

# SAFETY DATA SHEET

## 1. Identification

**Material name:** VULKEM 45 SSL LIMESTONE QT CTG  
**Material:** 445805A 333

### 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:** EH&S Department  
**Telephone:** 216-292-5000  
**Emergency telephone number:** 1-800-424-9300 (US); 1-613-996-6666 (Canada)

## 2. Hazard(s) identification

### Hazard Classification

#### Health Hazards

|                        |             |
|------------------------|-------------|
| Respiratory sensitizer | Category 1  |
| Skin sensitizer        | Category 1  |
| Carcinogenicity        | Category 1A |

#### Unknown toxicity - Health

|  |         |
|--|---------|
| Acute toxicity, oral                     | 56.46 % |
| Acute toxicity, dermal                   | 63.03 % |
| Acute toxicity, inhalation, vapor        | 98.01 % |
| Acute toxicity, inhalation, dust or mist | 90.45 % |

### Environmental Hazards

|  |            |
|--|------------|
| Acute hazards to the aquatic environment | Category 2 |
|--|------------|

#### Unknown toxicity - Environment

|  |         |
|--|---------|
| Acute hazards to the aquatic environment   | 86.58 % |
| Chronic hazards to the aquatic environment | 98.15 % |

### Label Elements

**Hazard Symbol:**



**Signal Word:** Danger

**Hazard Statement:** May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
May cause an allergic skin reaction.  
May cause cancer.  
Toxic to aquatic life.

**Precautionary Statements**

**Prevention:** Avoid breathing dust/fume/gas/mist/vapors/spray. [In case of inadequate ventilation] wear respiratory protection. Contaminated work clothing should 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: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER/doctor. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. IF exposed or concerned: Get medical advice/attention. Specific treatment (see on this label). Wash contaminated 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.

**Hazard(s) not otherwise classified (HNOC):** None.

|  |
|--|
| <b>3. Composition/information on ingredients</b> |
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**Mixtures**

| Chemical Identity | CAS number | Content in percent (%)* |
|-------------------|------------|-------------------------|
|-------------------|------------|-------------------------|

|  |            |            |
|--|------------|------------|
| Calcium Carbonate (Limestone)            | 1317-65-3  | 10 - <20%  |
| Polyvinyl chloride                       | 9002-86-2  | 10 - <20%  |
| Petroleum distillates                    | 64742-47-8 | 5 - <10%   |
| Titanium dioxide                         | 13463-67-7 | 1 - <5%    |
| Calcium oxide                            | 1305-78-8  | 1 - <5%    |
| Xylene                                   | 1330-20-7  | 1 - <5%    |
| Isophorone Diisocyanate                  | 4098-71-9  | 0.1 - <1%  |
| Diisodecyl phthalate                     | 26761-40-0 | 0.01 - <1% |
| Ethylbenzene                             | 100-41-4   | 0.1 - <1%  |
| Hydrotreated heavy naphthenic distillate | 64742-52-5 | 0.1 - <1%  |
| Aluminum oxide                           | 1344-28-1  | 0.1 - <1%  |
| Nonane                                   | 111-84-2   | 0.1 - <1%  |
| Iodopropynyl butylcarbamate              | 55406-53-6 | 0.01 - <1% |

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

#### 4. First-aid measures

- Ingestion:** Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
- Inhalation:** Call a physician or poison control center immediately. If breathing stops, provide artificial respiration. Move to fresh air. If breathing is difficult, give oxygen.
- Skin Contact:** 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:** 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/effects, acute and delayed

**Symptoms:** May cause skin and eye irritation.

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

**Treatment:** Symptoms may be delayed.

#### 5. Fire-fighting measures

**General Fire Hazards:** No unusual fire or explosion hazards noted.

#### Suitable (and unsuitable) extinguishing media

**Suitable extinguishing media:** Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media:** Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical:** 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**

**Personal precautions, protective equipment and 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 containment and cleaning 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:** Ventilate well, avoid breathing vapors. Use approved respirator if air contamination is above accepted level. Use mechanical ventilation in case of handling which causes formation of dust. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with eyes, skin, and clothing. Wash hands thoroughly after handling.

