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SAFETY DATA SHEET

1. Identification

Material name: ExoAir 230LT

Material: 586805 805

Recommended use and restriction on use

Recommended use: Sealant Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

Tremco U.S Sealants 3735 Green Road Beachwood OH 44122

US

Contact person:EH&S DepartmentTelephone:216-292-5000

Emergency telephone number: 1-800-424-9300 (US); 1-613-996-6666 (Canada)

2. Hazard(s) identification

Hazard Classification

Health Hazards

Carcinogenicity Category 2

Unknown toxicity - Health

Acute toxicity, oral 4.63 %
Acute toxicity, dermal 6.76 %
Acute toxicity, inhalation, vapor 62.64 %
Acute toxicity, inhalation, dust 56.18 %

or mist

Environmental Hazards

Acute hazards to the aquatic Category 3 environment

Unknown toxicity - Environment

Acute hazards to the aquatic 88.73 %

environment

Chronic hazards to the aquatic 88.97 %

environment

Label Elements

Hazard Symbol:



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Signal Word: Warning

Hazard Statement: Suspected of causing cancer.

Harmful to aquatic life.

Precautionary Statements

Prevention: Obtain special instructions before use. Do not handle until all safety

precautions have been read and understood. Avoid release to the environment. Use personal protective equipment as required.

Response: IF exposed or concerned: Get medical advice/attention.

Storage: Store locked up.

Disposal: Dispose of contents/container to an appropriate treatment and disposal

facility in accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC):

None.

3. Composition/information on ingredients

Mixtures

| Chemical Identity | CAS number | Content in percent (%)* |
|---------------------------------|------------|-------------------------|
| Dipropylene glycol methyl ether | 34590-94-8 | 5 - <10% |
| White mineral oil | 8042-47-5 | 5 - <10% |
| Amorphous silica | 7631-86-9 | 1 - <5% |
| Titanium dioxide | 13463-67-7 | 1 - <5% |
| Ammonium hydroxide | 1336-21-6 | 0.1 - <1% |
| Zinc oxide | 1314-13-2 | 0.1 - <0.25% |

^{*} 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: Wash skin thoroughly with soap and water. If skin irritation occurs:

Get medical advice/attention.



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Eye contact: Any material that contacts the eye should be washed out immediately

with water. If easy to do, remove contact lenses. If eye irritation

persists: Get medical advice/attention.

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: May cause skin and eye 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 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.

Accidental release measures:

In the event of a spill or accidental release, notify relevant authorities in

accordance with all applicable regulations.



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Methods and material for containment and cleaning up:

Collect spillage in containers, seal securely and deliver for disposal

according to local regulations.

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

to do so.

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: Do not handle until all safety precautions have been read and understood.

Obtain special instructions before use. Use personal protective equipment as required. Ventilate well, avoid breathing vapors. Use approved respirator if air contamination is above accepted level. Use mechanical ventilation in

case of handling which causes formation of dust.

Contact avoidance measures: No data available.

Hygiene measures: Observe good industrial hygiene practices. Wash hands before breaks and

immediately after handling the product.

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 |
|---|------|---|---|
| Dipropylene glycol methyl ether | PEL | 100 ppm 600 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006) |
| | TWA | 100 ppm | US. ACGIH Threshold Limit Values, as amended (2009) |
| | STEL | 150 ppm | US. ACGIH Threshold Limit Values, as amended (2009) |
| White mineral oil - Inhalable fraction. | TWA | 5 mg/m3 | US. ACGIH Threshold Limit Values, as amended (2011) |
| 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) |
| Amorphous silica | TWA | 20 millions of particles per cubic foot of air | amended (2000) |
| | TWA | 0.8 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000) |
| Titanium dioxide | TWA | 10 mg/m3 | US. ACGIH Threshold Limit Values, as amended (2011) |
| Titanium dioxide - Total dust. | PEL | 15 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as |



