

TREMstop Acrylic Spray

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SAFETY DATA SHEET

1. Identification

Material name: TREMSTOP ACR. SP. LIMESTONE - 5 US GAL
Material: 905805A805

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

Carcinogenicity Category 2

Unknown toxicity - Health

| | |
|--|---------|
| Acute toxicity, oral | 0.16 % |
| Acute toxicity, dermal | 2.34 % |
| Acute toxicity, inhalation, vapor | 53.53 % |
| Acute toxicity, inhalation, dust or mist | 47.03 % |

Label Elements

Hazard Symbol:



Signal Word: Warning
Hazard Statement: 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 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.

3. Composition/information on ingredients

Mixtures

| Chemical Identity | CAS number | Content in percent (%)* |
|--------------------|------------|-------------------------|
| White mineral oil | 8042-47-5 | 5 - <10% |
| Amorphous silica | 7631-86-9 | 1 - <5% |
| Propylene glycol | 57-55-6 | 1 - <5% |
| Titanium dioxide | 13463-67-7 | 1 - <5% |
| Ammonium hydroxide | 1336-21-6 | 0.1 - <1% |
| Zinc oxide | 1314-13-2 | 0.1 - <1% |

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

4. First-aid measures

- Ingestion:** Rinse mouth thoroughly.
- Inhalation:** Move to fresh air.
- Skin Contact:** Remove contaminated clothing and wash the skin thoroughly with soap and water after work.
- Eye contact:** Rinse immediately with plenty of water.

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: No data available.

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. Do not contaminate water sources or sewer. Environmental manager must be informed of all major spillages.

7. Handling and storage

Precautions for safe handling: Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. 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.

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 |
|---|------|--|---|
| White mineral oil - Inhalable fraction. | TWA | 5 mg/m ³ | US. ACGIH Threshold Limit Values (2011) |
| White mineral oil - Mist. | PEL | 5 mg/m ³ | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| Amorphous silica | TWA | 20 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000) (2000) |
| | TWA | 0.8 mg/m ³ | US. OSHA Table Z-3 (29 CFR 1910.1000) (2000) |
| 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 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/m ³ | US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016) |
| Titanium dioxide - Respirable fraction. | TWA | 5 mg/m ³ | 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) |
| Ammonium hydroxide | STEL | 35 ppm | US. ACGIH Threshold Limit Values (2011) |
| | TWA | 25 ppm | US. ACGIH Threshold Limit Values (2011) |
| | PEL | 50 ppm 35 mg/m ³ | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| Zinc oxide - Respirable fraction. | TWA | 2 mg/m ³ | US. ACGIH Threshold Limit Values (2011) |
| | STEL | 10 mg/m ³ | US. ACGIH Threshold Limit Values (2011) |
| Zinc oxide - Fume. | PEL | 5 mg/m ³ | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| Zinc oxide - Total dust. | PEL | 15 mg/m ³ | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| Zinc oxide - Respirable fraction. | PEL | 5 mg/m ³ | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |

| Chemical name | Type | Exposure Limit Values | Source |
|---|------|-----------------------|---|
| White mineral oil - Mist. | TWA | 1 mg/m ³ | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| White mineral oil - Inhalable fraction. | TWA | 5 mg/m ³ | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015) |
| | TWA | 5 mg/m ³ | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015) |
| White mineral oil - Mist. | TWA | 5 mg/m ³ | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| | STEL | 10 mg/m ³ | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |

| | | | |
|---|-----|------------------------------|---|
| Amorphous silica - Total | TWA | 4 mg/m ³ | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Amorphous silica - Respirable. | TWA | 1.5 mg/m ³ | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Amorphous silica - Respirable dust. | TWA | 6 mg/m ³ | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| Propylene glycol - Aerosol. | TWA | 10 mg/m ³ | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Propylene glycol - Vapor and aerosol. | TWA | 50 ppm 155 mg/m ³ | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015) |
| Titanium dioxide - Total dust. | TWA | 10 mg/m ³ | 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/m ³ | 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/m ³ | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Titanium dioxide - Total dust. | TWA | 10 mg/m ³ | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |

| Chemical name | Type | Exposure Limit Values | Source |
|---|------|-----------------------|---|
| White mineral oil - Mist. | TWA | 1 mg/m ³ | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| White mineral oil - Inhalable fraction. | TWA | 5 mg/m ³ | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015) |
| | TWA | 5 mg/m ³ | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015) |
| White mineral oil - Mist. | TWA | 5 mg/m ³ | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| | STEL | 10 mg/m ³ | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |

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|---|------|------------------------------|---|
| Amorphous silica - Total | TWA | 4 mg/m ³ | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Amorphous silica - Respirable. | TWA | 1.5 mg/m ³ | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Amorphous silica - Respirable dust. | TWA | 6 mg/m ³ | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| Propylene glycol - Aerosol. | TWA | 10 mg/m ³ | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Propylene glycol - Vapor and aerosol. | TWA | 50 ppm 155 mg/m ³ | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015) |
| Titanium dioxide - Total dust. | TWA | 10 mg/m ³ | 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/m ³ | 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/m ³ | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Titanium dioxide - Total dust. | TWA | 10 mg/m ³ | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| Ammonium hydroxide | STEL | 35 ppm | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| | TWA | 25 ppm | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Ammonium hydroxide | TWA | 25 ppm | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| | STEL | 35 ppm | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Zinc oxide - Respirable. | TWA | 2 mg/m ³ | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| | STEL | 10 mg/m ³ | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Zinc oxide - Respirable fraction. | TWA | 2 mg/m ³ | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| | STEL | 10 mg/m ³ | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Zinc oxide - Fume. | TWA | 5 mg/m ³ | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| | STEL | 10 mg/m ³ | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |

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|---------------------------------------|------|-------------|---|
| Zinc oxide - Total dust. | TWA | 10 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| Talc - Respirable. | 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) |
| Talc | TWA | 2 fibers/mL | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Talc - Respirable fraction. | TWA | 2 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015) |
| Talc - Respirable dust. | TWA | 3 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| Aluminum oxide - 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) |
| Aluminum oxide - 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) (05 2013) |
| Aluminum oxide - 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) (05 2013) |
| Aluminum oxide - Respirable fraction. | TWA | 1 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Aluminum oxide - Inhalable fraction. | TWA | 10 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015) |
| Aluminum oxide - Respirable fraction. | TWA | 3 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015) |
| Aluminum oxide - Total dust. - as Al | TWA | 10 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| Clay - Respirable. | 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) |
| Clay - Respirable fraction. | TWA | 2 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Clay - Respirable dust. | TWA | 5 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| Zirconium dioxide - as Zr | STEL | 10 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| | TWA | 5 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Zirconium dioxide - as Zr | TWA | 5 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| | STEL | 10 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Zirconium dioxide - as Zr | TWA | 5 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| | STEL | 10 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |

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|---|---------|-------------------|---|
| Carbon Black - Inhalable | TWA | 3 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (09 2011) |
| Carbon Black - Inhalable fraction. | TWA | 3 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015) |
| Carbon Black | TWA | 3.5 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| Methanol | STEL | 250 ppm | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| | TWA | 200 ppm | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Methanol | STEL | 250 ppm | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| | TWA | 200 ppm | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Methanol | STEL | 250 ppm 328 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| | TWA | 200 ppm 262 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| Crystalline Silica (Quartz)/ Silica Sand - Respirable fraction. | TWA | 0.025 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Crystalline Silica (Quartz)/ Silica Sand - Respirable fraction. | TWA | 0.10 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015) |
| Crystalline Silica (Quartz)/ Silica Sand - Respirable dust. | TWA | 0.1 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| Ethyl Acrylate | TWA | 5 ppm | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| | STEL | 15 ppm | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Ethyl Acrylate | TWA | 5 ppm | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| | STEL | 15 ppm | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Ethyl Acrylate | STEL | 15 ppm 61 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| | TWA | 5 ppm 20 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| Formaldehyde | TWA | 0.3 ppm | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| | CEILING | 1 ppm | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Formaldehyde | STEL | 1 ppm | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| | CEV | 1.5 ppm | Canada. Ontario OELs. (Control of Exposure to |

| | | | | |
|--|---------|--------|-------------|---|
| | | | | Biological or Chemical Agents) (11 2010) |
| Formaldehyde | CEILING | 2 ppm | 3 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| Propionic acid | TWA | 10 ppm | | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Propionic acid | TWA | 10 ppm | | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Propionic acid | TWA | 10 ppm | 30 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| Acetaldehyde | CEILING | 25 ppm | | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Acetaldehyde | CEV | 25 ppm | | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Acetaldehyde | CEILING | 25 ppm | 45 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| Cadmium - as Cd | TWA | | 0.01 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Cadmium - Respirable. - as Cd | TWA | | 0.002 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Cadmium - as Cd | TWA | | 0.01 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Cadmium - Respirable fraction. - as Cd | TWA | | 0.002 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015) |
| Cadmium - as Cd | TWA | | 0.025 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| Potassium hydroxide | CEILING | | 2 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Potassium hydroxide | CEV | | 2 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Potassium hydroxide | CEILING | | 2 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| Petroleum Oil - Mist. | 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) |
| | 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) |
| Petroleum Oil - Inhalable fraction. | TWA | | 5 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015) |
| Lead and compounds (inorganic) | TWA | | 0.05 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Lead and compounds (inorganic) - as Pb | TWA | | 0.05 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015) |
| Lead and compounds (inorganic) - as Pb | TWA | | 0.05 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |

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: No data available.

Respiratory Protection: In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

Hygiene measures: Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product.

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|--|
| 9. Physical and chemical properties |
|--|

Appearance

| | |
|--|---|
| Physical state: | solid |
| Form: | Paste |
| Color: | 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: | No data available. |
| Evaporation rate: | Slower than Ether |
| Flammability (solid, gas): | No |
| Upper/lower limit on flammability or explosive 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: | 1.058 |
| Solubility(ies) | |
| Solubility in water: | Miscible with 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.

10. Stability and reactivity

Reactivity: No data available.

Chemical Stability: Material is stable under normal conditions.

Possibility of hazardous reactions: No data available.

Conditions to avoid: Avoid heat or contamination.

Incompatible Materials: Strong acids. Avoid contact with oxidizing agents (e.g. nitric acid, peroxides and chromates). Strong bases.

Hazardous Decomposition Products: Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

11. Toxicological information**Information on likely routes of exposure**

Inhalation: In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.

Skin Contact: Moderately irritating to skin with prolonged exposure.

Eye contact: Eye contact is possible and should be avoided.

Ingestion: May be ingested by accident. Ingestion may cause irritation and malaise.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Ingestion: No data available.

Information on toxicological effects**Acute toxicity (list all possible routes of exposure)**

Oral Product: Not classified for acute toxicity based on available data.

