

Version: 2.2 Revision Date: 11/13/2022

SAFETY DATA SHEET

1. Identification

Material name: EUCOREPAIR SCC FAST - 50 LB BAG Material: 083FP 50

Recommended use and restriction on use

Recommended use: Cement, Portland, chemicals Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

Euclid Admixture Canada Inc. 2835 Grand-Allee Saint Hubert QC J4T 2R4 CA

Contact person: Telephone: Emergency telephone number:

EH&S Department (450)465-2233 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 - Repeated Exposure | Category 1 ^{1.} |

Target Organs

1. Lung

Unknown toxicity - Health

| Acute toxicity, oral | 16.89 % |
|-----------------------------------|---------|
| Acute toxicity, dermal | 91.77 % |
| Acute toxicity, inhalation, vapor | 99.99 % |
| Acute toxicity, inhalation, dust | 20.74 % |
| or mist | |

Environmental Hazards

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

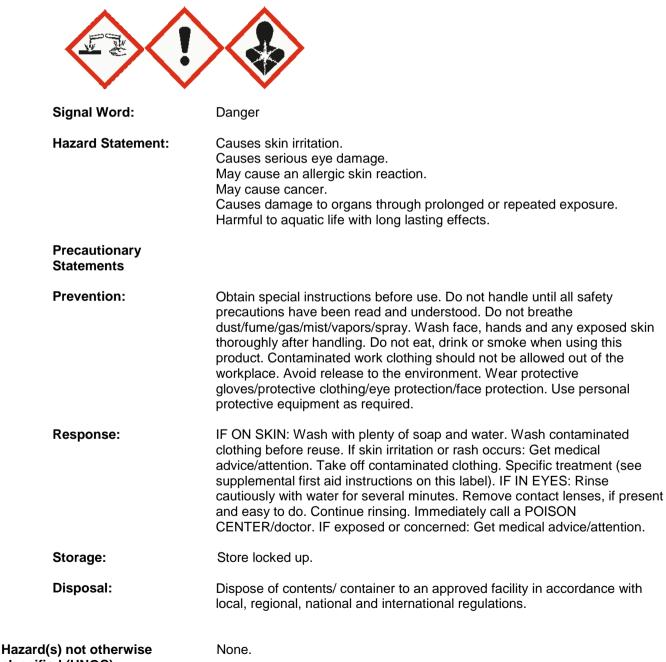
Unknown toxicity - Environment



| Acute hazards to the aquatic | 90.54 % |
|--------------------------------|---------|
| environment | |
| Chronic hazards to the aquatic | 90.54 % |
| environment | |

Label Elements

Hazard Symbol:



classified (HNOC):

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 | 10 - <20% |
| Fused calcium aluminate | 65997-16-2 | 5 - <10% |
| Calcium Carbonate (Limestone) | 1317-65-3 | 5 - <10% |
| Calcium sulfate | 7778-18-9 | 1 - <5% |
| Magnesite | 546-93-0 | 0 - <1% |
| Kaolin, Calcined | 92704-41-1 | 0 - <1% |
| Trade Secret in SAP 36103 | Trade Secret | 0 - <1% |
| BASF Melflux 1641 F SAP#3313 NJTSRN# 56705700001-5438P | Trade Secret | 0 - <1% |
| Fumed silica | 69012-64-2 | 0 - <1% |
| Calcium lignosulfonate | 8061-52-7 | 0 - <1% |
| Lithium carbonate | 554-13-2 | 0 - <1% |
| Sodium citrate dihydrate | 6132-04-3 | 0 - <1% |
| Glycol ether | 112-34-5 | 0 - <1% |
| Sodium nitrite | 7632-00-0 | 0 - <0.1% |
| Amorphous silica | 7631-86-9 | 0 - <1% |
| Polypropylene | 9003-07-0 | 0 - <1% |
| Sodium gluconate | 527-07-1 | 0 - <1% |
| Water | 7732-18-5 | 0 - <1% |
| Titanium dioxide | 13463-67-7 | 0 - <0.1% |
| 2-Butenedioic acid (2Z)-, calcium salt | 34938-90-4 | 0 - <0.1% |
| White mineral oil | 8042-47-5 | 0 - <1% |
| C12-C-14 fatty acid ethoxylate | 9004-81-3 | 0 - <1% |
| Decyl Alcohol, ethoxlate phosphate | 52019-36-0 | 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. | | |
|--|---|--|--|
| Hazards: | No data available. | | |
| Indication of immediate medica | I 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) exting | juishing 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 a | nd 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 measure | es | | |
| | | | |
| 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 | Туре | 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_AC T | 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 |



