and materials for containment and cleaning up : Pick up and arrange disposal without creating dust.
Sweep up and shovel.
Keep in suitable, closed containers for disposal.

## SECTION 7. HANDLING AND STORAGE

Advice on safe handling : For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.

Conditions for safe storage : Keep in a dry, cool place.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Components with workplace control parameters**

| Components | CAS-No. | Form of exposure | Permissible concentration | Basis Update |
|---|---|---|---|---|
| Mineral wool fibres | 65997-17-3 | TWA | 1 fibre/cm3 | ACGIH (2010-03-01) |
| non-durable glass wool fiber | 65997-17-3 | TWA | 1 fibre/cm3 | ACGIH (2010-03-01) |

*Any OSHA PELs with Issue Date 1989: Vacated by court of appeals in 1992.

**Personal protective equipment**

Respiratory protection : No personal respiratory protective equipment normally required.

Hand protection
Remarks : For prolonged or repeated contact use protective gloves.

Eye protection : Safety glasses

Skin and body protection : If used and stored as directed, no special protective equipment is necessary.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.
Written instructions for handling must be available at the work place.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : fibres

Colour : brown

Odour : odourless

Odour Threshold : no data available

pH : not applicable

Melting point/freezing point : > 1,150 ℃

Boiling point/boiling range : not applicable

Flash point : not applicable

Evaporation rate : not applicable

Flammability (solid, gas) : no data available

Upper explosion limit : not applicable

Lower explosion limit : not applicable

Vapour pressure : not applicable

| | | |
|---|---|---|
| Relative vapour density | : | not applicable |
| Relative density | : | no data available |
| Solubility(ies) | | |
| Water solubility | : | insoluble |
| Solubility in other solvents | : | no data available |
| Partition coefficient: n-octanol/water | : | no data available |
| Auto-ignition temperature | : | no data available |
| Thermal decomposition | : | no data available |
| Viscosity | | |
| Viscosity, dynamic | : | no data available |
| Viscosity, kinematic | : | no data available |

## SECTION 10. STABILITY AND REACTIVITY

| | | |
|---|---|---|
| Reactivity | : | No decomposition if stored and applied as directed. |
| Chemical stability | : | Formaldehyde may be released by partial hydrolysis of the urea formaldehyde polymer, especially in high temperature applications or |
| Possibility of hazardous reactions | : | Stable under recommended storage conditions. No hazards to be specially mentioned. |
| Conditions to avoid | : | no data available |

## SECTION 11. TOXICOLOGICAL INFORMATION

**Acute toxicity**

**Product**

| | | |
|---|---|---|
| Acute oral toxicity | : | Acute toxicity estimate : > 5,000 mg/kg<br>Method: Calculation method |

**Skin corrosion/irritation**

no data available

**Serious eye damage/eye irritation**

no data available

**Respiratory or skin sensitisation**

no data available

**Germ cell mutagenicity**

no data available

**Carcinogenicity**

| | |
|---|---|
| **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. |
| **OSHA** | No component of this product present at levels greater than or equal to 0.1% is maintained in the OSHA Hazard Communication standard (29 CFR 1910.1200) and sections 1910.1001-1052. |
| **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. |

**Reproductive toxicity**

no data available

**STOT - single exposure**

no data available

**STOT - repeated exposure**

no data available

**Aspiration toxicity**

no data available

**Further information**

**Product**

no data available

## SECTION 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

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**

**Product:**

Additional ecological information : no data available

## SECTION 13. DISPOSAL CONSIDERATIONS

**Disposal methods**

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.
Packaging that can not be reused after cleaning must be disposed or recycled in accordance with all federal, national and local regulations.

## SECTION 14. TRANSPORT INFORMATION

**International transport regulations**

## SECTION 15. REGULATORY INFORMATION

**OSHA Hazards** : Carcinogen

**EPCRA - Emergency Planning and Community Right-to-Know Act**

**CERCLA Reportable Quantity**

| Components | CAS-No. | Component RQ (lbs) | Calculated product RQ (lbs) |
|---|---|---|---|
| formaldehyde | 50-00-0 | 100 | * |

*: Calculated RQ exceeds reasonably attainable upper limit.

**SARA 304 Extremely Hazardous Substances Reportable Quantity**

| Components | CAS-No. | Component RQ (lbs) | Calculated product RQ (lbs) |
|---|---|---|---|
| formaldehyde | 50-00-0 | 100 | * |

*: Calculated RQ exceeds reasonably attainable upper limit.

**SARA 302** : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : 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.

**US State Regulations**

**Massachusetts Right To Know**

| | | |
|---|---|---|
| formaldehyde | 50-00-0 | 0 - 0.1 % |

**Pennsylvania Right To Know**

| | | |
|---|---|---|
| Mineral wool fibres | 65997-17-3 | 50 - 70 % |

| | | |
|---|---|---|
| Urea, polymer with formaldehyde | 9011-05-6 | 10 - 20 % |
| non-durable glass wool fiber | 65997-17-3 | 5 - 10 % |
| formaldehyde | 50-00-0 | 0 - 0.1 % |

**New Jersey Right To Know**

| | | |
|---|---|---|
| Mineral wool fibres | 65997-17-3 | 50 - 70 % |
| Urea, polymer with formaldehyde | 9011-05-6 | 10 - 20 % |
| non-durable glass wool fiber | 65997-17-3 | 5 - 10 % |

**California Prop 65** WARNING! This product contains a chemical known to the State of California to cause cancer.

| | |
|---|---|
| Mineral wool fibres | 65997-17-3 |
| formaldehyde | 50-00-0 |

**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.

## SECTION 16. OTHER INFORMATION

**Further information**

Prepared by productsafety@jm.com

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.

National Gypsum

*Safety Data Sheet*

**SDS No. GB-5001**
**Fast Setting Joint Compounds**

## 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

## 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

**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

**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**

| | Exposure Limits | |
|---|---|---|
| **Component** | **OSHA PEL** (mg/m3) | **ACGIH TLV** (mg/m3) |
| Calcium Sulfate Hemihydrate (Plaster of Paris) | 15 (T)<br>5 (R) | 10 (T) |
| Calcium Carbonate or Dolomite (limestone) | 15 (T)<br>5 (R) | 10 (T) |
| Perlite | 15 (T)<br>5 (R) | 10 (T) |
| Talc (non-asbestiform) | 20 mppcf | 2 |
| Mica | 20 mppcf | 3 |
| Attapulgite Clay | 15 (T)<br>5 (R) | 10 (T) |
| Pyrophyllite | 15 (T)<br>5 (R) | 10 (T) |
| Crystalline Silica[1] | [(10) / (%SiO2+2)] (R);<br>[(30) / (%SiO2+2)] (T) | 0.025(R) |
| 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 ($SO_2$) 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.

| | |
|---|---|
| **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.

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 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**

| | |
|---|---|
| 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
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

## 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<br>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 | Attapulgite 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

**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
**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 (T)<br>5 (R) | 10 (T) |
| Mica | 20 mppcf | 3 |
| Talc (non-asbestiform) | 20 mppcf | 2 |
| Perlite | 15 (T)<br>5 (R) | 10 (T) |
| Attapulgite Clay | 15 (T)<br>5 (R) | 10 (T) |
| Sepiolite Clay | 15 (T)<br>5 (R) | 10 (T) |
| Smectite Clay | 15 (T)<br>5 (R) | 10 (T) |
| Crystalline Silica[1] | [(10) / (%SiO2+2)] (R);<br>[(30) / (%SiO2+2)] (T) | 0.025(R) |
| 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 ($CaCO_3$) decomposes to calcium oxide (CaO) and carbon dioxide.($CO_2$)

## 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.

| | |
|---|---|
| **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 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 |

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PAREXUSA

**Safety Data Sheet**

Revision Date:
09/04/13

## 1 Identification of the substance/preparation and of the company/undertaking

**Product details**

| | |
|---|---|
| Product category: | FAÇADE |
| Trade name: | PAREX 121 BASECOAT & ADHESIVE |
| Application/preparation of the substance: | EIFS Basecoat and Adhesive |
| Manufacturer/Supplier: | PAREXUSA, Inc.<br>4125 E. LA PALMA AVE<br>SUITE 250<br>ANAHEIM, CA 92807 |
| Further information obtainable from: | pedro.paredes@parexusa.com |
| Contact phone number: | 800-226-2424 |
| In case of emergency, contact CHEMTREC: | 800-424-9300 |

## 2 Hazards identification

**Hazard description**

Irritant Xi

HMIS codes:

| | |
|---|---|
| Health | 1 |
| Flammability | 0 |
| Reactivity | 0 |
| Protective equipment | B |

Information concerning particular hazards for human and environment:

May be harmful if ingested.

Dust may be irritating to eyes, respiratory system, and skin.

Not known to cause reproductive harm or birth defects.

Keep out of reach of children.

## 3 Composition/information on ingredients

**Chemical characterization**

Dangerous components:

| CAS # | Name | Exposure Limit | |
|---|---|---|---|
| 1317-65-3 | Calcium Carbonate | OSHA TW (Reparable dust) | 5 mg/m$^3$ |
| | | OSHA TWA (total) | 15 mg/m$^3$ |
| 51200-87-4 | 4,4 Dimethyloxazolidine | none established | |

Additional information: n/a

## 4 First aid measures

| | |
|---|---|
| General information: | n/a |
| After inhalation: | Remove to fresh air. If not breathing, give artificial respiration. If having difficulty breathing, give oxygen. Get immediate medical attention. |
| After skin contact: | Wash affected area thoroughly with soap and water. Remove contaminated clothes and launder before re-use. |
| After eye contact: | Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention. |
| After swallowing: | Do not induce vomiting. Get medical attention immediately. |

## 5 Fire-fighting measures

| | |
|---|---|
| General information: | Water- based product. |
| Flash point: | n/a |
| Suitable extinguishing agents: | For the dried product, use carbon dioxide, dry chemical, or alcohol foam. |
| Hazardous combustion products: | Incomplete combustion of dried product can yield low molecular weight hydrocarbons, carbon monoxide, and carbon dioxide. |
| Protective equipment: | n/a |
| Firefighting instructions: | Respiratory equipment should be worn to avoid inhalation of combustion products. Water should not be used except as fog to keep nearby containers cool. Water may be used to cool closed containers to prevent pressure build-up and exposed to extreme heat. |

## 6 Accidental release measures

| | |
|---|---|
| Measures for environmental protection: | Keep spilled products out of sewers, streams, and water systems. |
| Measures for cleaning/collecting: | For dry material, collect by sweeping and scooping. Transfer collected material to a container, being careful to minimize creation of dust. For wet material, scoop material up and transfer to an open container. Allow material to dry before disposal. |
| Additional information: | See section 13 and section 15 for specific regulatory information concerning this product. |

## 7 Handling and storage

Handling:

Wear appropriate protective equipment when working with this product. Promptly remove dusty clothing, or clothing wet with product mix, and launder before re-using. Wash thoroughly after exposure to product mixtures. Keep out of reach of children.

Storage:

Store in a dry location. Atmospheric temperatures and pressures do not affect the shelf life of this product.

## 8 Exposure controls/personal protection

Additional information about design of technical facilities: n/a

| Ingredients with limit values that require monitoring at the workplace: | | | |
|---|---|---|---|
| CAS # | Name | Exposure Limit | |
| 1317-65-3 | Calcium carbonate | OSHA TW (Reparable dust) | 5 mg/m$^3$ |
| | | OSHA TWA (total) | 15 mg/m$^3$ |
| 51200-87-4 | 4,4 Dimethyloxazolidine | none established | |

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 a NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find how low to protect yourself and your family by contacting the National Lead Hotline at 1800-424-LEAD or log onto www.epa.gov/lead

Additional information: The lists valid during the making were used as a basis.

Personal protective equipment:

ventilation: Use local exhaust. General exhaust acceptable if the exposure to materials above is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, and 1910.108.

respiratory protection: If personal exposure cannot or may not be controlled below applicable limits by ventilation, wear properly fitted respirator approved by NIOSH/MSHA for protection against materials described above.

eye protection: Wear safety glasses to reduce the potential for eye contact.

skin protection: Prevent prolonged or repeated contact by using rubber gloves and appropriate protective clothing.

## 9 Physical and chemical properties

| General information: | |
|---|---|
| form | Fluid |
| color | off white |
| odor | Mild ammonia |
| pH | 8.0-10.0 |
| Change in condition: | |
| melting point/melting point range | 32'F |
| boiling point/boiling point range | 190-212'F |
| evaporation rate: | Slower than ether |
| vapor density: | Heavier than air |
| Specific gravity: | 1.71 |
| Solubility in/Miscibility with water: | dispersible |
| Density at 20°C: | 14.21lb/gal |
| VOC: | 2 g/L (0.0168lb/gal) |

## 10 Stability and reactivity

Conditions to be avoided: None known

Chemical stability: Stable

Materials to be avoided: None known

Hazardous polymerization: Will not occur

Dangerous decomposition products:

Will not spontaneously occur. By Fire- low molecular weight hydrocarbons, carbon dioxide and monoxide.

## 11 Toxicological information

Acute toxicity:

| | |
|---|---|
| crystalline silica (quartz, cristobalite) | Considered a known human carcinogen by Federal (OSHA) and advising health agencies (IARC, NIOSH, and NTP). Additionally, crystalline silica can cause a lung condition known as silicosis after long term exposure to dusts containing crystalline silica. Exposure of workers to crystalline silica containing dusts is specifically regulated by OSHA. The use of a correctly fitted, NIOSH approved respirator suitable for use against crystalline silica inhalation is essential for minimizing exposure to this danger. |
| mineral dusts | Some items mentioned in Section 8 are considered mineral dusts by OSHA and a correctly fitted, NIOSH approved respirator is required when working with this product. |

Primary irritant effect:

| | |
|---|---|
| on the skin | Exposure of skin to wet product mix may cause chemical burns. Symptoms of exposure may take several hours to manifest. |
| on the eye | Exposure of eyes to wet product mix may cause chemical burns and blindness. Exposure to airborne dust can cause immediate or delayed irritation or inflammation. |
| through ingestion | May be harmful if ingested. |
| through inhalation | Dust generated during handling this product may cause irritation to the respiratory tract. |
| Additional toxicological information: | n/a |

## 12 Ecological information

| | |
|---|---|
| Elimination (persistence and degradability): | n/a |
| Behavior in environmental systems: | n/a |
| Mobility and bioaccumulation potential: | n/a |
| General notes: | n/a |

## 13 Disposal considerations

| | |
|---|---|
| Product recommendation: | This product must be disposed of in accordance with applicable local, state and federal regulations. Where possible, it is best to use up any excess material. |
| Uncleaned packaging recommendation: | Disposal must be made according to official regulations. |

## 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

**US Federal regulations**

CERCLA, section 103 (40CRF302.4)

This product contains the following toxic chemicals that require notification of the National Response Center of releases of quantities of hazardous substances equal to or greater than the Reportable Quantities (RQ):

No reportable quantities are present.

Clean Air Act, section 112

This product contains the following components present at or above the minimum level and listed as Hazardous or Extremely Hazardous Air Pollutants:

No reportable quantities are present.

SARA, section 302 (40CFR355.30) and section 304 (40CFR355.40)

This product contains the following items that require emergency planning based on Threshold Planning Quantities (TPQ) or release reporting based on RQ:

No reportable quantities are present.

SARA, section 311/312 (40CFR370.21) Hazard classification for this product

| | | |
|---|---|---|
| Fire: No | Pressure generating: No | Reactivity: No |
| Acute health: No | Chronic health: No | |

SARA, section 313 (40CFR372.65)

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986:

No reportable quantities are present.

EPA VOC regulations

Theoretical VOC for this product = 2 g/L (0.0168lb/gal)

TSCA

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

OSHA

This Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR1910.1200). Unlisted ingredients are not 'hazardous' per OSHA standards.

In addition to items listed in Section 11, this product contains the following items that are specifically regulated by OSHA. Exposure limits may be found in Section 8.

4,4 Dimethyloxazolidine CAS # 51200-87-4

**State regulations**

California Prop65

Warning - The following chemicals are present in this coating product in small amounts. These chemicals are listed by the California EPA as materials known to the State of California to cause cancer, (and/or) birth defects, (and/or) other reproductive harm:

Calcium carbonate CAS # 1317-65-3

## 16 Other information

The information and recommendation set forth herein are believed to be accurate. Because some of the information used to prepare this document is derived from information provided to PAREXUSA, Inc. from its suppliers, and because PAREXUSA, Inc. has no control over the conditions of handling and use, PAREXUSA, Inc. makes no warranty, expressed or implied, regarding the accuracy of the data or the results to be obtained from the use thereof and assumes no responsibility from use or reliance thereon. It is the responsibility of the user of PAREXUSA, Inc. products to comply with all applicable federal, state, and local laws and regulations.

PAREXUSA

**Safety Data Sheet**

Revision Date: 09/04/13

## 1 Identification of the substance/preparation and of the company/undertaking

**Product details**

| | |
|---|---|
| Product category: | FAÇADE |
| Trade name: | PAREX 202 STUCCO GREY COUCHE |
| Application/preparation of the substance: | Stucco Basecoat |
| Manufacturer/Supplier: | PAREXUSA, Inc.<br>4125 E. LA PALMA AVE<br>SUITE 250<br>ANAHEIM, CA 92807 |
| Further information obtainable from: | pedro.paredes@parexusa.com |
| Contact phone number: | 800-226-2424 |
| In case of emergency, contact CHEMTREC: | 800-424-9300 |

## 2 Hazards identification

**Hazard description**

Irritant Xi

HMIS codes:

| | |
|---|---|
| Health | 1* |
| Flammability | 0 |
| Reactivity | 0 |
| Protective equipment | E |

Information concerning particular hazards for human and environment:

May be harmful if ingested.

Dust may be irritating to eyes, respiratory system, and skin.

Not known to cause reproductive harm or birth defects.

Keep out of reach of children.

*Chronic Hazard

## 3 Composition/information on ingredients

**Chemical characterization**

Dangerous components:

| CAS # | Name | Exposure Limit | |
|---|---|---|---|
| 140808-60-7 | Crystalline silica | OSHA TWA (total) | 10 mg/m$^3$ |
| | | ACGIG TWA (total) | 0.05 mg/m$^3$ |
| 1317-65-3 | Calcium carbonate | OSHA PEL (Total) | 15 mg/m$^3$ |
| | | OSHA PEL (Respirable) | 5 mg/m$^3$ |
| 65997-15-1 | Portland cement | OSHA PEL (Respirable) | 5 mg/m$^3$ |
| | | OSHA PEL (total) | 15 mg/m$^3$ |
| | | ACGIH TLV (total) | 10 mg/m$^3$ |
| 13058-62-0 | Calcium hydroxide | OSHA PEL (Respirable) | 5 mg/m$^3$ |
| | | ACGIH TLV (Respirable) | 5 mg/m$^3$ |

Additional information: n/a

## 4 First aid measures

| | |
|---|---|
| General information: | n/a |
| After inhalation: | Remove to fresh air. If not breathing, give artificial respiration. If having difficulty breathing, give oxygen. Get immediate medical attention. |
| After skin contact: | Wash affected area thoroughly with soap and water. Remove contaminated clothes and launder before re-use. |
| After eye contact: | Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention. |
| After swallowing: | Do not induce vomiting. Get medical attention immediately. |

## 5 Fire-fighting measures

| | |
|---|---|
| General information: | This product does not support combustion and is non-flammable. |
| Flash point: | n/a |
| Suitable extinguishing agents: | For the dried product, use carbon dioxide, dry chemical, or alcohol foam. |
| Hazardous combustion products: | n/a |
| Protective equipment: | n/a |
| Firefighting instructions: | n/a |

## 6 Accidental release measures

| | |
|---|---|
| Measures for environmental protection: | Keep spilled products out of sewers, streams, and water systems. |
| Measures for cleaning/collecting: | For dry material, collect by sweeping and scooping. Transfer collected material to a container, being careful to minimize creation of dust. For wet material, scoop material up and transfer to an open container. Allow material to dry before disposal. |
| Additional information: | See section 13 and section 15 for specific regulatory information concerning this product. |

## 7 Handling and storage

Handling:

Wear appropriate protective equipment when working with this product. Promptly remove dusty clothing, or clothing wet with product mix, and launder before re-using. Wash thoroughly after exposure to product mixtures. Keep out of reach of children.

Storage:

Store in a dry location. Atmospheric temperatures and pressures do not affect the shelf life of this product. However, moisture contamination will render the product useless. Keep product dry until use.

## 8 Exposure controls/personal protection

Additional information about design of technical facilities:

n/a

Additional information: The lists valid during the making were used as a basis.

Personal protective equipment:

ventilation: Use local exhaust. General exhaust acceptable if the exposure to materials above is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, and 1910.108.

respiratory protection: If personal exposure cannot or may not be controlled below applicable limits by ventilation, wear properly fitted respirator approved by NIOSH/MSHA for protection against materials described above.

eye protection: Wear safety glasses to reduce the potential for eye contact.

skin protection: Prevent prolonged or repeated contact by using rubber gloves and appropriate protective clothing.

## 9 Physical and chemical properties

| | |
|---|---|
| General information: | |
| form | powdered solid |
| color | gray |
| odor | no distinct odor |
| pH | 12-13 in water |
| Change in condition: | |
| melting point/melting point range | n/a |
| boiling point/boiling point range | n/a |
| evaporation rate: | n/a |
| vapor density: | n/a |
| Specific gravity: | 2.7 |
| Solubility in/Miscibility with water: | dispersible |
| Density at 20°C: | 22 .48 lb/gal |
| VOC: | 0.0 g/L (0.0 lb/gal) |

## 10 Stability and reactivity

Conditions to be avoided: None known

Chemical stability: Stable

Materials to be avoided: None known

Hazardous polymerization: Will not occur

Dangerous decomposition products:

Will not spontaneously occur. Addition of water will produce caustic calcium hydroxide, which can cause chemical burns.

## 11 Toxicological information

Acute toxicity:

| | |
|---|---|
| crystalline silica (quartz, cristobalite) | Considered a known human carcinogen by Federal (OSHA) and advising health agencies (IARC, NIOSH, and NTP). Additionally, crystalline silica can cause a lung condition known as silicosis after long term exposure to dusts containing crystalline silica. Exposure of workers to crystalline silica containing dusts is specifically regulated by OSHA. The use of a correctly fitted, NIOSH approved respirator suitable for use against crystalline silica inhalation is essential for minimizing exposure to this danger. |
| mineral dusts | Some items mentioned in Section 8 are considered mineral dusts by OSHA and a correctly fitted, NIOSH approved respirator is required when working with this product. |
| Portland cement and calcium hydroxide | A single, short term exposure to the dry form of these two items, which are present in this cement concentrate mix, are not likely to cause serious harm. However, exposure of sufficient duration to wet cement can cause serious, potentially irreversible tissue destruction of the skin or eye from caustic chemical burns, including third degree burns. The same type of tissue destruction can occur if wet or moist areas of the body are exposed for sufficient duration to dry cement concentrate. Wet cement is caustic and personal protective equipment, and proper work hygiene, must be employed for protection against personal injury. |

Primary irritant effect:

| | |
|---|---|
| on the skin | Exposure of skin to wet product may cause chemical burns. Symptoms of exposure may take several hours to manifest. |
| on the eye | Exposure of eyes to wet product may cause chemical burns and blindness. Exposure to airborne dust can cause immediate or delayed irritation or inflammation. |
| through ingestion | May be harmful if ingested. |
| through inhalation | Dust generated during handling this product may cause irritation to the respiratory tract. |
| Additional toxicological information: | n/a |

## 12 Ecological information

| | |
|---|---|
| Elimination (persistence and degradability): | n/a |
| Behavior in environmental systems: | n/a |
| Mobility and bioaccumulation potential: | n/a |
| General notes: | n/a |

## 13 Disposal considerations

| | |
|---|---|
| Product recommendation: | This product must be disposed of in accordance with applicable local, state and federal regulations. Where possible, it is best to use up any excess material. |
| Uncleaned packaging recommendation: | Disposal must be made according to official regulations. |

## 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

**US Federal regulations**

CERCLA, section 103 (40CRF302.4)

This product contains the following toxic chemicals that require notification of the National Response Center of releases of quantities of hazardous substances equal to or greater than the Reportable Quantities (RQ):

No reportable quantities are present.

Clean Air Act, section 112

This product contains the following components present at or above the minimum level and listed as Hazardous or Extremely Hazardous Air Pollutants:

No reportable quantities are present.

SARA, section 302 (40CFR355.30) and section 304 (40CFR355.40)

This product contains the following items that require emergency planning based on Threshold Planning Quantities (TPQ) or release reporting based on RQ:

No reportable quantities are present.

SARA, section 311/312 (40CFR370.21) Hazard classification for this product

| | | |
|---|---|---|
| Fire: No | Pressure generating: No | Reactivity: No |
| Acute health: Yes | Chronic health: Yes | |

SARA, section 313 (40CFR372.65)

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986:

No reportable quantities are present.

EPA VOC regulations

Theoretical VOC for this product = 0.0 g/L (0.0 g/gal)

TSCA

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

OSHA

This Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR1910.1200). Unlisted ingredients are not 'hazardous' per OSHA standards.

In addition to items listed in Section 11, this product contains the following items that are specifically regulated by OSHA. Exposure limits may be found in Section 8.

| | | |
|---|---|---|
| Portland cement | CAS # | 65997-15-1 |

**State regulations**

California Prop65

Warning - The following chemicals are present in this coating product in small amounts. These chemicals are listed by the California EPA as materials known to the State of California to cause cancer, (and/or) birth defects, (and/or) other reproductive harm:

| | | |
|---|---|---|
| Portland cement | CAS # | 65997-15-1 |
| Calcium carbonate | CAS # | 1317-65-3 |
| Crystalline silica | CAS # | 14808-60-7 |
| Calcium hydroxide | CAS # | 1305-62-0 |

## 16 Other information

The information and recommendation set forth herein are believed to be accurate. Because some of the information used to prepare this document is derived from information provided to PAREXUSA, Inc. from its suppliers, and because PAREXUSA, Inc. has no control over the conditions of handling and use, PAREXUSA, Inc. makes no warranty, expressed or implied, regarding the accuracy of the data or the results to be obtained from the use thereof and assumes no responsibility from use or reliance thereon. It is the responsibility of the user of PAREXUSA, Inc. products to comply with all applicable federal, state, and local laws and regulations.

PAREXUSA

**Safety Data Sheet**

Revision Date:
06/19/13

## 1 Identification of the substance/preparation and of the company/undertaking

**Product details**

| | |
|---|---|
| Product category: | FACADE |
| Trade name: | PAREX 302 BASECOAT & ADHESIVE |
| Application/preparation of the substance: | EIFS Basecoat and Adhesive |
| Manufacturer/Supplier: | PAREXUSA, Inc.<br>4125 E. LA PALMA AVE<br>SUITE 250<br>ANAHEIM, CA 92807 |
| Further information obtainable from: | pedro.paredes@parexusa.com |
| Contact phone number: | 800-226-2424 |
| In case of emergency, contact CHEMTREC: | 800-424-9300 |

## 2 Hazards identification

**Hazard description**

Irritant Xi

HMIS codes:

| | |
|---|---|
| Health | 1* |
| Flammability | 0 |
| Reactivity | 0 |
| Protective equipment | E |

Information concerning particular hazards for human and environment:

May be harmful if ingested.

Dust may be irritating to eyes, respiratory system, and skin.

Not known to cause reproductive harm or birth defects.

Keep out of reach of children.

*Chronic Hazard

## 3 Composition/information on ingredients

**Chemical characterization**

Dangerous components:

| CAS # | Name | Exposure Limit | |
|---|---|---|---|
| 1317-65-3 | Calcium Carbonate | OSHA TWA | 15 mg/m$^3$(Total) |
| | | OSHA TWA | 5 mg/m$^3$(Resp) |
| 14807-96-6 | Talc | ACGIH TWA | 3mg/mg$^3$(Resp) |
| | | OSHA PEL | 3mg/mg$^3$(Resp) |
| 51200-87-4 | 4,4 Dimethyloxazolidine | none established | |
| 51200-87-4 | Titanium Dioxide | ACGIH TLV | 10mg/m$^3$(Total) |
| | | OSHA PEL | 15mg/m$^3$(Total) |
| | Nuisance Dust | ACGIH TLV | 3mg/mg$^3$(Resp) |
| | | ACGIH TLV | 5mg/mg$^3$(Resp) |

Additional information: n/a

## 4 First aid measures

| | |
|---|---|
| General information: | n/a |
| After inhalation: | Remove to fresh air. If not breathing, give artificial respiration. If having difficulty breathing, give oxygen. Get immediate medical attention. |
| After skin contact: | Wash affected area thoroughly with soap and water. Remove contaminated clothes and launder before re-use. |
| After eye contact: | Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention. |
| After swallowing: | Do not induce vomiting. Get medical attention immediately. |

## 5 Fire-fighting measures

| | |
|---|---|
| General information: | This product does not support combustion and is non- flammable |
| Flash point: | n/a |
| Suitable extinguishing agents: | For the dried product, use carbon dioxide, dry chemical, or alcohol foam. |
| Hazardous combustion products: | n/a |
| Protective equipment: | n/a |
| Firefighting instructions: | n/a |

## 6 Accidental release measures

| | |
|---|---|
| Measures for environmental protection: | Keep spilled products out of sewers, streams, and water systems. |
| Measures for cleaning/collecting: | For dry material, collect by sweeping and scooping. Transfer collected material to a container, being careful to minimize creation of dust. For wet material, scoop material up and transfer to an open container. Allow material to dry before disposal. |
| Additional information: | See section 13 and section 15 for specific regulatory information concerning this product. |

## 7 Handling and storage

Handling:

Wear appropriate protective equipment when working with this product. Promptly remove dusty clothing, or clothing wet with product mix, and launder before re-using. Wash thoroughly after exposure to product mixtures. Keep out of reach of children.