Specified substance(s):

| | |
|--------------------|----------------------------|
| White mineral oil | LD 50 (Rat): > 5,000 mg/kg |
| Amorphous silica | LD 50 (Rat): > 5,000 mg/kg |
| Propylene glycol | LD 50 (Rat): 22,000 mg/kg |
| Titanium dioxide | LD 50 (Rat): > 5,000 mg/kg |
| Ammonium hydroxide | LD 50 (Rat): 350 mg/kg |
| Zinc oxide | LD 50 (Rat): > 5,000 mg/kg |

Dermal**Product:**

Not classified for acute toxicity based on available data.

Specified substance(s):

| | |
|-------------------|-------------------------------|
| White mineral oil | LD 50 (Rabbit): > 2,000 mg/kg |
| Amorphous silica | LD 50 (Rabbit): > 2,000 mg/kg |
| Propylene glycol | LD 50 (Rabbit): > 2,000 mg/kg |
| Zinc oxide | LD 50 (Rat): > 2,000 mg/kg |

Inhalation**Product:**

Not classified for acute toxicity based on available data.

Specified substance(s):

| | |
|-------------------|--|
| White mineral oil | LC 50 (Rat): > 5.2 mg/l |
| Amorphous silica | LC 50 (Rat): > 2.08 mg/l |
| Titanium dioxide | LC 50 (Rat): 3.43 mg/l |
| Zinc oxide | LC 50 (Rat): > 5,700 mg/m ³ |

Repeated dose toxicity**Product:**

No data available.

Skin Corrosion/Irritation**Product:** No data available.**Specified substance(s):**

| | | |
|-------------------|--------------------------------|---------------------------------------|
| White mineral oil | in vivo (Rabbit): Not irritant | Experimental result, Key study |
| Amorphous silica | in vivo (Rabbit): Not irritant | Experimental result, Key study |
| Propylene glycol | in vivo (Rabbit): Not irritant | Experimental result, Key study |
| Titanium dioxide | in vivo (Rabbit): Not irritant | Experimental result, Supporting study |
| Zinc oxide | in vivo (Rabbit): Not irritant | Experimental result, Key study |

Serious Eye Damage/Eye Irritation**Product:** No data available.**Specified substance(s):**

| | |
|-------------------|-------------------------------------|
| White mineral oil | Rabbit, 24 - 72 hrs: Not irritating |
| Amorphous silica | Rabbit, 24 hrs: Not irritating |
| Titanium dioxide | Rabbit, 24 hrs: Not irritating |
| Zinc oxide | Rabbit, 24 - 72 hrs: Not irritating |

Respiratory or Skin Sensitization**Product:** No data available.**Carcinogenicity****Product:** Suspected of causing cancer.**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

| | |
|------------------|--|
| Titanium dioxide | Overall evaluation: Possibly carcinogenic to humans. |
|------------------|--|

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

No carcinogenic components identified

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

No carcinogenic components identified

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.

Specified substance(s):

Propylene glycol LC 50 (Fathead minnow (Pimephales promelas), 96 h): 29,485 - 39,339 mg/l Mortality

Zinc oxide LC 50 (Fathead minnow (Pimephales promelas), 96 h): 2,246 mg/l Mortality

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Propylene glycol EC 50 (Water flea (Daphnia magna), 48 h): > 10,000 mg/l Intoxication

Titanium dioxide EC 50 (Water flea (Daphnia magna), 48 h): > 1,000 mg/l Intoxication

Chronic hazards to the aquatic environment:**Fish****Product:** No data available.**Specified substance(s):**White mineral oil NOAEL (Oncorhynchus mykiss, 28 d): $\geq 1,000$ mg/l QSAR QSAR, Supporting study

Propylene glycol NOAEL (Pimephales promelas, 7 d): 11,530 mg/l Experimental result, Not specified

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.**Specified substance(s):**

Propylene glycol Log Kow: -0.92

Mobility in soil: No data available.**Other adverse effects:** No data available.**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> |
|---|--|
| Crystalline Silica (Quartz)/ Silica Sand | kidney effects lung effects immune system effects Cancer |
| Formaldehyde | Acute toxicity Skin irritation Skin sensitization Flammability respiratory tract irritation Respiratory sensitization Cancer Eye irritation |
| Cadmium | Acute toxicity Lung Kidney Cancer |
| Lead and compounds (inorganic) | Kidney Acute toxicity Central nervous system Blood Reproductive toxicity |

CERCLA Hazardous Substance List (40 CFR 302.4):

| <u>Chemical Identity</u> | <u>Reportable quantity</u> |
|-------------------------------------|----------------------------|
| Ammonium hydroxide | 1000 lbs. |
| Methyl benzimidazole-2-yl carbamate | 10 lbs. |
| Methanol | 5000 lbs. |
| Ethyl Acrylate | 1000 lbs. |
| Formaldehyde | 100 lbs. |
| Propionic acid | 5000 lbs. |
| Acetaldehyde | 1000 lbs. |
| Cadmium | 10 lbs. |
| Potassium hydroxide | 1000 lbs. |
| Lead and compounds (inorganic) | 10 lbs. |

Superfund Amendments and Reauthorization Act of 1986 (SARA)**Hazard categories**Delayed (Chronic) Health Hazard
Carcinogenicity**SARA 302 Extremely Hazardous Substance**

| <u>Chemical Identity</u> | <u>Reportable quantity</u> | <u>Threshold Planning Quantity</u> |
|--------------------------|----------------------------|------------------------------------|
| Formaldehyde | 100 lbs. | 500 lbs. |