| Deutlend compart | T)A/A | 50 millions of | amended (02 2006) |
|-------------------------------|-------|---------------------------------|--|
| Portland cement | TWA | 50 millions of particles per | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000) |
| | | cubic foot of | |
| | | air | |
| Calcium Carbonate | PEL | 15 mg/m3 | US. OSHA Table Z-1 Limits for Air |
| (Limestone) - Total dust. | | To highlio | Contaminants (29 CFR 1910.1000), as |
| | | | amended (02 2006) |
| Calcium Carbonate | PEL | 5 mg/m3 | US. OSHA Table Z-1 Limits for Air |
| (Limestone) - Respirable | | 5 | Contaminants (29 CFR 1910.1000), as |
| fraction. | | | amended (02 2006) |
| Calcium sulfate - Total | REL | 10 mg/m3 | US. NIOSH: Pocket Guide to Chemical |
| | | | Hazards, as amended (2010) |
| Calcium sulfate - Respirable. | REL | 5 mg/m3 | US. NIOSH: Pocket Guide to Chemical |
| | | | Hazards, as amended (2010) |
| Calcium sulfate - Total dust. | TWA | 15 mg/m3 | US. OSHA Table Z-1-A (29 CFR 1910.1000), |
| | | - / - | as amended (1989) |
| Calcium sulfate - Respirable | TWA | 5 mg/m3 | US. OSHA Table Z-1-A (29 CFR 1910.1000), |
| fraction. | | 40 / 0 | as amended (1989) |
| Calcium sulfate - Inhalable | TWA | 10 mg/m3 | US. ACGIH Threshold Limit Values, as |
| fraction. | 551 | | amended (2008) |
| Calcium sulfate - Respirable | PEL | 5 mg/m3 | US. OSHA Table Z-1 Limits for Air |
| fraction. | | | Contaminants (29 CFR 1910.1000), as |
| Calcium sulfate - Total dust. | PEL | 15 mg/m3 | amended (02 2006) US. OSHA Table Z-1 Limits for Air |
| Calcium suitate - Total dust. | FEL | 15 mg/m3 | |
| | | | Contaminants (29 CFR 1910.1000), as |
| Calcium sulfate - Respirable | TWA | 15 millions of | amended (02 2006) US. OSHA Table Z-3 (29 CFR 1910.1000), as |
| fraction. | IVVA | particles per | amended (09 2016) |
| ITACIION. | | cubic foot of | |
| | | air | |
| Calcium sulfate - Total dust. | TWA | 50 millions of | US. OSHA Table Z-3 (29 CFR 1910.1000), as |
| Calcium suitate - Total dust. | IVVA | particles per | amended (09 2016) |
| | | cubic foot of | |
| | | air | |
| Calcium sulfate - Respirable | TWA | 5 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000), as |
| fraction. | | 6 mg/m6 | amended (09 2016) |
| Calcium sulfate - Total dust. | TWA | 15 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000), as |
| | | 10 11.9,110 | amended (09 2016) |
| Magnesite - Total dust. | PEL | 15 mg/m3 | US. OSHA Table Z-1 Limits for Air |
| 5 | | 0 | Contaminants (29 CFR 1910.1000), as |
| | | | amended (02 2006) |
| Magnesite - Respirable | PEL | 5 mg/m3 | US. OSHA Table Z-1 Limits for Air |
| fraction. | | Ũ | Contaminants (29 CFR 1910.1000), as |
| | | | amended (02 2006) |
| Magnesite - Total dust. | TWA | 15 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000), as |
| - | | - | amended (09 2016) |
| Magnesite - Respirable | TWA | 3 mg/m3 | US. ACGIH Threshold Limit Values, as |
| particles. | | - | amended (01 2021) |
| Magnesite - Total dust. | TWA | 50 millions of | US. OSHA Table Z-3 (29 CFR 1910.1000), as |
| | | particles per | amended (09 2016) |
| | | cubic foot of | |
| | | air | |
| Magnesite - Inhalable | TWA | 10 mg/m3 | US. ACGIH Threshold Limit Values, as |
| particles. | | | amended (01 2021) |
| Magnesite - Respirable | TWA | 15 millions of | US. OSHA Table Z-3 (29 CFR 1910.1000), as |
| fraction. | | particles per | amended (09 2016) |
| | | cubic foot of | |
| | | air | |
| | TWA | 5 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000), as |
| | 714/1 | | amended (09 2016) |
| | TWA | 20 millions of | US. OSHA Table Z-3 (29 CFR 1910.1000), as |
| Fumed silica | 1 | particles per | amended (2000) |
| Fumed silica | | | |
| Fumed silica | | cubic foot of | |
| Fumed silica | | air | |
| Fumed silica | TWA | | US. OSHA Table Z-3 (29 CFR 1910.1000), as |
| Fumed silica | TWA | air | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000) US. OSHA Table Z-3 (29 CFR 1910.1000), as |



