

SAFETY DATA SHEET

1. Identification

Material name: Primus ® DM

Material: 3010DS 501

Recommended use and restriction on use

Recommended use: Coatings

Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

Tremco CPG Inc. - 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

| | |
|---|-------------------------|
| Skin Corrosion/Irritation | Category 2 |
| Serious Eye Damage/Eye Irritation | Category 1 |
| Skin sensitizer | Category 1 |
| Carcinogenicity | Category 1A |
| Specific Target Organ Toxicity - Single Exposure | Category 3 ¹ |
| Specific Target Organ Toxicity - Repeated Exposure | Category 1 ² |

Target Organs

1. Respiratory tract irritation.
2. Lung

Unknown toxicity - Health

| | |
|---|---------|
| Acute toxicity, oral | 45 % |
| Acute toxicity, dermal | 97.28 % |
| Acute toxicity, inhalation, vapor | 100 % |
| Acute toxicity, inhalation, dust or mist | 48.85 % |

Environmental Hazards

| | |
|---|------------|
| Acute hazards to the aquatic environment | Category 3 |
|---|------------|

Unknown toxicity - Environment

| | |
|--|---------|
| Acute hazards to the aquatic environment | 96.99 % |
| Chronic hazards to the aquatic environment | 96.99 % |

Label Elements

Hazard Symbol:



Signal Word: Danger

Hazard Statement: Causes skin irritation.
Causes serious eye damage.
May cause an allergic skin reaction.
May cause cancer.
May cause respiratory irritation.
Causes damage to organs through prolonged or repeated exposure.
Harmful to aquatic life.

Precautionary Statements

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. Use personal protective equipment as required.

Response: IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing. Specific treatment (see supplemental first aid instructions on this label). IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. IF exposed or concerned: Get medical advice/attention.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal: Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

Hazard(s) not otherwise
classified (HNOC):

None.

3. Composition/information on ingredients

Mixtures

| Chemical Identity | CAS number | Content in percent (%)* |
|--|------------|-------------------------|
| Crystalline Silica (Quartz)/ Silica Sand | 14808-60-7 | 50 - <100% |
| Portland cement | 65997-15-1 | 20 - <50% |
| Calcium Carbonate (Limestone) | 1317-65-3 | 5 - <10% |
| Calcium salt | 13397-24-5 | 1 - <5% |
| Calcium oxide | 1305-78-8 | 1 - <5% |
| Magnesium oxide | 1309-48-4 | 1 - <5% |
| Fly Ash | 68131-74-8 | 1 - <5% |
| Wollastonite | 13983-17-0 | 0.1 - <1% |
| Dolomite | 16389-88-1 | 0.1 - <1% |
| Chromium | 7440-47-3 | 0.001 - <0.1% |

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

4. First-aid measures

Description of necessary first-aid measures

Inhalation: Move to fresh air.

Skin Contact: Get medical attention. Destroy or thoroughly clean contaminated shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an allergic skin reaction develops, get medical attention.

Eye contact: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Call a physician or poison control center immediately.

Ingestion: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

Personal Protection for First-aid Responders: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Most important symptoms/effects, acute and delayed

Symptoms: Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping. Extreme irritation of eyes and mucous membranes, including burning and tearing. Respiratory tract irritation.

Hazards: No data available.

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 fire-fighters

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: See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

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

Methods and material for containment and cleaning up: Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

Environmental Precautions: Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid release to the environment.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation): 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.

Safe handling advice: Wash hands thoroughly after handling. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Do not get in eyes. Avoid contact with skin. Avoid contact with eyes, skin, and clothing. 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.

Contact avoidance measures: No data available.

Hygiene measures: Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. Do not get in eyes. Wash contaminated clothing before reuse. Avoid contact with skin. Contaminated work clothing should not be allowed out of the workplace.

Storage

Safe storage conditions: Store locked up.

