

# **SAFETY DATA SHEET**

# 1. Identification

Material name: VULKEM 116 LV STONE 30 CTG/CS Material: 426892L 323

## Recommended use and restriction on use

Recommended use: Sealant Restrictions on use: Not known.

#### Manufacturer/Importer/Supplier/Distributor Information

Tremco U.S Sealants 3735 Green Road Beachwood OH 44122 US

#### Contact person: Telephone: Emergency telephone number:

EH&S Department 216-292-5000 1-800-424-9300 (US); 1-613-996-6666 (Canada)

# 2. Hazard(s) identification

#### Hazard Classification

| Health Hazards                              |             |
|---|-------------|
| Acute toxicity (Inhalation - vapor)         | Category 4  |
| Respiratory sensitizer                      | Category 1  |
| Skin sensitizer                             | Category 1  |
| Germ Cell Mutagenicity                      | Category 1B |
| Carcinogenicity                             | Category 1A |
| Unknown toxicity - Health                   |             |
| Acute toxicity, oral                        | 36.42 %     |
| Acute toxicity, dermal                      | 42.02 %     |
| Acute toxicity, inhalation, vapor           | 97.33 %     |
| Acute toxicity, inhalation, dust or mist    | 99.24 %     |
| Environmental Hazards                       |             |
| Acute hazards to the aquatic environment    | Category 2  |
| Unknown toxicity - Environment              |             |
| Acute hazards to the aquatic<br>environment | 78.4 %      |
| Chronic hazards to the aquatic environment  | 100 %       |
|   |             |

# Label Elements

#### Hazard Symbol:



| Signal Word:   | Danger   |
|--|--|
| Hazard Statement:  | Harmful if inhaled.<br>May cause allergy or asthma symptoms or breathing difficulties if inhaled.<br>May cause an allergic skin reaction.<br>May cause genetic defects.<br>May cause cancer.<br>Toxic to aquatic life.   |
| Precautionary<br>Statement:                              |  |
| Prevention:  | Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. [In case of inadequate ventilation] wear respiratory protection. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Avoid release to the environment. |
| Response:  | IF INHALED: Remove person to fresh air and keep comfortable for<br>breathing. If experiencing respiratory symptoms: Call a POISON<br>CENTER/doctor. IF ON SKIN: Wash with plenty of water. If skin irritation or<br>rash occurs: Get medical advice/attention. Call a POISON CENTER/doctor<br>if you feel unwell. Specific treatment (see this label). Wash contaminated<br>clothing before reuse.   |
| Storage:   | Store locked up.   |
| Disposal:  | Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.   |
| Other hazards which do not result in GHS classification: | None.  |

# 3. Composition/information on ingredients

# Mixtures

| Chemical Identity                | CAS number | Content in percent (%)* |
|----------------------------------|------------|-------------------------|
| Calcium Carbonate<br>(Limestone) | 1317-65-3  | 15 - 40%                |
| **                               | **         | 1 - 5%                  |
| Titanium dioxide                 | 13463-67-7 | 1 - 5%                  |
| Heavy aromatic naphtha           | 64742-94-5 | 1 - 5%                  |
| Aromatic petroleum distillates   | 64742-95-6 | 1 - 5%                  |
| 1,2,4-Trimethylbenzene           | 95-63-6    | 0.5 - 1.5%              |



| 4,4'-Methylene<br>bis(phenylisocyanate)            | 101-68-8   | 0.5 - 1.5%  |  |  |  |  |
|--|--|---|--|--|--|--|
| 1,3,5-Trimethylbenzene                             | 108-67-8   | 0.1 - 1%  |  |  |  |  |
| Polymethylene polyphenyl isocyanate                | 9016-87-9  | 016-87-9 0.1 - 1%   |  |  |  |  |
| Crystalline Silica (Quartz)/<br>Silica Sand        | 14808-60-7   | 14808-60-7 0.1 - 1%   |  |  |  |  |
| Aluminum oxide<br>* All concentrations are percent | 1344-28-1<br>nt by weight unless   | 0.1 - 1%<br>ngredient is a gas. Gas concentrations are in percent by volume.  |  |  |  |  |
| Trade secret information:                          | <b>Trade secret information:</b> ** A specific chemical identity and/or percentage of composition has been withheld as a trade secret. |   |  |  |  |  |
| 4. First-aid measures                              |  |   |  |  |  |  |
| Ingestion:   | Call a PO  | SON CENTER/doctor//if you feel unwell. Rinse mouth.   |  |  |  |  |
| Inhalation:  |  | sician or poison control center immediately. If breathing stops, tificial respiration. Move to fresh air. If breathing is difficult, give   |  |  |  |  |
| Skin Contact:                                      | clean cont<br>shoes and  | If skin irritation occurs: Get medical advice/attention. Destroy or thoroughly clean contaminated shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an allergic skin reaction develops, get medical attention. |  |  |  |  |
| Eye contact:                                       | water. If e  | Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. If eye irritation persists: Get medical advice/attention.   |  |  |  |  |
| Most important symptoms/ef                         | fects, acute an  | d delayed   |  |  |  |  |
| Symptoms:  | May cause  | May cause skin and eye irritation.  |  |  |  |  |
| Indication of immediate medic                      | al attention an  | d special treatment needed  |  |  |  |  |
| Treatment:   | Treatment: Symptoms may be delayed.  |   |  |  |  |  |
| 5. Fire-fighting measures                          |  |   |  |  |  |  |
| General Fire Hazards:                              | No unusu   | No unusual fire or explosion hazards noted.   |  |  |  |  |
| Suitable (and unsuitable) extinguishing media      |  |   |  |  |  |  |
| Suitable extinguishing media:                      | Use fire-e   | Use fire-extinguishing media appropriate for surrounding materials.   |  |  |  |  |
| Unsuitable extinguishing media:                    | Do not use   | Do not use water jet as an extinguisher, as this will spread the fire.  |  |  |  |  |
| Specific hazards arising fron the chemical:        | n During fire  | During fire, gases hazardous to health may be formed.   |  |  |  |  |