| Fumed silica - Inhalable | TWA | 10 mg/m3 | |
|--------------------------------|-----|----------------|--|
| particles. | IWA | 10 119/113 | US. ACGIH Threshold Limit Values, as amended (01 2021) |
| Fumed silica - Respirable | TWA | 5 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000), as |
| fraction. | | - | amended (09 2016) |
| Fumed silica - Total dust. | TWA | 50 millions of | US. OSHA Table Z-3 (29 CFR 1910.1000), as |
| | | particles per | amended (09 2016) |
| | | cubic foot of | |
| | | air | |
| Fumed silica - Respirable | TWA | 15 millions of | US. OSHA Table Z-3 (29 CFR 1910.1000), as |
| fraction. | | particles per | amended (09 2016) |
| | | cubic foot of | |
| | | air | |
| Fumed silica - Respirable | TWA | 3 mg/m3 | US. ACGIH Threshold Limit Values, as |
| particles. | | | amended (01 2021) |
| Glycol ether - Inhalable | TWA | 10 ppm | US. ACGIH Threshold Limit Values, as |
| fraction and vapor. | | | amended (03 2013) |
| Amorphous silica - Inhalable | TWA | 10 mg/m3 | US. ACGIH Threshold Limit Values, as |
| particles. | | | amended (01 2021) |
| Amorphous silica - | TWA | 3 mg/m3 | US. ACGIH Threshold Limit Values, as |
| Respirable particles. | | | amended (01 2021) |
| Amorphous silica - | TWA | 5 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000), as |
| Respirable fraction. | | | amended (09 2016) |
| Amorphous silica - Total | TWA | 15 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000), as |
| dust. | | | amended (09 2016) |
| | TWA | 50 millions of | US. OSHA Table Z-3 (29 CFR 1910.1000), as |
| | | particles per | amended (09 2016) |
| | | cubic foot of | |
| | | air | |
| Amorphous silica - | TWA | 15 millions of | US. OSHA Table Z-3 (29 CFR 1910.1000), as |
| Respirable fraction. | | particles per | amended (09 2016) |
| | | cubic foot of | |
| | | air | |
| Titanium dioxide | TWA | 10 mg/m3 | US. ACGIH Threshold Limit Values, as |
| | | | amended (2008) |
| Titanium dioxide - Total dust. | PEL | 15 mg/m3 | US. OSHA Table Z-1 Limits for Air |
| | | | Contaminants (29 CFR 1910.1000), as |
| | | | amended (02 2006) |
| Titanium dioxide - Respirable | TWA | 15 millions of | US. OSHA Table Z-3 (29 CFR 1910.1000), as |
| fraction. | | particles per | amended (03 2016) |
| | | cubic foot of | |
| | | air | |
| Titanium dioxide - Total dust. | TWA | 15 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000), as |
| | | | amended (03 2016) |
| Titanium dioxide - Respirable | TWA | 5 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000), as |
| fraction. | | | amended (03 2016) |
| Titanium dioxide - Total dust. | TWA | 50 millions of | US. OSHA Table Z-3 (29 CFR 1910.1000), as |
| | | particles per | amended (03 2016) |
| | | cubic foot of | |
| | | air | |
| White mineral oil - Mist. | PEL | 5 mg/m3 | US. OSHA Table Z-1 Limits for Air |
| | | | Contaminants (29 CFR 1910.1000), as |
| | | | amended (02 2006) |
| White mineral oil - Inhalable | TWA | 5 mg/m3 | US. ACGIH Threshold Limit Values, as |
| fraction. | | | amended (01 2010) |