Safe packaging materials: No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

| Chemical Identity | Type | Exposure Limit Values | Source |
|--|----------|---|--|
| Crystalline Silica (Quartz)/ Silica Sand - Respirable dust. | TWA | 0.05 mg/m3 | US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended (03 2016) |
| | OSHA_ACT | 0.025 mg/m3 | US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended (03 2016) |
| Crystalline Silica (Quartz)/ Silica Sand - Respirable dust. | PEL | 0.05 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (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), as amended (2000) |
| | TWA | 0.1 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000) |
| Crystalline Silica (Quartz)/ Silica Sand - Respirable fraction. | TWA | 0.025 mg/m3 | US. ACGIH Threshold Limit Values, as amended (02 2020) |
| Portland cement - Respirable fraction. | TWA | 1 mg/m3 | US. ACGIH Threshold Limit Values, as amended (2011) |
| Portland cement - Total dust. | PEL | 15 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006) |
| Portland cement - Respirable fraction. | PEL | 5 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006) |
| Portland cement | TWA | 50 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000) |
| Calcium Carbonate (Limestone) - Total dust. | PEL | 15 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006) |
| Calcium Carbonate (Limestone) - Respirable fraction. | PEL | 5 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006) |
| Calcium salt - Inhalable fraction. | TWA | 10 mg/m3 | US. ACGIH Threshold Limit Values, as amended (2011) |
| Calcium salt - Total dust. | PEL | 15 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006) |
| Calcium salt - Respirable fraction. | PEL | 5 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006) |
| | TWA | 5 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000), as |

| | | | |
|---|-----|--|---|
| | | | amended (09 2016) |
| Calcium salt - Total dust. | TWA | 50 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (09 2016) |
| | TWA | 15 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (09 2016) |
| Calcium salt - Respirable fraction. | TWA | 15 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (09 2016) |
| Calcium oxide | TWA | 2 mg/m3 | US. ACGIH Threshold Limit Values, as amended (2008) |
| | PEL | 5 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006) |
| Magnesium oxide - Inhalable fraction. | TWA | 10 mg/m3 | US. ACGIH Threshold Limit Values, as amended (2011) |
| Magnesium oxide - Total particulate. | PEL | 15 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006) |
| Magnesium oxide - Respirable fraction. | TWA | 15 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016) |
| Magnesium oxide - Total dust. | TWA | 15 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016) |
| | TWA | 50 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016) |
| Magnesium oxide - Respirable fraction. | TWA | 5 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016) |
| Wollastonite - Inhalable fraction. | TWA | 1 mg/m3 | US. ACGIH Threshold Limit Values, as amended (03 2019) |
| Dolomite - Inhalable particles. | TWA | 10 mg/m3 | US. ACGIH Threshold Limit Values, as amended (03 2016) |
| Dolomite - Respirable particles. | TWA | 3 mg/m3 | US. ACGIH Threshold Limit Values, as amended (03 2016) |
| Dolomite - Respirable fraction. | TWA | 15 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016) |
| Dolomite - Total dust. | TWA | 50 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016) |
| | TWA | 15 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016) |
| Dolomite - Respirable fraction. | TWA | 5 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016) |
| Chromium - Inhalable fraction. - as Cr(0) | TWA | 0.5 mg/m3 | US. ACGIH Threshold Limit Values, as amended (03 2018) |
| Chromium - as Cr | PEL | 1 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006) |

| Chemical name | Type | Exposure Limit Values | Source |
|---|------|-----------------------|---|
| Crystalline Silica (Quartz)/ Silica Sand - Respirable fraction. | TWA | 0.10 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (06 2015) |
| Crystalline Silica (Quartz)/ Silica Sand - Respirable dust. | TWA | 0.1 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017) |
| Crystalline Silica (Quartz)/ Silica Sand - Respirable fraction. | TWA | 0.025 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (06 2020) |
| Portland cement - Total dust. | TWA | 10 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017) |
| Portland cement - Respirable dust. | TWA | 5 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017) |
| Portland cement - Respirable. | TWA | 1 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (06 2017) |
| Portland cement - Respirable fraction. | TWA | 1 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (08 2017) |
| Calcium Carbonate (Limestone) - Total dust. | STEL | 20 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| | TWA | 10 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Calcium Carbonate (Limestone) - Respirable fraction. | TWA | 3 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Calcium Carbonate (Limestone) - Total dust. | TWA | 10 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017) |
| Calcium salt - Total dust. | TWA | 10 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| | STEL | 20 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |

| | | | |
|--|------|-----------|--|
| Calcium salt - Respirable fraction. | TWA | 3 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Calcium salt - Inhalable fraction. | TWA | 10 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010) |
| Calcium salt - Inhalable | TWA | 10 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (06 2020) |
| Calcium salt - Inhalable dust. | TWA | 10 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (03 2020) |
| Calcium oxide | TWA | 2 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Calcium oxide | TWA | 2 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (12 2007) |
| Calcium oxide | TWA | 2 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017) |
| Magnesium oxide - Respirable dust and/or fume. - as Mg | STEL | 10 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Magnesium oxide - Inhalable fume. | TWA | 10 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Magnesium oxide - Respirable dust and/or fume. - as Mg | TWA | 3 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Magnesium oxide - Inhalable fraction. | TWA | 10 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010) |
| Magnesium oxide - Inhalable dust. | TWA | 10 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (03 2020) |
| Wollastonite - fibers, total dust | TWA | 10 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017) |
| Wollastonite - Fiber. | TWA | 5 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017) |
| Dolomite - Respirable fraction. | TWA | 3 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (05 2013) |
| Dolomite - Total dust. | TWA | 10 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (05 2013) |
| Dolomite - Respirable fraction. | TWA | 3 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (06 2015) |
| Dolomite - Inhalable fraction. | TWA | 10 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (06 2015) |
| Dolomite - Total dust. | TWA | 10 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017) |
| Chromium - as Cr | TWA | 0.5 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010) |

| | | | |
|------------------|-----|-----------|--|
| Chromium | TWA | 0.5 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017) |
| Chromium - Total | TWA | 0.5 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2018) |

Biological Limit Values

| Chemical Identity | Exposure Limit Values | Source |
|---|-----------------------|---------------------|
| Chromium (Total chromium: Sampling time: End of shift at end of work week.) | 0.7 µg/l (Urine) | ACGIH BEI (01 2021) |

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

Eye/face protection: Wear a full-face respirator, if needed. Wear safety glasses with side shields (or goggles) and a face shield.

Skin Protection

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

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

Respiratory Protection: 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 get in eyes. Wash contaminated clothing before reuse. Avoid contact with skin. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance

| | |
|---|--------------------|
| Physical state: | solid |
| Form: | Powder |
| Color: | Various |
| Odor: | Faint |
| 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: | No data available. |
| Flammability (solid, gas): | No data available. |
| 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: | No data available. |
| Relative density: | 2.4437 |
| Solubility(ies) | |
| Solubility in water: | No data available. |
| 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: | No data available. |
| 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: | May be harmful in contact with skin. Causes skin irritation. May cause an allergic skin reaction. |
| Eye contact: | Causes serious eye damage. |
| Ingestion: | May be harmful if swallowed. |

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: ATEmix: 2,036.35 mg/kg

Dermal
Product: ATEmix: 3,673.13 mg/kg

Inhalation
Product:

Specified substance(s):
Crystalline Silica (Quartz)/ Silica Sand LC 50: > 5.0 mg/l
Calcium oxide LC 50 (Rat): 40 mg/m3
Fly Ash LC 50 (Rat): > 5.38 mg/l
Wollastonite LC 50 (Rabbit): 20.1 mg/l
Chromium LC 50 (Rat): > 5.41 mg/l

Repeated dose toxicity
Product: No data available.

Skin Corrosion/Irritation
Product: No data available.

Specified substance(s):
Calcium oxide in vivo (Rabbit): Irritating , 24 - 72 h
Fly Ash In vitro Not irritant , 60 min
Chromium in vivo (Rabbit): Not irritant , 1 - 7 d

Serious Eye Damage/Eye Irritation
Product: No data available.

Specified substance(s):

| | |
|---------------|-----------------------------|
| Calcium oxide | Rabbit, 1 hrs: Irritating |
| Fly Ash | Moderately irritating |
| Chromium | Rabbit, 1 hrs: Not irritant |

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

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

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

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

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

| | |
|--|--------|
| Crystalline Silica (Quartz)/ Silica Sand | Cancer |
|--|--------|

Germ Cell Mutagenicity

In vitro
Product: No data available.