Special protective equipment and precautions for firefighters



| Special fire fighting procedures:  | No data available.   |
|--|--|
| Special protective equipment for fire-fighters:                            | Self-contained breathing apparatus and full protective clothing must be worn in case of fire.  |
| 6. Accidental release measures   | s  |
| Personal precautions,<br>protective equipment and<br>emergency procedures: | Ventilate closed spaces before entering them. Evacuate area. See Section 8 of the SDS for Personal Protective Equipment. Keep upwind. Keep unauthorized personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.  |
| Methods and material for<br>containment and cleaning<br>up:                | Collect spillage in containers, seal securely and deliver for disposal according to local regulations.   |
| Notification Procedures:   | In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.  |
| Environmental Precautions:   | Avoid release to the environment. Prevent further leakage or spillage if safe to do so.  |
| 7. Handling and storage  |  |
| Precautions for safe handling:   | Do not handle until all safety precautions have been read and understood.<br>Obtain special instructions before use. Use personal protective equipment<br>as required. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact<br>with eyes, skin, and clothing. Wash hands thoroughly after handling.<br>Ventilate well, avoid breathing vapors. Use approved respirator if air<br>contamination is above accepted level. Use mechanical ventilation in case<br>of handling which causes formation of dust. |
| Conditions for safe storage,<br>including any<br>incompatibilities:        | Store locked up.   |
| 8 Exposure controls/personal   | protection   |

# 8. Exposure controls/personal protection

# **Control Parameters**

# Occupational Exposure Limits

| Chemical Identity  | type | Exposure Limit Values | Source  |
|--|------|-----------------------|---|
| Calcium Carbonate<br>(Limestone) - Total<br>dust.          | PEL  | 15 mg/m3              | US. OSHA Table Z-1 Limits for Air<br>Contaminants (29 CFR 1910.1000)<br>(02 2006) |
| Calcium Carbonate<br>(Limestone) -<br>Respirable fraction. | PEL  | 5 mg/m3               | US. OSHA Table Z-1 Limits for Air<br>Contaminants (29 CFR 1910.1000)<br>(02 2006) |
| **   | TWA  | 10 mg/m3              | US. ACGIH Threshold Limit Values<br>(03 2015)                                     |
|  | TWA  | 3 mg/m3               | US. ACGIH Threshold Limit Values (03 2015)  |



|   | PEL     | 5 mg/m   | 3 US. OSHA Table Z-1 Limits for Air<br>Contaminants (29 CFR 1910.1000)              |
|---|---------|--|---|
|   | PEL     | 15 mg/m  |   |
|   |         |  | Contaminants (29 CFR 1910.1000)<br>(02 2006)  |
|   | TWA     | 15 mg/m  | 1910.1000) (2000)   |
|   | TWA     | 50 million<br>of particle<br>per cub<br>foot of a    | es 1910.1000) (2000)<br>ic<br>ir  |
|   | TWA     | 5 mg/m   | 1910.1000) (2000)   |
|   | TWA     | 15 million<br>of particle<br>per cub<br>foot of a    | es 1910.1000) (2000)<br>ic  |
| Titanium dioxide  | TWA     | 10 mg/m  | 3 US. ACGIH Threshold Limit Values (2011)   |
| Titanium dioxide - Total dust.  | PEL     | 15 mg/m  | 3 US. OSHA Table Z-1 Limits for Air<br>Contaminants (29 CFR 1910.1000)<br>(02 2006) |
| Heavy aromatic<br>naphtha - Non-aerosol.<br>- as total hydrocarbon<br>vapor | TWA     | 20<br>mg/m   |   |
| Heavy aromatic<br>naphtha   | PEL     | 100 ppm 40<br>mg/m                                   |   |
| 1,2,4-Trimethylbenzene  | TWA     | 25 ppm   | US. ACGIH Threshold Limit Values (2011)   |
| 4,4'-Methylene<br>bis(phenylisocyanate)                                     | TWA     | 0.005 ppm  | US. ACGIH Threshold Limit Values (2011)   |
|   | Ceiling | 0.02 ppm 0.2 mg/m                                    | Contaminants (29 CFR 1910.1000)<br>(02 2006)  |
| 1,3,5-Trimethylbenzene  | TWA     | 25 ppm   | US. ACGIH Threshold Limit Values (2011)   |
| Polymethylene<br>polyphenyl isocyanate                                      | TWA     | 0.005 ppm  | US. ACGIH Threshold Limit Values (2011)   |
|   | Ceiling | 0.02 ppm 0.2 mg/m                                    | Contaminants (29 CFR 1910.1000)<br>(02 2006)  |
| Crystalline Silica<br>(Quartz)/ Silica Sand -<br>Respirable fraction.       | TWA     | 0.02<br>mg/m   | 3 (2011)  |
| Crystalline Silica<br>(Quartz)/ Silica Sand -<br>Respirable.                | TWA     | 2.<br>millions o<br>particle<br>per cub<br>foot of a | of 1910.1000) (2000)<br>es<br>ic<br>ir  |
|   | TWA     | 0.1 mg/m   | 3 US. OSHA Table Z-3 (29 CFR<br>1910.1000) (2000)                                   |
| Crystalline Silica<br>(Quartz)/ Silica Sand -                               | TWA     | 0.3 mg/m   | 3 US. OSHA Table Z-3 (29 CFR<br>1910.1000) (2000)<br>5/19                           |