| Chemical name | Туре | 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 sulfate | TWA | 10 mg/m3 | Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (07 2009) |
| Calcium sulfate - 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) (07 2007) |
| Calcium sulfate - Inhalable fraction. | TWA | 10 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010) |
| Calcium sulfate - Total dust. | TWA | 10 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (03 2020) |
| Magnesite - Total dust. | TWA | 10 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017) |
| Magnesite - Respirable fraction. | TWA | 3 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (01 2020) |
| Magnesite - 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) (06 2020) |
| Magnesite - Respirable particles. | TWA | 3 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (01 2020) |
| Magnesite - 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) (06 2020) |
| Magnesite - Inhalable particles. | TWA | 10 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (01 2020) |
| Magnesite - Inhalable fraction. | TWA | 10 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (01 2020) |
| Fumed silica - Respirable fume. | TWA | 1.5 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Fumed silica - Respirable fraction. | TWA | 2 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (06 2015) |
| Fumed silica - Respirable dust and/or fume. | TWA | 2 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017) |
| Fumed silica - Total fume. | TWA | 4 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (06 2021) |
| Glycol ether - Inhalable fraction and vapor. | TWA | 10 ppm | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (06 2015) |
| Amorphous silica - 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) (06 2020) |
| Amorphous silica - Inhalable fraction. | TWA | 10 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (01 2020) |



| Amorphous silica - Respirable particles. | TWA | 3 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (01 2020) |
|---|------|----------|---|
| Amorphous silica - Total dust. | TWA | 10 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (03 2020) |
| Amorphous silica - Respirable fraction. | TWA | 3 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (01 2020) |
| Amorphous silica - 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) (06 2020) |
| Amorphous silica - Inhalable particles. | TWA | 10 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (01 2020) |
| Titanium dioxide - 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) |
| Titanium dioxide - 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) |
| Titanium dioxide | TWA | 10 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010) |
| Titanium dioxide - Total dust. | TWA | 10 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017) |
| White mineral oil - Mist. | TWA | 1 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| White mineral oil - Inhalable fraction. | TWA | 5 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (06 2015) |
| White mineral oil - Mist. | TWA | 5 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017) |
| | STEL | 10 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017) |

Appropriate Engineering
ControlsMechanical 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: | Gray |
| Odor: | Odorless |
| 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 |
| Upper/lower limit on flammability or explos | ive 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: | 2.80 |
| 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: | 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 physic | al, 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 effe | Information on toxicological effects | | |
| Acute toxicity (list all possible | e routes of exposure) | | |
| Oral Product: | ATEmix: 2,080.92 mg/kg | | |
| Dermal Product: | ATEmix: 2,451.51 mg/kg | | |
| Inhalation Product: | ATEmix: 22.42 mg/l | | |
| Repeated dose toxicity Product: | No data available. | | |
| Specified substance(s): Calcium sulfate | NOAEL (Rat(Male), Oral, 52 - 104 Weeks): 256 mg/kg Oral Experimental result, Supporting study NOAEL (Rat(female), Oral, 52 - 104 Weeks): 284 mg/kg Oral Experimental result, Supporting study NOAEL (Rat(Male), Oral, 13 Weeks): 886 mg/kg Oral Experimental result, Supporting study 12/21 | | |
| 00000025446 | | | |