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| | | | | amended (02 2006) |
|-----------------------------------|------|--------------|-------|--|
| Titanium dioxide - Respirable | TWA | 15 million | s of | US. OSHA Table Z-3 (29 CFR 1910.1000), as |
| fraction. | | particles | per | amended (03 2016) |
| | | cubic foo | | , |
| | | | 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 million | | US. OSHA Table Z-3 (29 CFR 1910.1000), as |
| | | particles | | amended (03 2016) |
| | | cubic foo | | |
| | 0==: | | air | |
| Ammonium hydroxide | STEL | 35 ppm | | US. ACGIH Threshold Limit Values, as |
| | | | | amended (2011) |
| | TWA | 25 ppm | | US. ACGIH Threshold Limit Values, as |
| | DE! | 50 05 | / 0 | amended (2011) |
| | PEL | 50 ppm 35 mg | /m3 | US. OSHA Table Z-1 Limits for Air |
| | | | | Contaminants (29 CFR 1910.1000), as |
| Zina ayida Dagairahla | TWA | 2 m a | /~~? | amended (02 2006) US. ACGIH Threshold Limit Values, as |
| Zinc oxide - Respirable fraction. | IVVA | 2 mg | /1113 | amended (2011) |
| Haction. | STEL | 10 mg | /m2 | US. ACGIH Threshold Limit Values, as |
| | SIEL | To mg. | /1113 | amended (2011) |
| Zinc oxide - Fume. | PEL | 5 mg | /m2 | US. OSHA Table Z-1 Limits for Air |
| Zinc oxide - Fume. | FEL | 5 mg | /1113 | Contaminants (29 CFR 1910.1000), as |
| | | | | amended (02 2006) |
| Zinc oxide - Total dust. | PEL | 15 mg | /m3 | US, OSHA Table Z-1 Limits for Air |
| Zilic Oxide - Total dust. | 1 | 19 1119. | /1113 | Contaminants (29 CFR 1910.1000), as |
| | | | | amended (02 2006) |
| Zinc oxide - Respirable | PEL | 5 mg. | /m3 | US. OSHA Table Z-1 Limits for Air |
| fraction. | | J mg | | Contaminants (29 CFR 1910.1000), as |
| | | | | amended (02 2006) |

| Chemical name | emical name Type Exposure Limit Values | | Source | |
|---|--|---------|-----------|---|
| Dipropylene glycol methyl ether | STEL | 150 ppm | | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Dipropylene glycol methyl ether | STEL | 150 ppm | 909 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017) |
| | TWA | 100 ppm | 606 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017) |
| | TWA | 100 ppm | | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Dipropylene glycol methyl ether | TWA | 100 ppm | | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010) |
| | STEL | 150 ppm | | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010) |
| White mineral oil - Mist. | TWA | | 1 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (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) |
|---|------|--------|-----------|---|
| 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 occupational health and safety), as amended (09 2017) |
| Propylene glycol - Aerosol. | TWA | | 10 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010) |
| Propylene glycol - Vapor and aerosol. | TWA | 50 ppm | 155 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (06 2015) |
| Titanium dioxide - Total dust. | TWA | | 10 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Titanium dioxide - Respirable fraction. | TWA | | 3 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Titanium dioxide | TWA | | 10 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), 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) |
| 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), as amended (11 2010) |
| | STEL | 35 ppm | | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010) |
| Zinc oxide - 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) |
| | 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) |
| Zinc oxide - Respirable fraction. | TWA | | 2 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010) |
| | STEL | | 10 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010) |
| Zinc oxide - Fume. | 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) |





| Zinc oxide - Total dust. | TWA | 10 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and |
|---|------|-------------|--|
| Talc - Respirable. | TWA | 2 mg/m3 | safety), as amended (09 2017) Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Talc - Respirable dust. | TWA | 3 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017) |
| Talc | TWA | 2 Fibers/cc | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (08 2017) |
| Talc - Respirable fraction. | TWA | 2 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (08 2017) |
| Aluminum oxide - Respirable. | TWA | 1 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Aluminum oxide - Total dust. | TWA | 10 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (05 2013) |
| Aluminum oxide - Respirable fraction. | TWA | 3 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (05 2013) |
| Aluminum oxide - Respirable fraction. | TWA | 1 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010) |
| Aluminum oxide - Inhalable fraction. | TWA | 10 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (06 2015) |
| Aluminum oxide - Respirable fraction. | TWA | 3 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (06 2015) |
| Aluminum oxide - Total dust. - as Al | TWA | 10 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017) |
| Clay - Respirable. | TWA | 2 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Clay - Respirable dust. | TWA | 5 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017) |
| Clay - Respirable fraction. | TWA | 2 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (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), as amended (11 2010) |
| | STEL | 10 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010) |