Storage:

Store in a dry location. Atmospheric temperatures and pressures do not affect the shelf life of this product.

## 8 Exposure controls/personal protection

Additional information about design of technical facilities: n/a

Personal protective equipment:

| | |
|---|---|
| ventilation | Use local exhaust. General exhaust acceptable if the exposure to materials above is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, and 1910.108. |
| respiratory protection | If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH for protection against materials described above. |
| eye protection | Wear safety glasses to reduce the potential for eye contact. |
| skin protection | Prevent prolonged or repeated contact by using rubber gloves and appropriate protective clothing. |

## 9 Physical and chemical properties

| | |
|---|---|
| General information: | |
| form | Powdered solid |
| color | off white |
| odor | Mild Ammonia |
| pH | 12-13 in water |
| Change in condition: | |
| melting point/melting point range | n/a |
| boiling point/boiling point range | n/a |
| evaporation rate: | n/a |
| vapor density: | n/a |
| Specific gravity: | 1.89 |
| Solubility in/Miscibility with water: | dispersible |
| Density at 20°C: | 15.76 lb/gal |
| VOC: | 8g/L (0.066lb/gal) |

## 10 Stability and reactivity

| | |
|---|---|
| Conditions to be avoided: | None known |
| Chemical stability: | Stable |
| Materials to be avoided: | None known |
| Hazardous polymerization: | Will not occur |

Dangerous decomposition products:

Will not spontaneously occur. Addition of water will produce caustic calcium hydroxide, which can cause chemical burns.

## 11 Toxicological information

Acute toxicity:

| | |
|---|---|
| crystalline silica (quartz, cristobalite) | Considered a known human carcinogen by Federal (OSHA) and advising health agencies (IARC, NIOSH, and NTP). Additionally, crystalline silica can cause a lung condition known as silicosis after long term exposure to dusts containing crystalline silica. Exposure of workers to crystalline silica containing dusts is specifically regulated by OSHA. The use of a correctly fitted, NIOSH approved respirator suitable for use against crystalline silica inhalation is essential for minimizing exposure to this danger. |
| mineral dusts | Some items mentioned in Section 8 are considered mineral dusts by OSHA and a correctly fitted, NIOSH approved respirator is required when working with this product. |
| titanium dioxide | is considered a suspected carcinogen by advising health agencies. There is one animal study where titanium dioxide exposure caused lung cancer in rats. However, the level of exposure during the test was far in excess of what would be experienced by workers during use of this product. However, care should be exercised and the use of a correctly fitted, NIOSH approved respirator should be used when working with the product. |

Primary irritant effect:

| | |
|---|---|
| on the skin | Exposure of skin to wet product may cause chemical burns. Symptoms of exposure may take several hours to manifest. |
| on the eye | Exposure of eyes to wet product may cause chemical burns and blindness. Exposure to airborne dust can cause immediate or delayed irritation or inflammation. |
| through ingestion | May be harmful if ingested. |
| through inhalation | Dust generated during handling this product may cause irritation to the respiratory tract. |
| Additional toxicological information: | n/a |

## 12 Ecological information

| | |
|---|---|
| Elimination (persistence and degradability): | n/a |
| Behavior in environmental systems: | n/a |
| Mobility and bioaccumulation potential: | n/a |
| General notes: | n/a |

## 13 Disposal considerations

| | |
|---|---|
| Product recommendation: | This product must be disposed of in accordance with applicable local, state and federal regulations. Where possible, it is best to use up any excess material. |
| Uncleaned packaging recommendation: | Disposal must be made according to official regulations. |

## 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

**US Federal regulations**

CERCLA, section 103 (40CRF302.4)

This product contains the following toxic chemicals that require notification of the National Response Center of releases of quantities of hazardous substances equal to or greater than the Reportable Quantities (RQ):

No reportable quantities are present.

Clean Air Act, section 112

This product contains the following components present at or above the minimum level and listed as Hazardous or Extremely Hazardous Air Pollutants:

No reportable quantities are present.

SARA, section 302 (40CFR355.30) and section 304 (40CFR355.40)

This product contains the following items that require emergency planning based on Threshold Planning Quantities (TPQ) or release reporting based on RQ:

No reportable quantities are present.

SARA, section 311/312 (40CFR370.21) Hazard classification for this product

| | | |
|---|---|---|
| Fire: No | Pressure generating: No | Reactivity: No |
| Acute health: Yes | Chronic health: Yes | |

SARA, section 313 (40CFR372.65)

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986:

No reportable quantities are present.

EPA VOC regulations

Theoretical VOC for this product = 8 g/L (0.0665lb/gal)

TSCA

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

OSHA

This Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR1910.1200). Unlisted ingredients are not 'hazardous' per OSHA standards.

In addition to items listed in Section 11, this product contains the following items that are specifically regulated by OSHA. Exposure limits may be found in Section 8.

No reportable quantities are present.

**State regulations**

California Prop65

Warning - The following chemicals are present in this coating product in small amounts. These chemicals are listed by the California EPA as materials known to the State of California to cause cancer, (and/or) birth defects, (and/or) other reproductive harm:

Calcium carbonate CAS # 1317-65-3

## 16 Other information

The information and recommendation set forth herein are believed to be accurate. Because some of the information used to prepare this document is derived from information provided to PAREXUSA, Inc. from its suppliers, and because PAREXUSA, Inc. has no control over the conditions of handling and use, PAREXUSA, Inc. makes no warranty, expressed or implied, regarding the accuracy of the data or the results to be obtained from the use thereof and assumes no responsibility from use or reliance thereon. It is the responsibility of the user of PAREXUSA, Inc. products to comply with all applicable federal, state, and local laws and regulations.

PAREXUSA

**Safety Data Sheet**

Revision Date: 09/04/13

## 1 Identification of the substance/preparation and of the company/undertaking

**Product details**

| | |
|---|---|
| Product category: | FAÇADE |
| Trade name: | PAREX 303 SHEATHING ADHESIVE |
| Application/preparation of the substance: | EIFS Adhesive |
| Manufacturer/Supplier: | PAREXUSA, Inc.<br>4125 E. LA PALMA AVE<br>SUITE 250<br>ANAHEIM, CA 92807 |
| Further information obtainable from: | pedro.paredes@parexusa.com |
| Contact phone number: | 800-226-2424 |
| In case of emergency, contact CHEMTREC: | 800-424-9300 |

## 2 Hazards identification

**Hazard description**

Irritant Xi

HMIS codes:

| | |
|---|---|
| Health | 1 |
| Flammability | 0 |
| Reactivity | 0 |
| Protective equipment | B |

Information concerning particular hazards for human and environment:

May be harmful if ingested.

Dust may be irritating to eyes, respiratory system, and skin.

Not known to cause reproductive harm or birth defects.

Keep out of reach of children.

## 3 Composition/information on ingredients

**Chemical characterization**

Dangerous components:

| CAS # | Name | Exposure Limit | |
|---|---|---|---|
| 1317-65-3 | Calcium Carbonate | OSHA PEL | 15 mg/m$^3$(Total) |
| | | OSHA PEL | 5 mg/m$^3$(Resp) |
| 51200-87-4 | 4,4 Dimethyloxazolidine | none established | |

Additional information: n/a

## 4 First aid measures

| | |
|---|---|
| General information: | n/a |
| After inhalation: | Remove to fresh air. If not breathing, give artificial respiration. If having difficulty breathing, give oxygen. Get immediate medical attention. |
| After skin contact: | Wash affected area thoroughly with soap and water. Remove contaminated clothes and launder before re-use. |
| After eye contact: | Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention. |
| After swallowing: | Do not induce vomiting. Get medical attention immediately. |

## 5 Fire-fighting measures

| | |
|---|---|
| General information: | Water- based product. |
| Flash point: | n/a |
| Suitable extinguishing agents: | For the dried product, use carbon dioxide, dry chemical, or alcohol foam. |
| Hazardous combustion products: | Incomplete combustion of dried product can yield low molecular weight hydrocarbons, carbon monoxide, and carbon dioxide. |
| Protective equipment: | n/a |
| Firefighting instructions: | Respiratory equipment should be worn to avoid inhalation of combustion products. Water should not be used except as fog to keep nearby containers cool. Water may be used to cool closed containers to prevent pressure build-up and exposed to extreme heat. |

## 6 Accidental release measures

| | |
|---|---|
| Measures for environmental protection: | Keep spilled products out of sewers, streams, and water systems. |
| Measures for cleaning/collecting: | For dry material, collect by sweeping and scooping. Transfer collected material to a container, being careful to minimize creation of dust. For wet material, scoop material up and transfer to an open container. Allow material to dry before disposal. |
| Additional information: | See section 13 and section 15 for specific regulatory information concerning this product. |

## 7 Handling and storage

Handling:

Wear appropriate protective equipment when working with this product. Promptly remove dusty clothing, or clothing wet with product , and launder before re-using. Wash thoroughly after exposure to product mixtures. Keep out of reach of children.

Storage:

Store in a dry location. Atmospheric temperatures and pressures do not affect the shelf life of this product.

## 8 Exposure controls/personal protection

Additional information about design of technical facilities: n/a

| Ingredients with limit values that require monitoring at the workplace: | | | |
|---|---|---|---|
| CAS # | Name | Exposure Limit | |
| 1317-65-3 | Calcium Carbonate | OSHA PEL | 15 mg/m$^3$(Resp) |
| | | OSHA PEL | 5 mg/m$^3$(Resp) |
| 51200-87-4 | 4,4 Dimethyloxazolidine | none established | |

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 a NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find how low to protect yourself and your family by contacting the National Lead Hotline at 1800-424-LEAD or log onto www.epa.gov/lead

Additional information: The lists valid during the making were used as a basis.

Personal protective equipment:

ventilation: Use local exhaust. General exhaust acceptable if the exposure to materials above is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, and 1910.108.

respiratory protection: If personal exposure cannot or may not be controlled below applicable limits by ventilation, wear properly fitted respirator approved by NIOSH/MSHA for protection against materials described above.

eye protection: Wear safety glasses to reduce the potential for eye contact.

skin protection: Prevent prolonged or repeated contact by using rubber gloves and appropriate protective clothing.

## 9 Physical and chemical properties

| General information: | |
|---|---|
| form | Fluid |
| color | off white |
| odor | Mild ammonia |
| pH | 8.0-10.0 |
| Change in condition: | |
| melting point/melting point range | 32'F |
| boiling point/boiling point range | 190-212'F |
| evaporation rate: | Slower than ether |
| vapor density: | Heavier than air |
| Specific gravity: | 1.51 |
| Solubility in/Miscibility with water: | dispersible |
| Density at 20°C: | 12.57lb/gal |
| VOC: | 12 g/L (0.1028lb/gal) |

## 10 Stability and reactivity

Conditions to be avoided: None known

Chemical stability: Stable

Materials to be avoided: None known

Hazardous polymerization: Will not occur

Dangerous decomposition products:

Will not spontaneously occur. By Fire- low molecular weight hydrocarbons, carbon dioxide and monoxide.

## 11 Toxicological information

Acute toxicity:

| | |
|---|---|
| crystalline silica (quartz, cristobalite) | Considered a known human carcinogen by Federal (OSHA) and advising health agencies (IARC, NIOSH, and NTP). Additionally, crystalline silica can cause a lung condition known as silicosis after long term exposure to dusts containing crystalline silica. Exposure of workers to crystalline silica containing dusts is specifically regulated by OSHA. The use of a correctly fitted, NIOSH approved respirator suitable for use against crystalline silica inhalation is essential for minimizing exposure to this danger. |
| mineral dusts | Some items mentioned in Section 8 are considered mineral dusts by OSHA and a correctly fitted, NIOSH approved respirator is required when working with this product. |

Primary irritant effect:

| | |
|---|---|
| on the skin | Exposure of skin to wet product may cause chemical burns. Symptoms of exposure may take several hours to manifest. |
| on the eye | Exposure of eyes to wet product may cause chemical burns and blindness. Exposure to airborne dust can cause immediate or delayed irritation or inflammation. |
| through ingestion | May be harmful if ingested. |
| through inhalation | Dust generated during handling this product may cause irritation to the respiratory tract. |
| Additional toxicological information: | n/a |

## 12 Ecological information

| | |
|---|---|
| Elimination (persistence and degradability): | n/a |
| Behavior in environmental systems: | n/a |
| Mobility and bioaccumulation potential: | n/a |
| General notes: | n/a |

## 13 Disposal considerations

| | |
|---|---|
| Product recommendation: | This product must be disposed of in accordance with applicable local, state and federal regulations. Where possible, it is best to use up any excess material. |
| Uncleaned packaging recommendation: | Disposal must be made according to official regulations. |

## 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

**US Federal regulations**

CERCLA, section 103 (40CRF302.4)

This product contains the following toxic chemicals that require notification of the National Response Center of releases of quantities of hazardous substances equal to or greater than the Reportable Quantities (RQ):

No reportable quantities are present.

Clean Air Act, section 112

This product contains the following components present at or above the minimum level and listed as Hazardous or Extremely Hazardous Air Pollutants:

No reportable quantities are present.

SARA, section 302 (40CFR355.30) and section 304 (40CFR355.40)

This product contains the following items that require emergency planning based on Threshold Planning Quantities (TPQ) or release reporting based on RQ:

No reportable quantities are present.

SARA, section 311/312 (40CFR370.21) Hazard classification for this product

| | | |
|---|---|---|
| Fire: No | Pressure generating: No | Reactivity: No |
| Acute health: No | Chronic health: No | |

SARA, section 313 (40CFR372.65)

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986:

4,4 Dimethyloxizolodine CAS# 51200-87-4

EPA VOC regulations

Theoretical VOC for this product = 12 g/L (0.1028lb/gal)

TSCA

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

OSHA

This Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR1910.1200). Unlisted ingredients are not 'hazardous' per OSHA standards.

In addition to items listed in Section 11, this product contains the following items that are specifically regulated by OSHA. Exposure limits may be found in Section 8.

No reportable quantities are present.

**State regulations**

California Prop65

Warning - The following chemicals are present in this coating product in small amounts. These chemicals are listed by the California EPA as materials known to the State of California to cause cancer, (and/or) birth defects, (and/or) other reproductive harm:

Calcium carbonate CAS # 1317-65-3

## 16 Other information

The information and recommendation set forth herein are believed to be accurate. Because some of the information used to prepare this document is derived from information provided to PAREXUSA, Inc. from its suppliers, and because PAREXUSA, Inc. has no control over the conditions of handling and use, PAREXUSA, Inc. makes no warranty, expressed or implied, regarding the accuracy of the data or the results to be obtained from the use thereof and assumes no responsibility from use or reliance thereon. It is the responsibility of the user of PAREXUSA, Inc. products to comply with all applicable federal, state, and local laws and regulations.

PAREXUSA

**Safety Data Sheet**

Revision Date: 09/05/13

## 1 Identification of the substance/preparation and of the company/undertaking

**Product details**

| | |
|---|---|
| Product category: | FAÇADE |
| Trade name: | PAREX USA 365 FLASHING MEMBRANE |
| Application/preparation of the substance: | EIFS Accessories |
| Manufacturer/Supplier: | PAREXUSA, Inc.<br>4125 E. LA PALMA AVE<br>SUITE 250<br>ANAHEIM, CA 92807 |
| Further information obtainable from: | pedro.paredes@parexusa.com |
| Contact phone number: | 800-226-2424 |
| In case of emergency, contact CHEMTREC: | 800-424-9300 |

## 2 Hazards identification

**Hazard description**

Irritant Xi 

HMIS codes:

| | |
|---|---|
| Health | 1* |
| Flammability | 1 |
| Reactivity | 0 |
| Protective equipment | B |

Information concerning particular hazards for human and environment:

May be harmful if ingested.

Dust may be irritating to eyes, respiratory system, and skin.

Not known to cause reproductive harm or birth defects.

Keep out of reach of children.

## 3 Composition/information on ingredients

**Chemical characterization**

Dangerous components:

| CAS # | Name | Exposure Limit | |
|---|---|---|---|
| 8052-42-4 | Asphalt, petroleum, bitumen | OSHA TLV-TWA | 0.5 mg/m3 |
| 1317-65-3 | Calcium carbonate | OSHA PEL-TWA | 5 mg/m3 |
| | | OSHA TLV-TWA | 10 mg/m3 |

## 4 First aid measures

| | |
|---|---|
| General information: | n/a |
| After inhalation: | Remove to fresh air. If not breathing, give artificial respiration. If having difficulty breathing, give oxygen. Get immediate medical attention. |
| After skin contact: | Wash affected area thoroughly with soap and water. Remove contaminated clothes and launder before re-use. |
| After eye contact: | Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention. |
| After swallowing: | Do not induce vomiting. Get medical attention immediately. |

## 5 Fire-fighting measures

| | |
|---|---|
| General information: | |
| Flash point: | >320 F |
| Flammable Limits | LEL: Not Applicable UEL: Not Applicable |
| Autoignition Temperature | Not determined |
| Extinguishing Media | Use foam or dry chemical to extinguish fire. Use fog nozzles if water is used. Water streams may cause violent eruptions and spread the burning of asphalt. Use water to cool fire exposed containers and structures. |
| Unusual Fire or Explosion Hazards | Product will burn if exposed to elevated temperatures or fire. Hot asphalt may ignite flammable mixtures on contact. Toxic vapors including hydrogen sulfide may release upon combustion. Hydrogen sulfide vapors are heavier than air, may accumulate in low areas and flashback ignited. |
| Special Firefighting instructions: | Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing. Do not allow run-off from fire fighting to enter drains or water courses. |
| Explosion Data | None Known |

## 6 Accidental release measures

| | |
|---|---|
| Measures for environmental protection: | Keep spilled products out of sewers, streams, and water systems. |
| Measures for cleaning/collecting: | For dry material, collect by sweeping and scooping. Transfer collected material to a container, being careful to minimize creation of dust. For wet material, scoop material up and transfer to an open container. Allow material to dry before disposal. |
| Additional information: | See section 13 and section 15 for specific regulatory information concerning this product. |

## 7 Handling and storage

Handling:

Wear appropriate protective equipment when working with this product. Promptly remove dusty clothing, or clothing wet with product mix, and launder before re-using. Wash thoroughly after exposure to product mixtures. Keep out of reach of children.

Storage:

Store in a dry location. Atmospheric temperatures and pressures do not affect the shelf life of this product.

## 8 Exposure controls/personal protection

Additional information about design of technical facilities: n/a

| Ingredients with limit values that require monitoring at the workplace: | | | |
|---|---|---|---|
| Dangerous components: | | | |
| CAS # | Name | Exposure Limit | |
| 8052-42-4 | Asphalt, petroleum, bitumen | OSHA TLV-TWA | 0.5 mg/m3 |
| 1317-65-3 | Calcium carbonate | OSHA PEL-TWA | 5 mg/m3 |
| | | OSHA TLV-TWA | 10 mg/m3 |

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 a NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find how low to protect yourself and your family by contacting the National Lead Hotline at 1800-424-LEAD or log onto www.epa.gov/lead

Additional information: The lists valid during the making were used as a basis.

Personal protective equipment:

ventilation: Use local exhaust. General exhaust acceptable if the exposure to materials above is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, and 1910.108.

respiratory protection: If personal exposure cannot or may not be controlled below applicable limits by ventilation, wear properly fitted respirator approved by NIOSH/MSHA for protection against materials described above.

eye protection: Wear safety glasses to reduce the potential for eye contact.

skin protection: Prevent prolonged or repeated contact by using rubber gloves and appropriate protective clothing.

## 9 Physical and chemical properties

| General information: | |
|---|---|
| form | Solid black tape with a white/tan wrapping and no odor |
| color | black |
| odor | odorless |
| pH | n/a |
| Change in condition: | |
| melting point/melting point range | n/a |
| boiling point/boiling point range | n/a |
| evaporation rate: | n/a |
| vapor density: | n/a |
| Specific gravity: | 1.3 |
| Solubility in/Miscibility with water: | n/a |
| Density at 20°C: | 10.56 lb/gal |
| VOC: | 0 g/L (0 lb/gal) |

## 10 Stability and reactivity

| | |
|---|---|
| Conditions to be avoided: | None known |
| Chemical stability: | Stable under normal storage and handling conditions |
| Materials to be avoided: | Strong Oxidizers, avoid water if product is molten |
| Hazardous polymerization: | Will not occur |

Dangerous decomposition products:

Combustion will produce carbon monoxide, sulfur oxides, hydrogen sulfide, acrolein, aldehydes, ketones, and unidentified organic compounds.

## 11 Toxicological information

Acute toxicity: n/a

Primary irritant effect:

| | |
|---|---|
| on the skin | May cause irritation, defatting of the skin and dermatitis. Contact with product at elevated temperatures may cause thermal burns. |
| on the eye | May cause irritation with redness, tearing and blurred vision. Contact with product at elevated temperatures may cause thermal burns. |
| through ingestion | No adverse effects are expected from normal use. Swallowing may cause gastrointestinal irritation, nausea, vomiting and diarrhea. |
| through inhalation | No adverse effects are expected at ambient temperatures. This product is not intended to be heated but if it is vapors released may cause respiratory irritation. At elevated temperatures hydrogen sulfide may be released. The release of hydrogen sulfide gas in various concentrations may cause irritation of the eyes and respiratory tract, headache, dizziness, nausea, and drowsiness. Exposure to high concentrations of hydrogen sulfide can cause respiratory arrest and death |

Additional toxicological information: n/a

## 12 Ecological information

| | |
|---|---|
| Elimination (persistence and degradability): | n/a |
| Behavior in environmental systems: | n/a |
| Mobility and bioaccumulation potential: | n/a |
| General notes: | n/a |

## 13 Disposal considerations

| | |
|---|---|
| Product recommendation: | This product must be disposed of in accordance with applicable local, state and federal regulations. Where possible, it is best to use up any excess material. |
| Uncleaned packaging recommendation: | Disposal must be made according to official regulations. |

## 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

**US Federal regulations**

CERCLA, section 103 (40CRF302.4)

This product contains the following toxic chemicals that require notification of the National Response Center of releases of quantities of hazardous substances equal to or greater than the Reportable Quantities (RQ):

No reportable quantities are present.

Clean Air Act, section 112

This product contains the following components present at or above the minimum level and listed as Hazardous or Extremely Hazardous Air Pollutants:

No reportable quantities are present.

SARA, section 302 (40CFR355.30) and section 304 (40CFR355.40)

This product contains the following items that require emergency planning based on Threshold Planning Quantities (TPQ) or release reporting based on RQ:

No reportable quantities are present.

SARA, section 311/312 (40CFR370.21) Hazard classification for this product

| | | |
|---|---|---|
| Fire: No | Pressure generating: No | Reactivity: No |
| Acute health: No | Chronic health: No | |

SARA, section 313 (40CFR372.65)

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986:

none

EPA VOC regulations

Theoretical VOC for this product = 0 g/L (0 lb/gal)

TSCA

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

OSHA

This Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR1910.1200). Unlisted ingredients are not 'hazardous' per OSHA standards.

In addition to items listed in Section 11, this product contains the following items that are specifically regulated by OSHA. Exposure limits may be found in Section 8.

None

**State regulations**

California Prop65

Warning - The following chemicals are present in this coating product in small amounts. These chemicals are listed by the California EPA as materials known to the State of California to cause cancer, (and/or) birth defects, (and/or) other reproductive harm:

Carbon Black CAS # 1333-86-4

## 16 Other information

The information and recommendation set forth herein are believed to be accurate. Because some of the information used to prepare this document is derived from information provided to PAREXUSA, Inc. from its suppliers, and because PAREXUSA, Inc. has no control over the conditions of handling and use, PAREXUSA, Inc. makes no warranty, expressed or implied, regarding the accuracy of the data or the results to be obtained from the use thereof and assumes no responsibility from use or reliance thereon. It is the responsibility of the user of PAREXUSA, Inc. products to comply with all applicable federal, state, and local laws and regulations.

PAREXUSA

**Safety Data Sheet**

Revision Date: 09/05/13

## 1 Identification of the substance/preparation and of the company/undertaking

**Product details**

| | |
|---|---|
| Product category: | FAÇADE |
| Trade name: | PAREX USA 396 SHEATHING TAPE |
| Application/preparation of the substance: | EIFS Accessories |
| Manufacturer/Supplier: | PAREXUSA, Inc.<br>4125 E. LA PALMA AVE<br>SUITE 250<br>ANAHEIM, CA 92807 |
| Further information obtainable from: | pedro.paredes@parexusa.com |
| Contact phone number: | 800-226-2424 |
| In case of emergency, contact CHEMTREC: | 800-424-9300 |

## 2 Hazards identification

**Hazard description**

Irritant Xi

HMIS codes:

| | |
|---|---|
| Health | 0 |
| Flammability | 1 |
| Reactivity | 0 |
| Protective equipment | B |

Information concerning particular hazards for human and environment:

May be harmful if ingested.

Dust may be irritating to eyes, respiratory system, and skin.

Not known to cause reproductive harm or birth defects.

Keep out of reach of children.

## 3 Composition/information on ingredients

**Chemical characterization**

Dangerous components:

| CAS # | Name | Exposure Limit | |
|---|---|---|---|
| 9003-07-0 | Polypropylene | OSHA Total Dust | 15 mg/m3 |
| | | OSHA Respirable Dust | 5 mg/m3 |
| 1333-86-4 | Carbon Black* | OSHA PEL | 3.5 mg/m3 |

Additional information: * This component is encapsulated in polyolefin resin and does not possess the same hazards as the powdered pure material.

## 4 First aid measures

| | |
|---|---|
| General information: | n/a |
| After inhalation: | Remove to fresh air. If not breathing, give artificial respiration. If having difficulty breathing, give oxygen. Get immediate medical attention. |
| After skin contact: | Wash affected area thoroughly with soap and water. Remove contaminated clothes and launder before re-use. |
| After eye contact: | Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention. |
| After swallowing: | Do not induce vomiting. Get medical attention immediately. |

## 5 Fire-fighting measures

| | |
|---|---|
| General information: | Water- based product. |
| Flash point: | n/a |
| Fire and explosion hazards: | Slight fire hazards |
| Suitable extinguishing agents: | Agents approved for Class A hazards, foam or steam, or water fog |
| Hazardous combustion products: | Incomplete combustion of dried product can yield low molecular weight hydrocarbons, carbon monoxide, and carbon dioxide. |
| Protective equipment: | Firefighters should wear full bunker gear, including a positive pressure self contained breathing apparatus |
| Firefighting instructions: | Respiratory equipment should be worn to avoid inhalation of combustion products. Water should not be used except as fog to keep nearby containers cool. Water may be used to cool closed containers to prevent pressure build-up and exposed to extreme heat. |

## 6 Accidental release measures

| | |
|---|---|
| Measures for environmental protection: | Keep spilled products out of sewers, streams, and water systems. |
| Measures for cleaning/collecting: | For dry material, collect by sweeping and scooping. Transfer collected material to a container, being careful to minimize creation of dust. For wet material, scoop material up and transfer to an open container. Allow material to dry before disposal. |
| Additional information: | See section 13 and section 15 for specific regulatory information concerning this product. |

## 7 Handling and storage

Handling:

Wear appropriate protective equipment when working with this product. Promptly remove dusty clothing, or clothing wet with product mix, and launder before re-using. Wash thoroughly after exposure to product mixtures. Keep out of reach of children.

Storage:

Store in a dry location. Atmospheric temperatures and pressures do not affect the shelf life of this product.

## 8 Exposure controls/personal protection

Additional information about design of technical facilities: n/a

| Ingredients with limit values that require monitoring at the workplace: | | | |
|---|---|---|---|
| CAS # | Name | Exposure Limit | |
| 9003-07-0 | Polypropylene | OSHA Total Dust | 15 mg/m3 |
| | | OSHA Respirable Dust | 5 mg/m3 |
| 1333-86-4 | Carbon Black* | OSHA PEL | 3.5 mg/m3 |

Additional information: * This component is encapsulated in polyolefin resin and does not possess the same hazards as the powdered pure material.

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 a NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find how low to protect yourself and your family by contacting the National Lead Hotline at 1800-424-LEAD or log onto www.epa.gov/lead

Additional information: The lists valid during the making were used as a basis.

Personal protective equipment:

ventilation: Use local exhaust. General exhaust acceptable if the exposure to materials above is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, and 1910.108.

respiratory protection: If personal exposure cannot or may not be controlled below applicable limits by ventilation, wear properly fitted respirator approved by NIOSH/MSHA for protection against materials described above.

eye protection: Wear safety glasses to reduce the potential for eye contact.

skin protection: Prevent prolonged or repeated contact by using rubber gloves and appropriate protective clothing.

## 9 Physical and chemical properties

| General information: | |
|---|---|
| form | woven fabric |
| color | beige, black, white, or combination |
| odor | odorless |
| pH | n/a |
| Change in condition: | |
| melting point/melting point range | 320'F (160'C) |
| boiling point/boiling point range | n/a |
| evaporation rate: | n/a |
| vapor density: | n/a |
| Specific gravity: | 0.9 |
| Solubility in/Miscibility with water: | negligible, below 0.1% |
| Density at 20°C: | 7.497 lb/gal |
| VOC: | 0 g/L (0 lb/gal) |

## 10 Stability and reactivity

| | |
|---|---|
| Conditions to be avoided: | None known |
| Chemical stability: | Stable |
| Materials to be avoided: | None known |
| Hazardous polymerization: | Will not occur |

Dangerous decomposition products:

Will not spontaneously occur. By Fire- low molecular weight hydrocarbons, carbon dioxide and monoxide.