SARA 304 Emergency Release Notification

| <u>Chemical Identity</u> | <u>Reportable quantity</u> |
|-------------------------------------|----------------------------|
| Ammonium hydroxide | 1000 lbs. |
| Zinc oxide | |
| Methyl benzimidazole-2-yl carbamate | 10 lbs. |
| Methanol | 5000 lbs. |
| Ethyl Acrylate | 1000 lbs. |
| Formaldehyde | 100 lbs. |
| Propionic acid | 5000 lbs. |
| Copper phthalocyanine | |
| Acetaldehyde | 1000 lbs. |
| Cadmium | 10 lbs. |
| Potassium hydroxide | 1000 lbs. |
| Lead and compounds (inorganic) | 10 lbs. |

SARA 311/312 Hazardous Chemical

| <u>Chemical Identity</u> | <u>Threshold Planning Quantity</u> |
|--------------------------|------------------------------------|
| Formaldehyde | 500lbs |
| White mineral oil | 10000 lbs |
| Amorphous silica | 10000 lbs |
| Propylene glycol | 10000 lbs |
| Titanium dioxide | 10000 lbs |
| Ammonium hydroxide | 10000 lbs |
| Zinc oxide | 10000 lbs |

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

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

| <u>Chemical Identity</u> | <u>Reportable quantity</u> |
|--------------------------|----------------------------|
| Formaldehyde | lbs |
| Acetaldehyde | lbs |

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

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65



WARNING

Cancer and Reproductive Harm - www.P65Warnings.ca.gov

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

| <u>Chemical Identity</u> |
|--------------------------|
| White mineral oil |
| Amorphous silica |
| Propylene glycol |
| Titanium dioxide |

US. Massachusetts RTK - Substance List

| <u>Chemical Identity</u> |
|--|
| White mineral oil |
| Amorphous silica |
| Titanium dioxide |
| Crystalline Silica (Quartz)/ Silica Sand |
| Ethyl Acrylate |
| Formaldehyde |

US. Pennsylvania RTK - Hazardous Substances

| <u>Chemical Identity</u> |
|--------------------------|
| White mineral oil |
| Amorphous silica |
| Propylene glycol |
| Titanium dioxide |

US. Rhode Island RTK

Chemical Identity

White mineral oil
Propylene glycol
Titanium dioxide

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) : 14 g/l

VOC Method 310 : 0.65 %

Inventory Status:

| | |
|--|--|
| 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:** 07/21/2018**Version #:** 1.1**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.

SAFETY DATA SHEET

1. Identification

Material name: TREMstop® ACRYLIC SP
Material: 905874A805

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

Carcinogenicity Category 2

Unknown toxicity - Health

| | |
|--|---------|
| Acute toxicity, oral | 47.3 % |
| Acute toxicity, dermal | 48.39 % |
| Acute toxicity, inhalation, vapor | 100 % |
| Acute toxicity, inhalation, dust or mist | 93.51 % |

Label Elements

Hazard Symbol:



Signal Word: Warning

Hazard Statement: 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 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.

3. Composition/information on ingredients

Mixtures

| Chemical Identity | CAS number | Content in percent (%)* |
|--------------------|------------|-------------------------|
| White mineral oil | 8042-47-5 | 5 - <10% |
| Amorphous silica | 7631-86-9 | 1 - <5% |
| Propylene glycol | 57-55-6 | 1 - <5% |
| Iron oxide | 1309-37-1 | 0.1 - <1% |
| Ammonium hydroxide | 1336-21-6 | 0.1 - <1% |
| Zinc oxide | 1314-13-2 | 0.1 - <1% |
| Titanium dioxide | 13463-67-7 | 0.1 - <1% |
| Talc | 14807-96-6 | 0.1 - <1% |

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

4. First-aid measures

Ingestion: Rinse mouth thoroughly.

Inhalation: Move to fresh air.

Skin Contact: Remove contaminated clothing and wash the skin thoroughly with soap and water after work.

Eye contact: Rinse immediately with plenty of water.

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: No data available.

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. Do not contaminate water sources or sewer. Environmental manager must be informed of all major spillages.

7. Handling and storage

Precautions for safe handling: Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. 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.

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 |
|---|------|---|---|
| White mineral oil - Inhalable fraction. | TWA | 5 mg/m3 | US. ACGIH Threshold Limit Values (2011) |
| White mineral oil - Mist. | PEL | 5 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| Amorphous silica | TWA | 20 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000) (2000) |
| | TWA | 0.8 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000) (2000) |
| Iron oxide - Respirable fraction. | TWA | 5 mg/m3 | US. ACGIH Threshold Limit Values (2011) |
| Iron oxide - Fume. | PEL | 10 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| Iron oxide - Total dust. | TWA | 15 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016) |
| | TWA | 50 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016) |
| Iron oxide - Respirable fraction. | TWA | 5 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016) |
| | TWA | 15 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016) |
| Ammonium hydroxide | STEL | 35 ppm | US. ACGIH Threshold Limit Values (2011) |
| | TWA | 25 ppm | US. ACGIH Threshold Limit Values (2011) |
| | PEL | 50 ppm 35 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| Zinc oxide - Respirable fraction. | TWA | 2 mg/m3 | US. ACGIH Threshold Limit Values (2011) |
| | STEL | 10 mg/m3 | US. ACGIH Threshold Limit Values (2011) |
| Zinc oxide - Fume. | PEL | 5 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| Zinc oxide - Total dust. | PEL | 15 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| Zinc oxide - Respirable fraction. | PEL | 5 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| 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) |
| Talc - Respirable fraction. | TWA | 2 mg/m3 | US. ACGIH Threshold Limit Values (2011) |
| Talc | TWA | 20 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000) (2000) |
| Talc - Respirable. | TWA | 2.4 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000) (2000) |
| | TWA | 0.1 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000) (2000) |
| Talc - Total dust. | TWA | 0.3 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000) |