| Total dust.            |     |          |                                   |
|------------------------|-----|----------|-----------------------------------|
| Aluminum oxide -       | TWA | 1 mg/m3  | US. ACGIH Threshold Limit Values  |
| Respirable fraction.   |     |          | (2011)                            |
|                        | PEL | 5 mg/m3  | US. OSHA Table Z-1 Limits for Air |
|                        |     |          | Contaminants (29 CFR 1910.1000)   |
|                        |     |          | (02 2006)                         |
| Aluminum oxide - Total | PEL | 15 mg/m3 | US. OSHA Table Z-1 Limits for Air |
| dust.                  |     |          | Contaminants (29 CFR 1910.1000)   |
|                        |     |          | (02 2006)                         |

| Chemical name                                     | type  | Exposure Limit Values | Source  |
|---|-------|-----------------------|---|
| Diisodecyl phthalate                              | TWAEV | 5 mg/m3               | Canada. Ontario OELs. (Control of<br>Exposure to Biological or Chemical<br>Agents) (11 2010)  |
| Calcium Carbonate<br>(Limestone) - Total<br>dust. | STEL  | 20 mg/m3              | Canada. British Columbia OELs.<br>(Occupational Exposure Limits for<br>Chemical Substances, Occupational<br>Health and Safety Regulation 296/97,<br>as amended) (07 2007) |
|   | TWA   | 10 mg/m3              | Canada. British Columbia OELs.<br>(Occupational Exposure Limits for<br>Chemical Substances, Occupational<br>Health and Safety Regulation 296/97,<br>as amended) (07 2007) |



| Calcium Carbonate<br>(Limestone) -<br>Respirable fraction.                  | TWA   | 3 mg/m3      | Canada. British Columbia OELs.<br>(Occupational Exposure Limits for<br>Chemical Substances, Occupational<br>Health and Safety Regulation 296/97,<br>as amended) (07 2007) |
|---|-------|--------------|---|
| Calcium Carbonate<br>(Limestone) - Total<br>dust.                           | TWA   | 10 mg/m3     | Canada. Quebec OELs. (Ministry of<br>Labor - Regulation Respecting the<br>Quality of the Work Environment) (12<br>2008)   |
| Polyethylene -<br>Respirable fraction.                                      | TWA   | 3 mg/m3      | Canada. British Columbia OELs.<br>(Occupational Exposure Limits for<br>Chemical Substances, Occupational<br>Health and Safety Regulation 296/97,<br>as amended) (05 2013) |
| Polyethylene - Total<br>dust.   | TWA   | 10 mg/m3     | Canada. British Columbia OELs.<br>(Occupational Exposure Limits for<br>Chemical Substances, Occupational<br>Health and Safety Regulation 296/97,<br>as amended) (05 2013) |
| Polyethylene -<br>Respirable particles.                                     | TWAEV | 3 mg/m3      | Canada. Ontario OELs. (Control of<br>Exposure to Biological or Chemical<br>Agents) (11 2010)  |
| Polyethylene -<br>Inhalable   | TWAEV | 10 mg/m3     | Canada. Ontario OELs. (Control of<br>Exposure to Biological or Chemical<br>Agents) (11 2010)  |
| Polyethylene - Total dust.  | TWA   | 10 mg/m3     | Canada. Quebec OELs. (Ministry of<br>Labor - Regulation Respecting the<br>Quality of the Work Environment) (11<br>2011)   |
| Titanium dioxide -<br>Total dust.   | TWA   | 10 mg/m3     | Canada. British Columbia OELs.<br>(Occupational Exposure Limits for<br>Chemical Substances, Occupational<br>Health and Safety Regulation 296/97,<br>as amended) (07 2007) |
| Titanium dioxide -<br>Respirable fraction.                                  | TWA   | 3 mg/m3      | Canada. British Columbia OELs.<br>(Occupational Exposure Limits for<br>Chemical Substances, Occupational<br>Health and Safety Regulation 296/97,<br>as amended) (07 2007) |
| Titanium dioxide  | TWAEV | 10 mg/m3     | Canada. Ontario OELs. (Control of<br>Exposure to Biological or Chemical<br>Agents) (11 2010)  |
| Titanium dioxide -<br>Total dust.   | TWA   | 10 mg/m3     | Canada. Quebec OELs. (Ministry of<br>Labor - Regulation Respecting the<br>Quality of the Work Environment) (12<br>2008)   |
| Heavy aromatic<br>naphtha - Non-aerosol.<br>- as total hydrocarbon<br>vapor | TWA   | 200<br>mg/m3 | Canada. British Columbia OELs.<br>(Occupational Exposure Limits for<br>Chemical Substances, Occupational<br>Health and Safety Regulation 296/97,<br>as amended) (05 2013) |
| Heavy aromatic<br>naphtha - Non-aerosol.<br>- as total hydrocarbon<br>vapor | TWAEV | 200<br>mg/m3 | Canada. Ontario OELs. (Control of<br>Exposure to Biological or Chemical<br>Agents) (11 2010)  |



