

SAFETY DATA SHEET

1. Identification

Material name: Solargard® 6083 FINISH COAT
Material: 1120700005P

Recommended use and restriction on use

Recommended use: Coatings
Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

Tremco U.S. Roofing
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

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|------------------------|-------------|
| Germ Cell Mutagenicity | Category 1B |
| Carcinogenicity | Category 1A |
| Toxic to reproduction | Category 1B |

Unknown toxicity - Health

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| Acute toxicity, oral | 37.25 % |
| Acute toxicity, dermal | 42.06 % |
| Acute toxicity, inhalation, vapor | 70.3 % |
| Acute toxicity, inhalation, dust or mist | 70.03 % |

Environmental Hazards

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| Acute hazards to the aquatic environment | Category 3 |
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Unknown toxicity - Environment

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| Acute hazards to the aquatic environment | 89.86 % |
| Chronic hazards to the aquatic environment | 99.92 % |

Label Elements

Hazard Symbol:



Signal Word: Danger

Hazard Statement: May cause genetic defects.
May cause cancer.
May damage fertility or the unborn child.
Harmful to aquatic life.

Precautionary Statements

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Avoid release to the environment.

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 (%)* |
|-------------------|------------|-------------------------|
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| Calcium Carbonate (Limestone) | 1317-65-3 | 20 - <50% |
| Zinc oxide | 1314-13-2 | 1 - <5% |
| Titanium dioxide | 13463-67-7 | 1 - <5% |
| Propylene glycol | 57-55-6 | 1 - <5% |
| Aluminum oxide | 1344-28-1 | 0.1 - <1% |
| Crystalline Silica (Quartz)/ Silica Sand | 14808-60-7 | 0.1 - <1% |
| n-(3,4-dichlorophenyl)-n,n-dimethylurea | 330-54-1 | 0.1 - <1% |
| Kaolin Clay | 1332-58-7 | 0.1 - <1% |
| Methyl benzimidazole-2-yl carbamate | 10605-21-7 | 0.1 - <0.3% |
| 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:** 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: Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

Notification Procedures: In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

Environmental Precautions: Avoid release to the environment. Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Precautions for safe handling: Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

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 (Limestone) - Respirable fraction. | PEL | 5 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) |

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| 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) |
| Aluminum oxide - Respirable fraction. | TWA | 1 mg/m ³ | US. ACGIH Threshold Limit Values (2011) |
| | PEL | 5 mg/m ³ | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| Aluminum oxide - Total dust. | PEL | 15 mg/m ³ | 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/m ³ | US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016) |
| Aluminum oxide - Total dust. | TWA | 15 mg/m ³ | US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016) |
| Crystalline Silica (Quartz)/ Silica Sand - Respirable fraction. | TWA | 0.025 mg/m ³ | US. ACGIH Threshold Limit Values (2011) |
| Crystalline Silica (Quartz)/ Silica Sand - Respirable dust. | TWA | 0.05 mg/m ³ | US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) (03 2016) |
| | OSHA_ACT | 0.025 mg/m ³ | US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) (03 2016) |
| Crystalline Silica (Quartz)/ Silica Sand - Respirable dust. | PEL | 0.05 mg/m ³ | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (03 2016) |
| Crystalline Silica (Quartz)/ Silica Sand - 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/m ³ | US. OSHA Table Z-3 (29 CFR 1910.1000) (2000) |
| n-(3,4-dichlorophenyl)-n,n-dimethylurea | TWA | 10 mg/m ³ | US. ACGIH Threshold Limit Values (2011) |
| Kaolin Clay - Respirable fraction. | TWA | 2 mg/m ³ | US. ACGIH Threshold Limit Values (2011) |
| | PEL | 5 mg/m ³ | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| Kaolin Clay - Total dust. | PEL | 15 mg/m ³ | 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) |
| Kaolin Clay - 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/m ³ | US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016) |
| Kaolin Clay - Total dust. | TWA | 15 mg/m ³ | US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016) |

| Chemical name | Type | Exposure Limit Values | Source |
|---|------|------------------------------|---|
| Calcium Carbonate (Limestone) - Total dust. | STEL | 20 mg/m ³ | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| | 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) |
| Calcium Carbonate (Limestone) - 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) |
| Calcium Carbonate (Limestone) - Total dust. | TWA | 10 mg/m ³ | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| 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) |
| Zinc oxide - Total dust. | TWA | 10 mg/m ³ | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| 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) |
| 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) |
| Crystalline Silica (Quartz)/ Silica Sand - Respirable fraction. | TWA | 0.025 mg/m ³ | 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/m ³ | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015) |
| Crystalline Silica (Quartz)/ Silica Sand - Respirable dust. | TWA | 0.1 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 |
|--|------|-----------------------|---|
| Calcium Carbonate (Limestone) - Total dust. | STEL | 20 mg/m ³ | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| | 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) |
| Calcium Carbonate (Limestone) - 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) |
| Calcium Carbonate (Limestone) - Total dust. | TWA | 10 mg/m ³ | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| 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) |
| 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) |
| 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) |
| 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) |
| 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) |
| n-(3,4-dichlorophenyl)-n,n-dimethylurea | 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) |
| n-(3,4-dichlorophenyl)-n,n-dimethylurea | TWA | 10 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| n-(3,4-dichlorophenyl)-n,n-dimethylurea | TWA | 10 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008) |
| Kaolin 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) |
| Kaolin Clay - Respirable dust. | TWA | 5 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work |