**Conditions for safe storage, including any incompatibilities:** Store locked up.

**8. Exposure controls/personal protection**

**Control Parameters**

**Occupational Exposure Limits**

| Chemical Identity                           | Type | Exposure Limit Values | Source  |
|---|------|-----------------------|---|
| Calcium Carbonate (Limestone) - Total dust. | PEL  | 15 mg/m3              | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| Calcium Carbonate                           | PEL  | 5 mg/m3               | US. OSHA Table Z-1 Limits for Air   |

|   |           |  |  |
|---|-----------|--|--|
| (Limestone) - Respirable fraction.                                |           |  | Contaminants (29 CFR 1910.1000) (02 2006)                                    |
| Polyvinyl chloride - Respirable fraction.                         | TWA       | 1 mg/m3  | US. ACGIH Threshold Limit Values (2011)                                      |
| Polyvinyl chloride - as vinyl chloride monomer                    | TWA       | 1 ppm  | US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) (02 2006) |
|   | STEL      | 5 ppm  | US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) (02 2006) |
|   | OSHA_AC T | 0.5 ppm  | US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) (02 2006) |
| Polyvinyl chloride - Respirable fraction.                         | PEL       | 5 mg/m3  | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)  |
| Polyvinyl chloride - Total dust.                                  | PEL       | 15 mg/m3                                       | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)  |
|   | TWA       | 50 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)                                 |
| Polyvinyl chloride - Respirable fraction.                         | TWA       | 15 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)                                 |
| Polyvinyl chloride - Total dust.                                  | TWA       | 15 mg/m3                                       | US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)                                 |
| Polyvinyl chloride - Respirable fraction.                         | TWA       | 5 mg/m3  | US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)                                 |
| Petroleum distillates - Non-aerosol. - as total hydrocarbon vapor | TWA       | 200 mg/m3                                      | US. ACGIH Threshold Limit Values (2011)                                      |
|   | TWA       | 200 mg/m3                                      | US. ACGIH Threshold Limit Values (2011)                                      |
| Titanium dioxide  | TWA       | 10 mg/m3                                       | US. ACGIH Threshold Limit Values (2011)                                      |
| Titanium dioxide - Total dust.                                    | PEL       | 15 mg/m3                                       | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)  |
| Titanium dioxide - Respirable fraction.                           | TWA       | 15 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)                              |
| Titanium dioxide - Total dust.                                    | TWA       | 15 mg/m3                                       | US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)                              |
| Titanium dioxide - Respirable fraction.                           | TWA       | 5 mg/m3  | US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)                              |
| Titanium dioxide - Total dust.                                    | TWA       | 50 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)                              |
| Calcium oxide   | TWA       | 2 mg/m3  | US. ACGIH Threshold Limit Values (2011)                                      |
|   | PEL       | 5 mg/m3  | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)  |
| Xylene  | STEL      | 150 ppm 655 mg/m3                              | US. NIOSH: Pocket Guide to Chemical Hazards (2010)                           |
|   | REL       | 100 ppm 435 mg/m3                              | US. NIOSH: Pocket Guide to Chemical Hazards (2010)                           |
|   | STEL      | 150 ppm 655 mg/m3                              | US. NIOSH: Pocket Guide to Chemical Hazards (2010)                           |
|   | REL       | 100 ppm 435 mg/m3                              | US. NIOSH: Pocket Guide to Chemical Hazards (2010)                           |
|   | STEL      | 150 ppm 655 mg/m3                              | US. NIOSH: Pocket Guide to Chemical Hazards (2010)                           |
|   | REL       | 100 ppm 435 mg/m3                              | US. NIOSH: Pocket Guide to Chemical Hazards (2010)                           |
|   | STEL      | 150 ppm 655 mg/m3                              | US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)                               |
|   | TWA       | 100 ppm 435 mg/m3                              | US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)                               |
|   | TWA       | 100 ppm 435 mg/m3                              | US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)       |
|   | STEL      | 150 ppm 655 mg/m3                              | US. Tennessee. OELs. Occupational Exposure                                   |