| Heavy aromatic<br>naphtha               | TWA     | 400 ppm   | 1,590<br>mg/m3 | Canada. Quebec OELs. (Ministry of<br>Labor - Regulation Respecting the<br>Quality of the Work Environment) (11<br>2011)   |
|---|---------|-----------|----------------|---|
| 1,2,4-Trimethylbenzene                  | TWA     | 25 ppm    |                | Canada. British Columbia OELs.<br>(Occupational Exposure Limits for<br>Chemical Substances, Occupational<br>Health and Safety Regulation 296/97,<br>as amended) (07 2007) |
| 1,2,4-Trimethylbenzene                  | TWAEV   | 25 ppm    |                | Canada. Ontario OELs. (Control of<br>Exposure to Biological or Chemical<br>Agents) (11 2010)  |
| 1,2,4-Trimethylbenzene                  | TWA     | 25 ppm    | 123<br>mg/m3   | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)  |
| 4,4'-Methylene<br>bis(phenylisocyanate) | CEILING | 0.01 ppm  |                | Canada. British Columbia OELs.<br>(Occupational Exposure Limits for<br>Chemical Substances, Occupational<br>Health and Safety Regulation 296/97,<br>as amended) (07 2007) |
|   | TWA     | 0.005 ppm |                | Canada. British Columbia OELs.<br>(Occupational Exposure Limits for<br>Chemical Substances, Occupational<br>Health and Safety Regulation 296/97,<br>as amended) (07 2007) |
| 4,4'-Methylene<br>bis(phenylisocyanate) | TWAEV   | 0.005 ppm |                | Canada. Ontario OELs. (Control of<br>Exposure to Biological or Chemical<br>Agents) (11 2010)  |
|   | CEV     | 0.02 ppm  |                | Canada. Ontario OELs. (Control of<br>Exposure to Biological or Chemical<br>Agents) (11 2010)  |
| 4,4'-Methylene<br>bis(phenylisocyanate) | TWA     | 0.005 ppm | 0.051<br>mg/m3 | Canada. Quebec OELs. (Ministry of<br>Labor - Regulation Respecting the<br>Quality of the Work Environment) (12<br>2008)   |
| 1,3,5-Trimethylbenzene                  | TWA     | 25 ppm    |                | Canada. British Columbia OELs.<br>(Occupational Exposure Limits for<br>Chemical Substances, Occupational<br>Health and Safety Regulation 296/97,<br>as amended) (07 2007) |
| 1,3,5-Trimethylbenzene                  | TWAEV   | 25 ppm    |                | Canada. Ontario OELs. (Control of<br>Exposure to Biological or Chemical<br>Agents) (11 2010)  |
| 1,3,5-Trimethylbenzene                  | TWA     | 25 ppm    | 123<br>mg/m3   | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)  |
| Polymethylene<br>polyphenyl isocyanate  | TWA     | 0.005 ppm |                | Canada. British Columbia OELs.<br>(Occupational Exposure Limits for<br>Chemical Substances, Occupational<br>Health and Safety Regulation 296/97,<br>as amended) (07 2007) |
|   | CEILING | 0.01 ppm  |                | Canada. British Columbia OELs.<br>(Occupational Exposure Limits for   |



