

# SAFETY DATA SHEET

## 1. Identification

**Material name:** EXOAIR 230 LIMESTONE - 5 GAL  
**Material:** 584805 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 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 sensitizer	Category 1
Carcinogenicity	Category 2

#### Unknown toxicity - Health

Acute toxicity, oral	0.35 %
Acute toxicity, dermal	2.4 %
Acute toxicity, inhalation, vapor	53.83 %
Acute toxicity, inhalation, dust or mist	47.4 %

### Environmental Hazards

Acute hazards to the aquatic environment	Category 2
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#### Unknown toxicity - Environment

Acute hazards to the aquatic environment	96.34 %
Chronic hazards to the aquatic environment	100 %

### Label Elements

**Hazard Symbol:**



**Signal Word:** Warning

**Hazard Statement:** May cause an allergic skin reaction.  
Suspected of causing cancer.  
Toxic to aquatic life.

**Precautionary Statements**

**Prevention:** Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Avoid release to the environment.

**Response:** IF ON SKIN: Wash with plenty of water/... If skin irritation or rash occurs: Get medical advice/attention. IF exposed or concerned: Get medical advice/attention. Specific treatment (see on this label). Wash contaminated clothing before reuse.

**Storage:** Store locked up.

**Disposal:** Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Hazard(s) not otherwise classified (HNOC):** None.

### 3. Composition/information on ingredients

**Mixtures**

Chemical Identity	CAS number	Content in percent (%)*
White mineral oil	8042-47-5	5 - <10%
Amorphous silica	7631-86-9	1 - <5%
Propylene glycol	57-55-6	1 - <5%
Titanium dioxide	13463-67-7	1 - <5%
Talc	14807-96-6	0.1 - <1%
Ammonium hydroxide	1336-21-6	0.1 - <1%
Zinc oxide	1314-13-2	0.1 - <1%
Iodopropynyl butylcarbamate	55406-53-6	0.01 - <1%
Chlorothalonil	1897-45-6	0.1 - <1%

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

## 4. First-aid measures

<b>Ingestion:</b>	Rinse mouth thoroughly.
<b>Inhalation:</b>	Move to fresh air.
<b>Skin Contact:</b>	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.
<b>Eye contact:</b>	Rinse immediately with plenty of water.

### Most important symptoms/effects, acute and delayed

**Symptoms:** May cause skin and eye irritation.

### Indication of immediate medical attention and special treatment needed

**Treatment:** Symptoms may be delayed.

## 5. Fire-fighting measures

**General Fire Hazards:** No unusual fire or explosion hazards noted.

### Suitable (and unsuitable) extinguishing media

**Suitable extinguishing media:** Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media:** Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical:** During fire, gases hazardous to health may be formed.

### Special protective equipment and precautions for firefighters

**Special fire fighting procedures:** No data available.

**Special protective equipment for fire-fighters:** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures:** 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.

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

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

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

**7. Handling and storage**

**Precautions for safe handling:** Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Avoid contact with eyes, skin, and clothing. Wash hands thoroughly after handling. Ventilate well, avoid breathing vapors. Use approved respirator if air contamination is above accepted level. Use mechanical ventilation in case of handling which causes formation of dust.

**Conditions for safe storage, including any incompatibilities:** Store locked up.

**8. Exposure controls/personal protection**

**Control Parameters**

**Occupational Exposure Limits**

Chemical Identity	Type	Exposure Limit Values	Source
White mineral oil - Inhalable fraction.	TWA	5 mg/m <sup>3</sup>	US. ACGIH Threshold Limit Values (2011)
White mineral oil - Mist.	PEL	5 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Amorphous silica	TWA	20 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)
	TWA	0.8 mg/m <sup>3</sup>	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)
Titanium dioxide	TWA	10 mg/m <sup>3</sup>	US. ACGIH Threshold Limit Values (2011)
Titanium dioxide - Total dust.	PEL	15 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Titanium dioxide - Respirable fraction.	TWA	15 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
Titanium dioxide - Total dust.	TWA	15 mg/m <sup>3</sup>	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
Titanium dioxide - Respirable fraction.	TWA	5 mg/m <sup>3</sup>	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
Titanium dioxide - Total dust.	TWA	50 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
Talc - Respirable fraction.	TWA	2 mg/m <sup>3</sup>	US. ACGIH Threshold Limit Values (2011)
Talc	TWA	20 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)
Talc - Respirable.	TWA	2.4 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)