| | | | |
|--|--|--|--------|
| | | | (2000) |
|--|--|--|--------|

| Chemical name | Type | Exposure Limit Values | Source |
|---|------|------------------------------|---|
| White mineral oil - Mist. | TWA | 1 mg/m ³ | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| White mineral oil - Inhalable fraction. | TWA | 5 mg/m ³ | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015) |
| | TWA | 5 mg/m ³ | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015) |
| White mineral oil - Mist. | TWA | 5 mg/m ³ | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008) |
| | STEL | 10 mg/m ³ | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008) |
| Amorphous silica - Total | TWA | 4 mg/m ³ | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Amorphous silica - Respirable. | TWA | 1.5 mg/m ³ | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Amorphous silica - Respirable dust. | TWA | 6 mg/m ³ | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008) |
| Propylene glycol - Aerosol. | TWA | 10 mg/m ³ | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Propylene glycol - Vapor and aerosol. | TWA | 50 ppm 155 mg/m ³ | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015) |
| Titanium dioxide - Total dust. | TWA | 10 mg/m ³ | 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/m ³ | 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/m ³ | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Titanium dioxide - Total dust. | TWA | 10 mg/m ³ | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008) |
| Talc - Respirable. | TWA | 2 mg/m ³ | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Talc | TWA | 2 fibers/mL | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Talc - Respirable fraction. | TWA | 2 mg/m ³ | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015) |
| Talc - Respirable dust. | TWA | 3 mg/m ³ | 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 | |
| Hand Protection: | Use suitable protective gloves if risk of skin contact. |
| Other: | No data available. |
| Respiratory Protection: | In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor. |
| Hygiene measures: | Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. |

9. Physical and chemical properties

Appearance

| | |
|--|---|
| Physical state: | solid |
| Form: | Paste |
| Color: | Dark red |
| 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: | No data available. |
| Evaporation rate: | Slower than Ether |
| Flammability (solid, gas): | No |
| Upper/lower limit on flammability or explosive 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: | 1.049 |
| Solubility(ies) | |
| Solubility in water: | Miscible with 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. |

10. Stability and reactivity

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

11. Toxicological information**Information on likely routes of exposure**

| | |
|----------------------|---|
| Inhalation: | In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes. |
| Skin Contact: | Moderately irritating to skin with prolonged exposure. |
| Eye contact: | Eye contact is possible and should be avoided. |
| Ingestion: | May be ingested by accident. Ingestion may cause irritation and malaise. |

Symptoms related to the physical, chemical and toxicological characteristics

| | |
|----------------------|--------------------|
| Inhalation: | No data available. |
| Skin Contact: | No data available. |
| Eye contact: | No data available. |
| Ingestion: | No data available. |

Information on toxicological effects**Acute toxicity (list all possible routes of exposure)**

| | |
|----------------------|--|
| Oral Product: | Not classified for acute toxicity based on available data. |
|----------------------|--|

Specified substance(s):

| | |
|--------------------|----------------------------|
| White mineral oil | LD 50 (Rat): > 5,000 mg/kg |
| Amorphous silica | LD 50 (Rat): > 5,000 mg/kg |
| Propylene glycol | LD 50 (Rat): 22,000 mg/kg |
| Iron oxide | LD 50 (Rat): > 5,000 mg/kg |
| Ammonium hydroxide | LD 50 (Rat): 350 mg/kg |
| Zinc oxide | LD 50 (Rat): > 5,000 mg/kg |
| Titanium dioxide | LD 50 (Rat): > 5,000 mg/kg |

Dermal**Product:** ATEmix: 9,677.53 mg/kg**Inhalation****Product:** Not classified for acute toxicity based on available data.**Specified substance(s):**

| | |
|-------------------|----------------------------|
| White mineral oil | LC 50 (Rat): > 5.2 mg/l |
| Amorphous silica | LC 50 (Rat): > 2.08 mg/l |
| Zinc oxide | LC 50 (Rat): > 5,700 mg/m3 |
| Titanium dioxide | LC 50 (Rat): 3.43 mg/l |

Repeated dose toxicity**Product:** No data available.**Skin Corrosion/Irritation****Product:** No data available.**Specified substance(s):**

| | | |
|-------------------|--------------------------------|---|
| White mineral oil | in vivo (Rabbit): Not irritant | Experimental result, Key study |
| Amorphous silica | in vivo (Rabbit): Not irritant | Experimental result, Key study |
| Propylene glycol | in vivo (Rabbit): Not irritant | Experimental result, Key study |
| Iron oxide | in vivo (Rabbit): Not irritant | Experimental result, Weight of Evidence study |
| Zinc oxide | in vivo (Rabbit): Not irritant | Experimental result, Key study |
| Titanium dioxide | in vivo (Rabbit): Not irritant | Experimental result, Supporting study |

Serious Eye Damage/Eye Irritation**Product:** No data available.**Specified substance(s):**

| | |
|-------------------|-------------------------------------|
| White mineral oil | Rabbit, 24 - 72 hrs: Not irritating |
| Amorphous silica | Rabbit, 24 hrs: Not irritating |
| Zinc oxide | Rabbit, 24 - 72 hrs: Not irritating |
| Titanium dioxide | Rabbit, 24 hrs: Not irritating |

Respiratory or Skin Sensitization**Product:** No data available.**Carcinogenicity****Product:** Suspected of causing cancer.**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

| | |
|------------------|--|
| Titanium dioxide | Overall evaluation: Possibly carcinogenic to humans. |
| Talc | Overall evaluation: Not classifiable as to carcinogenicity to humans. Overall evaluation: Possibly carcinogenic to humans. |

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

No carcinogenic components identified

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

No carcinogenic components identified

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.