|   |         | 0.005     |                | Chemical Substances, Occupational<br>Health and Safety Regulation 296/97,<br>as amended) (07 2007)  |
|---|---------|-----------|----------------|---|
|   | TWA     | 0.005 ppm |                | Canada. British Columbia OELs.<br>(Occupational Exposure Limits for<br>Chemical Substances, Occupational<br>Health and Safety Regulation 296/97,<br>as amended) (07 2007) |
|   | CEILING | 0.01 ppm  |                | Canada. British Columbia OELs.<br>(Occupational Exposure Limits for<br>Chemical Substances, Occupational<br>Health and Safety Regulation 296/97,<br>as amended) (07 2007) |
| Polymethylene<br>polyphenyl isocyanate                                | TWAEV   | 0.005 ppm |                | Canada. Ontario OELs. (Control of<br>Exposure to Biological or Chemical<br>Agents) (11 2010)  |
|   | CEV     | 0.02 ppm  |                | Canada. Ontario OELs. (Control of<br>Exposure to Biological or Chemical<br>Agents) (11 2010)  |
| Polymethylene<br>polyphenyl isocyanate                                | TWA     | 0.005 ppm | 0.051<br>mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)  |
| Crystalline Silica<br>(Quartz)/ Silica Sand -<br>Respirable fraction. | TWA     |           | 0.025<br>mg/m3 | Canada. British Columbia OELs.<br>(Occupational Exposure Limits for<br>Chemical Substances, Occupational<br>Health and Safety Regulation 296/97,<br>as amended) (07 2007) |
| Crystalline Silica<br>(Quartz)/ Silica Sand -<br>Respirable.          | TWAEV   |           | 0.10<br>mg/m3  | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)  |
| Crystalline Silica<br>(Quartz)/ Silica Sand -<br>Respirable dust.     | TWA     |           | 0.1 mg/m3      | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)  |

#### Appropriate Engineering Controls

Mechanical ventilation or local exhaust ventilation may be required. Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of dust.

#### Individual protection measures, such as personal protective equipment

| General information:                | Use personal protective equipment as required.   |  |
|-------------------------------------|--|--|
| Eye/face protection:                | Wear goggles/face shield.  |  |
| Skin Protection<br>Hand Protection: | Use suitable protective gloves if risk of skin contact.  |  |
| Other:                              | Wear chemical-resistant gloves, footwear, and protective clothing<br>appropriate for the risk of exposure. Contact health and safety professional<br>or manufacturer for specific information. |  |



| Respiratory Protection: | If engineering controls do not maintain airborne concentrations below<br>recommended exposure limits (where applicable) or to an acceptable level<br>(in countries where exposure limits have not been established), an<br>approved respirator must be worn. Air-purifying respirator with an<br>appropriate, government approved (where applicable), air-purifying filter,<br>cartridge or canister. Contact health and safety professional or<br>manufacturer for specific information. |
|-------------------------|---|
| Hygiene measures:       | Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. Contaminated work clothing should not be allowed out of the workplace. Avoid contact with skin.   |

# 9. Physical and chemical properties

| Appearance                                   |   |
|--|---|
| Physical state:                              | solid   |
| Form:  | Paste   |
| Color:                                       | Pale gray   |
| Odor:  | Mild  |
| Odor threshold:                              | No data available.  |
| pH:  | No data available.  |
| Melting point/freezing point:                | No data available.  |
| Initial boiling point and boiling range:     | No data available.  |
| Flash Point:                                 | 99 °C 210 °F(ISO 3679 (seta closed))  |
| Evaporation rate:                            | Slower than n-Butyl Acetate   |
| Flammability (solid, gas):                   | No  |
| Upper/lower limit on flammability or explose | sive limits   |
| Flammability limit - upper (%):              | No data available.  |
| Flammability limit - lower (%):              | No data available.  |
| Explosive limit - upper (%):                 | No data available.  |
| Explosive limit - lower (%):                 | No data available.  |
| Vapor pressure:                              | No data available.  |
| Vapor density:                               | Vapors are heavier than air and may travel along the floor and in the bottom of containers. |
| Relative density:                            | 1.16  |
| Solubility(ies)                              |   |
| Solubility in water:                         | Insoluble in water  |
| Solubility (other):                          | No data available.  |
| Partition coefficient (n-octanol/water):     | No data available.  |
| Auto-ignition temperature:                   | No data available.  |
| Decomposition temperature:                   | No data available.  |
| Viscosity:                                   | No data available.  |
| 40 Stability and reactivity                  |   |

# 10. Stability and reactivity

# **Reactivity:**

No data available.



| Chemical Stability:                    | Material is stable under normal conditions.   |
|--|---|
| Possibility of hazardous<br>reactions: | No data available.  |
| Conditions to avoid:                   | Avoid heat or contamination.  |
| Incompatible Materials:                | Alcohols. Amines. Strong acids. Avoid contact with oxidizing agents (e.g. nitric acid, peroxides and chromates). Strong bases. Water, moisture. |
| Hazardous Decomposition<br>Products:   | Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.   |

11. Toxicological information

# Information on likely routes of exposure

| Ingestion:    | May be ingested by accident. Ingestion may cause irritation and malaise.                      |
|---------------|---|
| Inhalation:   | In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes. |
| Skin Contact: | Causes mild skin irritation. May cause an allergic skin reaction.                             |
| Eye contact:  | Eye contact is possible and should be avoided.  |