	TWA	0.1 mg/m <sup>3</sup>	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)
Ammonium hydroxide	STEL	35 ppm	US. ACGIH Threshold Limit Values (2011)
	TWA	25 ppm	US. ACGIH Threshold Limit Values (2011)
	PEL	50 ppm 35 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Zinc oxide - Respirable fraction.	TWA	2 mg/m <sup>3</sup>	US. ACGIH Threshold Limit Values (2011)
	STEL	10 mg/m <sup>3</sup>	US. ACGIH Threshold Limit Values (2011)
Zinc oxide - Fume.	PEL	5 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Zinc oxide - Total dust.	PEL	15 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Zinc oxide - Respirable fraction.	PEL	5 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)

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

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

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

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

Zinc oxide - Fume.	TWA	5 mg/m <sup>3</sup>	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
	STEL	10 mg/m <sup>3</sup>	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Zinc oxide - Total dust.	TWA	10 mg/m <sup>3</sup>	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Aluminum oxide - Respirable.	TWA	1 mg/m <sup>3</sup>	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/m <sup>3</sup>	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/m <sup>3</sup>	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/m <sup>3</sup>	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Aluminum oxide - Inhalable fraction.	TWA	10 mg/m <sup>3</sup>	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)
Aluminum oxide - Respirable fraction.	TWA	3 mg/m <sup>3</sup>	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)
Aluminum oxide - Total dust. - as Al	TWA	10 mg/m <sup>3</sup>	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Zirconium dioxide - as Zr	STEL	10 mg/m <sup>3</sup>	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	TWA	5 mg/m <sup>3</sup>	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/m <sup>3</sup>	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
	STEL	10 mg/m <sup>3</sup>	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Zirconium dioxide - as Zr	TWA	5 mg/m <sup>3</sup>	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
	STEL	10 mg/m <sup>3</sup>	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (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) (06 2015)
Carbon Black	TWA	3.5 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Silica gel desiccant - Respirable dust.	TWA	6 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Crystalline Silica (Quartz)/ Silica Sand - Respirable fraction.	TWA	0.025 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Crystalline Silica (Quartz)/ Silica Sand - Respirable fraction.	TWA	0.10 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)
Crystalline Silica (Quartz)/ Silica Sand - Respirable dust.	TWA	0.1 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Methanol	STEL	250 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	TWA	200 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Methanol	STEL	250 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
	TWA	200 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Methanol	STEL	250 ppm 328 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
	TWA	200 ppm 262 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Ethyl Acrylate	TWA	5 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	STEL	15 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Ethyl Acrylate	TWA	5 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
	STEL	15 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Ethyl Acrylate	STEL	15 ppm 61 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
	TWA	5 ppm 20 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Formaldehyde	TWA	0.3 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	CEILING	1 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)

Formaldehyde	STEL	1 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
	CEV	1.5 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Formaldehyde	CEILING	2 ppm	3 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Propionic acid	TWA	10 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Propionic acid	TWA	10 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Propionic acid	TWA	10 ppm	30 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Acetaldehyde	CEILING	25 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Acetaldehyde	CEV	25 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Acetaldehyde	CEILING	25 ppm	45 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Cadmium - as Cd	TWA		0.01 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Cadmium - Respirable. - as Cd	TWA		0.002 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Cadmium - as Cd	TWA		0.01 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Cadmium - Respirable fraction. - as Cd	TWA		0.002 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)
Cadmium - as Cd	TWA		0.025 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Lead and compounds (inorganic)	TWA		0.05 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Lead and compounds (inorganic) - as Pb	TWA		0.05 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)
Lead and compounds (inorganic) - as Pb	TWA		0.05 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)

**Appropriate Engineering Controls**

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

**Individual protection measures, such as personal protective equipment**

- General information:** Use personal protective equipment as required.
- Eye/face protection:** Wear goggles/face shield.
- Skin Protection**
- Hand Protection:** Use suitable protective gloves if risk of skin contact.