|  |         |  | Limits, Table Z1A (06 2008)  |
|--|---------|--|--|
|  | ST ESL  | 350 µg/m3                                      | US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (07 2011)  |
|  | ST ESL  | 80 ppb   | US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (07 2011)  |
|  | AN ESL  | 42 ppb   | US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (07 2011)  |
|  | AN ESL  | 180 µg/m3                                      | US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (07 2011)  |
|  | STEL    | 150 ppm 655 mg/m3                              | US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (08 2010) |
|  | Ceiling | 300 ppm  | US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (08 2010) |
|  | TWA PEL | 100 ppm 435 mg/m3                              | US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (08 2010) |
|  | TWA     | 100 ppm  | US. ACGIH Threshold Limit Values (2011)  |
|  | STEL    | 150 ppm  | US. ACGIH Threshold Limit Values (2011)  |
|  | PEL     | 100 ppm 435 mg/m3                              | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)                |
| Isophorone Diisocyanate  | TWA     | 0.005 ppm                                      | US. ACGIH Threshold Limit Values (2011)  |
| Ethylbenzene   | TWA     | 20 ppm   | US. ACGIH Threshold Limit Values (2011)  |
|  | PEL     | 100 ppm 435 mg/m3                              | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)                |
| Hydrotreated heavy naphthenic distillate - Inhalable fraction. | TWA     | 5 mg/m3  | US. ACGIH Threshold Limit Values (03 2014)   |
| Hydrotreated heavy naphthenic distillate                       | PEL     | 500 ppm 2,000 mg/m3                            | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)                |
| Hydrotreated heavy naphthenic distillate - Mist.               | PEL     | 5 mg/m3  | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)                |
| Aluminum oxide - Respirable fraction.                          | TWA     | 1 mg/m3  | US. ACGIH Threshold Limit Values (2011)  |
|  | PEL     | 5 mg/m3  | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)                |
| Aluminum oxide - Total dust.                                   | PEL     | 15 mg/m3                                       | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)                |
|  | TWA     | 50 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)  |
| Aluminum oxide - Respirable fraction.                          | TWA     | 15 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)  |
|  | TWA     | 5 mg/m3  | US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)  |
| Aluminum oxide - Total dust.                                   | TWA     | 15 mg/m3                                       | US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)  |
| Nonane   | TWA     | 200 ppm  | US. ACGIH Threshold Limit Values (02 2012)   |

| Chemical name                               | Type | Exposure Limit Values | Source  |
|---|------|-----------------------|---|
| Calcium Carbonate (Limestone) - Total dust. | STEL | 20 mg/m3              | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
|   | TWA  | 10 mg/m3              | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation                               |

|   |      |                   |   |
|---|------|-------------------|---|
|   |      |                   | 296/97, as amended) (07 2007)   |
| Calcium Carbonate (Limestone) - Respirable fraction.              | TWA  | 3 mg/m3           | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Calcium Carbonate (Limestone) - Total dust.                       | TWA  | 10 mg/m3          | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)  |
| Polyvinyl chloride - Respirable.                                  | TWA  | 1 mg/m3           | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Polyvinyl chloride - Respirable fraction.                         | TWA  | 1 mg/m3           | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)  |
| Polyvinyl chloride - Total dust.                                  | TWA  | 10 mg/m3          | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)  |
| Petroleum distillates - Non-aerosol. - as total hydrocarbon vapor | TWA  | 200 mg/m3         | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Petroleum distillates   | TWA  | 525 mg/m3         | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)  |
| Petroleum distillates - Non-aerosol. - as total hydrocarbon vapor | TWA  | 200 mg/m3         | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)  |
|   | TWA  | 200 mg/m3         | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)  |
| Titanium dioxide - Total dust.                                    | TWA  | 10 mg/m3          | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Titanium dioxide - Respirable fraction.                           | TWA  | 3 mg/m3           | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Titanium dioxide  | TWA  | 10 mg/m3          | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)  |
| Titanium dioxide - Total dust.                                    | TWA  | 10 mg/m3          | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)  |
| Calcium oxide   | TWA  | 2 mg/m3           | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Calcium oxide   | TWA  | 2 mg/m3           | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)  |
| Calcium oxide   | TWA  | 2 mg/m3           | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)  |
| Xylene  | TWA  | 100 ppm 434 mg/m3 | Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)   |
|   | STEL | 150 ppm 651 mg/m3 | Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)   |
| Xylene  | TWA  | 100 ppm           | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
|   | STEL | 150 ppm           | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Xylene  | TWA  | 100 ppm           | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)  |
|   | STEL | 150 ppm           | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)  |