| Zirconium dioxide - as Zr | 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) |
| Carbon Black - Inhalable | TWA | | 3 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (09 2011) |
| Carbon Black - Inhalable fraction. | TWA | | 3 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (06 2015) |
| Carbon Black | TWA | | 3.5 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017) |
| Methanol | TWA | 200 ppm | | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Methanol | TWA | 200 ppm | | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010) |
| | STEL | 250 ppm | | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| | STEL | 250 ppm | | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010) |
| Methanol | STEL | 250 ppm | 328 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017) |
| | TWA | 200 ppm | 262 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017) |
| Allyl glycidyl ether | TWA | 1 ppm | | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Allyl glycidyl ether | TWA | 1 ppm | | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010) |
| Allyl glycidyl ether | STEL | 10 ppm | 47 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017) |
| | TWA | 5 ppm | 23 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 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), 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) |
| 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), as amended (11 2010) |
|----------------|------|---------|----------|---|
| | STEL | 15 ppm | | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010) |
| Ethyl Acrylate | STEL | 15 ppm | 61 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017) |
| | TWA | 5 ppm | 20 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017) |
| Formaldehyde | STEL | 0.3 ppm | | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (01 2020) |
| | TWA | 0.1 ppm | | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (01 2020) |
| Formaldehyde | STEL | 1 ppm | | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010) |
| | CEV | 1.5 ppm | | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (12 2007) |





| Formaldehyde | CEILING | 2 ppm 3 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017) |
|---------------------------------------|---------|-----------------|---|
| Propionic acid | TWA | 10 ppm | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Propionic acid | TWA | 10 ppm | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010) |
| Propionic acid | TWA | 10 ppm 30 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017) |
| Copper phthalocyanine - Fume as Cu | TWA | 0.2 mg/m3 | B Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (01 2020) |
| 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), as amended (11 2010) |
| Acetaldehyde | CEILING | 25 ppm 45 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017) |
| Cadmium - as Cd | TWA | 0.01 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Cadmium - Respirable as Cd | TWA | 0.002 mg/m3 | Ganada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Cadmium - as Cd | TWA | 0.01 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010) |
| Cadmium - Respirable fraction as Cd | TWA | 0.002 mg/m3 | Biological or Chemical Agents), as amended (06 2015) |
| Cadmium - as Cd | TWA | 0.025 mg/m3 | B Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017) |
| Potassium hydroxide | CEILING | 2 mg/m3 | Ganada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Potassium hydroxide | CEV | 2 mg/m3 | Ganada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010) |
| Potassium hydroxide | CEILING | 2 mg/m3 | 3 Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017) |
| Petroleum Oil - Mist. | TWA | 1 mg/m3 | Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (05 2013) |
| | TWA | 0.2 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (05 2013) |



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| Petroleum Oil - Inhalable fraction. | TWA | 5 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (06 2015) |
|--|-----|------------|---|
| Lead and compounds (inorganic) - as Pb | TWA | 0.05 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017) |
| Lead and compounds (inorganic) | TWA | 0.05 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Lead and compounds (inorganic) - as Pb | TWA | 0.05 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (06 2015) |

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

Eve/face protection: Wear goggles/face shield.

Skin Protection

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

Skin and Body Protection: No data available.

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

local supervisor.

Hygiene measures: Observe good industrial hygiene practices. Wash hands before breaks and

immediately after handling the product.

9. Physical and chemical properties

Appearance

Physical state: solid
Form: Paste
Color: Gray
Odor: Mild

Odor threshold: No data available.

pH: 7.5 - 8.6

Melting point/freezing point:No data available.Initial boiling point and boiling range:No data available.Flash Point:No data available.Evaporation rate:Slower than Ether

Flammability (solid, gas): No Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%):

Flammability limit - lower (%):

No data available.

Explosive limit - upper:

No data available.

Explosive limit - lower:

No data available.



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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: 1.056

Solubility(ies)

Solubility in water: Miscible with water.

Solubility (other): No data available.

Partition coefficient (n-octanol/water): No data available.

Auto-ignition temperature:

Decomposition temperature:

Viscosity:

No data available.

No data available.

No data available.

10. Stability and reactivity

Reactivity: No data available.

Chemical Stability: Material is stable under normal conditions.

Possibility of hazardous

reactions:

No data available.

Conditions to avoid: Avoid heat or contamination.

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

and chromates). Strong bases.

Hazardous Decomposition

Products:

Thermal decomposition or combustion may liberate carbon oxides and

other toxic gases or vapors.

11. Toxicological information

Information on likely routes of exposure

In high concentrations, vapors, fumes or mists may irritate nose, throat and

mucus membranes.

Skin Contact: Causes mild skin irritation.

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.



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Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product:

Specified substance(s):

Dipropylene glycol methyl

LD 50 (Rat): 5,180 mg/kg

ether

White mineral oil LD 50 (Rat): > 5,000 mg/kg

Titanium dioxide LD 50 (Rat): > 5,000 mg/kg

Ammonium hydroxide LD 50 (Rat): 350 mg/kg

Zinc oxide LD 50 (Rat): > 5,000 mg/kg

Dermal

Product: ATEmix: 26,749.41 mg/kg

Inhalation Product:

Specified substance(s):

White mineral oil LC 50 (Rat): > 5.2 mg/l

Titanium dioxide LC 50 (Rat): 3.43 mg/l

Zinc oxide LC 50 (Rat): > 5,700 mg/m3

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: No data available.