- Other:** 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. Contaminated work clothing should not be allowed out of the workplace. Avoid contact with skin.

## 9. Physical and chemical properties

### Appearance

<b>Physical state:</b>	solid
<b>Form:</b>	Paste
<b>Color:</b>	Gray
<b>Odor:</b>	Mild
<b>Odor threshold:</b>	No data available.
<b>pH:</b>	7.0 - 9.0
<b>Melting point/freezing point:</b>	No data available.
<b>Initial boiling point and boiling range:</b>	No data available.
<b>Flash Point:</b>	No data available.
<b>Evaporation rate:</b>	Slower than Ether
<b>Flammability (solid, gas):</b>	No
<b>Upper/lower limit on flammability or explosive limits</b>	
<b>Flammability limit - upper (%):</b>	No data available.
<b>Flammability limit - lower (%):</b>	No data available.
<b>Explosive limit - upper (%):</b>	No data available.
<b>Explosive limit - lower (%):</b>	No data available.
<b>Vapor pressure:</b>	No data available.
<b>Vapor density:</b>	Vapors are heavier than air and may travel along the floor and in the bottom of containers.
<b>Relative density:</b>	1.06
<b>Solubility(ies)</b>	
<b>Solubility in water:</b>	Miscible with water.
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Auto-ignition temperature:</b>	No data available.
<b>Decomposition temperature:</b>	No data available.
<b>Viscosity:</b>	No data available.

## 10. Stability and reactivity

**Reactivity:** No data available.

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

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation:</b>	In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.
<b>Skin Contact:</b>	May cause an allergic skin reaction.
<b>Eye contact:</b>	Eye contact is possible and should be avoided.
<b>Ingestion:</b>	May be ingested by accident. Ingestion may cause irritation and malaise.

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Inhalation:</b>	No data available.
<b>Skin Contact:</b>	No data available.
<b>Eye contact:</b>	No data available.
<b>Ingestion:</b>	No data available.

### Information on toxicological effects

#### Acute toxicity (list all possible routes of exposure)

<b>Oral Product:</b>	Not classified for acute toxicity based on available data.
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**Specified substance(s):**

White mineral oil	LD 50 (Rat): > 5,000 mg/kg
Amorphous silica	LD 50 (Rat): > 5,000 mg/kg
Propylene glycol	LD 50 (Rat): 22,000 mg/kg
Titanium dioxide	LD 50 (Rat): > 5,000 mg/kg
Ammonium hydroxide	LD 50 (Rat): 350 mg/kg
Zinc oxide	LD 50 (Rat): > 5,000 mg/kg
Iodopropynyl butylcarbamate	LD 50 (Rat): 1.1 g/kg
Chlorothalonil	LD 50 (Rat): 422 mg/kg

**Dermal**

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

**Specified substance(s):**

White mineral oil	LD 50 (Rabbit): > 2,000 mg/kg
Amorphous silica	LD 50 (Rabbit): > 2,000 mg/kg
Propylene glycol	LD 50 (Rabbit): > 2,000 mg/kg
Zinc oxide	LD 50 (Rat): > 2,000 mg/kg
Iodopropynyl butylcarbamate	LD 50 (Rabbit): > 2,000 mg/kg
Chlorothalonil	LD 50 (Rat): > 2,500 mg/kg

**Inhalation**

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

**Specified substance(s):**

White mineral oil	LC 50 (Rat): > 5.2 mg/l
Amorphous silica	LC 50 (Rat): > 2.08 mg/l
Titanium dioxide	LC 50 (Rat): 3.43 mg/l
Zinc oxide	LC 50 (Rat): > 5,700 mg/m3
Chlorothalonil	LC 50 (Rat): 0.10 mg/l

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

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

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

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

**Respiratory or Skin Sensitization****Product:** No data available.

**Carcinogenicity****Product:** Suspected of causing cancer.**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

Titanium dioxide Overall evaluation: Possibly carcinogenic to humans.