## 11 Toxicological information

Acute toxicity:

| | |
|---|---|
| carbon black | Carbon black(by itself) has been shown to cause lung tumors in rats at high exposure concentrations. These concentrations exceed the capacity of the lung to clear the carbon black particles, thus resulting in significant toxicity. The International Agency for Research on Cancer (IARC) has evaluated carbon black and found it to be possibly carcinogenic to human. |

Primary irritant effect:

| | |
|---|---|
| on the skin | Exposure of skin to product may cause chemical burns. Symptoms of exposure may take several hours to manifest. |
| on the eye | Exposure of eyes to product may cause chemical burns and blindness. Exposure to airborne dust can cause immediate or delayed irritation or inflammation. |
| through ingestion | May be harmful if ingested. |
| through inhalation | Dust generated during handling this product may cause irritation to the respiratory tract. |
| Additional toxicological information: | n/a |

## 12 Ecological information

| | |
|---|---|
| Elimination (persistence and degradability): | n/a |
| Behavior in environmental systems: | n/a |
| Mobility and bioaccumulation potential: | n/a |
| General notes: | n/a |

## 13 Disposal considerations

| | |
|---|---|
| Product recommendation: | This product must be disposed of in accordance with applicable local, state and federal regulations. Where possible, it is best to use up any excess material. |
| Uncleaned packaging recommendation: | Disposal must be made according to official regulations. |

## 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

**US Federal regulations**

CERCLA, section 103 (40CRF302.4)

This product contains the following toxic chemicals that require notification of the National Response Center of releases of quantities of hazardous substances equal to or greater than the Reportable Quantities (RQ):

No reportable quantities are present.

Clean Air Act, section 112

This product contains the following components present at or above the minimum level and listed as Hazardous or Extremely Hazardous Air Pollutants:

No reportable quantities are present.

SARA, section 302 (40CFR355.30) and section 304 (40CFR355.40)

This product contains the following items that require emergency planning based on Threshold Planning Quantities (TPQ) or release reporting based on RQ:

No reportable quantities are present.

SARA, section 311/312 (40CFR370.21) Hazard classification for this product

| | | |
|---|---|---|
| Fire: No | Pressure generating: No | Reactivity: No |
| Acute health: No | Chronic health: No | |

SARA, section 313 (40CFR372.65)

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986:

none

EPA VOC regulations

Theoretical VOC for this product = 0 g/L (0 lb/gal)

TSCA

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

OSHA

This Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR1910.1200). Unlisted ingredients are not 'hazardous' per OSHA standards.

In addition to items listed in Section 11, this product contains the following items that are specifically regulated by OSHA. Exposure limits may be found in Section 8.

| | |
|---|---|
| Polypropylene | CAS # 9003-07-0 |
| Carbon Black | CAS # 1333-86-4 |

**State regulations**

California Prop65

Warning - The following chemicals are present in this coating product in small amounts. These chemicals are listed by the California EPA as materials known to the State of California to cause cancer, (and/or) birth defects, (and/or) other reproductive harm:

| | |
|---|---|
| Carbon Black | CAS # 1333-86-4 |

## 16 Other information

The information and recommendation set forth herein are believed to be accurate. Because some of the information used to prepare this document is derived from information provided to PAREXUSA, Inc. from its suppliers, and because PAREXUSA, Inc. has no control over the conditions of handling and use, PAREXUSA, Inc. makes no warranty, expressed or implied, regarding the accuracy of the data or the results to be obtained from the use thereof and assumes no responsibility from use or reliance thereon. It is the responsibility of the user of PAREXUSA, Inc. products to comply with all applicable federal, state, and local laws and regulations.

PAREXUSA

**Safety Data Sheet**

Revision Date:
09/04/13

## 1 Identification of the substance/preparation and of the company/undertaking

**Product details**

| | |
|---|---|
| Product category: | FAÇADE |
| Trade name: | PAREX DPR FINISHES |
| Application/preparation of the substance: | EIFS Coating |
| Manufacturer/Supplier: | PAREXUSA, Inc.<br>4125 E. LA PALMA AVE<br>SUITE 250<br>ANAHEIM, CA 92807 |
| Further information obtainable from: | pedro.paredes@parexusa.com |
| Contact phone number: | 800-226-2424 |
| In case of emergency, contact CHEMTREC: | 800-424-9300 |

## 2 Hazards identification

**Hazard description**

Irritant Xi

HMIS codes:

| | |
|---|---|
| Health | 1 |
| Flammability | 0 |
| Reactivity | 0 |
| Protective equipment | B |

Information concerning particular hazards for human and environment:

May be harmful if ingested.

Dust may be irritating to eyes, respiratory system, and skin.

Not known to cause reproductive harm or birth defects.

Keep out of reach of children.

## 3 Composition/information on ingredients

**Chemical characterization**

Dangerous components:

| CAS # | Name | Exposure Limit | |
|---|---|---|---|
| 140808-60-7 | Crystalline silica | OSHA PEL (total) | 15mg/$m^3$ |
| | | OSHA PEL (Resp) | 5mg/$m^3$ |
| | | ACGIG TWA(Resp) | 3mg/$m^3$(Resp) |
| | | OSHA PEL(Resp) | 3mg/$m^3$(Resp) |
| 1317-65-3 | Calcium carbonate | OSHA PEL (Total) | 15 mg/$m^3$ |
| | | OSHA PEL (Respirable) | 5 mg/$m^3$ |
| 65997-15-1 | Titanium dioxide | ACGIG TLV | 10 mg/$m^3$ |
| | | OSHA PEL | 15mg/$m^3$ |
| | Nuisance dust | ACGIG TLV 3 mg/$m^3$ | 5 mg/$m^3$ |
| 51200-87-4 | 4,4 Dimethyloxazolidine | none established | |

Additional information: n/a

## 4 First aid measures

| | |
|---|---|
| General information: | n/a |
| After inhalation: | Remove to fresh air. If not breathing, give artificial respiration. If having difficulty breathing, give oxygen. Get immediate medical attention. |
| After skin contact: | Wash affected area thoroughly with soap and water. Remove contaminated clothes and launder before re-use. |
| After eye contact: | Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention. |
| After swallowing: | Do not induce vomiting. Get medical attention immediately. |

## 5 Fire-fighting measures

| | |
|---|---|
| General information: | Water based product |
| Flash point: | n/a |
| Suitable extinguishing agents: | For the dried product, use carbon dioxide, dry chemical, or alcohol foam. |
| Hazardous combustion products: | Incomplete combustion of dried product can yield low molecular weight hydrocarbons, carbon monoxide, and carbon dioxide. |
| Protective equipment: | n/a |
| Firefighting instructions: | Respiratory equipment should be worn to avoid inhalation of combustion products. Water should not be used except as fog to keep nearby containers cool. Water may be used to cool closed containers to prevent pressure build-up and exposed to extreme heat. |

## 6 Accidental release measures

| | |
|---|---|
| Measures for environmental protection: | Keep spilled products out of sewers, streams, and water systems. |
| Measures for cleaning/collecting: | For dry material, collect by sweeping and scooping. Transfer collected material to a container, being careful to minimize creation of dust. For wet material, scoop material up and transfer to an open container. Allow material to dry before disposal. |
| Additional information: | See section 13 and section 15 for specific regulatory information concerning this product. |

## 7 Handling and storage

Handling:

Wear appropriate protective equipment when working with this product. Promptly remove dusty clothing, or clothing wet with product mix, and launder before re-using. Wash thoroughly after exposure to product mixtures. Keep out of reach of children.

Storage:

Store in a dry location. Atmospheric temperatures and pressures do not affect the shelf life of this product.

## 8 Exposure controls/personal protection

Additional information about design of technical facilities:

n/a

| Ingredients with limit values that require monitoring at the workplace: | | | |
|---|---|---|---|
| CAS # | Name | Exposure Limit | |
| 140808-60-7 | Crystalline silica | OSHA PEL (total) | 15mg/$m^3$ |
| | | OSHA PEL (Resp) | 5mg/$m^3$ |
| | | ACGIG TWA(Resp) | 3mg/$m^3$(Resp) |
| | | OSHA PEL(Resp) | 3mg/$m^3$(Resp) |
| 1317-65-3 | Calcium carbonate | OSHA PEL (Total) | 15 mg/$m^3$ |
| | | OSHA PEL (Respirable) | 5 mg/$m^3$ |
| 65997-15-1 | Titanium dioxide | ACGIG TLV | 10 mg/$m^3$ |
| | | OSHA PEL | 15mg/$m^3$ |
| | Nuisance dust | ACGIG TLV 3 mg/$m^3$ | 5 mg/$m^3$ |
| 51200-87-4 | 4,4 Dimethyloxazolidine | none established | |

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 a NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find how low to protect yourself and your family by contacting the National Lead Hotline at 1800-424-LEAD or log onto www.epa.gov/lead

Personal protective equipment:

| | |
|---|---|
| ventilation | Use local exhaust. General exhaust acceptable if the exposure to materials above is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, and 1910.108. |
| respiratory protection | If personal exposure cannot or may not be controlled below applicable limits by ventilation, wear properly fitted respirator approved by NIOSH/MSHA for protection against materials described above. |
| eye protection | Wear safety glasses to reduce the potential for eye contact. |
| skin protection | Prevent prolonged or repeated contact by using rubber gloves and appropriate protective clothing. |

## 9 Physical and chemical properties

| General information: | |
|---|---|
| form | Fluid |
| color | white and/or colored |
| odor | Mild ammonia |
| pH | 8.0-10.0 |
| Change in condition: | |
| melting point/melting point range | 32'F |
| boiling point/boiling point range | 190-212'F |
| evaporation rate: | Slower than ether |
| vapor density: | Heavier than air |
| Specific gravity: | 1.95 |
| Solubility in/Miscibility with water: | dispersible |
| Density at 20°C: | 16.2 lb/gal |
| VOC: | 7 g/L (0.0596 lb/gal) |

## 10 Stability and reactivity

| | |
|---|---|
| Conditions to be avoided: | None known |
| Chemical stability: | Stable |
| Materials to be avoided: | None known |
| Hazardous polymerization: | Will not occur |

Dangerous decomposition products:

Will not spontaneously occur. By Fire- low molecular weight hydrocarbons, carbon dioxide and monoxide.

## 11 Toxicological information

Acute toxicity:

| | |
|---|---|
| crystalline silica (quartz, cristobalite) | Considered a known human carcinogen by Federal (OSHA) and advising health agencies (IARC, NIOSH, and NTP). Additionally, crystalline silica can cause a lung condition known as silicosis after long term exposure to dusts containing crystalline silica. Exposure of workers to crystalline silica containing dusts is specifically regulated by OSHA. The use of a correctly fitted, NIOSH approved respirator suitable for use against crystalline silica inhalation is essential for minimizing exposure to this danger. |
| mineral dusts | Some items mentioned in Section 8 are considered mineral dusts by OSHA and a correctly fitted, NIOSH approved respirator is required when working with this product. |
| titanium dioxide | is considered a suspected carcinogen by advising health agencies. There is one animal study where titanium dioxide exposure caused lung cancer in rats. However, the level of exposure during the test was far in excess of what would be experienced by workers during use of this product. However, care should be exercised and the use of a correctly fitted NIOSH approved respirator should be used when working with this product. |

Primary irritant effect:

| | |
|---|---|
| on the skin | Exposure of skin to wet product may cause chemical burns. Symptoms of exposure may take several hours to manifest. |
| on the eye | Exposure of eyes to wet product may cause chemical burns and blindness. Exposure to airborne dust can cause immediate or delayed irritation or inflammation. |
| through ingestion | May be harmful if ingested. |
| through inhalation | Dust generated during handling this product may cause irritation to the respiratory tract. |
| Additional toxicological information: | n/a |

## 12 Ecological information

| | |
|---|---|
| Elimination (persistence and degradability): | n/a |
| Behavior in environmental systems: | n/a |
| Mobility and bioaccumulation potential: | n/a |
| General notes: | n/a |

## 13 Disposal considerations

| | |
|---|---|
| Product recommendation: | This product must be disposed of in accordance with applicable local, state and federal regulations. Where possible, it is best to use up any excess material. |
| Uncleaned packaging recommendation: | Disposal must be made according to official regulations. |

## 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

**US Federal regulations**

CERCLA, section 103 (40CRF302.4)

This product contains the following toxic chemicals that require notification of the National Response Center of releases of quantities of hazardous substances equal to or greater than the Reportable Quantities (RQ):

No reportable quantities are present.

Clean Air Act, section 112

This product contains the following components present at or above the minimum level and listed as Hazardous or Extremely Hazardous Air Pollutants:

No reportable quantities are present.

SARA, section 302 (40CFR355.30) and section 304 (40CFR355.40)

This product contains the following items that require emergency planning based on Threshold Planning Quantities (TPQ) or release reporting based on RQ:

No reportable quantities are present.

SARA, section 311/312 (40CFR370.21) Hazard classification for this product

| | | |
|---|---|---|
| Fire: No | Pressure generating: No | Reactivity: No |
| Acute health: No | Chronic health: No | |

SARA, section 313 (40CFR372.65)

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986:

4,4 Dimethyloxazolidine CAS # 51200-87-4

EPA VOC regulations

Theoretical VOC for this product = 7 g/L (0.0 596g/gal)

TSCA

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

OSHA

This Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR1910.1200). Unlisted ingredients are not 'hazardous' per OSHA standards.

In addition to items listed in Section 11, this product contains the following items that are specifically regulated by OSHA. Exposure limits may be found in Section 8.

Titanium Dioxide CAS # 013463-67-7

**State regulations**

California Prop65

Warning - The following chemicals are present in this coating product in small amounts. These chemicals are listed by the California EPA as materials known to the State of California to cause cancer, (and/or) birth defects, (and/or) other reproductive harm:

| | | |
|---|---|---|
| Calcium carbonate | CAS # | 1317-65-3 |
| Crystalline silica | CAS # | 14808-60-7 |

## 16 Other information

The information and recommendation set forth herein are believed to be accurate. Because some of the information used to prepare this document is derived from information provided to PAREXUSA, Inc. from its suppliers, and because PAREXUSA, Inc. has no control over the conditions of handling and use, PAREXUSA, Inc. makes no warranty, expressed or implied, regarding the accuracy of the data or the results to be obtained from the use thereof and assumes no responsibility from use or reliance thereon. It is the responsibility of the user of PAREXUSA, Inc. products to comply with all applicable federal, state, and local laws and regulations.

PAREXUSA

**Safety Data Sheet**

Revision Date: 09/05/13

## 1 Identification of the substance/preparation and of the company/undertaking

**Product details**

| | |
|---|---|
| Product category: | FAÇADE |
| Trade name: | PAREX USA MESH (WOVEN FIBERGLASS FABRIC) |
| Application/preparation of the substance: | EIFS Accessories |
| Manufacturer/Supplier: | PAREXUSA, Inc.<br>4125 E. LA PALMA AVE<br>SUITE 250<br>ANAHEIM, CA 92807 |
| Further information obtainable from: | pedro.paredes@parexusa.com |
| Contact phone number: | 800-226-2424 |
| In case of emergency, contact CHEMTREC: | 800-424-9300 |

## 2 Hazards identification

**Hazard description**

Irritant Xi

HMIS codes:

| | |
|---|---|
| Health | 1 |
| Flammability | 0 |
| Reactivity | 0 |
| Protective equipment | B |

Information concerning particular hazards for human and environment:

May be harmful if ingested.

Dust may be irritating to eyes, respiratory system, and skin.

Not known to cause reproductive harm or birth defects.

Keep out of reach of children.

## 3 Composition/information on ingredients

**Chemical characterization**

Dangerous components:

| CAS # | Name | Exposure Limit | |
|---|---|---|---|
| 65997-17-3 | Fiberglass*/Continuous Filament | OSHA Total Dust | 15 mg/m3 |
| | | OSHA Respirable Dust | 5 mg/m3 |
| | | ACGIH TLV | 10 mg/m3 |
| | | NIOSH REL TWA | 3 fiber/cc |
| none | Organic Polymer | none established | |

Additional information: * This component is encapsulated in polyolefin resin and does not possess the same hazards as the powdered pure material.

## 4 First aid measures

| | |
|---|---|
| General information: | n/a |
| After inhalation: | Remove to fresh air. If not breathing, give artificial respiration. If having difficulty breathing, give oxygen. Get immediate medical attention. |
| After skin contact: | Wash affected area thoroughly with soap and water. Remove contaminated clothes and launder before re-use. |
| After eye contact: | Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention. |
| After swallowing: | Do not induce vomiting. Get medical attention immediately. |

## 5 Fire-fighting measures

| | |
|---|---|
| General information: | Water- based product. |
| Flash point: | n/a |
| Fire and explosion hazards: | Not a fire hazards |
| Suitable extinguishing agents: | Water is the best extinguishing media |
| Hazardous combustion products: | Incomplete combustion of dried product can yield low molecular weight hydrocarbons, carbon monoxide, and carbon dioxide. |
| Protective equipment: | Firefighters should wear full bunker gear, including a positive pressure self contained breathing apparatus |
| Firefighting instructions: | Respiratory equipment should be worn to avoid inhalation of combustion products. Water should not be used except as fog to keep nearby containers cool. Water may be used to cool closed containers to prevent pressure build-up and exposed to extreme heat. |

## 6 Accidental release measures

| | |
|---|---|
| Measures for environmental protection: | Keep spilled products out of sewers, streams, and water systems. |
| Measures for cleaning/collecting: | For dry material, collect by sweeping and scooping. Transfer collected material to a container, being careful to minimize creation of dust. For wet material, scoop material up and transfer to an open container. Allow material to dry before disposal. |
| Additional information: | See section 13 and section 15 for specific regulatory information concerning this product. |

## 7 Handling and storage

Handling:

Handle properly to prevent the spread of fiberglass dust or fibers

Storage:

Store in proper containers to prevent the spread of dusts and fibers. Low humidity levels will increase the spread of dusts and fibers.

## 8 Exposure controls/personal protection

Additional information about design of technical facilities: n/a

Additional information: The lists valid during the making were used as a basis.

Personal protective equipment:

ventilation: Use local exhaust. General exhaust acceptable if the exposure to materials above is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, and 1910.108.

respiratory protection: If personal exposure cannot or may not be controlled below applicable limits by ventilation, wear properly fitted respirator approved by NIOSH/MSHA for protection against materials described above.

eye protection: Wear safety glasses to reduce the potential for eye contact.

skin protection: Prevent prolonged or repeated contact by using rubber gloves and appropriate protective clothing.

## 9 Physical and chemical properties

| | |
|---|---|
| General information: | |
| form | woven fiberglass fabric |
| color | white or colored |
| odor | odorless |
| pH | 6-8 (in water) |
| Change in condition: | |
| melting point/melting point range | 800 deg C |
| boiling point/boiling point range | n/a |
| evaporation rate: | n/a |
| vapor density: | n/a |
| Specific gravity: | 0.9 |
| Solubility in/Miscibility with water: | n/a |
| Density at 20°C: | n/a |
| VOC: | 0 g/L (0 lb/gal) |

## 10 Stability and reactivity

Conditions to be avoided: None known

Chemical stability: Stable

Materials to be avoided: None known

Hazardous polymerization: Will not occur

Dangerous decomposition products:

Will not spontaneously occur. By Fire- low molecular weight hydrocarbons, carbon dioxide and monoxide.

## 11 Toxicological information

Acute toxicity:

| | |
|---|---|
| fiber toxicity | Glass fiber diameter determines whether the fiber is Respirable. NIOSH 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 have a fiber diameter larger than 3.5 microns and therefore are non-Respirable. The following organizations have found that the continuous fiberglass filaments are not considered to be carcinogenic based on human and animal tests conduced within the last 10 years. (IARC, ACGIH, OSHA, NTP) |

Primary irritant effect:

| | |
|---|---|
| on the skin | Exposure of skin to product may cause chemical burns. Symptoms of exposure may take several hours to manifest. |
| on the eye | Exposure of eyes to product may cause chemical burns and blindness. Exposure to airborne dust can cause immediate or delayed irritation or inflammation. |
| through ingestion | May be harmful if ingested. |
| through inhalation | Dust generated during handling this product may cause irritation to the respiratory tract. |
| Additional toxicological information: | n/a |

## 12 Ecological information

| | |
|---|---|
| Elimination (persistence and degradability): | n/a |
| Behavior in environmental systems: | n/a |
| Mobility and bioaccumulation potential: | n/a |
| General notes: | n/a |

## 13 Disposal considerations

| | |
|---|---|
| Product recommendation: | This product must be disposed of in accordance with applicable local, state and federal regulations. Where possible, it is best to use up any excess material. |
| Uncleaned packaging recommendation: | Disposal must be made according to official regulations. |

## 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

**US Federal regulations**

CERCLA, section 103 (40CRF302.4)

This product contains the following toxic chemicals that require notification of the National Response Center of releases of quantities of hazardous substances equal to or greater than the Reportable Quantities (RQ):

No reportable quantities are present.

Clean Air Act, section 112

This product contains the following components present at or above the minimum level and listed as Hazardous or Extremely Hazardous Air Pollutants:

No reportable quantities are present.

SARA, section 302 (40CFR355.30) and section 304 (40CFR355.40)

This product contains the following items that require emergency planning based on Threshold Planning Quantities (TPQ) or release reporting based on RQ:

No reportable quantities are present.

SARA, section 311/312 (40CFR370.21) Hazard classification for this product

| | | |
|---|---|---|
| Fire: No | Pressure generating: No | Reactivity: No |
| Acute health: No | Chronic health: No | |

SARA, section 313 (40CFR372.65)

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986:

none

EPA VOC regulations

Theoretical VOC for this product = 0 g/L (0 lb/gal)

TSCA

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

OSHA

This Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR1910.1200). Unlisted ingredients are not 'hazardous' per OSHA standards.

In addition to items listed in Section 11, this product contains the following items that are specifically regulated by OSHA. Exposure limits may be found in Section 8.

none

**State regulations**

California Prop65

Warning - The following chemicals are present in this coating product in small amounts. These chemicals are listed by the California EPA as materials known to the State of California to cause cancer, (and/or) birth defects, (and/or) other reproductive harm:

none

## 16 Other information

The information and recommendation set forth herein are believed to be accurate. Because some of the information used to prepare this document is derived from information provided to PAREXUSA, Inc. from its suppliers, and because PAREXUSA, Inc. has no control over the conditions of handling and use, PAREXUSA, Inc. makes no warranty, expressed or implied, regarding the accuracy of the data or the results to be obtained from the use thereof and assumes no responsibility from use or reliance thereon. It is the responsibility of the user of PAREXUSA, Inc. products to comply with all applicable federal, state, and local laws and regulations.

PAREXUSA

**Safety Data Sheet**

Revision Date: 09/05/13

## 1 Identification of the substance/preparation and of the company/undertaking

**Product details**

| | |
|---|---|
| Product category: | FAÇADE |
| Trade name: | PAREX USA LIQUID COLOR |
| Application/preparation of the substance: | Coating |
| Manufacturer/Supplier: | PAREXUSA, Inc.<br>4125 E. LA PALMA AVE<br>SUITE 250<br>ANAHEIM, CA 92807 |
| Further information obtainable from: | pedro.paredes@parexusa.com |
| Contact phone number: | 800-226-2424 |
| In case of emergency, contact CHEMTREC: | 800-424-9300 |

## 2 Hazards identification

**Hazard description**

Irritant Xi

HMIS codes:

| | |
|---|---|
| Health | 2 |
| Flammability | 0 |
| Reactivity | 0 |
| Protective equipment | B |

Information concerning particular hazards for human and environment:

May be harmful if ingested.

Dust may be irritating to eyes, respiratory system, and skin.

Not known to cause reproductive harm or birth defects.

Keep out of reach of children.

## 3 Composition/information on ingredients

**Chemical characterization**

No reportable quantities are present.

Additional information: n/a

## 4 First aid measures

General information: n/a

After inhalation: Remove to fresh air. If not breathing, give artificial respiration. If having difficulty breathing, give oxygen. Get immediate medical attention.

After skin contact: Wash affected area thoroughly with soap and water. Remove contaminated clothes and launder before re-use.

After eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

After swallowing: Do not induce vomiting. Get medical attention immediately.

## 5 Fire-fighting measures

| | |
|---|---|
| General information: | Water- based product. |
| Flash point: | n/a |
| Suitable extinguishing agents: | For the dried product, use carbon dioxide, dry chemical, or alcohol foam. |
| Hazardous combustion products: | Incomplete combustion of dried product can yield low molecular weight hydrocarbons, carbon monoxide, and carbon dioxide. |
| Protective equipment: | n/a |
| Firefighting instructions: | Respiratory equipment should be worn to avoid inhalation of combustion products. Water should not be used except as fog to keep nearby containers cool. Water may be used to cool closed containers to prevent pressure build-up and exposed to extreme heat. |

## 6 Accidental release measures

| | |
|---|---|
| Measures for environmental protection: | Keep spilled products out of sewers, streams, and water systems. |
| Measures for cleaning/collecting: | For dry material, collect by sweeping and scooping. Transfer collected material to a container, being careful to minimize creation of dust. For wet material, scoop material up and transfer to an open container. Allow material to dry before disposal. |
| Additional information: | See section 13 and section 15 for specific regulatory information concerning this product. |

## 7 Handling and storage

Handling:

Wear appropriate protective equipment when working with this product. Promptly remove dusty clothing, or clothing wet with product mix, and launder before re-using. Wash thoroughly after exposure to product mixtures. Keep out of reach of children.

Storage:

Store in a dry location. Atmospheric temperatures and pressures do not affect the shelf life of this product.

## 8 Exposure controls/personal protection

Additional information about design of technical facilities: n/a

No reportable quantities are present

Additional information: The lists valid during the making were used as a basis.

Personal protective equipment:

ventilation: Use local exhaust. General exhaust acceptable if the exposure to materials above is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, and 1910.108.

respiratory protection: If personal exposure cannot or may not be controlled below applicable limits by ventilation, wear properly fitted respirator approved by NIOSH/MSHA for protection against materials described above.

eye protection: Wear safety glasses to reduce the potential for eye contact.

skin protection: Prevent prolonged or repeated contact by using rubber gloves and appropriate protective clothing.

## 9 Physical and chemical properties

| | |
|---|---|
| General information: | |
| form | Fluid |
| color | colored |
| odor | Mild ammonia |
| pH | 8.0-10.0 |
| Change in condition: | |
| melting point/melting point range | 32'F |
| boiling point/boiling point range | 190-212'F |
| evaporation rate: | Slower than ether |
| vapor density: | Heavier than air |
| Specific gravity: | 1.11 |
| Solubility in/Miscibility with water: | dispersible |
| Density at 20°C: | 9.22lb/gal |
| VOC: | 0 g/L (0.0 lb/gal) |

## 10 Stability and reactivity

Conditions to be avoided: None known

Chemical stability: Stable

Materials to be avoided: None known

Hazardous polymerization: Will not occur

Dangerous decomposition products:

Will not spontaneously occur. By Fire- low molecular weight hydrocarbons, carbon dioxide and monoxide.

## 11 Toxicological information

Acute toxicity:

n/a

Primary irritant effect:

| | |
|---|---|
| on the skin | Exposure of skin to wet product may cause chemical burns. Symptoms of exposure may take several hours to manifest. |
| on the eye | Exposure of eyes to wet product may cause chemical burns and blindness. Exposure to airborne dust can cause immediate or delayed irritation or inflammation. |
| through ingestion | May be harmful if ingested. |
| through inhalation | Dust generated during handling this product may cause irritation to the respiratory tract. |
| Additional toxicological information: | n/a |

## 12 Ecological information

| | |
|---|---|
| Elimination (persistence and degradability): | n/a |
| Behavior in environmental systems: | n/a |
| Mobility and bioaccumulation potential: | n/a |
| General notes: | n/a |

## 13 Disposal considerations

| | |
|---|---|
| Product recommendation: | This product must be disposed of in accordance with applicable local, state and federal regulations. Where possible, it is best to use up any excess material. |
| Uncleaned packaging recommendation: | Disposal must be made according to official regulations. |

## 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

**US Federal regulations**

| |
|---|
| CERCLA, section 103 (40CRF302.4) |
| This product contains the following toxic chemicals that require notification of the National Response Center of releases of quantities of hazardous substances equal to or greater than the Reportable Quantities (RQ): |
| No reportable quantities are present. |
| Clean Air Act, section 112 |
| This product contains the following components present at or above the minimum level and listed as Hazardous or Extremely Hazardous Air Pollutants: |
| No reportable quantities are present. |
| SARA, section 302 (40CFR355.30) and section 304 (40CFR355.40) |
| This product contains the following items that require emergency planning based on Threshold Planning Quantities (TPQ) or release reporting based on RQ: |
| No reportable quantities are present. |
| SARA, section 311/312 (40CFR370.21) Hazard classification for this product |
| Fire: No — Pressure generating: No — Reactivity: No |
| Acute health: No — Chronic health: No |
| SARA, section 313 (40CFR372.65) |
| This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986: |
| No reportable quantities are present. |
| EPA VOC regulations |
| Theoretical VOC for this product = 0g/L (0.0lb/gal) |
| TSCA |
| All components of this product are listed, or are exempt from listing on the TSCA inventory. |
| OSHA |
| This Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR1910.1200). Unlisted ingredients are not 'hazardous' per OSHA standards.<br><br>In addition to items listed in Section 11, this product contains the following items that are specifically regulated by OSHA. Exposure limits may be found in Section 8. |
| No reportable quantities are present. |

**State regulations**

| |
|---|
| California Prop65 |
| Warning - The following chemicals are present in this coating product in small amounts. These chemicals are listed by the California EPA as materials known to the State of California to cause cancer, (and/or) birth defects, (and/or) other reproductive harm: |
| No reportable quantities are present. |

## 16 Other information

The information and recommendation set forth herein are believed to be accurate. Because some of the information used to prepare this document is derived from information provided to PAREXUSA, Inc. from its suppliers, and because PAREXUSA, Inc. has no control over the conditions of handling and use, PAREXUSA, Inc. makes no warranty, expressed or implied, regarding the accuracy of the data or the results to be obtained from the use thereof and assumes no responsibility from use or reliance thereon. It is the responsibility of the user of PAREXUSA, Inc. products to comply with all applicable federal, state, and local laws and regulations.