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|-------------------------------------|------|--|-----------------|---|
| | | | | Environment) (09 2017) |
| Kaolin Clay - Respirable fraction. | TWA | | 2 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (08 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) |
| 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) (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) |
| 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) |

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| 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) |
| 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) |
| p-Dioxane | TWA | 20 ppm | | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| p-Dioxane | TWA | 20 ppm | | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| p-Dioxane | TWA | 20 ppm | 72 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008) |
| Ethylene oxide | TWA | 0.1 ppm | | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| | STEL | 1 ppm | | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Ethylene oxide | STEL | 10 ppm | 18 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015) |
| | TWA | 1 ppm | 1.8 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015) |
| Ethylene oxide | TWA | 1 ppm | 1.8 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| Amorphous Precipitated 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 Precipitated 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 Precipitated Silica - Respirable dust. | TWA | | 6 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |

Appropriate Engineering Controls

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

Individual protection measures, such as personal protective equipment

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|--------------------------------|---|
| 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. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. |

9. Physical and chemical properties

Appearance

| | |
|---|--------------------|
| Physical state: | liquid |
| Form: | liquid |
| Color: | White |
| Odor: | Mild |
| Odor threshold: | No data available. |
| pH: | 8 - 10 |
| Melting point/freezing point: | No data available. |
| Initial boiling point and boiling range: | 100 °C 212 °F |
| Flash Point: | > 93 °C > 199 °F |
| 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: | 1.4 |
| Solubility(ies) | |
| Solubility in water: | Soluble |
| 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. 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):

| | |
|---|-----------------------------|
| Zinc oxide | LD 50 (Rat): > 5,000 mg/kg |
| Titanium dioxide | LD 50 (Rat): > 5,000 mg/kg |
| Propylene glycol | LD 50 (Rat): 22,000 mg/kg |
| Aluminum oxide | LD 50 (Rat): > 10,000 mg/kg |
| n-(3,4-dichlorophenyl)- n,n-dimethylurea | LD 50 (Rat): 4,150 mg/kg |
| Kaolin Clay | LD 50 (Rat): > 5,000 mg/kg |
| Methyl benzimidazole-2- yl carbamate | LD 50 (Rat): 6,400 mg/kg |
| Iodopropynyl butylcarbamate | LD 50 (Rat): 1.1 g/kg |

Dermal**Product:**

Not classified for acute toxicity based on available data.

Specified substance(s):

| | |
|---|---|
| Zinc oxide | LD 50 (Rat): > 2,000 mg/kg |
| Propylene glycol | LD 50 (Rabbit): > 2,000 mg/kg |
| n-(3,4-dichlorophenyl)- n,n-dimethylurea | LD 50 (Rat): > 5,000 mg/kg |
| Kaolin Clay | LD 50 (Rat): > 5,000 mg/kg |
| Methyl benzimidazole-2- yl carbamate | LD 50 (Rabbit): > 10,000 mg/kg LD 50 (Rabbit): > 2,000 mg/kg |
| Iodopropynyl butylcarbamate | LD 50 (Rabbit): > 2,000 mg/kg |

Inhalation**Product:**

ATEmix: 36.56 mg/l

Repeated dose toxicity**Product:**

No data available.

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

| | | |
|---|---|---------------------------------------|
| Zinc oxide | in vivo (Rabbit): Not irritant | Experimental result, Key study |
| Titanium dioxide | in vivo (Rabbit): Not irritant | Experimental result, Supporting study |
| Propylene glycol | in vivo (Rabbit): Not irritant | Experimental result, Key study |
| Aluminum oxide | in vivo (Rabbit): Not irritant | Experimental result, Key study |
| n-(3,4-dichlorophenyl)- n,n-dimethylurea | Possibly Irritating in vivo (Rabbit): Not irritant | Experimental result, Key study |

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

| | |
|------------------|-------------------------------------|
| Zinc oxide | Rabbit, 24 - 72 hrs: Not irritating |
| Titanium dioxide | Rabbit, 24 hrs: Not irritating |
| Aluminum oxide | Rabbit, 24 hrs: Not irritating |

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

| | |
|--|--|
| Titanium dioxide | Overall evaluation: Possibly carcinogenic to humans. |
| Crystalline Silica (Quartz)/ Silica Sand | Overall evaluation: Carcinogenic to humans. |

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

| | |
|--|-------------------------------|
| Crystalline Silica (Quartz)/ Silica Sand | Known To Be Human Carcinogen. |
|--|-------------------------------|

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

Crystalline Silica
(Quartz)/ Silica Cancer
Sand

Germ Cell Mutagenicity

In vitro
Product: No data available.

In vivo
Product: No data available.

Reproductive toxicity
Product: May damage fertility or the unborn child.