Talc Overall evaluation: Not classifiable as to carcinogenicity to humans. Overall evaluation: Possibly carcinogenic to humans.

Chlorothalonil Overall evaluation: Possibly carcinogenic to humans.

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

No carcinogenic components identified

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

No carcinogenic components identified

**Germ Cell Mutagenicity****In vitro****Product:** No data available.**In vivo****Product:** No data available.**Reproductive toxicity****Product:** No data available.**Specific Target Organ Toxicity - Single Exposure****Product:** No data available.**Specific Target Organ Toxicity - Repeated Exposure****Product:** No data available.**Aspiration Hazard****Product:** No data available.**Other effects:**

No data available.

<b>12. Ecological information</b>
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**Ecotoxicity:**

**Acute hazards to the aquatic environment:**

**Fish**

<b>Product:</b>	No data available.
<b>Specified substance(s):</b>	
Propylene glycol	LC 50 (Fathead minnow (Pimephales promelas), 96 h): 29,485 - 39,339 mg/l Mortality
Zinc oxide	LC 50 (Fathead minnow (Pimephales promelas), 96 h): 2,246 mg/l Mortality
Iodopropynyl butylcarbamate	LC 50 (Rainbow trout,donaldson trout (Oncorhynchus mykiss), 96 h): 0.05 - 0.089 mg/l Mortality
Chlorothalonil	LC 50 (Rainbow trout,donaldson trout (Oncorhynchus mykiss), 96 h): 0.0171 mg/l Mortality

**Aquatic Invertebrates**

<b>Product:</b>	No data available.
<b>Specified substance(s):</b>	
Propylene glycol	EC 50 (Water flea (Daphnia magna), 48 h): > 10,000 mg/l Intoxication
Titanium dioxide	EC 50 (Water flea (Daphnia magna), 48 h): > 1,000 mg/l Intoxication
Chlorothalonil	LC 50 (Water flea (Daphnia magna), 48 h): 0.151 - 0.253 mg/l Mortality

**Chronic hazards to the aquatic environment:**

**Fish**

<b>Product:</b>	No data available.
<b>Specified substance(s):</b>	
White mineral oil	NOAEL (Oncorhynchus mykiss, 28 d): >= 1,000 mg/l QSAR QSAR, Supporting study
Propylene glycol	NOAEL (Pimephales promelas, 7 d): 11,530 mg/l Experimental result, Not specified

**Aquatic Invertebrates**

**Product:** No data available.

**Toxicity to Aquatic Plants**

**Product:** No data available.

**Persistence and Degradability**

**Biodegradation**

**Product:** No data available.



**BOD/COD Ratio**

**Product:** No data available.

**Bioaccumulative potential**

**Bioconcentration Factor (BCF)**

**Product:** No data available.

**Specified substance(s):**

Chlorothalonil Algae, algal mat (Algae), Bioconcentration Factor (BCF): 271 (Static)

**Partition Coefficient n-octanol / water (log Kow)**

**Product:** No data available.

**Specified substance(s):**

Propylene glycol Log Kow: -0.92

**Mobility in soil:**

No data available.

**Other adverse effects:**

Toxic to aquatic organisms.

### 13. Disposal considerations

**Disposal instructions:**

Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Contaminated Packaging:**

No data available.

### 14. Transport information

**TDG:**

Not Regulated

**CFR / DOT:**

Not Regulated

**IMDG:**

Not Regulated

### 15. Regulatory information

**US Federal Regulations**

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

None present or none present in regulated quantities.