In vivo
Product: No data available.

Reproductive toxicity

Product: No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Target Organs

Specific Target Organ Toxicity - Single Exposure: Respiratory tract irritation.
Specific Target Organ Toxicity - Repeated Exposure: Lung

Aspiration Hazard

Product: No data available.

Other effects:

Constituents of this product may include crystalline silica which, if in inhalable form, may cause silicosis, a form of progressive pulmonary fibrosis. Inhalable crystalline silica is listed by IARC as a group I carcinogen (lung) based on sufficient evidence in occupationally exposed humans and sufficient evidence in animals. Crystalline silica is also listed by the NTP as a known human carcinogen. Constituents may also contain asbestiform or non-asbestiform tremolite or other silicates as impurities, and above de minimis exposure to these impurities in inhalable form may be carcinogenic or cause other serious lung problems.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

| | |
|---------------|--|
| Calcium oxide | LC 100 (Poecilia reticulata, 96 h): 560 mg/l Experimental result, Key study |
| Fly Ash | LC 50 (Poecilia reticulata, 96 h): > 100 mg/l Experimental result, Key study |
| Chromium | LC 50 (Fathead minnow (Pimephales promelas), 96 h): 37 mg/l Mortality |

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

| | |
|---------------|--|
| Calcium oxide | EC 50 (Daphnia magna, 48 h): > 100 mg/l read-across based on grouping of substances (category approach) Read-across based on grouping of substances (category approach), Key study |
| Fly Ash | EC 50 (Daphnia magna, 48 h): > 100 mg/l experimental result Experimental result, Key study |
| Chromium | EC 50 (Water flea (Daphnia magna), 48 h): 0.01 - 0.7 mg/l Intoxication |

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

| | |
|---------------|--|
| Calcium oxide | NOAEL (Oncorhynchus mykiss): 307 mg/l read-across based on grouping of |
|---------------|--|

substances (category approach) Read-across based on grouping of substances (category approach), Key study

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Specified substance(s):

Fly Ash ErC 50 (Algae, 72 h): > 100 mg/l Experimental result, Key study

Persistence and Degradability**Biodegradation**

Product: No data available.

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential**Bioconcentration Factor (BCF)**

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Mobility in soil: No data available.

Other adverse effects: Harmful to aquatic organisms.

13. Disposal considerations

Disposal methods: 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:

800000004500

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. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs)
(40 CFR 721, Subpt E)**

None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended

Chemical Identity

Crystalline Silica
(Quartz)/ Silica Sand

OSHA hazard(s)

kidney effects
lung effects
immune system effects
Cancer

CERCLA Hazardous Substance List (40 CFR 302.4):

Chemical Identity

Reportable quantity

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate (Acute) Health Hazards
Delayed (Chronic) Health Hazard
Skin Corrosion or Irritation
Serious eye damage or eye irritation
Respiratory or Skin Sensitization
Carcinogenicity
Specific target organ toxicity (single or repeated exposure)

US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances

Not regulated.

US. EPCRA (SARA Title III Section 313 Toxic Chemical Release Inventory (TRI) Reporting

Not regulated.

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

None present or none present in regulated quantities.

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

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65



WARNING

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

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) : 0 g/l

VOC Method 310 : 0.00 %

Inventory Status:

| | |
|--|--|
| Australia Industrial Chem. Act (AIC): | One or more components in this product are not listed on or exempt from the Inventory. |
| Canada DSL Inventory List: | 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. |
| Ontario Inventory: | 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. |
| Japan (ENCS) List: | 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. |
| Korea Existing Chemicals Inv. (KECI): | 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. |
| New Zealand Inventory of Chemicals: | 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. |
| Taiwan Chemical Substance Inventory: | One or more components in this |

product are not listed on or exempt from the Inventory.

US TSCA Inventory:

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

Switzerland New Subs
Notified/Registered:

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

Thailand DIW Existing Chemical Inv.
List:

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

Vietnam National Chemical Inventory:

One or more components in this product are not 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.

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

Revision Date: 09/28/2022

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.