PAREXUSA

**Safety Data Sheet**

Revision Date:
09/05/13

## 1 Identification of the substance/preparation and of the company/undertaking

**Product details**

| | |
|---|---|
| Product category: | FAÇADE |
| Trade name: | PAREX USA PRIMER |
| Application/preparation of the substance: | Cement Coating |
| Manufacturer/Supplier: | PAREXUSA, Inc. |
| | 4125 E. LA PALMA AVE |
| | SUITE 250 |
| | ANAHEIM, CA 92807 |
| Further information obtainable from: | pedro.paredes@parexusa.com |
| Contact phone number: | 800-226-2424 |
| In case of emergency, contact CHEMTREC: | 800-424-9300 |

## 2 Hazards identification

**Hazard description**

Irritant Xi

HMIS codes:

| | |
|---|---|
| Health | 1 |
| Flammability | 0 |
| Reactivity | 0 |
| Protective equipment | B |

Information concerning particular hazards for human and environment:

May be harmful if ingested.

Dust may be irritating to eyes, respiratory system, and skin.

Not known to cause reproductive harm or birth defects.

Keep out of reach of children.

## 3 Composition/information on ingredients

**Chemical characterization**

Dangerous components:

| CAS # | Name | Exposure Limit | |
|---|---|---|---|
| 1317-65-3 | Calcium Carbonate | OSHA TWA (Respirable dust) | 5 mg/m$^3$ |
| | | OSHA TWA (total) | 15 mg/m$^3$ |
| 013463-67-7 | Titanium Dioxide | ACHIG TLV 10mg/m3(Total) | 15mg/m3 |
| | | OSHA PEL (Total) | 15mg/m3 |
| | Nuisance dust | ACHIG TLV 3mg/m3(Resp) | 5 mg/m3 |
| 51200-87-4 | 4,4 Dimethyloxazolidine | none established | |

Additional information: n/a

## 4 First aid measures

| | |
|---|---|
| General information: | n/a |
| After inhalation: | Remove to fresh air. If not breathing, give artificial respiration. If having difficulty breathing, give oxygen. Get immediate medical attention. |
| After skin contact: | Wash affected area thoroughly with soap and water. Remove contaminated clothes and launder before re-use. |
| After eye contact: | Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention. |
| After swallowing: | Do not induce vomiting. Get medical attention immediately. |

## 5 Fire-fighting measures

| | |
|---|---|
| General information: | Water- based product. |
| Flash point: | n/a |
| Suitable extinguishing agents: | For the dried product, use carbon dioxide, dry chemical, or alcohol foam. |
| Hazardous combustion products: | Incomplete combustion of dried product can yield low molecular weight hydrocarbons, carbon monoxide, and carbon dioxide. |
| Protective equipment: | n/a |
| Firefighting instructions: | Respiratory equipment should be worn to avoid inhalation of combustion products. Water should not be used except as fog to keep nearby containers cool. Water may be used to cool closed containers to prevent pressure build-up and exposed to extreme heat. |

## 6 Accidental release measures

| | |
|---|---|
| Measures for environmental protection: | Keep spilled products out of sewers, streams, and water systems. |
| Measures for cleaning/collecting: | For dry material, collect by sweeping and scooping. Transfer collected material to a container, being careful to minimize creation of dust. For wet material, scoop material up and transfer to an open container. Allow material to dry before disposal. |
| Additional information: | See section 13 and section 15 for specific regulatory information concerning this product. |

## 7 Handling and storage

Handling:

Wear appropriate protective equipment when working with this product. Promptly remove dusty clothing, or clothing wet with product mix, and launder before re-using. Wash thoroughly after exposure to product mixtures. Keep out of reach of children.

Storage:

Store in a dry location. Atmospheric temperatures and pressures do not affect the shelf life of this product.

## 8 Exposure controls/personal protection

Additional information about design of technical facilities: n/a

| Ingredients with limit values that require monitoring at the workplace: | | | |
|---|---|---|---|
| CAS # | Name | Exposure Limit | |
| 1317-65-3 | Calcium carbonate | OSHA TW (Respirable dust) | 5 mg/m$^3$ |
| | | OSHA TWA (total) | 15 mg/m$^3$ |
| 013463-67-7 | Titanium Dioxide | ACHIG TLV 10mg/m3(Total) | 15mg/m3 |
| | | OSHA PEL (Total) | 15mg/m3 |
| | Nuisance dust | ACHIG TLV 3mg/m3(Resp) | 5 mg/m3 |
| 51200-87-4 | 4,4 Dimethyloxazolidine | none established | |

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 a NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find how low to protect yourself and your family by contacting the National Lead Hotline at 1800-424-LEAD or log onto www.epa.gov/lead

Additional information: The lists valid during the making were used as a basis.

Personal protective equipment:

ventilation: Use local exhaust. General exhaust acceptable if the exposure to materials above is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, and 1910.108.

respiratory protection: If personal exposure cannot or may not be controlled below applicable limits by ventilation, wear properly fitted respirator approved by NIOSH/MSHA for protection against materials described above.

eye protection: Wear safety glasses to reduce the potential for eye contact.

skin protection: Prevent prolonged or repeated contact by using rubber gloves and appropriate protective clothing.

## 9 Physical and chemical properties

| General information: | |
|---|---|
| form | Fluid |
| color | white or colored |
| odor | Mild ammonia |
| pH | 8.0-10.0 |
| Change in condition: | |
| melting point/melting point range | 32'F |
| boiling point/boiling point range | 190-212'F |
| evaporation rate: | Slower than ether |
| vapor density: | Heavier than air |
| Specific gravity: | 1.58 |
| Solubility in/Miscibility with water: | dispersible |
| Density at 20°C: | 13.15 lb/gal |
| VOC: | 10 g/L (0.0813lb/gal) |

## 10 Stability and reactivity

Conditions to be avoided: None known

Chemical stability: Stable

Materials to be avoided: None known

Hazardous polymerization: Will not occur

Dangerous decomposition products:

Will not spontaneously occur. By Fire- low molecular weight hydrocarbons, carbon dioxide and monoxide.

## 11 Toxicological information

Acute toxicity:

| | |
|---|---|
| crystalline silica (quartz, cristobalite) | Considered a known human carcinogen by Federal (OSHA) and advising health agencies (IARC, NIOSH, and NTP). Additionally, crystalline silica can cause a lung condition known as silicosis after long term exposure to dusts containing crystalline silica. Exposure of workers to crystalline silica containing dusts is specifically regulated by OSHA. The use of a correctly fitted, NIOSH approved respirator suitable for use against crystalline silica inhalation is essential for minimizing exposure to this danger. |
| mineral dusts | Some items mentioned in Section 8 are considered mineral dusts by OSHA and a correctly fitted, NIOSH approved respirator is required when working with this product. |
| titanium dioxide | is considered a suspected carcinogen by advising health agencies. There is one animal study where titanium dioxide exposure caused lung cancer in rats. However, the level of exposure during the test was far in excess of what would be experienced by workers during use of this product. However, care should be exercised and the use of a correctly fitted NIOSH approved respirator should be used when working with this product. |

Primary irritant effect:

| | |
|---|---|
| on the skin | Exposure of skin to wet product may cause chemical burns. Symptoms of exposure may take several hours to manifest. |
| on the eye | Exposure of eyes to wet product may cause chemical burns and blindness. Exposure to airborne dust can cause immediate or delayed irritation or inflammation. |
| through ingestion | May be harmful if ingested. |
| through inhalation | Dust generated during handling this product may cause irritation to the respiratory tract. |
| Additional toxicological information: | n/a |

## 12 Ecological information

| | |
|---|---|
| Elimination (persistence and degradability): | n/a |
| Behavior in environmental systems: | n/a |
| Mobility and bioaccumulation potential: | n/a |
| General notes: | n/a |

## 13 Disposal considerations

| | |
|---|---|
| Product recommendation: | This product must be disposed of in accordance with applicable local, state and federal regulations. Where possible, it is best to use up any excess material. |
| Uncleaned packaging recommendation: | Disposal must be made according to official regulations. |

## 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

**US Federal regulations**

CERCLA, section 103 (40CRF302.4)

This product contains the following toxic chemicals that require notification of the National Response Center of releases of quantities of hazardous substances equal to or greater than the Reportable Quantities (RQ):

No reportable quantities are present.

Clean Air Act, section 112

This product contains the following components present at or above the minimum level and listed as Hazardous or Extremely Hazardous Air Pollutants:

No reportable quantities are present.

SARA, section 302 (40CFR355.30) and section 304 (40CFR355.40)

This product contains the following items that require emergency planning based on Threshold Planning Quantities (TPQ) or release reporting based on RQ:

No reportable quantities are present.

SARA, section 311/312 (40CFR370.21) Hazard classification for this product

Fire: No Pressure generating: No Reactivity: No

Acute Chronic health: No

SARA, section 313 (40CFR372.65)

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986:

4,4 Dimethyloxazolidine CAS # 51200-87-4

EPA VOC regulations

Theoretical VOC for this product = 10 g/L (0.0183lb/gal)

TSCA

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

OSHA

This Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR1910.1200). Unlisted ingredients are not 'hazardous' per OSHA standards.

In addition to items listed in Section 11, this product contains the following items that are specifically regulated by OSHA. Exposure limits may be found in Section 8.

Titanium CAS # 013463-67-7

**State regulations**

California Prop65

Warning - The following chemicals are present in this coating product in small amounts. These chemicals are listed by the California EPA as materials known to the State of California to cause cancer, (and/or) birth defects, (and/or) other reproductive harm:

Calcium CAS # 1317-65-3

## 16 Other information

The information and recommendation set forth herein are believed to be accurate. Because some of the information used to prepare this document is derived from information provided to PAREXUSA, Inc. from its suppliers, and because PAREXUSA, Inc. has no control over the conditions of handling and use, PAREXUSA, Inc. makes no warranty, expressed or implied, regarding the accuracy of the data or the results to be obtained from the use thereof and assumes no responsibility from use or reliance thereon. It is the responsibility of the user of PAREXUSA, Inc. products to comply with all applicable federal, state, and local laws and regulations.

PAREXUSA

**Safety Data Sheet**

Revision Date:
09/05/13

## 1 Identification of the substance/preparation and of the company/undertaking

**Product details**

| | |
|---|---|
| Product category: | FAÇADE |
| Trade name: | PAREX USA WEATHERDRY |
| Application/preparation of the substance: | Weather Barrier |
| Manufacturer/Supplier: | PAREXUSA, Inc.<br>4125 E. LA PALMA AVE<br>SUITE 250<br>ANAHEIM, CA 92807 |
| Further information obtainable from: | pedro.paredes@parexusa.com |
| Contact phone number: | 800-226-2424 |
| In case of emergency, contact CHEMTREC: | 800-424-9300 |

## 2 Hazards identification

**Hazard description**

Irritant Xi

HMIS codes:

| | |
|---|---|
| Health | 1 |
| Flammability | 0 |
| Reactivity | 0 |
| Protective equipment | B |

Information concerning particular hazards for human and environment:

May be harmful if ingested.

Dust may be irritating to eyes, respiratory system, and skin.

Not known to cause reproductive harm or birth defects.

Keep out of reach of children.

## 3 Composition/information on ingredients

**Chemical characterization**

Dangerous components:

| CAS # | Name | Exposure Limit | |
|---|---|---|---|
| 1317-65-3 | Calcium Carbonate | OSHA TWA (Respirable dust) | 5 mg/m$^3$ |
| | | OSHA TWA (total) | 15 mg/m$^3$ |
| 51200-87-4 | 4,4 Dimethyloxazolidine | none established | |

Additional information: n/a

## 4 First aid measures

| | |
|---|---|
| General information: | n/a |
| After inhalation: | Remove to fresh air. If not breathing, give artificial respiration. If having difficulty breathing, give oxygen. Get immediate medical attention. |
| After skin contact: | Wash affected area thoroughly with soap and water. Remove contaminated clothes and launder before re-use. |
| After eye contact: | Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention. |
| After swallowing: | Do not induce vomiting. Get medical attention immediately. |

## 5 Fire-fighting measures

| | |
|---|---|
| General information: | Water- based product. |
| Flash point: | n/a |
| Suitable extinguishing agents: | For the dried product, use carbon dioxide, dry chemical, or alcohol foam. |
| Hazardous combustion products: | Incomplete combustion of dried product can yield low molecular weight hydrocarbons, carbon monoxide, and carbon dioxide. |
| Protective equipment: | Respiratory equipment should be worn to avoid inhalation of combustion products. |
| Firefighting instructions: | Water should not be used except as fog to keep nearby containers cool. Water may be used to cool closed containers to prevent pressure build-up and exposed to extreme heat. |

## 6 Accidental release measures

| | |
|---|---|
| Measures for environmental protection: | Keep spilled products out of sewers, streams, and water systems. |
| Measures for cleaning/collecting: | For dry material, collect by sweeping and scooping. Transfer collected material to a container, being careful to minimize creation of dust. For wet material, scoop material up and transfer to an open container. Allow material to dry before disposal. |
| Additional information: | See section 13 and section 15 for specific regulatory information concerning this product. |

## 7 Handling and storage

Handling:

Wear appropriate protective equipment when working with this product. Promptly remove dusty clothing, or clothing wet with product mix, and launder before re-using. Wash thoroughly after exposure to product mixtures. Keep out of reach of children.

Storage:

Store in a dry location. Atmospheric temperatures and pressures do not affect the shelf life of this product.

## 8 Exposure controls/personal protection

Additional information about design of technical facilities: n/a

| Ingredients with limit values that require monitoring at the workplace: | | | |
|---|---|---|---|
| CAS # | Name | Exposure Limit | |
| 1317-65-3 | Calcium carbonate | OSHA TW (Respirable dust) | 5 mg/m$^3$ |
| | | OSHA TWA (total) | 15 mg/m$^3$ |
| 51200-87-4 | 4,4 Dimethyloxazolidine | none established | |

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 a NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find how low to protect yourself and your family by contacting the National Lead Hotline at 1800-424-LEAD or log onto www.epa.gov/lead

Additional information: The lists valid during the making were used as a basis.

Personal protective equipment:

ventilation: Use local exhaust. General exhaust acceptable if the exposure to materials above is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, and 1910.108.

respiratory protection: If personal exposure cannot or may not be controlled below applicable limits by ventilation, wear properly fitted respirator approved by NIOSH/MSHA for protection against materials described above.

eye protection: Wear safety glasses to reduce the potential for eye contact.

skin protection: Prevent prolonged or repeated contact by using rubber gloves and appropriate protective clothing.

## 9 Physical and chemical properties

| General information: | |
|---|---|
| form | Fluid |
| color | off white |
| odor | Mild ammonia |
| pH | 8.0-10.0 |
| Change in condition: | |
| melting point/melting point range | 32'F |
| boiling point/boiling point range | 190-212'F |
| evaporation rate: | Slower than ether |
| vapor density: | Heavier than air |
| Specific gravity: | 1.63 |
| Solubility in/Miscibility with water: | dispersible |
| Density at 20°C: | 13.53 lb/gal |
| VOC: | 2g/L (0.016lb/gal) |

## 10 Stability and reactivity

| | |
|---|---|
| Conditions to be avoided: | None known |
| Chemical stability: | Stable |
| Materials to be avoided: | None known |
| Hazardous polymerization: | Will not occur |

Dangerous decomposition products:

Will not spontaneously occur. By Fire- low molecular weight hydrocarbons, carbon dioxide and monoxide.

## 11 Toxicological information

Acute toxicity:

| | |
|---|---|
| crystalline silica (quartz, cristobalite) | Considered a known human carcinogen by Federal (OSHA) and advising health agencies (IARC, NIOSH, and NTP). Additionally, crystalline silica can cause a lung condition known as silicosis after long term exposure to dusts containing crystalline silica. Exposure of workers to crystalline silica containing dusts is specifically regulated by OSHA. The use of a correctly fitted, NIOSH approved respirator suitable for use against crystalline silica inhalation is essential for minimizing exposure to this danger. |
| mineral dusts | Some items mentioned in Section 8 are considered mineral dusts by OSHA and a correctly fitted, NIOSH approved respirator is required when working with this product. |
| titanium dioxide | is considered a suspected carcinogen by advising health agencies. There is one animal study where titanium dioxide exposure caused lung cancer in rats. However, the level of exposure during the test was far in excess of what would be experienced by workers during use of this product. However, care should be exercised and the use of a correctly fitted NIOSH approved respirator should be used when working with this product. |

Primary irritant effect:

| | |
|---|---|
| on the skin | Exposure of skin to wet product may cause chemical burns. Symptoms of exposure may take several hours to manifest. |
| on the eye | Exposure of eyes to wet product may cause chemical burns and blindness. Exposure to airborne dust can cause immediate or delayed irritation or inflammation. |
| through ingestion | May be harmful if ingested. |
| through inhalation | Dust generated during handling this product may cause irritation to the respiratory tract. |
| Additional toxicological information: | n/a |

## 12 Ecological information

| | |
|---|---|
| Elimination (persistence and degradability): | n/a |
| Behavior in environmental systems: | n/a |
| Mobility and bioaccumulation potential: | n/a |
| General notes: | n/a |

## 13 Disposal considerations

| | |
|---|---|
| Product recommendation: | This product must be disposed of in accordance with applicable local, state and federal regulations. Where possible, it is best to use up any excess material. |
| Uncleaned packaging recommendation: | Disposal must be made according to official regulations. |

## 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

**US Federal regulations**

CERCLA, section 103 (40CRF302.4)

This product contains the following toxic chemicals that require notification of the National Response Center of releases of quantities of hazardous substances equal to or greater than the Reportable Quantities (RQ):

No reportable quantities are present.

Clean Air Act, section 112

This product contains the following components present at or above the minimum level and listed as Hazardous or Extremely Hazardous Air Pollutants:

No reportable quantities are present.

SARA, section 302 (40CFR355.30) and section 304 (40CFR355.40)

This product contains the following items that require emergency planning based on Threshold Planning Quantities (TPQ) or release reporting based on RQ:

No reportable quantities are present.

SARA, section 311/312 (40CFR370.21) Hazard classification for this product

| | | |
|---|---|---|
| Fire: No | Pressure generating: No | Reactivity: No |
| Acute health: No | Chronic health: No | |

SARA, section 313 (40CFR372.65)

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986:

4,4 Dimethyloxazolidine CAS # 51200-87-4

EPA VOC regulations

Theoretical VOC for this product = 2g/L (0.016lb/gal)

TSCA

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

OSHA

This Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR1910.1200). Unlisted ingredients are not 'hazardous' per OSHA standards.

In addition to items listed in Section 11, this product contains the following items that are specifically regulated by OSHA. Exposure limits may be found in Section 8.

No reportable quantities are present.

**State regulations**

California Prop65

Warning - The following chemicals are present in this coating product in small amounts. These chemicals are listed by the California EPA as materials known to the State of California to cause cancer, (and/or) birth defects, (and/or) other reproductive harm:

Calcium carbonate CAS # 1317-65-3

## 16 Other information

The information and recommendation set forth herein are believed to be accurate. Because some of the information used to prepare this document is derived from information provided to PAREXUSA, Inc. from its suppliers, and because PAREXUSA, Inc. has no control over the conditions of handling and use, PAREXUSA, Inc. makes no warranty, expressed or implied, regarding the accuracy of the data or the results to be obtained from the use thereof and assumes no responsibility from use or reliance thereon. It is the responsibility of the user of PAREXUSA, Inc. products to comply with all applicable federal, state, and local laws and regulations.

PAREXUSA

**Safety Data Sheet**

Revision Date:
09/05/13

## 1 Identification of the substance/preparation and of the company/undertaking

**Product details**

| | |
|---|---|
| Product category: | FAÇADE |
| Trade name: | PAREX USA WEATHERSEAL SPRAY & ROLL-ON |
| Application/preparation of the substance: | Weather Barrier |
| Manufacturer/Supplier: | PAREXUSA, Inc.<br>4125 E. LA PALMA AVE<br>SUITE 250<br>ANAHEIM, CA 92807 |
| Further information obtainable from: | pedro.paredes@parexusa.com |
| Contact phone number: | 800-226-2424 |
| In case of emergency, contact CHEMTREC: | 800-424-9300 |

## 2 Hazards identification

**Hazard description**

Irritant Xi

HMIS codes:

| | |
|---|---|
| Health | 1 |
| Flammability | 0 |
| Reactivity | 0 |
| Protective equipment | B |

Information concerning particular hazards for human and environment:

May be harmful if ingested.

Dust may be irritating to eyes, respiratory system, and skin.

Not known to cause reproductive harm or birth defects.

Keep out of reach of children.

## 3 Composition/information on ingredients

**Chemical characterization**

Dangerous components:

| CAS # | Name | Exposure Limit | |
|---|---|---|---|
| 1317-65-3 | Calcium Carbonate | OSHA TWA (Respirable dust) | 5 mg/m$^3$ |
| | | OSHA TWA (total) | 15 mg/m$^3$ |
| 013463-67-7 | Titanium Dioxide | ACHIG TLV 10mg/m3(Total) | 15mg/m3 |
| | | OSHA PEL (Total) | 15mg/m3 |
| | Nuisance dust | ACHIG TLV 3mg/m3(Resp) | 5 mg/m3 |
| 51200-87-4 | 4,4 Dimethyloxazolidine | none established | |

Additional information: n/a

## 4 First aid measures

| | |
|---|---|
| General information: | n/a |
| After inhalation: | Remove to fresh air. If not breathing, give artificial respiration. If having difficulty breathing, give oxygen. Get immediate medical attention. |
| After skin contact: | Wash affected area thoroughly with soap and water. Remove contaminated clothes and launder before re-use. |
| After eye contact: | Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention. |
| After swallowing: | Do not induce vomiting. Get medical attention immediately. |

## 5 Fire-fighting measures

| | |
|---|---|
| General information: | Water- based product. |
| Flash point: | n/a |
| Suitable extinguishing agents: | For the dried product, use carbon dioxide, dry chemical, or alcohol foam. |
| Hazardous combustion products: | Incomplete combustion of dried product can yield low molecular weight hydrocarbons, carbon monoxide, and carbon dioxide. |
| Protective equipment: | n/a |
| Firefighting instructions: | Respiratory equipment should be worn to avoid inhalation of combustion products. Water should not be used except as fog to keep nearby containers cool. Water may be used to cool closed containers to prevent pressure build-up and exposed to extreme heat. |

## 6 Accidental release measures

| | |
|---|---|
| Measures for environmental protection: | Keep spilled products out of sewers, streams, and water systems. |
| Measures for cleaning/collecting: | For dry material, collect by sweeping and scooping. Transfer collected material to a container, being careful to minimize creation of dust. For wet material, scoop material up and transfer to an open container. Allow material to dry before disposal. |
| Additional information: | See section 13 and section 15 for specific regulatory information concerning this product. |

## 7 Handling and storage

Handling:

Wear appropriate protective equipment when working with this product. Promptly remove dusty clothing, or clothing wet with product mix, and launder before re-using. Wash thoroughly after exposure to product mixtures. Keep out of reach of children.

Storage:

Store in a dry location. Atmospheric temperatures and pressures do not affect the shelf life of this product.

## 8 Exposure controls/personal protection

Additional information about design of technical facilities: n/a

| Ingredients with limit values that require monitoring at the workplace: | | | |
|---|---|---|---|
| CAS # | Name | Exposure Limit | |
| 1317-65-3 | Calcium carbonate | OSHA TW (Respirable dust) | 5 mg/m$^3$ |
| | | OSHA TWA (total) | 15 mg/m$^3$ |
| 013463-67-7 | Titanium Dioxide | ACHIG TLV 10mg/m3(Total) | 15mg/m3 |
| | | OSHA PEL (Total) | 15mg/m3 |
| | Nuisance dust | ACHIG TLV 3mg/m3(Resp) | 5 mg/m3 |
| 51200-87-4 | 4,4 Dimethyloxazolidine | none established | |

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 a NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find how low to protect yourself and your family by contacting the National Lead Hotline at 1800-424-LEAD or log onto www.epa.gov/lead

Additional information: The lists valid during the making were used as a basis.

Personal protective equipment:

ventilation: Use local exhaust. General exhaust acceptable if the exposure to materials above is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, and 1910.108.

respiratory protection: If personal exposure cannot or may not be controlled below applicable limits by ventilation, wear properly fitted respirator approved by NIOSH/MSHA for protection against materials described above.

eye protection: Wear safety glasses to reduce the potential for eye contact.

skin protection: Prevent prolonged or repeated contact by using rubber gloves and appropriate protective clothing.

## 9 Physical and chemical properties

| General information: | |
|---|---|
| form | Fluid |
| color | blue |
| odor | Mild ammonia |
| pH | 8.0-10.0 |
| Change in condition: | |
| melting point/melting point range | 32'F |
| boiling point/boiling point range | 190-212'F |
| evaporation rate: | Slower than ether |
| vapor density: | Heavier than air |
| Specific gravity: | 1.43 |
| Solubility in/Miscibility with water: | dispersible |
| Density at 20°C: | 11.94 lb/gal |
| VOC: | 7g/L (0.0619lb/gal) |

## 10 Stability and reactivity

| | |
|---|---|
| Conditions to be avoided: | None known |
| Chemical stability: | Stable |
| Materials to be avoided: | None known |
| Hazardous polymerization: | Will not occur |

Dangerous decomposition products:

Will not spontaneously occur. By Fire- low molecular weight hydrocarbons, carbon dioxide and monoxide.

## 11 Toxicological information

Acute toxicity:

| | |
|---|---|
| crystalline silica (quartz, cristobalite) | Considered a known human carcinogen by Federal (OSHA) and advising health agencies (IARC, NIOSH, and NTP). Additionally, crystalline silica can cause a lung condition known as silicosis after long term exposure to dusts containing crystalline silica. Exposure of workers to crystalline silica containing dusts is specifically regulated by OSHA. The use of a correctly fitted, NIOSH approved respirator suitable for use against crystalline silica inhalation is essential for minimizing exposure to this danger. |
| mineral dusts | Some items mentioned in Section 8 are considered mineral dusts by OSHA and a correctly fitted, NIOSH approved respirator is required when working with this product. |
| titanium dioxide | is considered a suspected carcinogen by advising health agencies. There is one animal study where titanium dioxide exposure caused lung cancer in rats. However, the level of exposure during the test was far in excess of what would be experienced by workers during use of this product. However, care should be exercised and the use of a correctly fitted NIOSH approved respirator should be used when working with this product. |

Primary irritant effect:

| | |
|---|---|
| on the skin | Exposure of skin to wet product may cause chemical burns. Symptoms of exposure may take several hours to manifest. |
| on the eye | Exposure of eyes to wet product may cause chemical burns and blindness. Exposure to airborne dust can cause immediate or delayed irritation or inflammation. |
| through ingestion | May be harmful if ingested. |
| through inhalation | Dust generated during handling this product may cause irritation to the respiratory tract. |
| Additional toxicological information: | n/a |

## 12 Ecological information

| | |
|---|---|
| Elimination (persistence and degradability): | n/a |
| Behavior in environmental systems: | n/a |
| Mobility and bioaccumulation potential: | n/a |
| General notes: | n/a |

## 13 Disposal considerations

Product recommendation: This product must be disposed of in accordance with applicable local, state and federal regulations. Where possible, it is best to use up any excess material.

Uncleaned packaging recommendation: Disposal must be made according to official regulations.

## 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

**US Federal regulations**

CERCLA, section 103 (40CRF302.4)

This product contains the following toxic chemicals that require notification of the National Response Center of releases of quantities of hazardous substances equal to or greater than the Reportable Quantities (RQ):

No reportable quantities are present.

Clean Air Act, section 112

This product contains the following components present at or above the minimum level and listed as Hazardous or Extremely Hazardous Air Pollutants:

No reportable quantities are present.

SARA, section 302 (40CFR355.30) and section 304 (40CFR355.40)

This product contains the following items that require emergency planning based on Threshold Planning Quantities (TPQ) or release reporting based on RQ:

No reportable quantities are present.

SARA, section 311/312 (40CFR370.21) Hazard classification for this product

Fire: No | Pressure generating: No | Reactivity: No

Acute health: No | Chronic health: No

SARA, section 313 (40CFR372.65)

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986:

No reportable quantities are present.

EPA VOC regulations

Theoretical VOC for this product = 7g/L (0.0619lb/gal)

TSCA

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

OSHA

This Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR1910.1200). Unlisted ingredients are not 'hazardous' per OSHA standards.