LOAEL (Rat(Male), Oral, 35 - 45 d): 237 mg/kg Oral Experimental result, Key study NOAEL (Rat(Male), Oral, 35 - 45 d): 79 mg/kg Oral Experimental result, Key study

| Skin Corrosion/Irritation Product: | No data available. |
|---|--|
| Specified substance(s): Fused calcium aluminate | In vitro (EpiDerm tissue): Not irritant , 60 min |
| Calcium sulfate | in vivo (Rabbit): Not irritant , 72 h |
| Magnesite | In vitro (Human, in vitro reconstituted epidermis model): not corrosive , 60 min |
| Kaolin, Calcined | in vivo (Rabbit): Not irritant , 24 - 72 h |
| Fumed silica | in vivo (Rabbit): Not irritant , 24 h |
| Lithium carbonate | in vivo (Rabbit): Not irritant , 24 - 72 h |
| Glycol ether | in vivo (Rabbit): Slightly irritating , 24 - 72 h |
| Sodium nitrite | in vivo (Rabbit): Not irritant , 1 d |
| Amorphous silica | in vivo (Rabbit): Not irritant , 48 h |
| Titanium dioxide | in vivo (Rabbit): Not irritant , 24 h |
| White mineral oil | in vivo (Rabbit): Not irritant , 24 - 72 h |
| Serious Eye Damage/Eye Irritatio Product: Specified substance(s): | on No data available. |
| Calcium sulfate | Rabbit, 72 hrs: Not irritant |
| Magnesite | Reconstituted Corneal Epithelium model, 10 min: Not irritant |
| Fumed silica | Rabbit, 1 hrs: Not irritant |
| Lithium carbonate | Rabbit, 24 - 72 hrs: Category II |
| Glycol ether | Rabbit, 24 - 72 hrs: Highly irritating Rabbit, 48 hrs: Not irritant |



| Titanium dioxide | Rabbit, 24 - 72 hrs: Not irritant | |
|--|--|--|
| White mineral oil | Rabbit, 24 - 72 hrs: Not irritant | |
| Respiratory or Skin Sensitizatio Product: | on No data available. | |
| Carcinogenicity Product: | No data available. | |
| IARC Monographs on the Evalu | uation of Carcinogenic Risks to Humans: | |
| Crystalline Silica (Quartz)/ Silica Sand | Overall evaluation: Carcinogenic to humans. | |
| | am (NTP) Report on Carcinogens: A Known To Be Human Carcinogen. | |
| US. OSHA Specifically Regulate Crystalline Silica (Quartz)/ Silica Sand | ed Substances (29 CFR 1910.1001-1050), as amended: 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 Product: | - Single Exposure No data available. | |
| Specific Target Organ Toxicity Product: | - Repeated Exposure No data available. | |
| Target Organs 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): Fused calcium aluminate | LC 50 (Danio rerio, 96 h): > 100 mg/l Experimental result, Key study |
| Calcium sulfate | LC 50 (Pimephales promelas, 96 h): > 1,970 mg/l Experimental result, Weight of Evidence study |
| Magnesite | LC 50 (Pimephales promelas, 96 h): 2,120 mg/l Read-across from supporting substance (structural analogue or surrogate), Key study |
| Fumed silica | LC 50 (Danio rerio, 96 h): > 100 mg/l Experimental result, Supporting study |
| Lithium carbonate | LC 50 (Oncorhynchus mykiss, 96 h): 36.3 mg/l LC 50 (Oncorhynchus mykiss, 96 h): 5.69 mg/l Experimental result, Key study |
| Glycol ether | LC 50 (Lepomis macrochirus, 96 h): 1,300 mg/l Experimental result, Key study |
| Sodium nitrite | LC 50 (Oncorhynchus mykiss, 96 h): 0.54 - 26.3 mg/l Experimental result, Key study |
| Titanium dioxide | LC 50 (Pimephales promelas, 96 h): 8.2 mg/l Read-across from supporting substance (structural analogue or surrogate), Supporting study |
| White mineral oil | LL 50 (Leuciscus idus, 96 h): > 10,000 mg/l Experimental result, Key study |
| C12-C-14 fatty acid ethoxylate | LC 50 (Common eel (Anguilla anguilla), 96 h): 120 mg/l Mortality |
| Aquatic Invertebrates Product: | No data available. |