Specified substance(s):



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Dipropylene glycol

methyl ether

in vivo Not irritant, 5 d

White mineral oil in vivo (Rabbit): Not irritant, 24 - 72 h

Amorphous silica in vivo (Rabbit): Not irritant, 24 h

Titanium dioxide in vivo (Rabbit): Not irritant, 24 h

Zinc oxide in vivo (Rabbit): Not irritant, 24 h

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

Dipropylene glycol

methyl ether

Rabbit, 24 - 72 hrs: Not irritating

White mineral oil Rabbit, 24 - 72 hrs: Not irritating

Titanium dioxide Rabbit, 24 hrs: Not irritating

Zinc oxide Rabbit, 24 - 72 hrs: Not irritating

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: Suspected of causing cancer.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

Titanium dioxide Overall evaluation: Possibly carcinogenic to humans.

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

No carcinogenic components identified

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

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: No data available.

In vivo

Product: No data available.

Reproductive toxicity



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Product: No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard

Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

Dipropylene glycol methyl LC 50 (Pimephales promelas, 96 h): > 10,000 mg/l Experimental result,

ether Supporting study

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

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Dipropylene glycol methyl EC 50 (Acartia tonsa, 48 h): 1,930 mg/l Experimental result, Supporting

ether study

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

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

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

Supporting study

Aquatic Invertebrates

Product: No data available.



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Specified substance(s):

Dipropylene glycol methyl

NOAEL (Daphnia magna): 0.5 mg/l Experimental result, Key study

ether

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

Specified substance(s):

Dipropylene glycol methyl

ether

94 % (13 d) Detected in water. Experimental result, Supporting study 10 % (81 d) Detected in water. Experimental result, Supporting study 72.9 % (28 d) Detected in water. Experimental result, Supporting study

76 % Detected in water. Experimental result, Key study 96 % Detected in water. Experimental result, Key study

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



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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)

None present or none present in regulated quantities.

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

Chemical IdentityOSHA hazard(s)Crystalline Silicakidney effects(Quartz)/ Silica Sandlung effects

immune system effects

Cancer

Formaldehyde Skin irritation

Flammability

respiratory tract irritation

Cancer
Acute toxicity
Skin sensitization
Respiratory sensitization

Eye irritation

Cadmium Acute toxicity

Lung Kidney Cancer

Lead and compounds

(inorganic)

Acute toxicity

Reproductive toxicity

Kidney

Central nervous system

Blood



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CERCLA Hazardous Substance List (40 CFR 302.4):

| <u>Chen</u> | <u>nical</u> | <u>lde</u> | <u>ntit</u> | : y | Reportable quantity |
|-------------|--------------|------------|-------------|------------|---------------------|
| | | | | | |

Ammonium hydroxide 1000 lbs. Methyl benzimidazole-2- 10 lbs.

yl carbamate

Methanol 5000 lbs. Ethyl Acrylate 1000 lbs. Formaldehyde 100 lbs. Propionic acid 5000 lbs. Acetaldehyde 1000 lbs. Cadmium 10 lbs. Potassium hydroxide 1000 lbs. Lead and compounds 10 lbs.

(inorganic)

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Delayed (Chronic) Health Hazard Carcinogenicity

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.

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

Chemical Identity Reportable quantity

Formaldehyde lbs Acetaldehyde lbs

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

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65



WARNING

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

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

Chemical Identity

Dipropylene glycol methyl ether

White mineral oil

Amorphous silica

Propylene glycol

Titanium dioxide



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US. Massachusetts RTK - Substance List

Chemical Identity

Dipropylene glycol methyl ether

White mineral oil

Amorphous silica

Titanium dioxide

Crystalline Silica (Quartz)/ Silica Sand

Ethyl Acrylate

Formaldehyde

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

Dipropylene glycol methyl ether

White mineral oil

Amorphous silica

Propylene glycol

Titanium dioxide

US. Rhode Island RTK

Chemical Identity

Dipropylene glycol methyl ether

White mineral oil

Propylene glycol

Titanium dioxide

International regulations

Montreal protocol

Not applicable

Stockholm convention

Not applicable

Rotterdam convention

Not applicable

Kyoto protocol

Not applicable

VOC:

Regulatory VOC (less water and

: 146 g/l

exempt solvent)

VOC Method 310 : 8.35 %



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Inventory Status:

Australia AICS: 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



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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.

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: 01/04/2021

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.