In addition to items listed in Section 11, this product contains the following items that are specifically regulated by OSHA. Exposure limits may be found in Section 8.

Titanium Dioxide CAS # 013463-67-7

**State regulations**

California Prop65

Warning - The following chemicals are present in this coating product in small amounts. These chemicals are listed by the California EPA as materials known to the State of California to cause cancer, (and/or) birth defects, (and/or) other reproductive harm:

Calcium carbonate CAS # 1317-65-3

## 16 Other information

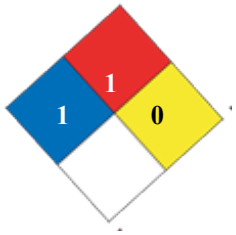
The information and recommendation set forth herein are believed to be accurate. Because some of the information used to prepare this document is derived from information provided to PAREXUSA, Inc. from its suppliers, and because PAREXUSA, Inc. has no control over the conditions of handling and use, PAREXUSA, Inc. makes no warranty, expressed or implied, regarding the accuracy of the data or the results to be obtained from the use thereof and assumes no responsibility from use or reliance thereon. It is the responsibility of the user of PAREXUSA, Inc. products to comply with all applicable federal, state, and local laws and regulations.

# SAFETY DATA SHEET

## SECTION 1 - IDENTIFICATION

| | |
|---|---|
| Product Name: | **Sto Hot Prime** |
| Product Code: | 80805 |
| SDS Manufacturer Number: | 80805 |
| Product Use/Restriction: | Waterbased Acrylic Coating. |
| Manufacturer Name: | Sto Corp. |
| Address: | 6175 Riverside Drive, SW<br>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: | |

**NFPA**




**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<br>Skin Irritant, Category 2 |
| Hazard Statements: | Causes eye irritation<br>Causes skin irritation |
| Precautionary Statements: | Wash hands thoroughly after handling.<br>Wear protective gloves/protective clothing/eye protection/face protection.<br>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>If eye irritation persists: Get medical advice/attention.<br>IF ON SKIN: Wash with plenty of soap and water.<br>If skin irritation or rash occurs: Get medical advice/attention.<br>Wash contaminated clothing before reuse. |
| Emergency Overview: | WARNING! Irritant. |
| Route of Exposure: | Eyes. Skin. Inhalation. Ingestion. |
| Potential Health Effects: | |

| | |
|---|---|
| Eye: | May cause irritation. |
| Skin: | May cause irritation. |
| Inhalation: | Prolonged or excessive inhalation may cause respiratory tract irritation. |
| Ingestion: | Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea. |
| Target Organs: | Eyes. Skin. Respiratory system. Digestive system. |

## SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS# | Ingredient Percent | EC Num. |
|---|---|---|---|
| Calcium carbonate | 1317-65-3 | 10 - 30 by weight | |
| Crystaline silica (Quartz) | 14808-60-7 | 10 - 30 by weight | |
| Styrene acrylate based polymer | No Data | 10 - 30 by weight | |
| Talc | 14807-96-6 | 1 - 5 by weight | |
| Titanium Oxide | 13463-67-7 | 1 - 5 by weight | |
| Trimethylpentanediol monoisobutyrate | 25265-77-4 | 1 - 5 by weight | |
| Water | 7732-18-5 | 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 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.<br>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. |
| Other First Aid: | First Responders should provide for their own safety prior to rendering assistance. |

## SECTION 5 - FIRE FIGHTING MEASURES

| | |
|---|---|
| Flash Point: | Not determined. |
| Auto Ignition Temperature: | Not determined. |
| Lower Flammable/Explosive Limit: | 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

| | |
|---|---|
| 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. |

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

| | |
|---|---|
| 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

**Crystaline silica (Quartz) :**

| | |
|---|---|
| Guideline ACGIH: | TLV-TWA: 0.025 mg/m3 Respirable fraction (R) |

**Talc :**

| | |
|---|---|
| Guideline ACGIH: | TLV-TWA: 2 mg/m3 Respirable fraction (R)<br>TLV-TWA: 1 mg/m3 Respirable fraction (R) |
| Guideline OSHA: | PEL-TWA: 20 mppcf |

**Titanium Oxide :**

| | |
|---|---|
| Guideline ACGIH: | TLV-TWA: 10 mg/m3 |
| 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: | 0ºC (32ºF) |
| 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) ]<br>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) |

**Crystaline 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 ]<br>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 ]<br>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 ]<br>Inhalation - Mouse TCLo - Lowest published toxic concentration : 40 mg/kg [ Lungs, Thorax, or Respiration - Other changes ]<br>Inhalation - Mouse TCLo - Lowest published toxic concentration : 40 mg/kg [ Immunological Including Allergic - Decrease in cellular immune response ]<br>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 ]<br>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 ]<br>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 ]<br>Oral - Mouse LD50 - Lethal dose, 50 percent kill : 3200 mg/kg [ Details of toxic effects not reported other than lethal dose value ] (RTECS) |

## SECTION 12 - ECOLOGICAL INFORMATION

| | |
|---|---|
| Ecotoxicity: | No environmental information found for this product. |
| Environmental Fate: | No environmental information found for this product. |

## SECTION 13 - DISPOSAL CONSIDERATIONS

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

## 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):<br>WARNING! This product contains a chemical known to the State of California to cause cancer. |
| Canada WHMIS: | Xi - Irritant |
| EU Class: | Irritant.<br>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.<br>S37 - Wear suitable gloves. |

**Calcium carbonate :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |

**Crystaline 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 |

**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:

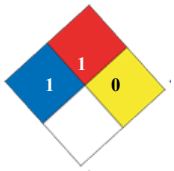
The information and recommendations contained herein are, to the best of Sto Corp.'s knowledge and belief, accurate and reliable as of the date issued. Sto Corp. does not warrant or guarantee their accuracy or reliability, and Sto Corp. shall not be liable for any loss or damage arising out of their 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.

# SAFETY DATA SHEET

## SECTION 1 : IDENTIFICATION

| | |
|---|---|
| Product Name: | **Sto Omnigard™ Part A** |
| Product Code: | 81366 |
| SDS Manufacturer Number: | 81366 |
| Manufacturer Name: | Sto Corp. |
| Address: | 6175 Riverside Drive, SW<br>Atlanta, Georgia 30331 |
| General Phone Number: | (404) 346-3666 |
| Emergency Phone Number: | (800) 424-9300 |
| SDS Creation Date: | January 08, 2014 |
| SDS Revision Date: | May 01, 2015 |
| (M)SDS Format: | |

**NFPA**




**HMIS**

| | |
|---|---|
| Health Hazard | 1 |
| Fire Hazard | 1 |
| Reactivity | 0 |
| Personal Protection | X |

## SECTION 2 : HAZARD(S) IDENTIFICATION

GHS Pictograms:

| | |
|---|---|
| Signal Word: | WARNING! |
| GHS Class: | Eye Irritant, Category 2.<br>Skin Irritant, Category 2. |
| Hazard Statements: | Causes eye irritation.<br>Causes skin irritation. |
| Precautionary Statements: | Wash hands thoroughly after handling.<br>Wear protective gloves/protective clothing/eye protection/face protection.<br>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>If eye irritation persists: Get medical advice/attention.<br>IF ON SKIN: Wash with plenty of soap and water.<br>If skin irritation or rash occurs: Get medical advice/attention.<br>Wash contaminated clothing before reuse. |
| Emergency Overview: | WARNING! Irritant. |
| Route of Exposure: | Eyes. Skin. Inhalation. Ingestion. |
| Potential Health Effects: | |
| Eye: | May cause irritation. |
| Skin: | May cause irritation. |
| Inhalation: | Prolonged or excessive inhalation may cause respiratory tract irritation. |
| Ingestion: | Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea. |
| Target Organs: | Eyes. Skin. Respiratory system. Digestive system. |

## SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS# | Ingredient Percent | EC Num. |
|---|---|---|---|
| Calcium carbonate | 1317-65-3 | 10 - 30 by weight | |
| Acrylic polymer | No Data | 5 - 20 by weight | |
| Titanium Oxide | 13463-67-7 | 5 - 15 by weight | |
| Water | 7732-18-5 | 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 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.<br>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. |
| Other First Aid: | First Responders should provide for their own safety prior to rendering assistance. |

## SECTION 5 : FIRE FIGHTING MEASURES

| | |
|---|---|
| Flash Point: | Not determined. |
| Auto Ignition Temperature: | Not determined. |
| Lower Flammable/Explosive Limit: | 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

| | |
|---|---|
| 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.<br>Store away from direct heat or sunlight, sources of UV radiation, peroxides, or free radicals.<br>Do not store in temperatures above 49°C (120 °F) or below 9°C (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. |

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

| | |
|---|---|
| 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

**Titanium Oxide :**

| | |
|---|---|
| Guideline ACGIH: | TLV-TWA: 10 mg/m3 |
| 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: | 0ºC (32ºF) |
| 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 0°C (32°F). |
| Incompatible Materials: | Water reactive materials. |
| Special Decomposition Products: | Thermal decomposition can lead to release irritant fumes and toxic gases. |

## SECTION 11 : TOXICOLOGICAL INFORMATION

**Titanium Oxide :**

| | |
|---|---|
| Carcinogenicity: | IARC: Group 2B: Possibly carcinogenic to humans. |

## SECTION 12 : ECOLOGICAL INFORMATION

| | |
|---|---|
| Ecotoxicity: | No environmental information found for this product. |
| Environmental Fate: | No environmental information found for this product. |

## SECTION 13 : DISPOSAL CONSIDERATIONS

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

## 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):<br>WARNING! This product contains a chemical known to the State of California to cause cancer. |
| Canada WHMIS: | Xi - Irritant. |
| EU Class: | Irritant.<br>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.<br>S37 - Wear suitable gloves. |

**Calcium carbonate :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |

**Titanium Oxide :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |
| Canada DSL: | Listed |

**Water :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |
| Canada DSL: | Listed |

## SECTION 16 : ADDITIONAL INFORMATION

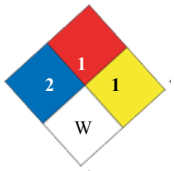
| | |
|---|---|
| HMIS Health Hazard: | 1 |
| HMIS Fire Hazard: | 1 |
| HMIS Reactivity: | 0 |
| HMIS Personal Protection: | X |
| SDS Creation Date: | January 08, 2014 |
| SDS Revision Date: | May 01, 2015 |
| Disclaimer: | The information and recommendations contained herein are, to the best of Sto 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 Omnigard™ Part B** |
| Product Code: | 81367 |
| SDS Manufacturer Number: | 81367 |
| Manufacturer Name: | Sto Corp. |
| Address: | 6175 Riverside Drive, SW<br>Atlanta, Georgia 30331 |
| General Phone Number: | (404) 346-3666 |
| Emergency Phone Number: | (800) 424-9300 |
| SDS Creation Date: | January 08, 2014 |
| SDS Revision Date: | May 01, 2015 |
| (M)SDS Format: | |

**NFPA**




**HMIS**

| | |
|---|---|
| Health Hazard | 2 |
| Fire Hazard | 1 |
| Reactivity | 1 |
| Personal Protection | X |

## SECTION 2 : HAZARD(S) IDENTIFICATION

GHS Pictograms:

| | |
|---|---|
| Signal Word: | DANGER! |
| GHS Class: | Eye Damage, Category 1.<br>Skin Irritant, Category 2.<br>Acute Toxicity Inhalation, Category 4. |
| Hazard Statements: | Causes serious eye damage.<br>Causes skin irritation.<br>Harmful if inhaled. |
| Precautionary Statements: | Wash hands thoroughly after handling.<br>Wear protective gloves/protective clothing/eye protection/face protection.<br>Avoid breathing dust/fume/gas/mist/vapours/spray.<br>Use only outdoors or in a well-ventilated area.<br>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>Immediately call a POISON CENTER or doctor/physician.<br>IF ON SKIN: Wash with plenty of water.<br>If skin irritation occurs: Get medical advice/attention.<br>IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.<br>Call a POISON CENTER or doctor/physician if you feel unwell.<br>Take off contaminated clothing and wash it before reuse. |
| Emergency Overview: | Irritant. |
| Route of Exposure: | Eyes. Skin. Inhalation. Ingestion. |
| Potential Health Effects: | |
| Eye: | Can cause severe eye injury. |
| Skin: | May cause skin irritation. |
| Inhalation: | Harmful by inhalation.<br>May cause severe respiratory system irritation. |
| Ingestion: | May cause irritation. Ingesting large amounts may cause injury. |
| Aggravation of Pre-Existing Conditions: | May aggravate pre-existing respiratory disorders, allergy, eczema, or skin conditions. |

## SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS# | Ingredient Percent | EC Num. |
|---|---|---|---|
| [3-(2,3-epoxypropoxy)propyl]trimethoxysilane | 2530-83-8 | 60 - 100 by weight | |

| | | |
|---|---|---|
| Non hazardous | No Data | 1 - 5 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 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.<br>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. |

## SECTION 5 : FIRE FIGHTING MEASURES

| | |
|---|---|
| Flash Point: | Not determined. |
| 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: | Dry chemical, foam and carbon dioxide. Do not use water. |
| Unsuitable Media: | water. |
| 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 will react with water and may release a flammable and/or toxic gas. |
| Hazardous Combustion Byproducts: | Oxides of carbon, oxides of nitrogen and other organic substances may be formed. |

**NFPA Ratings:**

| | |
|---|---|
| NFPA Health: | 2 |
| NFPA Flammability: | 1 |
| NFPA Reactivity: | 1 |
| NFPA Other: | W |

## 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.<br>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

| | |
|---|---|
| Notes : | Only established PEL and TLV values for the ingredients are listed. |

## SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

| | |
|---|---|
| Physical State Appearance: | Liquid. |
| Color: | Clear |
| Odor: | Not reported. |
| Boiling Point: | 120 deg C @ 2 mmHg |
| Melting Point: | Not determined. |
| Specific Gravity: | Not determined. |
| Solubility: | Reacts with water. |
| Vapor Density: | Not determined. |
| Vapor Pressure: | Not determined. |
| Percent Volatile: | Not determined. |
| Evaporation Rate: | Not determined. |
| pH: | Not determined. |
| Flash Point: | 76.7 $^{O}$C (170 $^{O}$F) |
| Flash Point Method: | Data not available. |
| Auto Ignition Temperature: | Data not available. |

## SECTION 10 : STABILITY and REACTIVITY

| | |
|---|---|
| Chemical Stability: | Uncured product reacts with water, moisture and strong oxidants. |
| Reactivity: | Reacts with water. |
| Hazardous Polymerization: | Will not occur. |
| Conditions to Avoid: | Incompatible materials, exposure to moist air or water. |
| Incompatible Materials: | Strong oxidizing agents, strong acids, water, bases, peroxides. |
| Special Decomposition Products: | Carbon monoxide, carbon dioxide, silicon dioxide, methanol. |

## SECTION 11 : TOXICOLOGICAL INFORMATION

**[3-(2,3-epoxypropoxy)propyl]trimethoxysilane :**

| | |
|---|---|
| Eye: | Administration into the eye - Rabbit Standard Draize test: 100 mg [Mild] (RTECS) |
| Skin: | Administration onto the skin - Rabbit LD50 - Lethal dose, 50 percent kill: 3970 uL/kg [Details of toxic effects not reported other than lethal dose value] (RTECS) |
| Inhalation: | Inhalation - Rat LC50 - Lethal concentration, 50 percent kill: >5300 mg/m3/4H [Sense Organs and Special Senses (Eye)-LacrimationLungs, Thorax, or Respiration-Other changes] (RTECS) |
| Ingestion: | Oral - Rat LD50 - Lethal dose, 50 percent kill: 22600 uL/kg [Details of toxic effects not reported other than lethal dose value]<br>Oral - Rat LD50 - Lethal dose, 50 percent kill: 7.01 gm/kg [Behavioral-Somnolence (general depressed activity)Behavioral-Coma] (RTECS) |
| Mutagenicity: | Mutagenic effects have been observed on tests with laboratory animals. |

## 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. |

## 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):<br>This product does not contain any Proposition 65 chemicals. |

**[3-(2,3-epoxypropoxy)propyl]trimethoxysilane :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |
| Canada DSL: | Listed |

## SECTION 16 : ADDITIONAL INFORMATION

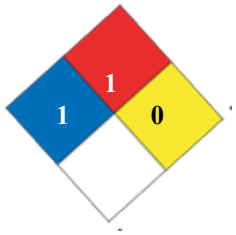
| | |
|---|---|
| HMIS Health Hazard: | 2 |
| HMIS Fire Hazard: | 1 |
| HMIS Reactivity: | 1 |
| HMIS Personal Protection: | X |
| SDS Creation Date: | January 08, 2014 |
| SDS Revision Date: | May 01, 2015 |
| Disclaimer: | The information and recommendations contained herein are, to the best of Sto 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 Plex W** |
| Product Code: | 80831 |
| SDS Manufacturer Number: | 80831 |
| Product Use/Restriction: | Waterbased Acrylic Coating. |
| Manufacturer Name: | Sto Corp. |
| Address: | 6175 Riverside Drive, SW<br>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: | |

**NFPA**




**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<br>Skin Irritant, Category 2 |
| Hazard Statements: | Causes eye irritation<br>Causes skin irritation |
| Precautionary Statements: | Wash hands thoroughly after handling.<br>Wear protective gloves/protective clothing/eye protection/face protection.<br>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>If eye irritation persists: Get medical advice/attention.<br>IF ON SKIN: Wash with plenty of soap and water.<br>If skin irritation or rash occurs: Get medical advice/attention.<br>Wash contaminated clothing before reuse. |
| Emergency Overview: | WARNING! Irritant. |
| Route of Exposure: | Eyes. Skin. Inhalation. Ingestion. |
| Potential Health Effects: | |

| | |
|---|---|
| Eye: | May cause irritation. |
| Skin: | May cause irritation. |
| Inhalation: | Prolonged or excessive inhalation may cause respiratory tract irritation. |
| Ingestion: | Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea. |
| Target Organs: | 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 | |
| Water | 7732-18-5 | 60 - 100 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 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.<br>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. |
| Other First Aid: | First Responders should provide for their own safety prior to rendering assistance. |

## SECTION 5 - FIRE FIGHTING MEASURES

| | |
|---|---|
| Flash Point: | Not determined. |
| Auto Ignition Temperature: | Not determined. |
| Lower Flammable/Explosive Limit: | 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

| | |
|---|---|
| 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.<br>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. |

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

| | |
|---|---|
| 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

| | |
|---|---|
| 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: | 0ºC (32ºF) |
| 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

| | |
|---|---|
| Eye: | No information available. |
| Skin: | No information available. |
| Inhalation: | No information available. |
| Ingestion: | No information available. |

## SECTION 12 - ECOLOGICAL INFORMATION

| | |
|---|---|
| Ecotoxicity: | No environmental information found for this product. |
| Environmental Fate: | No environmental information found for this product. |

## SECTION 13 - DISPOSAL CONSIDERATIONS

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

## 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):<br>This product does not contain any Proposition 65 chemicals. |

| | |
|---|---|
| Canada WHMIS: | Xi - Irritant |
| EU Class: | Irritant.<br>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.<br>S37 - Wear suitable gloves. |

## SECTION 16 - ADDITIONAL INFORMATION

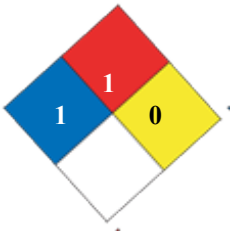
| | |
|---|---|
| HMIS Health Hazard: | 1 |
| HMIS Fire Hazard: | 1 |
| HMIS Reactivity: | 0 |
| HMIS Personal Protection: | X |
| SDS Creation Date: | July 08, 2013 |
| SDS Revision Date: | July 08, 2013 |
| Disclaimer: | The information and recommendations contained herein are, to the best of Sto Corp.'s 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. |

# 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<br>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: | |

**NFPA**




**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<br>Skin Irritant, Category 2 |
| Hazard Statements: | Causes eye irritation<br>Causes skin irritation |
| Precautionary Statements: | Wash hands thoroughly after handling.<br>Wear protective gloves/protective clothing/eye protection/face protection.<br>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>If eye irritation persists: Get medical advice/attention.<br>IF ON SKIN: Wash with plenty of soap and water.<br>If skin irritation or rash occurs: Get medical advice/attention.<br>Wash contaminated clothing before reuse. |
| Emergency Overview: | WARNING! Irritant. |
| Route of Exposure: | Eyes. Skin. Inhalation. Ingestion. |

Potential Health Effects:

| | |
|---|---|
| Eye: | May cause irritation. |
| Skin: | May cause irritation. |
| Inhalation: | Prolonged or excessive inhalation may cause respiratory tract irritation. |
| Ingestion: | Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea. |
| Target Organs: | 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 (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 | |

## 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.<br>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. |
| Other First Aid: | First Responders should provide for their own safety prior to rendering assistance. |

## SECTION 5 - FIRE FIGHTING MEASURES

| | |
|---|---|
| Flash Point: | Not determined. |
| Auto Ignition Temperature: | Not determined. |
| Lower Flammable/Explosive Limit: | 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

| | |
|---|---|
| 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.<br>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. |

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

| | |
|---|---|
| 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 (Cristobalite) :**

Guideline ACGIH: TLV-TWA: 0.025 mg/m3 Respirable fraction (R)

**Titanium Oxide :**

Guideline ACGIH: TLV-TWA: 10 mg/m3

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: | 0ºC (32ºF) |
| 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) ]<br>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 (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 ]<br>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) |

## SECTION 12 - ECOLOGICAL INFORMATION

| | |
|---|---|
| Ecotoxicity: | No environmental information found for this product. |
| Environmental Fate: | No environmental information found for this product. |

## SECTION 13 - DISPOSAL CONSIDERATIONS

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

## 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):<br>WARNING! This product contains a chemical known to the State of California to cause cancer. |
| Canada WHMIS: | Xi - Irritant |
| EU Class: | Irritant.<br>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.<br>S37 - Wear suitable gloves. |

**Calcium carbonate :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |

**Crystalline Silica (Cristobalite) :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |
| Canada DSL: | Listed |

**Titanium Oxide :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |
| Canada DSL: | Listed |

## SECTION 16 - ADDITIONAL INFORMATION

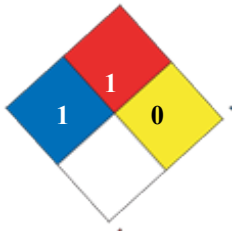
| | |
|---|---|
| HMIS Health Hazard: | 1* |
| HMIS Fire Hazard: | 1 |
| HMIS Reactivity: | 0 |
| HMIS Personal Protection: | X |
| SDS Creation Date: | July 08, 2013 |
| SDS Revision Date: | July 08, 2013 |
| Disclaimer: | The information and recommendations contained herein are, to the best of Sto 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. |

# 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<br>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: | |

**NFPA**




**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<br>Skin Irritant, Category 2 |
| Hazard Statements: | Causes eye irritation<br>Causes skin irritation |
| Precautionary Statements: | Wash hands thoroughly after handling.<br>Wear protective gloves/protective clothing/eye protection/face protection.<br>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>If eye irritation persists: Get medical advice/attention.<br>IF ON SKIN: Wash with plenty of soap and water.<br>If skin irritation or rash occurs: Get medical advice/attention.<br>Wash contaminated clothing before reuse. |
| Emergency Overview: | WARNING! Irritant. |
| Route of Exposure: | Eyes. Skin. Inhalation. Ingestion. |
| Potential Health Effects: | |

| | |
|---|---|
| Eye: | May cause irritation. |
| Skin: | May cause irritation. |
| Inhalation: | Prolonged or excessive inhalation may cause respiratory tract irritation. |
| Ingestion: | Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea. |
| Target Organs: | 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 | |
| Crystaline 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

| | |
|---|---|
| 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.<br>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. |
| Other First Aid: | First Responders should provide for their own safety prior to rendering assistance. |

## SECTION 5 - FIRE FIGHTING MEASURES

| | |
|---|---|
| Flash Point: | Not determined. |
| Auto Ignition Temperature: | Not determined. |
| Lower Flammable/Explosive Limit: | 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

| | |
|---|---|
| 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.<br>Store away from direct heat or sunlight, sources of UV radiation, peroxides, or free radicals.<br>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. |

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

| | |
|---|---|
| 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

| | |
|---|---|
| **Crystaline silica (Quartz) :** | |
| Guideline ACGIH: | TLV-TWA: 0.025 mg/m3 Respirable fraction (R) |
| **Muscovite Mica :** | |
| Guideline ACGIH: | TLV-TWA: 3 mg/m3 Respirable fraction (R) |
| Guideline OSHA: | PEL-TWA: 20 mppcf |
| **Talc :** | |
| Guideline ACGIH: | TLV-TWA: 2 mg/m3 Respirable fraction (R)<br>TLV-TWA: 1 mg/m3 Respirable fraction (R) |
| Guideline OSHA: | PEL-TWA: 20 mppcf |
| **Titanium Oxide :** | |
| Guideline ACGIH: | TLV-TWA: 10 mg/m3 |
| 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: | 0ºC (32ºF) |
| 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) ]<br>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) |

**Crystaline 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 ]<br>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 ]<br>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 ]<br>Inhalation - Mouse TCLo - Lowest published toxic concentration : 40 mg/kg [ Lungs, Thorax, or Respiration - Other changes ]<br>Inhalation - Mouse TCLo - Lowest published toxic concentration : 40 mg/kg [ Immunological Including Allergic - Decrease in cellular immune response ]<br>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 ]<br>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 ]<br>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 ]<br>Oral - Mouse LD50 - Lethal dose, 50 percent kill : 3200 mg/kg [ Details of toxic effects not reported other than lethal dose value ] (RTECS) |

## SECTION 12 - ECOLOGICAL INFORMATION

| | |
|---|---|
| Ecotoxicity: | No environmental information found for this product. |
| Environmental Fate: | No environmental information found for this product. |

## SECTION 13 - DISPOSAL CONSIDERATIONS

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

## 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):<br>WARNING! This product contains a chemical known to the State of California to cause cancer. |
| Canada WHMIS: | Xi - Irritant |
| EU Class: | Irritant.<br>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.<br>S37 - Wear suitable gloves. |

**Anhydrous aluminum silicate (Calcined kaolin) :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |
| Canada DSL: | Listed |

**Calcium carbonate :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |

**Crystaline 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

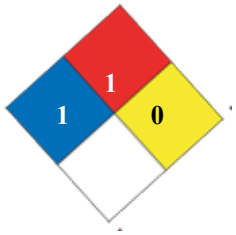
| | |
|---|---|
| HMIS Health Hazard: | 1 |
| HMIS Fire Hazard: | 1 |
| HMIS Reactivity: | 0 |
| HMIS Personal Protection: | X |
| SDS Creation Date: | July 08, 2013 |
| SDS Revision Date: | July 08, 2013 |
| Disclaimer: | The information and recommendations contained herein are, to the best of Sto Corp.'s 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. |

# SAFETY DATA SHEET

## SECTION 1 : IDENTIFICATION

| | |
|---|---|
| Product Name: | **StoCoat Color** |
| Product Code: | 80202 |
| SDS Manufacturer Number: | 80202 |
| Product Use/Restriction: | Waterbased Acrylic Coating. |
| Manufacturer Name: | Sto Corp. |
| Address: | 6175 Riverside Drive, SW<br>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: | |

**NFPA**




**HMIS**

| | |
|---|---|
| **Health Hazard** | **1** |
| **Fire Hazard** | **1** |
| **Reactivity** | **0** |
| **Personal Protection** | **X** |

## SECTION 2 : HAZARD(S) IDENTIFICATION

GHS Pictograms:

| | |
|---|---|
| Signal Word: | WARNING! |
| GHS Class: | Eye Irritant, Category 2<br>Skin Irritant, Category 2 |
| Hazard Statements: | Causes eye irritation<br>Causes skin irritation |
| Precautionary Statements: | Wash hands thoroughly after handling.<br>Wear protective gloves/protective clothing/eye protection/face protection.<br>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>If eye irritation persists: Get medical advice/attention.<br>IF ON SKIN: Wash with plenty of soap and water.<br>If skin irritation or rash occurs: Get medical advice/attention.<br>Wash contaminated clothing before reuse. |
| Emergency Overview: | WARNING! Irritant. |
| Route of Exposure: | Eyes. Skin. Inhalation. Ingestion. |

Potential Health Effects:

| | |
|---|---|
| Eye: | May cause irritation. |
| Skin: | May cause irritation. |
| Inhalation: | Prolonged or excessive inhalation may cause respiratory tract irritation. |
| Ingestion: | Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea. |
| Target Organs: | 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 | |
| Crystaline 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

| | |
|---|---|
| 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.<br>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. |
| Other First Aid: | First Responders should provide for their own safety prior to rendering assistance. |

## SECTION 5 : FIRE FIGHTING MEASURES

| | |
|---|---|
| Flash Point: | Not determined. |
| Auto Ignition Temperature: | Not determined. |

| | |
|---|---|
| Lower Flammable/Explosive Limit: | 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

| | |
|---|---|
| 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. |

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

| | |
|---|---|
| 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

| | |
|---|---|
| **Crystaline silica (Quartz) :** | |
| Guideline ACGIH: | TLV-TWA: 0.025 mg/m3 Respirable fraction (R) |
| **Muscovite Mica :** | |
| Guideline ACGIH: | TLV-TWA: 3 mg/m3 Respirable fraction (R) |
| Guideline OSHA: | PEL-TWA: 20 mppcf |
| **Talc :** | |
| Guideline ACGIH: | TLV-TWA: 2 mg/m3 Respirable fraction (R)<br>TLV-TWA: 1 mg/m3 Respirable fraction (R) |
| Guideline OSHA: | PEL-TWA: 20 mppcf |
| **Titanium Oxide :** | |
| Guideline ACGIH: | TLV-TWA: 10 mg/m3 |
| 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: | 0ºC (32ºF) |
| 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) ]<br>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) |