# Information on toxicological effects

# Acute toxicity (list all possible routes of exposure)

| Oral<br>Product:                            | ATEmix: 12,904.76 mg/kg                                 |
|---|---|
| Dermal<br>Product:                          | ATEmix: 17,154.88 mg/kg                                 |
| Inhalation<br>Product:                      | ATEmix: 17.97 mg/l                                      |
| Repeated dose toxicity<br>Product:          | No data available.                                      |
| Skin Corrosion/Irritation<br>Product:       | No data available.                                      |
| Specified substance(s):<br>Titanium dioxide | in vivo (Rabbit): Experimental result, Supporting study |



|        | Heavy aromatic<br>naphtha  | in vivo (Rabbit): Experimental result, Key study  |
|--------|--|---|
|        | Aromatic petroleum distillates   | in vivo (Rabbit): Experimental result, Key study  |
|        | 1,2,4-Trimethylbenzene   | in vivo (Rabbit): Read-across from supporting substance (structural analogue or surrogate), Key study   |
|        | 4,4'-Methylene<br>bis(phenylisocyanate)  | in vivo (Rabbit): Read-across based on grouping of substances (category approach), Key study  |
|        | 1,3,5-Trimethylbenzene   | in vivo (Rabbit): Experimental result, Key study  |
|        | Aluminum oxide   | in vivo (Rabbit): Experimental result, Key study  |
| Seriou | s Eye Damage/Eye Irritati  | on  |
|        | roduct:  | No data available.  |
| Р      |  |   |
| Р      | roduct:<br>pecified substance(s):  | No data available.  |
| Р      | roduct:<br>pecified substance(s):<br>Titanium dioxide<br>Heavy aromatic  | No data available.<br>in vivo (Rabbit, 24 hrs): Not irritating  |
| Р      | roduct:<br>pecified substance(s):<br>Titanium dioxide<br>Heavy aromatic<br>naphtha<br>Aromatic petroleum   | No data available.<br>in vivo (Rabbit, 24 hrs): Not irritating<br>in vivo (Rabbit, 24 - 72 hrs): Not irritating   |
| Р      | <b>pecified substance(s):</b><br>Titanium dioxide<br>Heavy aromatic<br>naphtha<br>Aromatic petroleum<br>distillates  | No data available.<br>in vivo (Rabbit, 24 hrs): Not irritating<br>in vivo (Rabbit, 24 - 72 hrs): Not irritating<br>in vivo (Rabbit, 24 - 72 hrs): Not irritating  |
| Р      | <b>Product:</b><br><b>pecified substance(s):</b><br>Titanium dioxide<br>Heavy aromatic<br>naphtha<br>Aromatic petroleum<br>distillates<br>1,2,4-Trimethylbenzene<br>4,4'-Methylene                           | No data available.<br>in vivo (Rabbit, 24 hrs): Not irritating<br>in vivo (Rabbit, 24 - 72 hrs): Not irritating<br>in vivo (Rabbit, 24 - 72 hrs): Not irritating<br>in vivo (Rabbit, 30 min): Not irritating  |
| PS     | <b>Product:</b><br><b>Specified substance(s):</b><br>Titanium dioxide<br>Heavy aromatic<br>naphtha<br>Aromatic petroleum<br>distillates<br>1,2,4-Trimethylbenzene<br>4,4'-Methylene<br>bis(phenylisocyanate) | No data available.<br>in vivo (Rabbit, 24 hrs): Not irritating<br>in vivo (Rabbit, 24 - 72 hrs): Not irritating<br>in vivo (Rabbit, 24 - 72 hrs): Not irritating<br>in vivo (Rabbit, 30 min): Not irritating<br>in vivo (Rabbit, 24 - 72 hrs): Not irritating<br>in vivo (Rabbit, 24 hrs): Not irritating |



#### IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

Titanium dioxide Overall evaluation: Possibly carcinogenic to humans.

Crystalline Silica Overall evaluation: Carcinogenic to humans. (Quartz)/ Silica Sand

US. National Toxicology Program (NTP) Report on Carcinogens: Crystalline Silica Known To Be Human Carcinogen. (Quartz)/ Silica Sand

#### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): No carcinogenic components identified

#### Germ Cell Mutagenicity

| In vitro<br>Product:                      | No data available.                               |
|---|--|
| In vivo<br>Product:                       | No data available.                               |
| Reproductive toxicity<br>Product:         | No data available.                               |
| Specific Target Organ Toxicit<br>Product: | <b>y - Single Exposure</b><br>No data available. |
| Specific Target Organ Toxicit<br>Product: | y - Repeated Exposure<br>No data available.      |
| Aspiration Hazard                         |  |
| Product:                                  | No data available.                               |

# 12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish Product:

No data available.