|  |         |           |             |   |
|--|---------|-----------|-------------|---|
| Xylene   | STEL    | 150 ppm   | 651 mg/m3   | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)  |
|  | TWA     | 100 ppm   | 434 mg/m3   | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)  |
| Isophorone Diisocyanate  | TWA     | 0.005 ppm |             | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
|  | CEILING | 0.01 ppm  |             | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Isophorone Diisocyanate  | TWA     | 0.005 ppm |             | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)  |
|  | CEV     | 0.02 ppm  |             | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)  |
| Isophorone Diisocyanate  | TWA     | 0.005 ppm | 0.045 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)  |
| Ethylbenzene   | TWA     | 20 ppm    |             | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (09 2011) |
| Ethylbenzene   | TWA     | 20 ppm    |             | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)  |
| Ethylbenzene   | STEL    | 125 ppm   | 543 mg/m3   | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)  |
|  | TWA     | 100 ppm   | 434 mg/m3   | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)  |
| Hydrotreated heavy naphthenic distillate - Mist.               | TWA     |           | 0.2 mg/m3   | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (05 2013) |
|  | TWA     |           | 1 mg/m3     | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (05 2013) |
| Hydrotreated heavy naphthenic distillate - Inhalable fraction. | TWA     |           | 5 mg/m3     | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)  |
|  | TWA     |           | 5 mg/m3     | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)  |
| Hydrotreated heavy naphthenic distillate - Mist.               | STEL    |           | 10 mg/m3    | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)  |
|  | TWA     |           | 5 mg/m3     | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)  |

**Biological Limit Values**

| Chemical Identity  | Exposure Limit Values          | Source              |
|--|--------------------------------|---------------------|
| Xylene (Methylhippuric acids: Sampling time: End of shift.)                                | 1.5 g/g (Creatinine in urine)  | ACGIH BEI (03 2013) |
| Ethylbenzene (Sum of mandelic acid and phenylglyoxylic acid: Sampling time: End of shift.) | 0.15 g/g (Creatinine in urine) | ACGIH BEI (02 2014) |



**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**

**Hand Protection:** Use suitable protective gloves if risk of skin contact.

**Other:** Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.

**Respiratory Protection:** If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.

**Hygiene measures:** Observe good industrial hygiene practices. 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.

|  |
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| <b>9. Physical and chemical properties</b> |
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**Appearance**

|  |  |
|--|--|
| <b>Physical state:</b>                                       | solid  |
| <b>Form:</b>   | Paste  |
| <b>Color:</b>  | Gray   |
| <b>Odor:</b>   | Mild   |
| <b>Odor threshold:</b>                                       | No data available.   |
| <b>pH:</b>   | No data available.   |
| <b>Melting point/freezing point:</b>                         | No data available.   |
| <b>Initial boiling point and boiling range:</b>              | No data available.   |
| <b>Flash Point:</b>  | > 93 °C > 199 °F (Setaflash Closed Cup)                        |
| <b>Evaporation rate:</b>                                     | Slower than n-Butyl Acetate                                    |
| <b>Flammability (solid, gas):</b>                            | No   |
| <b>Upper/lower limit on flammability or explosive limits</b> |  |
| <b>Flammability limit - upper (%):</b>                       | No data available.   |
| <b>Flammability limit - lower (%):</b>                       | No data available.   |
| <b>Explosive limit - upper (%):</b>                          | No data available.   |
| <b>Explosive limit - lower (%):</b>                          | No data available.   |
| <b>Vapor pressure:</b>                                       | No data available.   |
| <b>Vapor density:</b>  | Vapors are heavier than air and may travel along the floor and |

|   |                              |
|---|------------------------------|
|   | in the bottom of containers. |
| <b>Relative density:</b>                        | 1.32                         |
| <b>Solubility(ies)</b>                          |                              |
| <b>Solubility in water:</b>                     | Insoluble in water           |
| <b>Solubility (other):</b>                      | No data available.           |
| <b>Partition coefficient (n-octanol/water):</b> | No data available.           |
| <b>Auto-ignition temperature:</b>               | No data available.           |
| <b>Decomposition temperature:</b>               | No data available.           |
| <b>Viscosity:</b>                               | No data available.           |