**Crystaline 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 ]<br>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 ]<br>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 ]<br>Inhalation - Mouse TCLo - Lowest published toxic concentration : 40 mg/kg [ Lungs, Thorax, or Respiration - Other changes ]<br>Inhalation - Mouse TCLo - Lowest published toxic concentration : 40 mg/kg [ Immunological Including Allergic - Decrease in cellular immune response ]<br>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 ]<br>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 ]<br>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 ]<br>Oral - Mouse LD50 - Lethal dose, 50 percent kill : 3200 mg/kg [ Details of toxic effects not reported other than lethal dose value ] (RTECS) |

## SECTION 12 : ECOLOGICAL INFORMATION

| | |
|---|---|
| Ecotoxicity: | No environmental information found for this product. |
| Environmental Fate: | No environmental information found for this product. |

## SECTION 13 : DISPOSAL CONSIDERATIONS

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

## 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):<br>WARNING! This product contains a chemical known to the State of California to cause cancer. |
| Canada WHMIS: | Xi - Irritant |
| EU Class: | Irritant.<br>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.<br>S37 - Wear suitable gloves. |

**Anhydrous aluminum silicate (Calcined kaolin) :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |
| Canada DSL: | Listed |

**Calcium carbonate :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |

**Crystaline 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

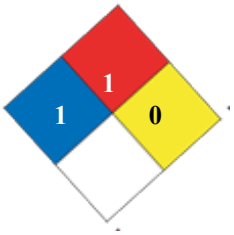
| | |
|---|---|
| HMIS Health Hazard: | 1 |
| HMIS Fire Hazard: | 1 |
| HMIS Reactivity: | 0 |
| HMIS Personal Protection: | X |
| SDS Creation Date: | July 08, 2013 |
| SDS Revision Date: | July 08, 2013 |
| Disclaimer: | The information and recommendations contained herein are, to the best of Sto Corp.'s 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. |

# SAFETY DATA SHEET

## SECTION 1 - IDENTIFICATION

| | |
|---|---|
| Product Name: | **StoCoat Lotusan** |
| Product Code: | 80217 |
| SDS Manufacturer Number: | 80217 |
| Product Use/Restriction: | Waterbased Acrylic Coating. |
| Manufacturer Name: | Sto Corp. |
| Address: | 6175 Riverside Drive, SW<br>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: | |

**NFPA**




**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<br>Skin Irritant, Category 2 |
| Hazard Statements: | Causes eye irritation<br>Causes skin irritation |
| Precautionary Statements: | Wash hands thoroughly after handling.<br>Wear protective gloves/protective clothing/eye protection/face protection.<br>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>If eye irritation persists: Get medical advice/attention.<br>IF ON SKIN: Wash with plenty of soap and water.<br>If skin irritation or rash occurs: Get medical advice/attention.<br>Wash contaminated clothing before reuse. |
| Emergency Overview: | WARNING! Irritant. |
| Route of Exposure: | Eyes. Skin. Inhalation. Ingestion. |

Potential Health Effects:

| | |
|---|---|
| Eye: | May cause irritation. |
| Skin: | May cause irritation. |
| Inhalation: | Prolonged or excessive inhalation may cause respiratory tract irritation. |
| Ingestion: | Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea. |
| Target Organs: | Eyes. Skin. Respiratory system. Digestive system. |

## SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS# | Ingredient Percent | EC Num. |
|---|---|---|---|
| Amorphous silica | 60676-86-0 | 5 - 10 by weight | |
| Cristobalite silica | 14464-46-1 | 5 - 10 by weight | |
| Crystaline silica (Quartz) | 14808-60-7 | 5 - 10 by weight | |
| Octyl triethoxy silane | 35435-21-3 | 1 - 5 by weight | |
| Polymethylethoxysiloxane | 68554-66-5 | 1 - 5 by weight | |
| Styrene acrylate based polymer | No Data | 10 - 30 by weight | |
| Titanium Oxide | 13463-67-7 | 10 - 30 by weight | |
| Tridymite silica | 15468-32-3 | 5 - 10 by weight | |
| Undisclosed/Non-hazardous | No Data | 1 - 5 by weight | |
| Water | 7732-18-5 | 10 - 30 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 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.<br>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. |
| Other First Aid: | First Responders should provide for their own safety prior to rendering assistance. |

## SECTION 5 - FIRE FIGHTING MEASURES

| | |
|---|---|
| Flash Point: | Not determined. |

| | |
|---|---|
| Auto Ignition Temperature: | Not determined. |
| Lower Flammable/Explosive Limit: | 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

| | |
|---|---|
| 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. |

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

| | |
|---|---|
| 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

| | |
|---|---|
| **Cristobalite silica :** | |
| Guideline ACGIH: | TLV-TWA: 0.025 mg/m3 Respirable fraction (R) |
| **Crystaline silica (Quartz) :** | |
| Guideline ACGIH: | TLV-TWA: 0.025 mg/m3 Respirable fraction (R) |
| **Titanium Oxide :** | |
| Guideline ACGIH: | TLV-TWA: 10 mg/m3 |
| 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: | 0ºC (32ºF) |
| 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

**Amorphous silica :**

| | |
|---|---|
| RTECS Number: | VV7328000 |
| Inhalation: | Inhalation - Rat TCLo - Lowest published toxic concentration : 197 mg/m3/6H/26W (Intermittent) [ Lungs, Thorax, or Respiration - Changes in lung weight ] (RTECS) |

**Cristobalite silica :**

| | |
|---|---|
| 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 ]<br>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) |

**Crystaline 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 ]<br>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 ]<br>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 ]<br>Inhalation - Mouse TCLo - Lowest published toxic concentration : 40 mg/kg [ Lungs, Thorax, or Respiration - Other changes ]<br>Inhalation - Mouse TCLo - Lowest published toxic concentration : 40 mg/kg [ Immunological Including Allergic - Decrease in cellular immune response ]<br>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) |

**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) |

## SECTION 12 - ECOLOGICAL INFORMATION

| | |
|---|---|
| Ecotoxicity: | No environmental information found for this product. |
| Environmental Fate: | No environmental information found for this product. |

## SECTION 13 - DISPOSAL CONSIDERATIONS

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

## 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):<br>WARNING! This product contains a chemical known to the State of California to cause cancer. |

| | |
|---|---|
| Canada WHMIS: | Xi - Irritant |
| EU Class: | Irritant.<br>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.<br>S37 - Wear suitable gloves. |

**Amorphous silica :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |
| Canada DSL: | Listed |

**Cristobalite silica :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |
| Canada DSL: | Listed |

**Crystaline silica (Quartz) :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |
| Canada DSL: | Listed |

**Octyl triethoxy silane :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |
| Canada DSL: | Listed |

**Polymethylethoxysiloxane :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |
| Canada DSL: | Listed |

**Titanium Oxide :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |
| Canada DSL: | Listed |

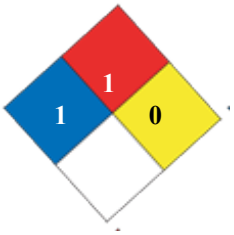
## SECTION 16 - ADDITIONAL INFORMATION

| | |
|---|---|
| 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. |

# SAFETY DATA SHEET

## SECTION 1 - IDENTIFICATION

NFPA




| | |
|---|---|
| Product Name: | **StoCoat Texture Coarse** |
| Product Code: | 80658 |
| SDS Manufacturer Number: | 80658 |
| Product Use/Restriction: | Waterbased Acrylic Coating. |
| Manufacturer Name: | Sto Corp. |
| Address: | 6175 Riverside Drive, SW<br>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<br>Skin Irritant, Category 2 |
| Hazard Statements: | Causes eye irritation<br>Causes skin irritation |
| Precautionary Statements: | Wash hands thoroughly after handling.<br>Wear protective gloves/protective clothing/eye protection/face protection.<br>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>If eye irritation persists: Get medical advice/attention.<br>IF ON SKIN: Wash with plenty of soap and water.<br>If skin irritation or rash occurs: Get medical advice/attention.<br>Wash contaminated clothing before reuse. |
| Emergency Overview: | WARNING! Irritant. |
| Route of Exposure: | Eyes. Skin. Inhalation. Ingestion. |

Potential Health Effects:

| | |
|---|---|
| Eye: | May cause irritation. |
| Skin: | May cause irritation. |
| Inhalation: | Prolonged or excessive inhalation may cause respiratory tract irritation. |
| Ingestion: | Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea. |
| Target Organs: | 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 | |
| Crystaline silica (Quartz) | 14808-60-7 | 0.1 - 1.0 by weight | |
| Crystalline Silica (Cristobalite) | 14464-46-1 | 0.1 - 1.0 by weight | |
| Muscovite Mica | 12001-26-2 | 1 - 5 by weight | |
| Silicon dioxide amorphous | 60676-86-0 | 5 - 10 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

| | |
|---|---|
| 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.<br>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. |
| Other First Aid: | First Responders should provide for their own safety prior to rendering assistance. |

## SECTION 5 - FIRE FIGHTING MEASURES

| | |
|---|---|
| Flash Point: | Not determined. |

| | |
|---|---|
| Auto Ignition Temperature: | Not determined. |
| Lower Flammable/Explosive Limit: | 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

| | |
|---|---|
| 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. |

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

| | |
|---|---|
| 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

**Crystaline silica (Quartz) :**

| | |
|---|---|
| Guideline ACGIH: | TLV-TWA: 0.025 mg/m3 Respirable fraction (R) |

**Crystalline Silica (Cristobalite) :**

| | |
|---|---|
| Guideline ACGIH: | TLV-TWA: 0.025 mg/m3 Respirable fraction (R) |

**Muscovite Mica :**

| | |
|---|---|
| Guideline ACGIH: | TLV-TWA: 3 mg/m3 Respirable fraction (R) |
| Guideline OSHA: | PEL-TWA: 20 mppcf |

**Talc :**

| | |
|---|---|
| Guideline ACGIH: | TLV-TWA: 2 mg/m3 Respirable fraction (R)<br>TLV-TWA: 1 mg/m3 Respirable fraction (R) |
| Guideline OSHA: | PEL-TWA: 20 mppcf |

**Titanium Oxide :**

| | |
|---|---|
| Guideline ACGIH: | TLV-TWA: 10 mg/m3 |
| 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: | 0ºC (32ºF) |
| 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) ]<br>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) |

**Crystaline 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 ]<br>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 ]<br>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 ]<br>Inhalation - Mouse TCLo - Lowest published toxic concentration : 40 mg/kg [ Lungs, Thorax, or Respiration - Other changes ]<br>Inhalation - Mouse TCLo - Lowest published toxic concentration : 40 mg/kg [ Immunological Including Allergic - Decrease in cellular immune response ]<br>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 ]<br>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) |

**Silicon dioxide amorphous :**

| | |
|---|---|
| RTECS Number: | VV7328000 |
| Inhalation: | Inhalation - Rat TCLo - Lowest published toxic concentration : 197 mg/m3/6H/26W (Intermittent) [ Lungs, Thorax, or Respiration - Changes in lung weight ] (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 ]<br>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 ]<br>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 ]<br>Oral - Mouse LD50 - Lethal dose, 50 percent kill : 3200 mg/kg [ Details of toxic effects not reported other than lethal dose value ] (RTECS) |

## SECTION 12 - ECOLOGICAL INFORMATION

| | |
|---|---|
| Ecotoxicity: | No environmental information found for this product. |
| Environmental Fate: | No environmental information found for this product. |

## SECTION 13 - DISPOSAL CONSIDERATIONS

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

## 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):<br>WARNING! This product contains a chemical known to the State of California to cause cancer. |
| Canada WHMIS: | Xi - Irritant |
| EU Class: | Irritant.<br>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.<br>S37 - Wear suitable gloves. |

**Anhydrous aluminum silicate (Calcined kaolin) :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |
| Canada DSL: | Listed |

**Calcium carbonate :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |

**Crystaline silica (Quartz) :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |
| Canada DSL: | Listed |

**Crystalline Silica (Cristobalite) :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |
| Canada DSL: | Listed |

**Muscovite Mica :**

Canada DSL: Listed

**Silicon dioxide amorphous :**

TSCA Inventory Status: Listed

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

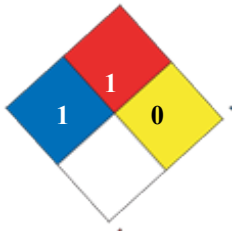
| | |
|---|---|
| HMIS Health Hazard: | 1* |
| HMIS Fire Hazard: | 1 |
| HMIS Reactivity: | 0 |
| HMIS Personal Protection: | X |
| SDS Creation Date: | July 08, 2013 |
| SDS Revision Date: | July 08, 2013 |
| Disclaimer: | The information and recommendations contained herein are, to the best of Sto 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. |

# SAFETY DATA SHEET

## SECTION 1 - IDENTIFICATION

| | |
|---|---|
| Product Name: | **StoCoat Texture Fine** |
| Product Code: | 80657 |
| SDS Manufacturer Number: | 80657 |
| Product Use/Restriction: | Waterbased Acrylic Coating. |
| Manufacturer Name: | Sto Corp. |
| Address: | 6175 Riverside Drive, SW<br>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: | |

**NFPA**




**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<br>Skin Irritant, Category 2 |
| Hazard Statements: | Causes eye irritation<br>Causes skin irritation |
| Precautionary Statements: | Wash hands thoroughly after handling.<br>Wear protective gloves/protective clothing/eye protection/face protection.<br>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>If eye irritation persists: Get medical advice/attention.<br>IF ON SKIN: Wash with plenty of soap and water.<br>If skin irritation or rash occurs: Get medical advice/attention.<br>Wash contaminated clothing before reuse. |
| Emergency Overview: | WARNING! Irritant. |
| Route of Exposure: | Eyes. Skin. Inhalation. Ingestion. |
| Potential Health Effects: | |

| | |
|---|---|
| Eye: | May cause irritation. |
| Skin: | May cause irritation. |
| Inhalation: | Prolonged or excessive inhalation may cause respiratory tract irritation. |
| Ingestion: | Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea. |
| Target Organs: | 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 | 1 - 5 by weight | |
| Calcium carbonate | 1317-65-3 | 5 - 10 by weight | |
| Crystaline silica (Quartz) | 14808-60-7 | 10 - 30 by weight | |
| Modified acrylic polymer(s) | No Data | 1 - 5 by weight | |
| Titanium Oxide | 13463-67-7 | 10 - 30 by weight | |
| Water | 7732-18-5 | 10 - 30 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 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.<br>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. |
| Other First Aid: | First Responders should provide for their own safety prior to rendering assistance. |

## SECTION 5 - FIRE FIGHTING MEASURES

| | |
|---|---|
| Flash Point: | Not determined. |
| Auto Ignition Temperature: | Not determined. |
| Lower Flammable/Explosive Limit: | 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

| | |
|---|---|
| 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. |

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

| | |
|---|---|
| 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

**Crystaline silica (Quartz) :**

Guideline ACGIH: TLV-TWA: 0.025 mg/m3 Respirable fraction (R)

**Titanium Oxide :**

Guideline ACGIH: TLV-TWA: 10 mg/m3

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: | 0ºC (32ºF) |
| 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) ]<br>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) |

**Crystaline 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 ]<br>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 ]<br>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 ]<br>Inhalation - Mouse TCLo - Lowest published toxic concentration : 40 mg/kg [ Lungs, Thorax, or Respiration - Other changes ]<br>Inhalation - Mouse TCLo - Lowest published toxic concentration : 40 mg/kg [ Immunological Including Allergic - Decrease in cellular immune response ]<br>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) |

**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) |

## SECTION 12 - ECOLOGICAL INFORMATION

| | |
|---|---|
| Ecotoxicity: | No environmental information found for this product. |
| Environmental Fate: | No environmental information found for this product. |

## SECTION 13 - DISPOSAL CONSIDERATIONS

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

## 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):<br>WARNING! This product contains a chemical known to the State of California to cause cancer. |
| Canada WHMIS: | Xi - Irritant |
| EU Class: | Irritant.<br>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.<br>S37 - Wear suitable gloves. |

**Anhydrous aluminum silicate (Calcined kaolin) :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |
| Canada DSL: | Listed |

**Calcium carbonate :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |

**Crystaline silica (Quartz) :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |
| Canada DSL: | Listed |

**Titanium Oxide :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |
| Canada DSL: | Listed |

## SECTION 16 - ADDITIONAL INFORMATION

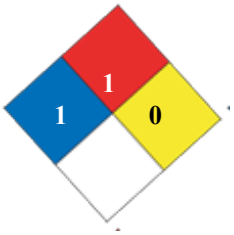
| | |
|---|---|
| HMIS Health Hazard: | 1 |
| HMIS Fire Hazard: | 1 |
| HMIS Reactivity: | 0 |
| HMIS Personal Protection: | X |
| SDS Creation Date: | July 08, 2013 |
| SDS Revision Date: | July 08, 2013 |
| Disclaimer: | The information and recommendations contained herein are, to the best of Sto Corp.'s 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. |

# SAFETY DATA SHEET

## SECTION 1 : IDENTIFICATION

| | |
|---|---|
| Product Name: | **StoCoat Texture Medium** |
| Product Code: | 80659 |
| SDS Manufacturer Number: | 80659 |
| Product Use/Restriction: | Waterbased Acrylic Coating. |
| Manufacturer Name: | Sto Corp. |
| Address: | 6175 Riverside Drive, SW<br>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: | |

**NFPA**




**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<br>Skin Irritant, Category 2 |
| Hazard Statements: | Causes eye irritation<br>Causes skin irritation |
| Precautionary Statements: | Wash hands thoroughly after handling.<br>Wear protective gloves/protective clothing/eye protection/face protection.<br>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>If eye irritation persists: Get medical advice/attention.<br>IF ON SKIN: Wash with plenty of soap and water.<br>If skin irritation or rash occurs: Get medical advice/attention.<br>Wash contaminated clothing before reuse. |
| Emergency Overview: | WARNING! Irritant. |

| | |
|---|---|
| Route of Exposure: | Eyes. Skin. Inhalation. Ingestion. |
| Potential Health Effects: | |
| Eye: | May cause irritation. |
| Skin: | May cause irritation. |
| Inhalation: | Prolonged or excessive inhalation may cause respiratory tract irritation. |
| Ingestion: | Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea. |
| Target Organs: | 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 | |
| Crystaline silica (Quartz) | 14808-60-7 | 0.1 - 1.0 by weight | |
| Crystalline Silica (Cristobalite) | 14464-46-1 | 0.1 - 1.0 by weight | |
| Muscovite Mica | 12001-26-2 | 1 - 5 by weight | |
| Silicon dioxide amorphous | 60676-86-0 | 5 - 10 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

| | |
|---|---|
| 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.<br>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. |
| Other First Aid: | First Responders should provide for their own safety prior to rendering assistance. |

## SECTION 5 : FIRE FIGHTING MEASURES

| | |
|---|---|
| Flash Point: | Not determined. |
| Auto Ignition Temperature: | Not determined. |
| Lower Flammable/Explosive Limit: | 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

| | |
|---|---|
| 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.<br>Store away from direct heat or sunlight, sources of UV radiation, peroxides, or free radicals.<br>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. |

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

| | |
|---|---|
| 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

| | |
|---|---|
| **Crystaline silica (Quartz) :** | |
| Guideline ACGIH: | TLV-TWA: 0.025 mg/m3 Respirable fraction (R) |
| **Crystalline Silica (Cristobalite) :** | |
| Guideline ACGIH: | TLV-TWA: 0.025 mg/m3 Respirable fraction (R) |
| **Muscovite Mica :** | |
| Guideline ACGIH: | TLV-TWA: 3 mg/m3 Respirable fraction (R) |
| Guideline OSHA: | PEL-TWA: 20 mppcf |
| **Talc :** | |
| Guideline ACGIH: | TLV-TWA: 2 mg/m3 Respirable fraction (R)<br>TLV-TWA: 1 mg/m3 Respirable fraction (R) |
| Guideline OSHA: | PEL-TWA: 20 mppcf |
| **Titanium Oxide :** | |
| Guideline ACGIH: | TLV-TWA: 10 mg/m3 |
| 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: | 0ºC (32ºF) |
| 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) ]<br>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) |

**Crystaline 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 ]<br>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 ]<br>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 ]<br>Inhalation - Mouse TCLo - Lowest published toxic concentration : 40 mg/kg [ Lungs, Thorax, or Respiration - Other changes ]<br>Inhalation - Mouse TCLo - Lowest published toxic concentration : 40 mg/kg [ Immunological Including Allergic - Decrease in cellular immune response ]<br>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)

**Silicon dioxide amorphous :**

RTECS Number: VV7328000

Inhalation: Inhalation - Rat TCLo - Lowest published toxic concentration : 197 mg/m3/6H/26W (Intermittent) [ Lungs, Thorax, or Respiration - Changes in lung weight ] (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)

## SECTION 12 : ECOLOGICAL INFORMATION

Ecotoxicity: No environmental information found for this product.

Environmental Fate: No environmental information found for this product.

## SECTION 13 : DISPOSAL CONSIDERATIONS

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

## 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):<br>WARNING! This product contains a chemical known to the State of California to cause cancer. |
| Canada WHMIS: | Xi - Irritant |
| EU Class: | Irritant.<br>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.<br>S37 - Wear suitable gloves. |

**Anhydrous aluminum silicate (Calcined kaolin) :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |
| Canada DSL: | Listed |

**Calcium carbonate :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |

**Crystaline silica (Quartz) :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |
| Canada DSL: | Listed |

**Crystalline Silica (Cristobalite) :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |
| Canada DSL: | Listed |

**Muscovite Mica :**

| | |
|---|---|
| Canada DSL: | Listed |

**Silicon dioxide amorphous :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |
| 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

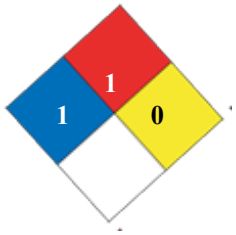
| | |
|---|---|
| HMIS Health Hazard: | 1* |
| HMIS Fire Hazard: | 1 |
| HMIS Reactivity: | 0 |
| HMIS Personal Protection: | X |
| SDS Creation Date: | July 08, 2013 |
| SDS Revision Date: | July 08, 2013 |
| Disclaimer: | The information and recommendations contained herein are, to the best of Sto 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. |

# SAFETY DATA SHEET

## SECTION 1 - IDENTIFICATION

| | |
|---|---|
| Product Name: | **Stolastic Smooth** |
| Product Code: | 80212 |
| SDS Manufacturer Number: | 80212 |
| Product Use/Restriction: | Waterbased Acrylic Coating. |
| Manufacturer Name: | Sto Corp. |
| Address: | 6175 Riverside Drive, SW<br>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: | |

**NFPA**




**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<br>Skin Irritant, Category 2 |
| Hazard Statements: | Causes eye irritation<br>Causes skin irritation |
| Precautionary Statements: | Wash hands thoroughly after handling.<br>Wear protective gloves/protective clothing/eye protection/face protection.<br>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>If eye irritation persists: Get medical advice/attention.<br>IF ON SKIN: Wash with plenty of soap and water.<br>If skin irritation or rash occurs: Get medical advice/attention.<br>Wash contaminated clothing before reuse. |
| Emergency Overview: | WARNING! Irritant. |
| Route of Exposure: | Eyes. Skin. Inhalation. Ingestion. |
| Potential Health Effects: | |

| | |
|---|---|
| Eye: | May cause irritation. |
| Skin: | May cause irritation. |
| Inhalation: | Prolonged or excessive inhalation may cause respiratory tract irritation. |
| Ingestion: | Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea. |
| Target Organs: | 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 | |
| Calcium carbonate | 1317-65-3 | 10 - 30 by weight | |
| Diatomaceous Earth, Flux-Calcined | 61790-53-2 | 1 - 5 by weight | |
| Magnesite | 546-93-0 | 1 - 5 by weight | |
| Talc | 14807-96-6 | 1 - 5 by weight | |
| Titanium Oxide | 13463-67-7 | 5 - 10 by weight | |
| Water | 7732-18-5 | 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 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.<br>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. |
| Other First Aid: | First Responders should provide for their own safety prior to rendering assistance. |

## SECTION 5 - FIRE FIGHTING MEASURES

| | |
|---|---|
| Flash Point: | Not determined. |
| Auto Ignition Temperature: | Not determined. |
| Lower Flammable/Explosive Limit: | 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

| | |
|---|---|
| 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. |

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

| | |
|---|---|
| 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

**Diatomaceous Earth, Flux-Calcined :**

| | |
|---|---|
| Guideline OSHA: | PEL-TWA: 20 mppcf |

**Magnesite :**

| | |
|---|---|
| Guideline OSHA: | PEL-TWA: 15 mg/m3 Total particulate/dust (T)<br>PEL-TWA: 5 mg/m3 Respirable fraction (R) |

**Talc :**

| | |
|---|---|
| Guideline ACGIH: | TLV-TWA: 2 mg/m3 Respirable fraction (R)<br>TLV-TWA: 1 mg/m3 Respirable fraction (R) |
| Guideline OSHA: | PEL-TWA: 20 mppcf |

**Titanium Oxide :**

| | |
|---|---|
| Guideline ACGIH: | TLV-TWA: 10 mg/m3 |
| 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: | 0ºC (32ºF) |
| 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) ]<br>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) |

**Magnesite :**

| | |
|---|---|
| RTECS Number: | OM2470000 |
| Inhalation: | Inhalation - Rat TCLo - Lowest published toxic concentration : 76 mg/m3/4H [ Cardiac - Pulse rate increase without fall in BP Liver - Liver function tests impaired Kidney/Ureter/Bladder - Other changes in urine composition ]<br>Inhalation - Rat TCLo - Lowest published toxic concentration : 76 mg/m3/4H [ Blood - Changes in serum composition (e.g., TP, bilirubin, cholesterol) Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - Phosphatases ] (RTECS) |
| Ingestion: | Oral - Mouse LD50 - Lethal dose, 50 percent kill : 7000 mg/kg [ Details of toxic effects not reported other than lethal dose value ]<br>Oral - Rat LD50 - Lethal dose, 50 percent kill : 8000 mg/kg [ Details of toxic effects not reported other than lethal dose value ] (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 ]<br>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) |

## SECTION 12 - ECOLOGICAL INFORMATION

| | |
|---|---|
| Ecotoxicity: | No environmental information found for this product. |
| Environmental Fate: | No environmental information found for this product. |

## SECTION 13 - DISPOSAL CONSIDERATIONS

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

## 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):<br>WARNING! This product contains a chemical known to the State of California to cause cancer. |
| Canada WHMIS: | Xi - Irritant |
| EU Class: | Irritant.<br>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.<br>S37 - Wear suitable gloves. |

**Calcium carbonate :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |

**Diatomaceous Earth, Flux-Calcined :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |

**Magnesite :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |
| Canada DSL: | Listed |

**Talc :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |
| Canada DSL: | Listed |

**Titanium Oxide :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |
| Canada DSL: | Listed |

## SECTION 16 - ADDITIONAL INFORMATION

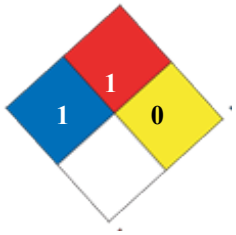
| | |
|---|---|
| HMIS Health Hazard: | 1 |
| HMIS Fire Hazard: | 1 |
| HMIS Reactivity: | 0 |
| HMIS Personal Protection: | X |
| SDS Creation Date: | July 08, 2013 |
| SDS Revision Date: | July 08, 2013 |
| Disclaimer: | The information and recommendations contained herein are, to the best of Sto Corp.'s 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. |

# SAFETY DATA SHEET

## SECTION 1 - IDENTIFICATION

| | |
|---|---|
| Product Name: | **StoSilco Lastic** |
| Product Code: | 80222 |
| SDS Manufacturer Number: | 80222 |
| Product Use/Restriction: | Waterbased Acrylic Coating. |
| Manufacturer Name: | Sto Corp. |
| Address: | 6175 Riverside Drive, SW<br>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: | |

**NFPA**




**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<br>Skin Irritant, Category 2 |
| Hazard Statements: | Causes eye irritation<br>Causes skin irritation |
| Precautionary Statements: | Wash hands thoroughly after handling.<br>Wear protective gloves/protective clothing/eye protection/face protection.<br>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>If eye irritation persists: Get medical advice/attention.<br>IF ON SKIN: Wash with plenty of soap and water.<br>If skin irritation or rash occurs: Get medical advice/attention.<br>Wash contaminated clothing before reuse. |
| Emergency Overview: | WARNING! Irritant. |
| Route of Exposure: | Eyes. Skin. Inhalation. Ingestion. |
| Potential Health Effects: | |

| | |
|---|---|
| Eye: | May cause irritation. |
| Skin: | May cause irritation. |
| Inhalation: | Prolonged or excessive inhalation may cause respiratory tract irritation. |
| Ingestion: | Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea. |
| Target Organs: | 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 | |
| Calcium carbonate | 1317-65-3 | 10 - 30 by weight | |
| Diatomaceous Earth, Flux-Calcined | 61790-53-2 | 1 - 5 by weight | |
| Magnesite | 546-93-0 | 1 - 5 by weight | |
| Talc | 14807-96-6 | 1 - 5 by weight | |
| Titanium Oxide | 13463-67-7 | 5 - 10 by weight | |
| Undisclosed/Non-hazardous | No Data | 1 - 5 by weight | |
| Water | 7732-18-5 | 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 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.<br>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. |
| Other First Aid: | First Responders should provide for their own safety prior to rendering assistance. |