Specified substance(s):

Zinc oxide LC 50 (Fathead minnow (*Pimephales promelas*), 96 h): 2,246 mg/l Mortality

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Propylene glycol EC 50 (Water flea (*Daphnia magna*), 48 h): > 10,000 mg/l Intoxication

Titanium dioxide EC 50 (Water flea (*Daphnia magna*), 48 h): > 1,000 mg/l Intoxication

Chronic hazards to the aquatic environment:**Fish**

Product: No data available.

Specified substance(s):
White mineral oil NOAEL (Oncorhynchus mykiss, 28 d): $\geq 1,000$ mg/l QSAR QSAR, Supporting study

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.

Specified substance(s):
Propylene glycol Log Kow: -0.92

Mobility in soil: No data available.

Other adverse effects: No data available.

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> |
|---|--|
| Crystalline Silica (Quartz)/ Silica Sand | kidney effects lung effects immune system effects Cancer |
| Formaldehyde | Acute toxicity Skin irritation Skin sensitization Flammability respiratory tract irritation Respiratory sensitization Cancer Eye irritation |

CERCLA Hazardous Substance List (40 CFR 302.4):

| <u>Chemical Identity</u> | <u>Reportable quantity</u> |
|-------------------------------------|----------------------------|
| Ammonium hydroxide | 1000 lbs. |
| Methyl benzimidazole-2-yl carbamate | 10 lbs. |
| Methanol | 5000 lbs. |
| Ethyl Acrylate | 1000 lbs. |
| Formaldehyde | 100 lbs. |
| Potassium hydroxide | 1000 lbs. |
| Propionic acid | 5000 lbs. |

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Delayed (Chronic) Health Hazard

SARA 302 Extremely Hazardous Substance

| <u>Chemical Identity</u> | <u>Reportable quantity</u> | <u>Threshold Planning Quantity</u> |
|--------------------------|----------------------------|------------------------------------|
| Formaldehyde | 100 lbs. | 500 lbs. |

SARA 304 Emergency Release Notification

| <u>Chemical Identity</u> | <u>Reportable quantity</u> |
|-------------------------------------|----------------------------|
| Ammonium hydroxide | 1000 lbs. |
| Zinc oxide | |
| Methyl benzimidazole-2-yl carbamate | 10 lbs. |
| Copper phthalocyanine | |
| Methanol | 5000 lbs. |
| Ethyl Acrylate | 1000 lbs. |
| Formaldehyde | 100 lbs. |
| Potassium hydroxide | 1000 lbs. |
| Propionic acid | 5000 lbs. |

SARA 311/312 Hazardous Chemical

| <u>Chemical Identity</u> | <u>Threshold Planning Quantity</u> |
|--------------------------|------------------------------------|
| Formaldehyde | 500lbs |
| White mineral oil | 10000 lbs |
| Amorphous silica | 10000 lbs |
| Propylene glycol | 10000 lbs |
| Iron oxide | 10000 lbs |
| Ammonium hydroxide | 10000 lbs |
| Zinc oxide | 10000 lbs |
| Titanium dioxide | 10000 lbs |
| Talc | 10000 lbs |

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

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

| <u>Chemical Identity</u> | <u>Reportable quantity</u> |
|--------------------------|----------------------------|
| Formaldehyde | lbs |

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

None present or none present in regulated quantities.

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.

| | |
|---|------------------------------|
| Titanium dioxide | Carcinogenic. 09 2011 |
| Methanol | Developmental toxin. 03 2012 |
| Crystalline Silica (Quartz)/ Silica Sand | Carcinogenic. 09 2011 |
| Ethyl Acrylate | Carcinogenic. 09 2011 |
| Formaldehyde | Carcinogenic. 09 2011 |

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

| <u>Chemical Identity</u> |
|--------------------------|
| White mineral oil |
| Amorphous silica |
| Propylene glycol |
| Talc |

US. Massachusetts RTK - Substance List

Chemical Identity

White mineral oil
Amorphous silica
Crystalline Silica (Quartz)/ Silica Sand
Ethyl Acrylate
Formaldehyde

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

White mineral oil
Amorphous silica
Propylene glycol

US. Rhode Island RTK

Chemical Identity

White mineral oil
Propylene glycol

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) : 14 g/l

VOC Method 310 : 0.68 %

Inventory Status:

| | |
|--|--|
| 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: 03/23/2017

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.

SAFETY DATA SHEET

1. Identification

Material name: TREMSTOP ACR. SP. WHITE - 5 US GAL
Material: 905806A805

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

Carcinogenicity Category 2

Unknown toxicity - Health

| | |
|--|---------|
| Acute toxicity, oral | 46.9 % |
| Acute toxicity, dermal | 48.49 % |
| Acute toxicity, inhalation, vapor | 100 % |
| Acute toxicity, inhalation, dust or mist | 93.46 % |

Label Elements

Hazard Symbol:



Signal Word: Warning

Hazard Statement: 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 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.