| Specified substance(s): Fused calcium aluminate | EC 50 (Daphnia magna, 48 h): 5.4 mg/l experimental result Experimental result, Key study |
|---|---|
| Calcium sulfate | EC 50 (Daphnia magna, 48 h): 1,970 mg/l |
| Magnesite | LC 50 (Daphnia magna, 48 h): 140 mg/l read-across from supporting substance (structural analogue or surrogate) Read-across from supporting substance (structural analogue or surrogate), Key study |
| Kaolin, Calcined | NOAEL (Daphnia magna, 48 h): >= 100 mg/l read-across from supporting substance (structural analogue or surrogate) Read-across from supporting substance (structural analogue or surrogate), Key study |
| Fumed silica | EC 50 (Daphnia magna, 24 h): > 1,003 mg/l experimental result Experimental result, Key study |
| Lithium carbonate | EC 50 (Daphnia magna, 48 h): 6.24 mg/l experimental result Experimental result, Key study |
| Glycol ether | EC 50 (Daphnia magna, 48 h): > 100 mg/l experimental result Experimental result, Key study |
| Sodium nitrite | EC 50 (Daphnia magna, 48 h): 15.4 mg/l EC 50 (Daphnia magna, 48 h): 15.4 mg/l experimental result Experimental result, Key study |
| Titanium dioxide | LC 50 (Daphnia magna, 48 h): > 100 mg/l experimental result Experimental result, Weight of Evidence study |
| White mineral oil | LL 50 (Daphnia magna, 48 h): > 100 mg/l experimental result Experimental result, Key study |

Chronic hazards to the aquatic environment:

| Fish Product: | No data available. |
|---|--|
| Specified substance(s): Kaolin, Calcined | NOAEL (Oncorhynchus mykiss): 100 mg/l experimental result Experimental result Experimental result, Key study |
| Lithium carbonate | NOAEL (Danio rerio): 17.35 mg/l read-across from supporting substance (structural analogue or surrogate) Read-across from supporting substance (structural analogue or surrogate), Key study |
| Sodium nitrite | NOAEL (Cyprinus carpio): 1.05 mg/l experimental result Experimental result, Key study |
| White mineral oil | NOAEL (Oncorhynchus mykiss): >= 1,000 mg/l QSAR QSAR, Supporting study |
| Aquatic Invertebrates Product: | No data available. |
| Specified substance(s): | |



| Kaolin, Calcined | NOAEL (Daphnia magna): 1,000 mg/l read-across from supporting substance (structural analogue or surrogate) Read-across from supporting substance (structural analogue or surrogate), Key study |
|--|--|
| Lithium carbonate | NOAEL (Daphnia magna): 1.7 mg/l read-across from supporting substance (structural analogue or surrogate) Read-across from supporting substance (structural analogue or surrogate), Key study |
| Titanium dioxide | NOAEL (Daphnia magna): 100 mg/l experimental result Experimental result, Supporting study |
| Toxicity to Aquatic Plants Product: | No data available. |
| Persistence and Degradability | |
| Biodegradation Product: | No data available. |
| Specified substance(s): Glycol ether | 85 % (28 d) Detected in water. Experimental result, Key study |
| BOD/COD Ratio Product: | No data available. |
| Bioaccumulative potential Bioconcentration Factor (B0 Product: | CF) No data available. |
| Partition Coefficient n-octanol / v Product: | vater (log Kow) No data available. |
| Specified substance(s): Glycol ether | Log Kow: 0.56 |
| Mobility in soil: | No data available. |
| Other adverse effects: | Harmful to aquatic life with long lasting effects. |
| 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:

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)

| Chemical Identity | |
|-------------------|----------------|
| Sodium nitrite | 12 201803 2021 |

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

| Chemical Identity | <u>OSHA hazard(s)</u> |
|-----------------------|-----------------------|
| Crystalline Silica | kidney effects |
| (Quartz)/ Silica Sand | lung effects |
| | immune system effects |
| | Cancer |

CERCLA Hazardous Substance List (40 CFR 302.4):

| Chemical Identity | Reportable quantity |
|-------------------|----------------------------|
| Sodium nitrite | 100 lbs. |

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.



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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) | : | < 5 g/l |
|--|---|---------|
| VOC Method 310 | : | 0.04 % |



| Inventory Status: 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. |
|--|--|
| Australia Industrial Chem. Act (AIIC): | 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. |
| 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. |

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

| Revision Date: | 11/13/2022 |
|----------------------|--|
| Version #: | 2.2 |
| 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. |