## SECTION 5 - FIRE FIGHTING MEASURES

| | |
|---|---|
| Flash Point: | Not determined. |
| Auto Ignition Temperature: | Not determined. |
| Lower Flammable/Explosive Limit: | 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

| | |
|---|---|
| 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.<br>Store away from direct heat or sunlight, sources of UV radiation, peroxides, or free radicals.<br>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. |

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

| | |
|---|---|
| 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

**Diatomaceous Earth, Flux-Calcined :**

| | |
|---|---|
| Guideline OSHA: | PEL-TWA: 20 mppcf |

**Magnesite :**

| | |
|---|---|
| Guideline OSHA: | PEL-TWA: 15 mg/m3 Total particulate/dust (T)<br>PEL-TWA: 5 mg/m3 Respirable fraction (R) |

**Talc :**

| | |
|---|---|
| Guideline ACGIH: | TLV-TWA: 2 mg/m3 Respirable fraction (R)<br>TLV-TWA: 1 mg/m3 Respirable fraction (R) |
| Guideline OSHA: | PEL-TWA: 20 mppcf |

**Titanium Oxide :**

| | |
|---|---|
| Guideline ACGIH: | TLV-TWA: 10 mg/m3 |
| 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: | 0ºC (32ºF) |
| 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) ]<br>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) |

**Magnesite :**

| | |
|---|---|
| RTECS Number: | OM2470000 |
| Inhalation: | Inhalation - Rat TCLo - Lowest published toxic concentration : 76 mg/m3/4H [ Cardiac - Pulse rate increase without fall in BP Liver - Liver function tests impaired Kidney/Ureter/Bladder - Other changes in urine composition ]<br>Inhalation - Rat TCLo - Lowest published toxic concentration : 76 mg/m3/4H [ Blood - Changes in serum composition (e.g., TP, bilirubin, cholesterol) Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - Phosphatases ] (RTECS) |
| Ingestion: | Oral - Mouse LD50 - Lethal dose, 50 percent kill : 7000 mg/kg [ Details of toxic effects not reported other than lethal dose value ]<br>Oral - Rat LD50 - Lethal dose, 50 percent kill : 8000 mg/kg [ Details of toxic effects not reported other than lethal dose value ] (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 ]<br>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) |

## SECTION 12 - ECOLOGICAL INFORMATION

| | |
|---|---|
| Ecotoxicity: | No environmental information found for this product. |
| Environmental Fate: | No environmental information found for this product. |

## SECTION 13 - DISPOSAL CONSIDERATIONS

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

## 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. |
| Canada WHMIS: | Xi - Irritant |
| EU Class: | Irritant.<br>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.<br>S37 - Wear suitable gloves. |

**Calcium carbonate :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |

**Diatomaceous Earth, Flux-Calcined :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |

**Magnesite :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |
| Canada DSL: | Listed |

**Talc :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |
| Canada DSL: | Listed |

**Titanium Oxide :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |
| Canada DSL: | Listed |

## SECTION 16 - ADDITIONAL INFORMATION

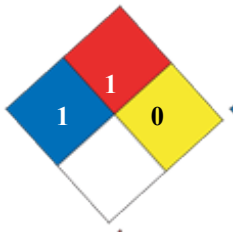
| | |
|---|---|
| HMIS Health Hazard: | 1 |
| HMIS Fire Hazard: | 1 |
| HMIS Reactivity: | 0 |
| HMIS Personal Protection: | X |
| SDS Creation Date: | July 08, 2013 |
| SDS Revision Date: | July 08, 2013 |
| Disclaimer: | The information and recommendations contained herein are, to the best of Sto Corp.'s 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. |

# SAFETY DATA SHEET

## SECTION 1 - IDENTIFICATION

| | |
|---|---|
| Product Name: | **Stolit Milano** |
| Product Code: | 81341 |
| SDS Manufacturer Number: | 81341 |
| Product Use/Restriction: | Waterbased Acrylic Coating. |
| Manufacturer Name: | Sto Corp. |
| Address: | 6175 Riverside Drive, SW<br>Atlanta, Georgia 30331 |
| General Phone Number: | (404) 346-3666 |
| Emergency Phone Number: | (800) 424-9300 |
| SDS Creation Date: | August 16, 2013 |
| SDS Revision Date: | August 16, 2013 |
| (M)SDS Format: | |

**NFPA**




**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<br>Skin Irritant, Category 2 |
| Hazard Statements: | Causes eye irritation<br>Causes skin irritation |
| Precautionary Statements: | Wash hands thoroughly after handling.<br>Wear protective gloves/protective clothing/eye protection/face protection.<br>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>If eye irritation persists: Get medical advice/attention.<br>IF ON SKIN: Wash with plenty of soap and water.<br>If skin irritation or rash occurs: Get medical advice/attention.<br>Wash contaminated clothing before reuse. |
| Emergency Overview: | WARNING! Irritant. |
| Route of Exposure: | Eyes. Skin. Inhalation. Ingestion. |
| Potential Health Effects: | |

| | |
|---|---|
| Eye: | May cause irritation. |
| Skin: | May cause irritation. |
| Inhalation: | Prolonged or excessive inhalation may cause respiratory tract irritation. Normal application procedures for this product pose no hazard as to the release of respirable titanium dioxide dust, but grinding or sanding dried films of this product may yield some respirable titanium dioxide. |
| Ingestion: | Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea. |
| Target Organs: | Eyes. Skin. Respiratory system. Digestive system. |

## SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS# | Ingredient Percent | EC Num. |
|---|---|---|---|
| Calcium carbonate | 1317-65-3 | 30 - 60 by weight | |
| Water | 7732-18-5 | 10 - 30 by weight | |
| Acrylic polymer | No Data | 5 - 10 by weight | |
| Undisclosed/Non-hazardous | No Data | 1 - 5 by weight | |
| Titanium Oxide | 13463-67-7 | 1 - 5 by weight | |
| Perlite | 93763-70-3 | 1 - 5 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 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.<br>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. |
| Other First Aid: | First Responders should provide for their own safety prior to rendering assistance. |

## SECTION 5 - FIRE FIGHTING MEASURES

| | |
|---|---|
| Flash Point: | Not determined. |
| Auto Ignition Temperature: | Not determined. |
| Lower Flammable/Explosive Limit: | 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

| | |
|---|---|
| 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.<br>Store away from direct heat or sunlight, sources of UV radiation, peroxides, or free radicals.<br>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. |

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

| | |
|---|---|
| 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

**Titanium Oxide :**

| | |
|---|---|
| Guideline ACGIH: | TLV-TWA: 10 mg/m3 |

**Perlite :**

| | |
|---|---|
| Guideline ACGIH: | TLV-TWA: 5 mg/m3 Respirable fraction (R) |
| Guideline OSHA: | PEL-TWA: 5 mg/m3 Respirable fraction (R)<br>PEL-TWA: 15 mg/m3 Total particulate/dust (T) |
| 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: | 0ºC (32ºF) |
| 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) ]<br>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) |

**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) |
| Chronic Effects: | Normal application procedures for this product pose no hazard as to the release of respirable titanium dioxide dust, but grinding or sanding dried films of this product may yield some respirable titanium dioxide. |
| Carcinogenicity: | IARC: Group 2B: Possibly carcinogenic to humans. |

**Perlite :**

| | |
|---|---|
| RTECS Number: | SD5254000 |
| Ingestion: | Oral - Mouse LD50 - Lethal dose, 50 percent kill : 12960 mg/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. |
| 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. |

## 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):<br>This product does not contain any Proposition 65 chemicals. |
| Canada WHMIS: | Xi - Irritant |
| EU Class: | Irritant.<br>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.<br>S37 - Wear suitable gloves. |

**Calcium carbonate :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |

**Titanium Oxide :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |
| Canada DSL: | Listed |

**Perlite :**

| | |
|---|---|
| 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: | August 16, 2013 |
| SDS Revision Date: | August 16, 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. |

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**
THERMAX(TM) 0.50 Inch Insulation Sheathing

**COMPANY IDENTIFICATION**
The Dow Chemical Company
2030 Willard H. Dow Center
Midland, MI 48674
United States

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:** Tan
**Physical State:** Board
**Odor:** Mild
**Hazards of product:**

Toxic fumes may be released in fire situations. Isolate area.

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

### Potential Health Effects
**Eye Contact:** 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.
**Skin Contact:** May cause itching. May cause skin irritation due to mechanical abrasion.
**Skin Absorption:** Skin absorption is unlikely due to physical properties.
**Inhalation:** 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.
**Ingestion:** 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.
**Aspiration hazard:** Based on physical properties, not likely to be an aspiration hazard.
**Effects of 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. For the minor component(s): May cause central nervous system effects. In animals, effects have been reported on the following organs: Male reproductive organs. Female reproductive organs. Liver.
**Birth Defects/Developmental Effects:** For the minor component(s): Has been toxic to the fetus in laboratory animals at doses toxic to the mother.
**Reproductive Effects:** Contains 1-bromopropane which has been shown to interfere with reproduction and fertility in animal studies.

## 3. Composition Information

This product is a mixture.

| Component | CAS # | Amount |
|---|---|---|
| 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 (8CI, 9CI) | 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 % |

## 4. First-aid measures

### 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 skin 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 immediate medical attention and special treatment needed
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.
Repeated excessive exposure may aggravate preexisting lung disease.

## 5. Fire Fighting Measures

### Suitable extinguishing media
Water. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers.

### 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.

## 6. Accidental Release Measures

**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.

## 7. Handling and Storage

### Handling

**General 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.
**Other Precautions:** Good housekeeping and controlling of dusts are necessary for safe handling of product.

### 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.

## 8. Exposure Controls / Personal Protection

### Exposure Limits

| Component | List | Type | Value |
|---|---|---|---|
| **Aluminum** | OSHA Table Z-1 | PEL Total dust. as Al | 15 mg/m3 |
| | OSHA Table Z-1 | PEL Respirable dust. as Al | 5 mg/m3 |
| | ACGIH | TWA Respirable fraction. | 1 mg/m3 |
| **Cyclopentane (8CI, 9CI)** | ACGIH | TWA | 600 ppm |
| **Isopentane** | ACGIH | TWA | 1,000 ppm |
| **Continuous Filament Glass Fiber** | ACGIH | TWA Inhalable fraction. | 5 mg/m3 |
| | ACGIH | TWA Fiber. | 1 fibers/cm3 |
| **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.

### Personal Protection
**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:** 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.

**Hand protection:** Use gloves to protect from mechanical injury. Selection of gloves 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.
**Ingestion:** No precautions necessary due to the physical properties of the material.

### 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 with adequate ventilation. Local exhaust ventilation may be necessary for some operations.

## 9. Physical and Chemical Properties

| | |
|---|---|
| **Appearance** | |
| **Physical State** | Board |
| **Color** | Tan |
| **Odor** | Mild |
| **Odor Threshold** | No test data available |
| **pH** | Not applicable |
| **Melting Point** | Not applicable |
| **Freezing Point** | Not applicable |
| **Boiling Point (760 mmHg)** | Not applicable. |
| **Flash Point - Closed Cup** | Not applicable |
| **Evaporation Rate (Butyl Acetate = 1)** | No test data available |
| **Flammability (solid, gas)** | No data available |
| **Flammable Limits In Air** | **Lower**: Not applicable<br>**Upper**: Not applicable |
| **Vapor Pressure** | Not applicable |
| **Vapor Density (air = 1)** | Not applicable |
| **Specific Gravity (H2O = 1)** | 0.02 - 0.05 *Literature* |
| **Solubility in water (by weight)** | *Literature* insoluble in water |
| **Partition coefficient, n-octanol/water (log Pow)** | no data available |
| **Autoignition Temperature** | 490 °C (914 °F) *ASTM D1929* |
| **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 |

## 10. Stability and Reactivity

### 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.

## 11. Toxicological Information

### Acute Toxicity
**Ingestion**
As product: Single dose oral LD50 has not been determined.
Based on information for component(s): LD50, rat > 5,000 mg/kg
**Dermal**
As product: The dermal LD50 has not been determined.
For the minor component(s): LD50, rabbit > 5,000 mg/kg
**Inhalation**
As product: The LC50 has not been determined.
For the minor component(s): LC50, 4 h, Aerosol, rat > 4.6 mg/l

### 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.

### Skin corrosion/irritation
May cause itching. May cause skin irritation due to mechanical abrasion.

### Sensitization
**Skin**
Relevant data not available.
**Respiratory**
Relevant data not available.

### Repeated Dose Toxicity
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. For the minor component(s): May cause central nervous system effects. In animals, effects have been reported on the following organs: Male reproductive organs. Female reproductive organs. Liver. Additives are encapsulated in the product and are not expected to be released under normal processing conditions or foreseeable emergency.

### Chronic Toxicity and 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.

### Developmental Toxicity
For the minor component(s): Has been toxic to the fetus in laboratory animals at doses toxic to the mother.

### Reproductive Toxicity
Contains 1-bromopropane which has been shown to interfere with reproduction and fertility in animal studies.

### Genetic Toxicology
The data presented are for the following material: The fiberglass in this product is continuous filament fiberglass. In vitro genetic toxicity studies were inconclusive. For the minor component(s) In vitro genetic toxicity studies were predominantly negative.

## 12. Ecological Information

### Toxicity

Not expected to be acutely toxic to aquatic organisms.

### Persistence and Degradability

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

**Mobility in soil:** In the terrestrial environment, material is expected to remain in the soil., In the aquatic environment, material is expected to float.

## 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: Landfill. Incinerator or other thermal destruction device.

## 14. Transport Information

**DOT Non-Bulk**
NOT REGULATED

**DOT Bulk**
NOT REGULATED

**IMDG**
NOT REGULATED

**ICAO/IATA**
NOT REGULATED

*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 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

| | |
|---|---|
| **Immediate (Acute) Health Hazard** | No |
| **Delayed (Chronic) Health Hazard** | No |
| **Fire Hazard** | No |
| **Reactive Hazard** | No |
| **Sudden Release of Pressure Hazard** | No |

**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.

| Component | CAS # | Amount |
|---|---|---|
| Aluminum | 7429-90-5 | < 35.0 % |

**Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Hazardous Substances List and/or Pennsylvania Environmental Hazardous Substance List:**

The following product components are cited in the Pennsylvania Hazardous Substance List and/or the Pennsylvania Environmental Substance List, and are present at levels which require reporting.

| Component | CAS # | Amount |
|---|---|---|
| Aluminum | 7429-90-5 | < 35.0 % |
| 1-Bromopropane | 106-94-5 | < 5.0 % |
| Cyclopentane (8CI, 9CI) | 287-92-3 | < 10.0 % |
| Isopentane | 78-78-4 | < 5.0 % |
| 2,2-Dimethylbutane | 75-83-2 | < 5.0 % |

**Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Special Hazardous Substances List:**

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)**

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

| Component | CAS # | Amount |
|---|---|---|
| 1-Bromopropane | 106-94-5 | < 5.0 % |

**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.

## 16. Other Information

### Product Literature

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

## Recommended Uses and Restrictions

### 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.

## Revision

Identification Number: 82173 / 0000 / Issue Date 04/21/2014 / Version: 13.0
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. |

# Material Safety Data Sheet
**The Dow Chemical Company**

**Product Name:** THERMAX(TM) 0.75 Inch Insulation Sheathing **Issue Date:** 04/21/2014
**Print Date:** 22 Apr 2014

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**
THERMAX(TM) 0.75 Inch Insulation Sheathing

**COMPANY IDENTIFICATION**
The Dow Chemical Company
2030 Willard H. Dow Center
Midland, MI 48674
United States

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:** Tan
**Physical State:** Board
**Odor:** Mild
**Hazards of product:**

Toxic fumes may be released in fire situations. Isolate area.

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

### Potential Health Effects
**Eye Contact:** 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.
**Skin Contact:** May cause itching. May cause skin irritation due to mechanical abrasion.
**Skin Absorption:** Skin absorption is unlikely due to physical properties.
**Inhalation:** 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.
**Ingestion:** 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.
**Aspiration hazard:** Based on physical properties, not likely to be an aspiration hazard.
**Effects of 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. For the minor component(s): May cause central nervous system effects. In animals, effects have been reported on the following organs: Male reproductive organs. Female reproductive organs. Liver.
**Birth Defects/Developmental Effects:** For the minor component(s): Has been toxic to the fetus in laboratory animals at doses toxic to the mother.
**Reproductive Effects:** Contains 1-bromopropane which has been shown to interfere with reproduction and fertility in animal studies.

## 3. Composition Information

This product is a mixture.

| Component | CAS # | Amount |
|---|---|---|
| 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 (8CI, 9CI) | 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 % |

## 4. First-aid measures

### 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 skin 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 immediate medical attention and special treatment needed

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.
Repeated excessive exposure may aggravate preexisting lung disease.

## 5. Fire Fighting Measures

### Suitable extinguishing media

Water. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers.

### 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.

## 6. Accidental Release Measures

**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.

## 7. Handling and Storage

### Handling

**General 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.
**Other Precautions:** Good housekeeping and controlling of dusts are necessary for safe handling of product.

### 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.

## 8. Exposure Controls / Personal Protection

**Exposure Limits**

| Component | List | Type | Value |
|---|---|---|---|
| **Aluminum** | OSHA Table Z-1 | PEL Total dust. as Al | 15 mg/m3 |
| | OSHA Table Z-1 | PEL Respirable dust. as Al | 5 mg/m3 |
| | ACGIH | TWA Respirable fraction. | 1 mg/m3 |
| **Cyclopentane (8CI, 9CI)** | ACGIH | TWA | 600 ppm |
| **Isopentane** | ACGIH | TWA | 1,000 ppm |
| **Continuous Filament Glass Fiber** | ACGIH | TWA Inhalable fraction. | 5 mg/m3 |
| | ACGIH | TWA Fiber. | 1 fibers/cm3 |
| **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.

### Personal Protection
**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:** 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.
**Hand protection:** Use gloves to protect from mechanical injury. Selection of gloves 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.
**Ingestion:** No precautions necessary due to the physical properties of the material.

### 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 with adequate ventilation. Local exhaust ventilation may be necessary for some operations.

## 9. Physical and Chemical Properties

| | |
|---|---|
| **Appearance** | |
| **Physical State** | Board |
| **Color** | Tan |
| **Odor** | Mild |
| **Odor Threshold** | No test data available |
| **pH** | Not applicable |
| **Melting Point** | Not applicable |
| **Freezing Point** | Not applicable |
| **Boiling Point (760 mmHg)** | Not applicable. |
| **Flash Point - Closed Cup** | Not applicable |
| **Evaporation Rate (Butyl Acetate = 1)** | No test data available |
| **Flammability (solid, gas)** | No data available |
| **Flammable Limits In Air** | **Lower**: Not applicable<br>**Upper**: Not applicable |
| **Vapor Pressure** | Not applicable |
| **Vapor Density (air = 1)** | Not applicable |
| **Specific Gravity (H2O = 1)** | 0.02 - 0.05 *Literature* |
| **Solubility in water (by weight)** | *Literature* insoluble in water |
| **Partition coefficient, n-octanol/water (log Pow)** | no data available |
| **Autoignition Temperature** | 490 °C (914 °F) *ASTM D1929* |
| **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 |

## 10. Stability and Reactivity

### 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.

## 11. Toxicological Information

### Acute Toxicity
**Ingestion**
As product: Single dose oral LD50 has not been determined.
Based on information for component(s): LD50, rat > 5,000 mg/kg
**Dermal**
As product: The dermal LD50 has not been determined.
For the minor component(s): LD50, rabbit > 5,000 mg/kg
**Inhalation**
As product: The LC50 has not been determined.
For the minor component(s): LC50, 4 h, Aerosol, rat > 4.6 mg/l

### 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.

### Skin corrosion/irritation
May cause itching. May cause skin irritation due to mechanical abrasion.

### Sensitization
**Skin**
Relevant data not available.
**Respiratory**
Relevant data not available.

### Repeated Dose Toxicity
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. For the minor component(s): May cause central nervous system effects. In animals, effects have been reported on the following organs: Male reproductive organs. Female reproductive organs. Liver. Additives are encapsulated in the product and are not expected to be released under normal processing conditions or foreseeable emergency.

### Chronic Toxicity and 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.

### Developmental Toxicity
For the minor component(s): Has been toxic to the fetus in laboratory animals at doses toxic to the mother.

### Reproductive Toxicity
Contains 1-bromopropane which has been shown to interfere with reproduction and fertility in animal studies.

### Genetic Toxicology
The data presented are for the following material: The fiberglass in this product is continuous filament fiberglass. In vitro genetic toxicity studies were inconclusive. For the minor component(s) In vitro genetic toxicity studies were predominantly negative.

## 12. Ecological Information

### Toxicity

Not expected to be acutely toxic to aquatic organisms.

### Persistence and Degradability

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

**Mobility in soil:** In the terrestrial environment, material is expected to remain in the soil., In the aquatic environment, material is expected to float.

## 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: Landfill. Incinerator or other thermal destruction device.

## 14. Transport Information

**DOT Non-Bulk**
NOT REGULATED

**DOT Bulk**
NOT REGULATED

**IMDG**
NOT REGULATED

**ICAO/IATA**
NOT REGULATED

*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 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**

| | |
|---|---|
| **Immediate (Acute) Health Hazard** | No |
| **Delayed (Chronic) Health Hazard** | No |
| **Fire Hazard** | No |
| **Reactive Hazard** | No |
| **Sudden Release of Pressure Hazard** | No |

**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.

| Component | CAS # | Amount |
|---|---|---|
| Aluminum | 7429-90-5 | < 35.0 % |

**Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Hazardous Substances List and/or Pennsylvania Environmental Hazardous Substance List:**
The following product components are cited in the Pennsylvania Hazardous Substance List and/or the Pennsylvania Environmental Substance List, and are present at levels which require reporting.

| Component | CAS # | Amount |
|---|---|---|
| Aluminum | 7429-90-5 | < 35.0 % |
| 1-Bromopropane | 106-94-5 | < 5.0 % |
| Cyclopentane (8CI, 9CI) | 287-92-3 | < 10.0 % |
| Isopentane | 78-78-4 | < 5.0 % |
| 2,2-Dimethylbutane | 75-83-2 | < 5.0 % |

**Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Special Hazardous Substances List:**
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)**
WARNING: This product contains a chemical(s) known to the State of California to cause birth defects or other reproductive harm.

| Component | CAS # | Amount |
|---|---|---|
| 1-Bromopropane | 106-94-5 | < 5.0 % |

**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.

## 16. Other Information

**Product Literature**

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

## Recommended Uses and Restrictions

### 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.

## Revision

Identification Number: 82173 / 0000 / Issue Date 04/21/2014 / Version: 13.0
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. |

# Material Safety Data Sheet
**The Dow Chemical Company**

**Product Name:** THERMAX(TM) 1.55 Inch Insulation Sheathing **Issue Date:** 04/21/2014
**Print Date:** 22 Apr 2014

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**
THERMAX(TM) 1.55 Inch Insulation Sheathing

**COMPANY IDENTIFICATION**
The Dow Chemical Company
2030 Willard H. Dow Center
Midland, MI 48674
United States

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:** Tan
**Physical State:** Board
**Odor:** Mild
**Hazards of product:**

Toxic fumes may be released in fire situations. Isolate area.

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

### Potential Health Effects
**Eye Contact:** 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.
**Skin Contact:** May cause itching. May cause skin irritation due to mechanical abrasion.
**Skin Absorption:** Skin absorption is unlikely due to physical properties.
**Inhalation:** 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.
**Ingestion:** 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.
**Aspiration hazard:** Based on physical properties, not likely to be an aspiration hazard.
**Effects of 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. For the minor component(s): May cause central nervous system effects. In animals, effects have been reported on the following organs: Male reproductive organs. Female reproductive organs. Liver.
**Birth Defects/Developmental Effects:** For the minor component(s): Has been toxic to the fetus in laboratory animals at doses toxic to the mother.
**Reproductive Effects:** Contains 1-bromopropane which has been shown to interfere with reproduction and fertility in animal studies.

## 3. Composition Information

This product is a mixture.

| Component | CAS # | Amount |
|---|---|---|
| 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 (8CI, 9CI) | 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 % |

## 4. First-aid measures

### 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 skin 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 immediate medical attention and special treatment needed
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.
Repeated excessive exposure may aggravate preexisting lung disease.

## 5. Fire Fighting Measures

### Suitable extinguishing media
Water. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers.

### 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.

## 6. Accidental Release Measures

**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.

## 7. Handling and Storage

### Handling

**General 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.
**Other Precautions:** Good housekeeping and controlling of dusts are necessary for safe handling of product.

### 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.

## 8. Exposure Controls / Personal Protection

### Exposure Limits

| Component | List | Type | Value |
|---|---|---|---|
| **Aluminum** | OSHA Table Z-1 | PEL Total dust. as Al | 15 mg/m3 |
| | OSHA Table Z-1 | PEL Respirable dust. as Al | 5 mg/m3 |
| | ACGIH | TWA Respirable fraction. | 1 mg/m3 |
| **Cyclopentane (8CI, 9CI)** | ACGIH | TWA | 600 ppm |
| **Isopentane** | ACGIH | TWA | 1,000 ppm |
| **Continuous Filament Glass Fiber** | ACGIH | TWA Inhalable fraction. | 5 mg/m3 |
| | ACGIH | TWA Fiber. | 1 fibers/cm3 |
| **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.

### Personal Protection
**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:** 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.

**Hand protection:** Use gloves to protect from mechanical injury. Selection of gloves 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.
**Ingestion:** No precautions necessary due to the physical properties of the material.

### 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 with adequate ventilation. Local exhaust ventilation may be necessary for some operations.

## 9. Physical and Chemical Properties

| | |
|---|---|
| **Appearance** | |
| **Physical State** | Board |
| **Color** | Tan |
| **Odor** | Mild |
| **Odor Threshold** | No test data available |
| **pH** | Not applicable |
| **Melting Point** | Not applicable |
| **Freezing Point** | Not applicable |
| **Boiling Point (760 mmHg)** | Not applicable. |
| **Flash Point - Closed Cup** | Not applicable |
| **Evaporation Rate (Butyl Acetate = 1)** | No test data available |
| **Flammability (solid, gas)** | No data available |
| **Flammable Limits In Air** | **Lower**: Not applicable<br>**Upper**: Not applicable |
| **Vapor Pressure** | Not applicable |
| **Vapor Density (air = 1)** | Not applicable |
| **Specific Gravity (H2O = 1)** | 0.02 - 0.05 *Literature* |
| **Solubility in water (by weight)** | *Literature* insoluble in water |
| **Partition coefficient, n-octanol/water (log Pow)** | no data available |
| **Autoignition Temperature** | 490 °C (914 °F) *ASTM D1929* |
| **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 |

## 10. Stability and Reactivity

### 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.

## 11. Toxicological Information

### Acute Toxicity

**Ingestion**

As product: Single dose oral LD50 has not been determined.
Based on information for component(s): LD50, rat > 5,000 mg/kg

**Dermal**

As product: The dermal LD50 has not been determined.
For the minor component(s): LD50, rabbit > 5,000 mg/kg

**Inhalation**

As product: The LC50 has not been determined.
For the minor component(s): LC50, 4 h, Aerosol, rat > 4.6 mg/l

### 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.

### Skin corrosion/irritation

May cause itching. May cause skin irritation due to mechanical abrasion.

### Sensitization

**Skin**

Relevant data not available.

**Respiratory**

Relevant data not available.

### Repeated Dose Toxicity

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. For the minor component(s): May cause central nervous system effects. In animals, effects have been reported on the following organs: Male reproductive organs. Female reproductive organs. Liver. Additives are encapsulated in the product and are not expected to be released under normal processing conditions or foreseeable emergency.

### Chronic Toxicity and 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.

### Developmental Toxicity

For the minor component(s): Has been toxic to the fetus in laboratory animals at doses toxic to the mother.

### Reproductive Toxicity

Contains 1-bromopropane which has been shown to interfere with reproduction and fertility in animal studies.

### Genetic Toxicology

The data presented are for the following material: The fiberglass in this product is continuous filament fiberglass. In vitro genetic toxicity studies were inconclusive. For the minor component(s) In vitro genetic toxicity studies were predominantly negative.

## 12. Ecological Information

### Toxicity

Not expected to be acutely toxic to aquatic organisms.

### Persistence and Degradability

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

**Mobility in soil:** In the terrestrial environment, material is expected to remain in the soil., In the aquatic environment, material is expected to float.