Specified substance(s):



| 1,2,4-Trimethylbenzene                             | LC 50 (Fathead minnow (Pimephales promelas), 96 h): 7.19 - 8.28 mg/l<br>Mortality  |  |
|--|--|--|
| 1,3,5-Trimethylbenzene                             | LC 50 (Goldfish (Carassius auratus), 96 h): 9.89 - 15.05 mg/l Mortality  |  |
| Aquatic Invertebrates<br>Product:                  | No data available.   |  |
| Specified substance(s):<br>1,2,4-Trimethylbenzene  | LC 50 (Scud (Elasmopus pectinicrus), 24 h): 4.89 - 5.62 mg/l Mortality   |  |
| 1,3,5-Trimethylbenzene                             | EC 50 (Water flea (Daphnia magna), 24 h): 50 mg/l Intoxication   |  |
| Chronic hazards to the aquati                      | c environment:   |  |
| Fish<br>Product:                                   | No data available.   |  |
| <b>Specified substance(s):</b><br>Titanium dioxide | ED 0 (Phoxinus phoxinus, 30 d): >= 1,000 mg/l Experimental result,<br>Supporting study<br>LC 10 (Oncorhynchus mykiss, 28 d): 0.981 mg/l Read-across from<br>supporting substance (structural analogue or surrogate), Supporting study<br>LC 50 (Oncorhynchus mykiss, 28 d): 7.31 mg/l Read-across from supporting<br>substance (structural analogue or surrogate), Supporting study<br>LC 1 (Oncorhynchus mykiss, 28 d): 0.191 mg/l Read-across from supporting<br>substance (structural analogue or surrogate), Supporting study<br>LC 1 (Oncorhynchus mykiss, 28 d): 0.191 mg/l Read-across from supporting<br>substance (structural analogue or surrogate), Supporting study<br>LC 0 (Coregonus autumnalis migratorius G., 30 d): 3 mg/l Experimental<br>result, Supporting study |  |
| Heavy aromatic naphtha                             | NOAEL (Oncorhynchus mykiss, 28 d): 0.098 mg/I QSAR QSAR, Key study   |  |
| Aromatic petroleum<br>distillates                  | LL 50 (Pimephales promelas, 14 d): 5.2 mg/l Experimental result, Supporting<br>study<br>EC 50 (Daphnia magna, 21 d): 10 mg/l Other, Key study<br>NOAEL (Pimephales promelas, 14 d): 2.6 mg/l Experimental result,<br>Supporting study<br>NOAEL (Daphnia magna, 21 d): 2.6 mg/l Other, Key study  |  |
| Aluminum oxide                                     | NOAEL (Pimephales promelas, 28 d): 4.7 mg/l Experimental result, Weight<br>of Evidence study<br>IC 25 (Pimephales promelas, 7 d): 11.59 mg/l Experimental result, Weight of<br>Evidence study<br>LOAEL (Salvelinus fontinalis, 60 d): 0.35 mg/l Experimental result, Weight of<br>Evidence study<br>NOAEL (Pimephales promelas, 7 d): 0.4 mg/l Read-across based on<br>grouping of substances (category approach), Weight of Evidence study<br>NOAEL (Pimephales promelas, 7 d): >= 0.831 mg/l Experimental result,<br>Weight of Evidence study  |  |
| Aquatic Invertebrates<br>Product:                  | No data available.   |  |
| Toxicity to Aquatic Plants<br>Product:             | No data available.   |  |



| Persistence and Degradability                                       |   |
|---|---|
| Biodegradation<br>Product:  | No data available.  |
| BOD/COD Ratio<br>Product:   | No data available.  |
| Bioaccumulative Potential<br>Bioconcentration Factor (B<br>Product: | CF)<br>No data available.   |
| Partition Coefficient n-octa<br>Product:                            | nol / water (log Kow)<br>No data available.   |
| Mobility in Soil:   | No data available.  |
| Other Adverse Effects:  | Toxic to aquatic organisms.   |
| 13. Disposal considerations   |   |
| Disposal instructions:  | Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. |
| Contaminated Packaging:   | No data available.  |
| 14. Transport information   |   |
| TDG:  |   |
| Not Regulated   |   |

# CFR / DOT:

Not Regulated

# IMDG:

Not Regulated

# 15. Regulatory information

# **US Federal Regulations**



#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

| Chemical Identity        | Reportable quantity       |   |
|--------------------------|---------------------------|---|
| P-chlorobenzotrifluoride | De minimis concentration: | 1.0% One-Time Export Notification only. |

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) None present or none present in regulated quantities.

# CERCLA Hazardous Substance List (40 CFR 302.4):

| Chemical Identity        | Reportable quantity |
|--------------------------|---------------------|
| 4,4'-Methylene           | 5000 lbs.           |
| bis(phenylisocyanate)    |                     |
| Polymethylene            | 5000 lbs.           |
| polyphenyl isocyanate    |                     |
| Cumene                   | 5000 lbs.           |
| 2,4-Toluene diisocyanate | 100 lbs.            |
| Xylene                   | 100 lbs.            |
| Toluene-2,6-Diisocyanate | 100 lbs.            |
| Ethylbenzene             | 1000 lbs.           |
| Dioctyl phthalate        | 100 lbs.            |
| Chromium                 | 5000 lbs.           |

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### Hazard categories

Immediate (Acute) Health Hazards Delayed (Chronic) Health Hazard

## SARA 302 Extremely Hazardous Substance

| <u>Reportable</u> |
|-------------------|
| quantity          |
| 100 lbs.          |
| 100 lbs.          |
|                   |

Threshold Planning Quantity 500 lbs. 100 lbs.