## 10. Stability and reactivity

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

## 11. Toxicological information

### Information on likely routes of exposure

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

### Symptoms related to the physical, chemical and toxicological characteristics

|                      |                    |
|----------------------|--------------------|
| <b>Inhalation:</b>   | No data available. |
| <b>Skin Contact:</b> | No data available. |
| <b>Eye contact:</b>  | No data available. |
| <b>Ingestion:</b>    | No data available. |

**Information on toxicological effects****Acute toxicity (list all possible routes of exposure)****Oral****Product:** ATEmix: 138,552.24 mg/kg**Dermal****Product:** ATEmix: 11,135.34 mg/kg**Inhalation****Product:** Not classified for acute toxicity based on available data.**Repeated dose toxicity****Product:** No data available.**Skin Corrosion/Irritation****Product:** No data available.**Serious Eye Damage/Eye Irritation****Product:** No data available.**Respiratory or Skin Sensitization****Product:** May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
May cause sensitization by inhalation.**Carcinogenicity****Product:** No data available.**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

Titanium dioxide Overall evaluation: Possibly carcinogenic to humans.

Ethylbenzene Overall evaluation: Possibly carcinogenic to humans.

Hydrotreated heavy naphthenic distillate Overall evaluation: Not classifiable as to carcinogenicity to humans. Overall evaluation: Carcinogenic to humans.

**US. National Toxicology Program (NTP) Report on Carcinogens:**

Hydrotreated heavy naphthenic distillate Known To Be Human Carcinogen.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):**Polyvinyl chloride  
Cancer

**Germ Cell Mutagenicity**

**In vitro**  
**Product:** No data available.

**In vivo**  
**Product:** No data available.

**Reproductive toxicity**

**Product:** No data available.

**Specific Target Organ Toxicity - Single Exposure**

**Product:** No data available.

**Specific Target Organ Toxicity - Repeated Exposure**

**Product:** No data available.

**Aspiration Hazard**

**Product:** No data available.

**Other effects:** No data available.

**12. Ecological information****Ecotoxicity:****Acute hazards to the aquatic environment:**

**Fish**  
**Product:** No data available.

**Aquatic Invertebrates**  
**Product:** No data available.

**Chronic hazards to the aquatic environment:**

**Fish**  
**Product:** No data available.

**Aquatic Invertebrates**  
**Product:** No data available.

**Toxicity to Aquatic Plants**  
**Product:** No data available.

**Persistence and Degradability**

**Biodegradation**  
**Product:** No data available.

**BOD/COD Ratio**

**Product:** No data available.

**Bioaccumulative potential**

**Bioconcentration Factor (BCF)**

**Product:** No data available.

**Partition Coefficient n-octanol / water (log Kow)**

**Product:** 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)**

None present or none present in regulated quantities.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

| <u>Chemical Identity</u> | <u>OSHA hazard(s)</u>  |
|--------------------------|--|
| Polyvinyl chloride       | Blood<br>Liver<br>Cancer<br>Flammability<br>Central nervous system |

**CERCLA Hazardous Substance List (40 CFR 302.4):**

| <u>Chemical Identity</u> | <u>Reportable quantity</u> |
|--------------------------|----------------------------|
| Xylene                   | 100 lbs.                   |
| Ethylbenzene             | 1000 lbs.                  |
| Nonane                   | 100 lbs.                   |
| Toluene                  | 1000 lbs.                  |
| Methanol                 | 5000 lbs.                  |

**Superfund Amendments and Reauthorization Act of 1986 (SARA)****Hazard categories**

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

**SARA 302 Extremely Hazardous Substance**

| <u>Chemical Identity</u> | <u>Reportable quantity</u> | <u>Threshold Planning Quantity</u> |
|--------------------------|----------------------------|------------------------------------|
| Isophorone Diisocyanate  | 500 lbs.                   | 500 lbs.                           |

**SARA 304 Emergency Release Notification**

| <u>Chemical Identity</u>           | <u>Reportable quantity</u> |
|------------------------------------|----------------------------|
| Xylene                             | 100 lbs.                   |
| Isophorone Diisocyanate            |                            |
| Diisodecyl phthalate               |                            |
| Ethylbenzene                       | 1000 lbs.                  |
| Nonane                             | 100 lbs.                   |
| Toluene                            | 1000 lbs.                  |
| Diisodecyl phthalate<br>(mixed Is) |                            |
| Methanol                           | 5000 lbs.                  |