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

<u>Chemical Identity</u>	<u>OSHA hazard(s)</u>
Crystalline Silica (Quartz)/ Silica Sand	kidney effects lung effects immune system effects Cancer
Formaldehyde	Acute toxicity Skin irritation Skin sensitization Flammability respiratory tract irritation Respiratory sensitization Cancer Eye irritation
Cadmium	Acute toxicity Lung Kidney Cancer
Lead and compounds (inorganic)	Kidney Acute toxicity Central nervous system Blood Reproductive toxicity

**CERCLA Hazardous Substance List (40 CFR 302.4):**

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Ammonium hydroxide	1000 lbs.
Methanol	5000 lbs.
Ethyl Acrylate	1000 lbs.
Formaldehyde	100 lbs.
Propionic acid	5000 lbs.
Acetaldehyde	1000 lbs.
Cadmium	10 lbs.
Lead and compounds (inorganic)	10 lbs.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**

- Immediate (Acute) Health Hazards
- Delayed (Chronic) Health Hazard
- Respiratory or Skin Sensitization
- Carcinogenicity

**SARA 302 Extremely Hazardous Substance**

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

### SARA 304 Emergency Release Notification

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Ammonium hydroxide	1000 lbs.
Zinc oxide	
Methanol	5000 lbs.
Ethyl Acrylate	1000 lbs.
Formaldehyde	100 lbs.
Propionic acid	5000 lbs.
Acetaldehyde	1000 lbs.
Cadmium	10 lbs.
Lead and compounds (inorganic)	10 lbs.

### SARA 311/312 Hazardous Chemical

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

### SARA 313 (TRI Reporting)

<u>Chemical Identity</u>
Chlorothalonil

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

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

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

None present or none present in regulated quantities.

### US State Regulations

#### US. California Proposition 65



#### WARNING

Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

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

### Chemical Identity

White mineral oil  
Amorphous silica  
Propylene glycol  
Titanium dioxide  
Talc  
Chlorothalonil

## US. Massachusetts RTK - Substance List

### Chemical Identity

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

## US. Pennsylvania RTK - Hazardous Substances

### Chemical Identity

White mineral oil  
Amorphous silica  
Propylene glycol  
Titanium dioxide

## US. Rhode Island RTK

### Chemical Identity

White mineral oil  
Propylene glycol  
Titanium dioxide

## International regulations

### Montreal protocol

Not applicable

### Stockholm convention

Not applicable

### Rotterdam convention

Not applicable

### Kyoto protocol

Not applicable

### VOC:

Regulatory VOC (less water and  
exempt solvent) : 18 g/l

VOC Method 310 : 0.87 %

**Inventory Status:**

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Australia AICS:	One or more components in this product are not listed on or exempt from the Inventory.
Canada DSL Inventory List:	All components in this product are listed on or exempt from the Inventory.
EINECS, ELINCS or NLP:	One or more components in this product are not listed on or exempt from the Inventory.
Japan (ENCS) List:	One or more components in this product are not listed on or exempt from the Inventory.
China Inv. Existing Chemical Substances:	One or more components in this product are not listed on or exempt from the Inventory.
Korea Existing Chemicals Inv. (KECI):	One or more components in this product are not listed on or exempt from the Inventory.
Canada NDSL Inventory:	One or more components in this product are not listed on or exempt from the Inventory.
Philippines PICCS:	One or more components in this product are not listed on or exempt from the Inventory.
US TSCA Inventory:	All components in this product are listed on or exempt from the Inventory.
New Zealand Inventory of Chemicals:	One or more components in this product are not listed on or exempt from the Inventory.
Japan ISHL Listing:	One or more components in this product are not listed on or exempt from the Inventory.
Japan Pharmacopoeia Listing:	One or more components in this product are not listed on or exempt from the Inventory.
Mexico INSQ:	One or more components in this product are not listed on or exempt from the Inventory.
Ontario Inventory:	One or more components in this product are not listed on or exempt from the Inventory.
Taiwan Chemical Substance Inventory:	One or more components in this product are not listed on or exempt from the Inventory.

**16. Other information, including date of preparation or last revision****Revision Date:** 10/17/2018**Version #:** 1.2**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.