# SARA 304 Emergency Release Notification

| Chemical Identity        | Reportable quantity |
|--------------------------|---------------------|
| Diisodecyl phthalate     |                     |
| 4,4'-Methylene           | 5000 lbs.           |
| bis(phenylisocyanate)    |                     |
| Polymethylene            | 5000 lbs.           |
| polyphenyl isocyanate    |                     |
| Cumene                   | 5000 lbs.           |
| 2,4-Toluene diisocyanate | 100 lbs.            |
| Xylene                   | 100 lbs.            |
| Toluene-2,6-Diisocyanate | 100 lbs.            |
| Ethylbenzene             | 1000 lbs.           |
| Dioctyl phthalate        | 100 lbs.            |
| Chromium                 | 5000 lbs.           |



# SARA 311/312 Hazardous Chemical

| Chemical Identity            | Threshold Planning Quantity |
|------------------------------|-----------------------------|
| 2,4-Toluene diisocyanate     | 500lbs                      |
| Toluene-2,6-Diisocyanate     | 100lbs                      |
| Calcium Carbonate            | 500 lbs                     |
| (Limestone)                  |                             |
| Polyethylene                 | 500 lbs                     |
| Titanium dioxide             | 500 lbs                     |
| Heavy aromatic naphtha       | 500 lbs                     |
| Aromatic petroleum           | 500 lbs                     |
| distillates                  |                             |
| 1,2,4-Trimethylbenzene       | 500 lbs                     |
| 4,4'-Methylene               | 500 lbs                     |
| bis(phenylisocyanate)        |                             |
| 1,3,5-Trimethylbenzene       | 500 lbs                     |
| Polymethylene polyphenyl     | 500 lbs                     |
| isocyanate                   |                             |
| Crystalline Silica (Quartz)/ | 500 lbs                     |
| Silica Sand                  |                             |
| Aluminum oxide               | 500 lbs                     |
|                              |                             |

# SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

#### Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

| Chemical Identity | Reportable quantity |
|-------------------|---------------------|
| Xylene            | 100 lbs.            |

## Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

#### Chemical Identity

#### **Reportable quantity**

| 2,4-Toluene diisocyanate | 10000 lbs |
|--------------------------|-----------|
| Toluene-2,6-Diisocyanate | 10000 lbs |

#### **US State Regulations**

#### US. California Proposition 65

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

#### US. New Jersey Worker and Community Right-to-Know Act

#### **Chemical Identity**

Calcium Carbonate (Limestone) P-chlorobenzotrifluoride Titanium dioxide Heavy aromatic naphtha Crystalline Silica (Quartz)/ Silica Sand



One or more components in this product are not listed on or exempt from the Inventory.

All components in this product are listed on or

One or more components in this product are

One or more components in this product are

One or more components in this product are not listed on or exempt from the Inventory.

One or more components in this product are not listed on or exempt from the Inventory.

One or more components in this product are not listed on or exempt from the Inventory.

One or more components in this product are not listed on or exempt from the Inventory.

not listed on or exempt from the Inventory.

not listed on or exempt from the Inventory.

exempt from the Inventory.

## US. Massachusetts RTK - Substance List

#### Chemical Identity

Calcium Carbonate (Limestone) Titanium dioxide Heavy aromatic naphtha Crystalline Silica (Quartz)/ Silica Sand 2,4-Toluene diisocyanate Toluene-2,6-Diisocyanate Dioctyl phthalate

#### US. Pennsylvania RTK - Hazardous Substances

<u>Chemical Identity</u> Diisodecyl phthalate Calcium Carbonate (Limestone) Titanium dioxide Heavy aromatic naphtha

#### **US. Rhode Island RTK**

<u>Chemical Identity</u> Disodecyl phthalate

#### **Other Regulations:**

| Regulatory VOC (less water | 47 g/l |
|----------------------------|--------|
| and exempt solvent):       |        |
| VOC Method 310:            | 2.61 % |

# **Inventory Status:**

Australia AICS:

Canada DSL Inventory List:

EINECS, ELINCS or NLP:

Japan (ENCS) List:

China Inv. Existing Chemical Substances:

Korea Existing Chemicals Inv. (KECI):

Canada NDSL Inventory:

Philippines PICCS:



| US TSCA Inventory:                  | All components in this product are listed on or exempt from the Inventory.             |
|-------------------------------------|--|
| New Zealand Inventory of Chemicals: | One or more components in this product are not listed on or exempt from the Inventory. |
| Japan ISHL Listing:                 | One or more components in this product are not listed on or exempt from the Inventory. |
| Japan Pharmacopoeia Listing:        | One or more components in this product are not listed on or exempt from the Inventory. |

# 16.Other information, including date of preparation or last revision

| Revision Date:       | 03/28/2016  |
|----------------------|---|
| Version #:           | 1.0   |
| Further Information: | No data available.  |
| Disclaimer:          | For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition. |