## 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: Landfill. Incinerator or other thermal destruction device.

## 14. Transport Information

**DOT Non-Bulk**
NOT REGULATED

**DOT Bulk**
NOT REGULATED

**IMDG**
NOT REGULATED

**ICAO/IATA**
NOT REGULATED

*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 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

| | |
|---|---|
| **Immediate (Acute) Health Hazard** | No |
| **Delayed (Chronic) Health Hazard** | No |
| **Fire Hazard** | No |
| **Reactive Hazard** | No |
| **Sudden Release of Pressure Hazard** | No |

**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.

| Component | CAS # | Amount |
|---|---|---|
| Aluminum | 7429-90-5 | < 35.0 % |

**Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Hazardous Substances List and/or Pennsylvania Environmental Hazardous Substance List:**

The following product components are cited in the Pennsylvania Hazardous Substance List and/or the Pennsylvania Environmental Substance List, and are present at levels which require reporting.

| Component | CAS # | Amount |
|---|---|---|
| Aluminum | 7429-90-5 | < 35.0 % |
| 1-Bromopropane | 106-94-5 | < 5.0 % |
| Cyclopentane (8CI, 9CI) | 287-92-3 | < 10.0 % |
| Isopentane | 78-78-4 | < 5.0 % |
| 2,2-Dimethylbutane | 75-83-2 | < 5.0 % |

**Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Special Hazardous Substances List:**

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)**

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

| Component | CAS # | Amount |
|---|---|---|
| 1-Bromopropane | 106-94-5 | < 5.0 % |

**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.

## 16. Other Information

### Product Literature

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

## Recommended Uses and Restrictions

### 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.

## Revision

Identification Number: 82173 / 0000 / Issue Date 04/21/2014 / Version: 13.0
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. |

# Material Safety Data Sheet
**The Dow Chemical Company**

**Product Name:** THERMAX(TM) 3.00 Inch Insulation Sheathing **Issue Date:** 04/21/2014
**Print Date:** 22 Apr 2014

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**
THERMAX(TM) 3.00 Inch Insulation Sheathing

**COMPANY IDENTIFICATION**
The Dow Chemical Company
2030 Willard H. Dow Center
Midland, MI 48674
United States

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:** Tan
**Physical State:** Board
**Odor:** Mild
**Hazards of product:**

Toxic fumes may be released in fire situations. Isolate area.

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

### Potential Health Effects
**Eye Contact:** 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.
**Skin Contact:** May cause itching. May cause skin irritation due to mechanical abrasion.
**Skin Absorption:** Skin absorption is unlikely due to physical properties.
**Inhalation:** 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.
**Ingestion:** 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.
**Aspiration hazard:** Based on physical properties, not likely to be an aspiration hazard.
**Effects of 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. For the minor component(s): May cause central nervous system effects. In animals, effects have been reported on the following organs: Male reproductive organs. Female reproductive organs. Liver.
**Birth Defects/Developmental Effects:** For the minor component(s): Has been toxic to the fetus in laboratory animals at doses toxic to the mother.
**Reproductive Effects:** Contains 1-bromopropane which has been shown to interfere with reproduction and fertility in animal studies.

## 3. Composition Information

This product is a mixture.

| Component | CAS # | Amount |
|---|---|---|
| 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 (8CI, 9CI) | 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 % |

## 4. First-aid measures

### 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 skin 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 immediate medical attention and special treatment needed

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.
Repeated excessive exposure may aggravate preexisting lung disease.

## 5. Fire Fighting Measures

### Suitable extinguishing media

Water. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers.

### 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.

## 6. Accidental Release Measures

**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.

## 7. Handling and Storage

### Handling

**General 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.
**Other Precautions:** Good housekeeping and controlling of dusts are necessary for safe handling of product.

### 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.

## 8. Exposure Controls / Personal Protection

**Exposure Limits**

| Component | List | Type | Value |
|---|---|---|---|
| **Aluminum** | OSHA Table Z-1 | PEL Total dust. as Al | 15 mg/m3 |
| | OSHA Table Z-1 | PEL Respirable dust. as Al | 5 mg/m3 |
| | ACGIH | TWA Respirable fraction. | 1 mg/m3 |
| **Cyclopentane (8CI, 9CI)** | ACGIH | TWA | 600 ppm |
| **Isopentane** | ACGIH | TWA | 1,000 ppm |
| **Continuous Filament Glass Fiber** | ACGIH | TWA Inhalable fraction. | 5 mg/m3 |
| | ACGIH | TWA Fiber. | 1 fibers/cm3 |
| **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.

### Personal Protection
**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:** 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.
**Hand protection:** Use gloves to protect from mechanical injury. Selection of gloves 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.
**Ingestion:** No precautions necessary due to the physical properties of the material.

### 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 with adequate ventilation. Local exhaust ventilation may be necessary for some operations.

## 9. Physical and Chemical Properties

| | |
|---|---|
| **Appearance** | |
| **Physical State** | Board |
| **Color** | Tan |
| **Odor** | Mild |
| **Odor Threshold** | No test data available |
| **pH** | Not applicable |
| **Melting Point** | Not applicable |
| **Freezing Point** | Not applicable |
| **Boiling Point (760 mmHg)** | Not applicable. |
| **Flash Point - Closed Cup** | Not applicable |
| **Evaporation Rate (Butyl Acetate = 1)** | No test data available |
| **Flammability (solid, gas)** | No data available |
| **Flammable Limits In Air** | **Lower**: Not applicable<br>**Upper**: Not applicable |
| **Vapor Pressure** | Not applicable |
| **Vapor Density (air = 1)** | Not applicable |
| **Specific Gravity (H2O = 1)** | 0.02 - 0.05 *Literature* |
| **Solubility in water (by weight)** | *Literature* insoluble in water |
| **Partition coefficient, n-octanol/water (log Pow)** | no data available |
| **Autoignition Temperature** | 490 °C (914 °F) *ASTM D1929* |
| **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 |

## 10. Stability and Reactivity

### 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.

## 11. Toxicological Information

### Acute Toxicity
**Ingestion**
As product: Single dose oral LD50 has not been determined.
Based on information for component(s): LD50, rat > 5,000 mg/kg
**Dermal**
As product: The dermal LD50 has not been determined.
For the minor component(s): LD50, rabbit > 5,000 mg/kg
**Inhalation**
As product: The LC50 has not been determined.
For the minor component(s): LC50, 4 h, Aerosol, rat > 4.6 mg/l

### 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.

### Skin corrosion/irritation
May cause itching. May cause skin irritation due to mechanical abrasion.

### Sensitization
**Skin**
Relevant data not available.
**Respiratory**
Relevant data not available.

### Repeated Dose Toxicity
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. For the minor component(s): May cause central nervous system effects. In animals, effects have been reported on the following organs: Male reproductive organs. Female reproductive organs. Liver. Additives are encapsulated in the product and are not expected to be released under normal processing conditions or foreseeable emergency.

### Chronic Toxicity and 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.

### Developmental Toxicity
For the minor component(s): Has been toxic to the fetus in laboratory animals at doses toxic to the mother.

### Reproductive Toxicity
Contains 1-bromopropane which has been shown to interfere with reproduction and fertility in animal studies.

### Genetic Toxicology
The data presented are for the following material: The fiberglass in this product is continuous filament fiberglass. In vitro genetic toxicity studies were inconclusive. For the minor component(s) In vitro genetic toxicity studies were predominantly negative.

## 12. Ecological Information

### Toxicity

Not expected to be acutely toxic to aquatic organisms.

### Persistence and Degradability

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

**Mobility in soil:** In the terrestrial environment, material is expected to remain in the soil., In the aquatic environment, material is expected to float.

## 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: Landfill. Incinerator or other thermal destruction device.

## 14. Transport Information

**DOT Non-Bulk**
NOT REGULATED

**DOT Bulk**
NOT REGULATED

**IMDG**
NOT REGULATED

**ICAO/IATA**
NOT REGULATED

*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 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**

| | |
|---|---|
| **Immediate (Acute) Health Hazard** | No |
| **Delayed (Chronic) Health Hazard** | No |
| **Fire Hazard** | No |
| **Reactive Hazard** | No |
| **Sudden Release of Pressure Hazard** | No |

**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.

| Component | CAS # | Amount |
|---|---|---|
| Aluminum | 7429-90-5 | < 35.0 % |

**Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Hazardous Substances List and/or Pennsylvania Environmental Hazardous Substance List:**
The following product components are cited in the Pennsylvania Hazardous Substance List and/or the Pennsylvania Environmental Substance List, and are present at levels which require reporting.

| Component | CAS # | Amount |
|---|---|---|
| Aluminum | 7429-90-5 | < 35.0 % |
| 1-Bromopropane | 106-94-5 | < 5.0 % |
| Cyclopentane (8CI, 9CI) | 287-92-3 | < 10.0 % |
| Isopentane | 78-78-4 | < 5.0 % |
| 2,2-Dimethylbutane | 75-83-2 | < 5.0 % |

**Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Special Hazardous Substances List:**
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)**
WARNING: This product contains a chemical(s) known to the State of California to cause birth defects or other reproductive harm.

| Component | CAS # | Amount |
|---|---|---|
| 1-Bromopropane | 106-94-5 | < 5.0 % |

**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.

## 16. Other Information

**Product Literature**

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

## Recommended Uses and Restrictions

### 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.

## Revision

Identification Number: 82173 / 0000 / Issue Date 04/21/2014 / Version: 13.0
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. |

# MATERIAL SAFETY DATA SHEET
# FISSURED



USG Interiors, Inc.
125 South Franklin Street
Chicago, Illinois 60680-4470
A Subsidiary of USG Corporation

Product Safety: 1 (800) 507-8899
www.usg.com
Version Date: October 7, 2003
Version: 4

## SECTION 1
## CHEMICAL PRODUCT AND IDENTIFICATION

**PRODUCT:** USG Acoustical Ceiling Panels and Tiles - FISSURED
**SYNONYM:** Mineral wool acoustical ceiling panels
**CHEMICAL FAMILY:** Mixture of slag wool and minerals. Ceiling panels and tiles are products considered not to be dangerous chemicals or preparations.
*Manufactured by*
*USG Interiors, Inc.*
*850 North Broadway, Greenville, MS 38701-2305*

*and USG Interiors, Inc.*
*35 Arch St.*
*Cloquet, MN 55720-1599*

## SECTION 2
## COMPOSITION, INFORMATION ON INGREDIENTS

Ceiling panels are composed of inorganic substances including MMVF22 [(slag wool) man made vitreous (silicate) fibres (CAS 65997-17-3)], expanded perlite (CAS 93763-70-3), clay (kaolin, CAS 1332-58-7), and recycle paper (CAS 9004-34-6) using starch (CAS 9005-25-8) binder to form a solid dry matrix. The ceiling panels are coated on the surface with a solvent-free water based latex paint.

| MATERIAL | WT% | TLV (mg/m$^3$) | PEL( mg/m$^3$) | CAS NUMBER |
|---|---|---|---|---|
| Slag Wool Fiber[1] [recycled] | <30 | 1 f/cc (R)[1] | 15(T)/5(R) | 65997-17-3 |
| Expanded Perlite | >40 | 10 | 15(T)/5(R) | 93763-70-3 |
| Paper (Cellulose) [recycled post consumer] | >15 | 10 | 15(T)/5(R) | 9004-34-6 |
| Starch | >10 | 10 | 15(T)/5(R) | 9005-25-8 |
| Kaolin | 1-15 | 10 | 15(T)/5(R) | 1332-58-7 |
| Crystalline Silica (quartz)[2] | <5 | 0.05 (R) | 0.1(R) | 14808-60-7 |
| Vinyl Acetate Polymer[3] | 1-2 | (NE) | (NE) | 9003-20-7 |
| Or Ethylene Vinyl Acetate Polymer | | | | 24937-78-8 |
| May be available with foil backing: | | | | |
| Aluminum Foil (As Aluminum and compounds) | <3 | 10 | 15(T)/5(R) | 7429-90-5 |

(T) – Total (R) – Respirable (NE) – Not Established

[1]TWA is 1 f/cc [respirable fibers: length >5µm; aspect ratio ≥3:1, as determined by the membrane filter method at 400-450X magnification (4-mm objective), using phase-contrast illumination]. NIOSH recommended exposure level is 3 fibers/cc. This material is slag wool. Other generic terms that are used or have been used to classify this material include mineral wool, man made mineral fiber (MMMF), and man made vitreous fiber (MMVF). A more recent generic term that has appeared in the literature to describe these glassy materials is synthetic vitreous fiber (SVF).

[2]The weight percent for silica represents total quartz and not the respirable fraction. Respirable crystalline silica was not detected in industrial hygiene testing on workers installing acoustical ceiling panels for an 8 hour work day as measured by NIOSH Method 7500. Respirable crystalline silica: IARC: Group 1 carcinogen, NTP: Known human carcinogen.

[3]Ingredient only in painted surface coating that is a solvent-free water-based latex paint.

## SECTION 2 COMPOSITION, INFORMATION ON INGREDIENTS (continued)

This product is a manufactured article and therefore exempt from the requirements of Canada's WHMIS.

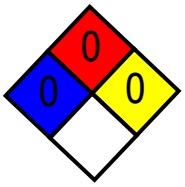
Food and Drug Administration [CFR Title 21, v.3, sec 184.1230] – Calcium Sulfate is Generally Recognized as Safe (GRAS).

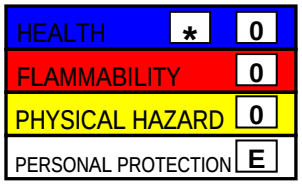
All ingredients of this product are included in the U.S. Environmental Protection Agency's Toxic Substances Control Act Chemical Substance Inventory. All components of this product are included in the Canadian Domestic Substances List (DSL).

## SECTION 3
## HAZARD IDENTIFICATION

### INFORMATION FOR HANDLING AND IDENTIFICATION OF CHEMICAL HAZARDS

| NFPA Ratings: | | HIMS Ratings: | |
|---|---|---|---|
| Health: | 0 | Health: | *0 |
| Fire: | 0 | Fire: | 0 |
| Reactivity: | 0 | Reactivity: | 0 |




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

Personal Protection: Use eye protection. Use gloves and NIOSH/MSHA-approved respiratory protection when required.

***Respirable crystalline silica can cause lung disease and/or cancer.**

### EMERGENCY 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.

Man-made mineral fibres have been classified by the European Union as irritating to skin (R:38).

### POTENTIAL HEALTH EFFECTS

**ACUTE:**

The components of acoustical ceiling panels and tiles are bound in a cementitious matrix. When panels are cut or trimmed, especially with power tools, the resulting dust may cause transitory mechanical irritation to skin, eyes or respiratory tract.

**Eyes:** Airborne dust or direct contact can cause mechanical irritation of eyes. If burning, redness, itching, pain or other symptoms persist or develop, consult physician.

**Skin:** Direct, prolonged or repeated contact with the skin can cause temporary irritation and itchiness. Rubbing of this product against the skin can result in abrasions. If irritation persists, consult a physician.

**Inhalation:** Inhalation of dust can irritate the nose, throat, and the 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.

**Ingestion:** Unlikely to occur, but if ingested may cause temporary irritation to the gastrointestinal tract, especially the throat and stomach.

**CHRONIC:**

**Inhalation:** 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. 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 concentration of respirable crystalline silica measured in airborne dust samples was below the detection limit using NIOSH Method 7500 in industrial hygiene testing of workers installing USG Acoustical Ceiling Panels for an 8 hour work day.

Slag wool fiber has been classified as "not classifiable as to its carcinogenicity to humans" (Group 3) by the International Agency for Research on Cancer (IARC).

## SECTION 3 HAZARD IDENTIFICATION (continued)

**CHRONIC (continued):**
**Eyes:** No known effects
**Skin:** No known effects.
**Ingestion:** No known effects.

**TARGET ORGANS:** Eyes, skin and nose, throat & respiratory system.
**PRIMARY ROUTES OF ENTRY:** Inhalation, eyes and skin contact.

**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.

## SECTION 4
## FIRST AID MEASURES

**FIRST AID PROCEDURES**

**Eyes:** In case of contact, do not rub or scratch your eyes. Dust particles may scratch the eye. Immediately flush thoroughly with water for 15 minutes to remove particulate. If irritation persists, contact a medical professional.

**Skin:** Rinse with cool water and then wash with soap and warm water. A commercially available skin cream or lotion may be helpful to treat dry skin areas. If skin has become cracked, take appropriate action to prevent infection and promote healing. If irritation or other disorders persist, consult physician.

**Inhalation:** If exposed to excessive levels of dust, leave area of dust exposure to fresh air and remain away until coughing and other symptoms subside. Drink water to clear throat, and blow nose to remove dust. Other measures are usually not necessary, however if conditions warrant, contact physician.

**Ingestion:** No harmful effects expected. If ingested, rinse mouth with water to remove particulate. If gastric disturbance occurs, call physician.

**Notes to Physician:** This product is a mechanical irritant, and is not expected to produce any chronic health effects from acute exposures. Treatment should be directed toward removing the source of irritation with symptomatic treatment as necessary.

## SECTION 5
## FIRE FIGHTING MEASURES

| | |
|---|---|
| **General Fire Hazards:** | Not expected to burn. |
| **Extinguishing Media:** | Water or use extinguishing media appropriate for surrounding fire. |
| **Special Fire Fighting Procedures:** | None use normal procedures. |
| **Unusual Fire and Explosion Hazards:** | None |
| **Hazardous Combustion Products:** | Organic material in the panels can produce oxides of carbon. |

| | | | |
|---|---|---|---|
| **Flash Point:** | None Known | **Auto Ignition:** | Not Applicable |
| **Method Used:** | Not Applicable | **Flammability Classification:** | Limited combustible |
| **Upper Flammable Limit (UFL):** | Not Applicable | | |
| **Lower Flammable Limit (LFL):** | Not Applicable | **Rate of Burning:** | Not Applicable |

## SECTION 6
## ACCIDENTAL RELEASE MEASURES

**CONTAINMENT:**

No special precautions. Containment not necessary. Treat as inert material. Keep the spill dry and away from incompatibles (See Section 10). Wear appropriate personal protection (See Section 8). Collect the material from spillage and if not damaged or contaminated by foreign material, ceiling panels may be reclaimed.

**CLEAN-UP:**

Use normal clean up procedures. Pick up large pieces. Wear appropriate protective equipment. Use gloves to avoid skin irritation. If dry, shovel or sweep up material from spillage and place collected material into a container for recovery or waste disposal. Avoid dust generation. Avoid inhalation of dust and contact with eyes and skin. Maintain proper ventilation. If vacuum is used to collect dust, use an industrial vacuum cleaner with a high efficiency air filter. If sweeping is necessary, use dust suppressant such as water. Do not dry sweep dust accumulation or use compressed air for clean up. These procedures will help minimize potential exposures.

## SECTION 7
## HANDLING AND STORAGE

**HANDLING:**

Avoid dust contact with eyes. Wear the appropriate eye protection against dust (See Section 8).

Avoid breathing dust. Wear the appropriate respiratory protection against dust in poorly ventilated areas and if TLV is exceeded (see Sections 2 and 8).

Minimize dust generation and accumulation. Use good safety and industrial hygiene practices.

Follow traditional building practices; such as management of water away form the interior of the structure to avoid the growth of mold, mildew and fungus. Remove from the jobsite any building products suspected of being exposed to sustained moisture and considered conducive to mold growth.

**STORAGE:**

Store in a cool, dry, ventilated area away from sources of heat, moisture and incompatibilities (see Section 10).

Protect from weather and prevent exposure to sustained moisture.

Protect product from physical damage.

## SECTION 8
## EXPOSURE CONTROLS / PERSONAL PROTECTION

**ENGINEERING CONTROLS:**

Good general ventilation should be sufficient to control airborne dust levels.

If user operations generate airborne dust, use ventilation to keep dust concentrations below permissible exposure limits (See Section 2).

Where general ventilation is inadequate, use process enclosures, local exhaust ventilation, or other engineering controls to control dust levels below permissible exposure limits (see Section 2).

Avoid unnecessary exposure to dust and handle with care. Keep work area clean of dust and fibers by using an industrial vacuum cleaner with high efficiency filter or wetting down area with water. Never use compressed air and avoid dry sweeping.

**RESPIRATORY PROTECTION:**

Wear an 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. Avoid prolonged and repeated breathing of dust.

## SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION (continued)

**OTHER PERSONAL PROTECTIVE EQUIPMENT:**
**Eye/Face:** Wear eye protection (safety glasses with side shields or goggles) to avoid particulate irritation of the eye.
**Skin:** Gloves or protective clothing are usually not necessary but may be desirable in specific work situations. For brief contact, no precautions other than clean body-covering clothing should be needed. Wear gloves [chemical gloves are not necessary, there is no chemical irritation hazard]; a long-sleeved shirt loose fitting at the neck and wrists, and long pants to prevent repeated or prolonged skin contact. Barrier creams or skin lotion may be applied to face, neck, wrist and hands when skin is exposed to help prevent drying of skin. Wash work clothing separately from other clothing. Rinse washer thoroughly after use.

**General:** Selection of Personal Protective Equipment will depend on environmental working conditions and operations.

## SECTION 9
## PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|---|---|---|---|
| **Appearance** | White or colored surface; beige/gray core | **Odor** | Low to no odor |
| **Physical State** | Solid | **pH @ 25 ° C** | ~ 9 |
| **Vapor Pressure** | Not applicable | **Vapor Density (Air = 1)** | Not applicable |
| **Boiling Point** | Not applicable | **Vapor Pressure (mm Hg)** | Not applicable |
| **Freezing Point** | Not applicable | **Evaporation Rate (BuAc = 1)** | Not applicable |
| **Melting Point** | 1200ºC (slag wool) | **Percent Volatile** | 0 |
| **Softening Point** | 700ºC (slag wool) | **Particle Size** | Not applicable |
| **Solubility (H2O)** | Very low | **Molecular Weight** | Not applicable |
| **Viscosity** | Not applicable | **Bulk Density** | ~ 250 -400 kg/$m^3$ |

**Specific Gravity ($H_20$ = 1):** 2.9

## SECTION 10
## CHEMICAL STABILITY AND REACTIVITY

| | |
|---|---|
| **STABILITY:** | Stable. |
| **CONDITIONS TO AVOID:** | High humidity, moisture, contact with incompatibles. |
| **INCOMPATIBILITY:** | Acids. |
| **HAZARDOUS POLYMERIZATION:** | Will not occur. |
| **HAZARDOUS DECOMPOSITION:** | The decomposition products from this material are those that would be expected from any organic (carbon-containing) material, and are mainly derived from pyrolysis (burning) of the organics. These decomposition products may include carbon monoxide, carbon dioxide, and carbon particles. |

## SECTION 11
## TOXICOLOGICAL INFORMATION

**ACUTE EFFECTS:**
Direct contact of dust and especially mineral wool fibers with skin can cause eye and skin irritation (mechanical) and itchiness. Inhalation of dust can cause coughing and sneezing due to temporary irritation of nose and throat.

$LD_{50:}$ Not Available for product.
$LC_{50}$: Not Available for product.

## SECTION 11 TOXICOLOGICAL INFORMATION (continued)

**CHRONIC EFFECTS / CARCINOGENICITY:**

**Slag Wool Fiber:** Large morbidity and mortality studies of both European and North American mineral wool manufacturing workers have been conducted. These studies have found no significant association of non-malignant (i.e. fibrosis) or malignant (i.e., lung cancer or mesothelioma) lung disease and exposures to slag wool fibers and have not established a causal relationship between exposure and malignant diseases.

In 2001, the International Agency for Research on Cancer (IARC) assigned slag wool fiber to the Group 3 category ["not classifiable as to carcinogenicity to humans"].

The synthetic mineral fiber used in this product is exonerated from classification as a carcinogen in accordance with Note Q in the EU Commission Directive 97/69/EC.

Industrial hygiene testing on workers installing acoustical ceiling panels for an 8 hour work day showed that the average respirable fiber exposure was 0.12 f/cc per NIOSH Method 7400-B.

**Crystalline silica:** Industrial hygiene testing on workers installing USG acoustical ceiling panels did not detect respirable crystalline silica in airborne dust exposures during a regular work day.

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. 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.

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 the ecology. A large discharge directly into waterways would not be expected to kill aquatic life. **Ecotoxicity Values:** Not determined.

## SECTION 13
## DISPOSAL CONSIDERATIONS

**WASTE DISPOSAL:**

Dispose of material in accordance with Federal, State, Provincial, and Local regulations. Consult with environmental regulatory agencies for guidance on acceptable disposal practices. A local provider of solid waste disposal can assist with compliance of local code requirements for this building material.

## SECTION 14
## TRANSPORT INFORMATION

**U.S. DOT INFORMATION:** Not a hazardous material per DOT shipping requirements. Not classified or regulated.

| | |
|---|---|
| **Shipping Name** | Same as product name. |
| **Hazard Class:** | Not classified |
| **UN/NA #:** | None. Not classified. |
| **Packing Group:** | None. |
| **Label (s) Required:** | Not applicable. |
| **GGVSec/MDG-Code:** | Not classified. |

## SECTION 14 TRANSPORT INFORMATION (continued)

**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 |
|---|---|---|---|---|---|---|---|
| Slag Wool Fiber | <30 | NL | NL | NL | NL | NL | NL |
| Expanded Perlite | >40 | NL | NL | NL | NL | NL | NL |
| Recycled Paper (Cellulose) | >15 | NL | NL | NL | NL | NL | NL |
| Starch | >10 | NL | NL | NL | NL | NL | NL |
| Kaolin | 1-15 | NL | NL | NL | NL | NL | NL |
| Crystalline Silica (quartz) | <5 | NL | NL | NL | NL | NL | NL |
| Vinyl Acetate Polymer | 1-2 | NL | NL | NL | NL | NL | NL |
| Or Ethylene Vinyl Acetate Polymer | | NL | NL | NL | NL | NL | NL |
| May be available with foil backing: | | | | | | | |
| Aluminum Foil (As Aluminum and compounds) | <3 | 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 the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations. All components of this product are included in the Canadian Domestic Substances List (DSL).

| MATERIAL | WT% | IDL Item # | WHMIS Classification: |
|---|---|---|---|
| Slag Wool Fiber | <30 | Not Listed | Not Listed |
| Expanded Perlite | >40 | Not Listed | Not Listed |
| Recycled Paper (Cellulose) | >15 | Not Listed | Not Listed |
| Starch | >10 | Not Listed | Not Listed |
| Kaolin | 1-15 | Not Listed | Not Listed |
| Crystalline Silica (quartz) | <5 | 1406 | D2A |
| Vinyl Acetate Polymer | 1-2 | Not Listed | Not Listed |
| Or Ethylene Vinyl Acetate Polymer | | Not Listed | Not Listed |
| May be available with foil backing: | | | |
| Aluminum Foil (As Aluminum and compounds) | <3 | 47 | Not Listed |

IDL Item # : Canadian Hazardous Products Act – Ingredient Disclosure List Item #
WHMIS Classification: Workplace Hazardous Material Information System

## SECTION 15 REGULATORY INFORMATION (continued)

| CARCINOGENICITY CLASSIFICATION OF INGREDIENT(S)<br>See Section 11 : Toxicology Information for detailed information | | | | |
|---|---|---|---|---|
| **MATERIAL** | **IARC** | **NTP** | **ACGIH** | **CAL- 65** |
| Respirable Crystalline Silica | 1 | 1 | A2 | Listed |
| Slag Wool Fiber | 3 | 2 | A3 | Not Listed |

IARC – International Agency for Research on Cancer (World Health Organization)
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"

**EUROPEAN REGULATIONS**

EC Classification

This product contains mineral wool [Man made vitreous (silicate) fibres].
Danger Symbol: X, Irritant
Risk Phrases: Irritating to skin (R:38)
Safety Phrases: Wear suitable protective clothing and gloves (S36/37).

The mineral wool in this product is exonerated from classification as a carcinogen according to Note Q in EU Commission Directive 97/69/EC.

## SECTION 16
## OTHER INFORMATION

**Label Information**

### ΔWARNING!

Follow good safety and industrial hygiene practices during the handling and installing of all products and systems. Dust created from product can cause temporary eye, skin, nose, throat or upper respiratory irritation.
Avoid creating dust and use proper ventilation to reduce dust exposure. Cut and trim with razor knife or hand saw to minimize dust levels. Using power tools for cutting will generate high dust levels. Power tools must be equipped with dust collection system. Use NIOSH/MSHA-approved dust respirator when exposure limits are exceeded. Avoid dust contact with eyes and skin. Wear eye protection and long-sleeve, loose fitting clothing closed at the neck and wrists. Wash work clothing separately from other clothing. Rinse washer thoroughly. If eye contact occurs, flush thoroughly with water for 15 minutes. If irritation persists, call physician. Do not ingest. If ingested, call physician.
Product safety information: (800) 507-8899 or www.usg.com
**KEEP OUT OF REACH OF CHILDREN.**

## SECTION 16OTHER INFORMATION (continued)

**Key/Legend**

| | |
|---|---|
| TLV | Threshold Limit Value |
| PEL | Permissible Exposure Limit |
| CAS | Chemical Abstracts Service (Registry Number) |
| NIOSH | National Institute for Occupational Safety and Health |
| MSHA | Mine Safety and Health Administration |
| OSHA | Occupational Health and Safety Administration |
| ACGIH | American Conference of Governmental Industrial Hygienists |
| IARC | International Agency for Research on Cancer |
| DOT | United States Department of Transportation |
| EPA | United States Environmental Protection Agency |
| NFPA | National Fire Protection Association |
| HMIS | Hazardous Materials Identification System |
| PPE | Personal Protection Equipment |
| TSCA | Toxic Substances Control Act |
| DSL | Canadian Domestic Substances List |
| NDSL | Canadian Non-Domestic Substances List |
| SARA | Superfund Amendments and Reauthorization Act of 1986 |
| RCRA | Resource Conservation and Recovery Act |
| CERCLA | Comprehensive Environmental Response, Compensation and Liability Act of 1980 |
| UN/NA# | United Nations/North America number |
| CFR | Code of Federal Regulations |
| WHMIS | Workplace Hazardous Material Information System |

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END