3. Composition/information on ingredients

Mixtures

| Chemical Identity | CAS number | Content in percent (%)* |
|--------------------|------------|-------------------------|
| White mineral oil | 8042-47-5 | 5 - <10% |
| Amorphous silica | 7631-86-9 | 1 - <5% |
| Propylene glycol | 57-55-6 | 1 - <5% |
| Titanium dioxide | 13463-67-7 | 0.1 - <1% |
| Ammonium hydroxide | 1336-21-6 | 0.1 - <1% |
| Zinc oxide | 1314-13-2 | 0.1 - <1% |

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

4. First-aid measures

Ingestion: Rinse mouth thoroughly.

Inhalation: Move to fresh air.

Skin Contact: Remove contaminated clothing and wash the skin thoroughly with soap and water after work.

Eye contact: Rinse immediately with plenty of water.

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: No data available.

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. Do not contaminate water sources or sewer. Environmental manager must be informed of all major spillages.

7. Handling and storage

Precautions for safe handling: Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. 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.

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 |
|---|------|--|---|
| White mineral oil - Inhalable fraction. | TWA | 5 mg/m ³ | US. ACGIH Threshold Limit Values (2011) |
| White mineral oil - Mist. | PEL | 5 mg/m ³ | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| Amorphous silica | TWA | 20 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000) (2000) |
| | TWA | 0.8 mg/m ³ | US. OSHA Table Z-3 (29 CFR 1910.1000) (2000) |
| 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 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/m ³ | US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016) |
| Titanium dioxide - Respirable fraction. | TWA | 5 mg/m ³ | 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) |
| Ammonium hydroxide | STEL | 35 ppm | US. ACGIH Threshold Limit Values (2011) |
| | TWA | 25 ppm | US. ACGIH Threshold Limit Values (2011) |
| | PEL | 50 ppm 35 mg/m ³ | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| Zinc oxide - Respirable fraction. | TWA | 2 mg/m ³ | US. ACGIH Threshold Limit Values (2011) |
| | STEL | 10 mg/m ³ | US. ACGIH Threshold Limit Values (2011) |
| Zinc oxide - Fume. | PEL | 5 mg/m ³ | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| Zinc oxide - Total dust. | PEL | 15 mg/m ³ | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| Zinc oxide - Respirable fraction. | PEL | 5 mg/m ³ | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |

| Chemical name | Type | Exposure Limit Values | Source |
|---|------|-----------------------|---|
| White mineral oil - Mist. | TWA | 1 mg/m ³ | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| White mineral oil - Inhalable fraction. | TWA | 5 mg/m ³ | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015) |
| | TWA | 5 mg/m ³ | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015) |
| White mineral oil - Mist. | TWA | 5 mg/m ³ | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008) |
| | STEL | 10 mg/m ³ | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008) |

| | | | |
|---|-----|------------------|---|
| Amorphous silica - Total | TWA | 4 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Amorphous silica - Respirable. | TWA | 1.5 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Amorphous silica - Respirable dust. | TWA | 6 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008) |
| Propylene glycol - Aerosol. | TWA | 10 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Propylene glycol - Vapor and aerosol. | TWA | 50 ppm 155 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015) |
| 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) (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**
 - Hand Protection:** Use suitable protective gloves if risk of skin contact.
 - Other:** No data available.
- Respiratory Protection:** In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.
- Hygiene measures:** Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product.

9. Physical and chemical properties

Appearance

- Physical state:** solid
- Form:** Paste
- Color:** White
- 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: | No data available. |
| Evaporation rate: | Slower than Ether |
| Flammability (solid, gas): | No |
| Upper/lower limit on flammability or explosive 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: | 1.052 |
| Solubility(ies) | |
| Solubility in water: | Miscible with 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. |

10. Stability and reactivity

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

11. Toxicological information

Information on likely routes of exposure

| | |
|----------------------|---|
| Inhalation: | In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes. |
| Skin Contact: | Moderately irritating to skin with prolonged exposure. |
| Eye contact: | Eye contact is possible and should be avoided. |

Ingestion: May be ingested by accident. Ingestion may cause irritation and malaise.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Ingestion: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: Not classified for acute toxicity based on available data.

Specified substance(s):

| | |
|--------------------|----------------------------|
| White mineral oil | LD 50 (Rat): > 5,000 mg/kg |
| Amorphous silica | LD 50 (Rat): > 5,000 mg/kg |
| Propylene glycol | LD 50 (Rat): 22,000 mg/kg |
| Titanium dioxide | LD 50 (Rat): > 5,000 mg/kg |
| Ammonium hydroxide | LD 50 (Rat): 350 mg/kg |
| Zinc oxide | LD 50 (Rat): > 5,000 mg/kg |

Dermal

Product: ATEmix: 9,745.9 mg/kg

Inhalation

Product: Not classified for acute toxicity based on available data.