### SARA 311/312 Hazardous Chemical

| <u>Chemical Identity</u>                    | <u>Threshold Planning Quantity</u> |
|---|------------------------------------|
| Isophorone Diisocyanate                     | 500lbs                             |
| Calcium Carbonate<br>(Limestone)            | 10000 lbs                          |
| Polyvinyl chloride                          | 10000 lbs                          |
| Petroleum distillates                       | 10000 lbs                          |
| Titanium dioxide                            | 10000 lbs                          |
| Calcium oxide                               | 10000 lbs                          |
| Xylene                                      | 10000 lbs                          |
| Diisodecyl phthalate                        | 10000 lbs                          |
| Ethylbenzene                                | 10000 lbs                          |
| Hydrotreated heavy<br>naphthenic distillate | 10000 lbs                          |
| Aluminum oxide                              | 10000 lbs                          |
| Nonane                                      | 10000 lbs                          |
| Iodopropynyl<br>butylcarbamate              | 10000 lbs                          |

### SARA 313 (TRI Reporting)

| <u>Chemical Identity</u> |
|--------------------------|
| Xylene                   |
| Ethylbenzene             |

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**  
None present or none present in regulated quantities.

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

| <u>Chemical Identity</u> | <u>Reportable quantity</u> |
|--------------------------|----------------------------|
| Xylene                   | Reportable quantity: lbs.  |

### US State Regulations

#### US. California Proposition 65



**WARNING**  
Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

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

| <u>Chemical Identity</u>                 |
|--|
| Calcium Carbonate (Limestone)            |
| Polyvinyl chloride                       |
| Petroleum distillates                    |
| Titanium dioxide                         |
| Calcium oxide                            |
| Xylene                                   |
| Ethylbenzene                             |
| Hydrotreated heavy naphthenic distillate |

## US. Massachusetts RTK - Substance List

### Chemical Identity

Calcium Carbonate (Limestone)  
Petroleum distillates  
Titanium dioxide  
Xylene  
Isophorone Diisocyanate  
Crystalline Silica (Quartz)/ Silica Sand

## US. Pennsylvania RTK - Hazardous Substances

### Chemical Identity

Calcium Carbonate (Limestone)  
Petroleum distillates  
Titanium dioxide  
Calcium oxide  
Xylene

## US. Rhode Island RTK

### Chemical Identity

Calcium Carbonate (Limestone)  
Polyvinyl chloride  
Petroleum distillates  
Titanium dioxide  
Xylene

## International regulations

### Montreal protocol

Not applicable

### Stockholm convention

Not applicable

### Rotterdam convention

Not applicable

### Kyoto protocol

Not applicable

### VOC:

Regulatory VOC (less water and  
exempt solvent) : 109 g/l

VOC Method 310 : 8.23 %



**Inventory Status:**

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|  |  |
|--|--|
| Australia AICS:                          | One or more components in this product are not listed on or exempt from the Inventory. |
| Canada DSL Inventory List:               | All components in this product are listed on or exempt from the Inventory.             |
| EINECS, ELINCS or NLP:                   | One or more components in this product are not listed on or exempt from the Inventory. |
| Japan (ENCS) List:                       | One or more components in this product are not listed on or exempt from the Inventory. |
| China Inv. Existing Chemical Substances: | One or more components in this product are not listed on or exempt from the Inventory. |
| Korea Existing Chemicals Inv. (KECI):    | One or more components in this product are not listed on or exempt from the Inventory. |
| Canada NDSL Inventory:                   | One or more components in this product are not listed on or exempt from the Inventory. |
| Philippines PICCS:                       | One or more components in this product are not listed on or exempt from the Inventory. |
| 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. |
| Mexico INSQ:                             | One or more components in this product are not listed on or exempt from the Inventory. |
| Ontario Inventory:                       | One or more components in this product are not listed on or exempt from the Inventory. |
| Taiwan Chemical Substance Inventory:     | 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:** 10/12/2018**Version #:** 3.1**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.