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 |
| Propylene glycol | LC 50 (Fathead minnow (Pimephales promelas), 96 h): 29,485 - 39,339 mg/l Mortality |
| n-(3,4-dichlorophenyl)- n,n-dimethylurea | LC 50 (Fathead minnow (Pimephales promelas), 96 h): 13.4 - 15 mg/l Mortality |
| Methyl benzimidazole-2- | LC 50 (Bluegill (Lepomis macrochirus), 96 h): > 3.2 mg/l Mortality |

yl carbamate

Iodopropynyl butylcarbamate LC 50 (Rainbow trout,donaldson trout (Oncorhynchus mykiss), 96 h): 0.05 - 0.089 mg/l Mortality

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

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

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

n-(3,4-dichlorophenyl)-n,n-dimethylurea EC 50 (Water flea (Daphnia pulex), 48 h): 1.4 mg/l Mortality

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

Product: No data available.

Specified substance(s):

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

n-(3,4-dichlorophenyl)-
n,n-dimethylurea Log Kow: 2.68

Methyl benzimidazole-2-
yl carbamate Log Kow: 1.52

Mobility in soil: No data available.

Other adverse effects: Harmful 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> |
|---|--|
| 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 |
| Ethylene oxide | Skin sensitization Reproductive toxicity Mutagenicity Eye irritation Acute toxicity respiratory tract irritation Cancer Skin irritation Flammability Central nervous system |

CERCLA Hazardous Substance List (40 CFR 302.4):

| <u>Chemical Identity</u> | <u>Reportable quantity</u> |
|---|----------------------------|
| n-(3,4-dichlorophenyl)- n,n-dimethylurea | 100 lbs. |
| Methyl benzimidazole-2- yl carbamate | 10 lbs. |
| Ammonium hydroxide | 1000 lbs. |
| Sodium nitrite | 100 lbs. |
| Ethyl Acrylate | 1000 lbs. |
| Acetaldehyde | 1000 lbs. |
| Formaldehyde | 100 lbs. |
| p-Dioxane | 100 lbs. |
| Ethylene oxide | 10 lbs. |

Superfund Amendments and Reauthorization Act of 1986 (SARA)

- Hazard categories**
- Delayed (Chronic) Health Hazard
 - Germ Cell Mutagenicity
 - Carcinogenicity
 - Reproductive toxicity

SARA 302 Extremely Hazardous Substance

| <u>Chemical Identity</u> | <u>Reportable quantity</u> | <u>Threshold Planning Quantity</u> |
|--------------------------|----------------------------|------------------------------------|
| Formaldehyde | 100 lbs. | 500 lbs. |
| Ethylene oxide | 10 lbs. | 1000 lbs. |

SARA 304 Emergency Release Notification

| <u>Chemical Identity</u> | <u>Reportable quantity</u> |
|---|----------------------------|
| Zinc oxide | |
| n-(3,4-dichlorophenyl)-n,n-dimethylurea | 100 lbs. |
| Methyl benzimidazole-2-yl carbamate | 10 lbs. |
| Ammonium hydroxide | 1000 lbs. |
| Sodium nitrite | 100 lbs. |
| Ethyl Acrylate | 1000 lbs. |
| Acetaldehyde | 1000 lbs. |
| Formaldehyde | 100 lbs. |
| p-Dioxane | 100 lbs. |
| Ethylene oxide | 10 lbs. |

SARA 311/312 Hazardous Chemical

| <u>Chemical Identity</u> | <u>Threshold Planning Quantity</u> |
|--|------------------------------------|
| Formaldehyde | 500lbs |
| Ethylene oxide | 500lbs |
| Calcium Carbonate (Limestone) | 10000 lbs |
| Zinc oxide | 10000 lbs |
| Titanium dioxide | 10000 lbs |
| Propylene glycol | 10000 lbs |
| Aluminum oxide | 10000 lbs |
| Crystalline Silica (Quartz)/ Silica Sand | 10000 lbs |
| n-(3,4-dichlorophenyl)-n,n-dimethylurea | 10000 lbs |
| Kaolin Clay | 10000 lbs |
| Methyl benzimidazole-2-yl carbamate | 10000 lbs |
| Iodopropynyl butylcarbamate | 10000 lbs |

SARA 313 (TRI Reporting)

| <u>Chemical Identity</u> |
|--------------------------|
| Zinc oxide |

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

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

Chemical Identity

Calcium Carbonate (Limestone)
Zinc oxide
Titanium dioxide
Propylene glycol
Crystalline Silica (Quartz)/ Silica Sand

US. Massachusetts RTK - Substance List

Chemical Identity

Calcium Carbonate (Limestone)
Zinc oxide
Titanium dioxide
Crystalline Silica (Quartz)/ Silica Sand

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

Calcium Carbonate (Limestone)
Zinc oxide
Titanium dioxide
Propylene glycol

US. Rhode Island RTK

Chemical Identity

Calcium Carbonate (Limestone)
Zinc oxide
Titanium dioxide
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) : 28 g/l

VOC Method 310 : 1.16 %

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. |
| 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. |
| US TSCA Inventory: | All components in this product are 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:** 12/18/2018**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.