Specified substance(s):

| | |
|-------------------|--|
| White mineral oil | LC 50 (Rat): > 5.2 mg/l |
| Amorphous silica | LC 50 (Rat): > 2.08 mg/l |
| Titanium dioxide | LC 50 (Rat): 3.43 mg/l |
| Zinc oxide | LC 50 (Rat): > 5,700 mg/m ³ |

Repeated dose toxicity**Product:** No data available.**Skin Corrosion/Irritation****Product:** No data available.**Specified substance(s):**

| | | |
|-------------------|--------------------------------|---------------------------------------|
| White mineral oil | in vivo (Rabbit): Not irritant | Experimental result, Key study |
| Amorphous silica | in vivo (Rabbit): Not irritant | Experimental result, Key study |
| Propylene glycol | in vivo (Rabbit): Not irritant | Experimental result, Key study |
| Titanium dioxide | in vivo (Rabbit): Not irritant | Experimental result, Supporting study |
| Zinc oxide | in vivo (Rabbit): Not irritant | Experimental result, Key study |

Serious Eye Damage/Eye Irritation**Product:** No data available.**Specified substance(s):**

| | |
|-------------------|-------------------------------------|
| White mineral oil | Rabbit, 24 - 72 hrs: Not irritating |
| Amorphous silica | Rabbit, 24 hrs: Not irritating |
| Titanium dioxide | Rabbit, 24 hrs: Not irritating |
| Zinc oxide | Rabbit, 24 - 72 hrs: Not irritating |

Respiratory or Skin Sensitization**Product:** No data available.**Carcinogenicity****Product:** Suspected of causing cancer.**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

| | |
|------------------|--|
| Titanium dioxide | Overall evaluation: Possibly carcinogenic to humans. |
|------------------|--|

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

No carcinogenic components identified

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

No carcinogenic components identified

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.

Specified substance(s):

Zinc oxide LC 50 (Fathead minnow (*Pimephales promelas*), 96 h): 2,246 mg/l Mortality

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Propylene glycol EC 50 (Water flea (*Daphnia magna*), 48 h): > 10,000 mg/l Intoxication

Titanium dioxide EC 50 (Water flea (*Daphnia magna*), 48 h): > 1,000 mg/l Intoxication

Chronic hazards to the aquatic environment:**Fish**

Product: No data available.

Specified substance(s):
White mineral oil NOAEL (Oncorhynchus mykiss, 28 d): >= 1,000 mg/l QSAR QSAR, Supporting study

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.

Specified substance(s):
Propylene glycol Log Kow: -0.92

Mobility in soil: No data available.

Other adverse effects: No data available.

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> |
|--------------------------|--|
| Formaldehyde | Acute toxicity Skin irritation Skin sensitization Flammability respiratory tract irritation Respiratory sensitization Cancer Eye irritation |

CERCLA Hazardous Substance List (40 CFR 302.4):

| <u>Chemical Identity</u> | <u>Reportable quantity</u> |
|-------------------------------------|----------------------------|
| Ammonium hydroxide | 1000 lbs. |
| Methyl benzimidazole-2-yl carbamate | 10 lbs. |
| Methanol | 5000 lbs. |
| Ethyl Acrylate | 1000 lbs. |
| Formaldehyde | 100 lbs. |
| Propionic acid | 5000 lbs. |

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Delayed (Chronic) Health Hazard

SARA 302 Extremely Hazardous Substance

| <u>Chemical Identity</u> | <u>Reportable quantity</u> | <u>Threshold Planning Quantity</u> |
|--------------------------|----------------------------|------------------------------------|
| Formaldehyde | 100 lbs. | 500 lbs. |

SARA 304 Emergency Release Notification

| <u>Chemical Identity</u> | <u>Reportable quantity</u> |
|-------------------------------------|----------------------------|
| Ammonium hydroxide | 1000 lbs. |
| Zinc oxide | |
| Methyl benzimidazole-2-yl carbamate | 10 lbs. |
| Methanol | 5000 lbs. |
| Ethyl Acrylate | 1000 lbs. |
| Formaldehyde | 100 lbs. |
| Propionic acid | 5000 lbs. |

SARA 311/312 Hazardous Chemical

| <u>Chemical Identity</u> | <u>Threshold Planning Quantity</u> |
|--------------------------|------------------------------------|
| Formaldehyde | 500lbs |
| White mineral oil | 10000 lbs |
| Amorphous silica | 10000 lbs |
| Propylene glycol | 10000 lbs |
| Titanium dioxide | 10000 lbs |
| Ammonium hydroxide | 10000 lbs |
| Zinc oxide | 10000 lbs |

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

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

| <u>Chemical Identity</u> | <u>Reportable quantity</u> |
|--------------------------|----------------------------|
| Formaldehyde | lbs |

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

None present or none present in regulated quantities.

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.

| | |
|------------------|------------------------------|
| Titanium dioxide | Carcinogenic. 09 2011 |
| Methanol | Developmental toxin. 03 2012 |
| Ethyl Acrylate | Carcinogenic. 09 2011 |
| Formaldehyde | Carcinogenic. 09 2011 |

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

| <u>Chemical Identity</u> |
|--------------------------|
| White mineral oil |
| Amorphous silica |
| Propylene glycol |

US. Massachusetts RTK - Substance List

| <u>Chemical Identity</u> |
|--------------------------|
| White mineral oil |
| Amorphous silica |
| Ethyl Acrylate |
| Formaldehyde |

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

White mineral oil
Amorphous silica
Propylene glycol

US. Rhode Island RTK

Chemical Identity

White mineral oil
Propylene glycol

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) : 14 g/l

VOC Method 310 : 0.65 %

Inventory Status:

| | |
|--|--|
| 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. |

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| 16. Other information, including date of preparation or last revision |
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Revision Date: 03/23/2017

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.

