

Revision Date: 10/02/2018

SAFETY DATA SHEET

1. Identification

Material name: CURTAIN WALL SEALANT

Material: 931102 323

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

Germ Cell Mutagenicity Category 1B
Carcinogenicity Category 1A

Unknown toxicity - Health

Acute toxicity, oral 38.79 %
Acute toxicity, dermal 39.35 %
Acute toxicity, inhalation, vapor 100 %
Acute toxicity, inhalation, dust 92.44 %

or mist

Label Elements

Hazard Symbol:



Signal Word: Danger

Hazard Statement: May cause genetic defects.

May cause cancer.



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Precautionary Statements

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

precautions have been read and understood. Use personal protective

equipment as required.

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 (%)* |
|---|------------|-------------------------|
| Clay | 1332-58-7 | 20 - <50% |
| Calcium Carbonate (Limestone) | 1317-65-3 | 20 - <50% |
| Stoddard solvent (Mineral Spirits) | 8052-41-3 | 5 - <10% |
| Residual oils (petroleum) | 64742-62-7 | 5 - <10% |
| Petroleum distillates | 64742-47-8 | 1 - <5% |
| Crystalline Silica (Quartz)/ Silica Sand | 14808-60-7 | 0.1 - <1% |
| Titanium dioxide | 13463-67-7 | 0.1 - <1% |
| 1,2,4-Trimethylbenzene | 95-63-6 | 0.1 - <1% |
| Nonane | 111-84-2 | 0.1 - <1% |
| Carbon Black | 1333-86-4 | 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

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

Inhalation: Move to fresh air.

Skin Contact: Wash skin thoroughly with soap and water. If skin irritation occurs: Get

medical advice/attention.

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.



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Most important symptoms/effects, acute and delayed

Symptoms: May cause skin and eye irritation.

Indication of immediate medical attention and special treatment needed

Treatment: Symptoms may be delayed.

5. Fire-fighting measures

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

Suitable (and unsuitable) extinguishing media

Suitable extinguishing

media:

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing

media:

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from

the chemical:

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Special fire fighting

procedures:

No data available.

Special protective equipment

for fire-fighters:

Self-contained breathing apparatus and full protective clothing must be

worn in case of fire.

6. Accidental release measures

Personal precautions,

protective equipment and

emergency procedures:

No data available.

Methods and material for containment and cleaning

up:

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. Do not contaminate water sources or sewer. Environmental

manager must be informed of all major spillages.



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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. 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 | Туре | Exposure Limit Values | Source |
|--------------------------------|---------|-----------------------|---|
| Clay - Respirable fraction. | TWA | 2 mg/m3 | US. ACGIH Threshold Limit Values (2011) |
| • | PEL | 5 mg/m3 | US. OSHA Table Z-1 Limits for Air |
| | | - | Contaminants (29 CFR 1910.1000) (02 2006) |
| Clay - Total dust. | PEL | 15 mg/m3 | US. OSHA Table Z-1 Limits for Air |
| | | | Contaminants (29 CFR 1910.1000) (02 2006) |
| | TWA | 50 millions of | US. OSHA Table Z-3 (29 CFR 1910.1000) (03 |
| | | particles per | 2016) |
| | | cubic foot of | |
| Clay Despirable fraction | TWA | air 15 millions of | US. OSHA Table Z-3 (29 CFR 1910.1000) (03 |
| Clay - Respirable fraction. | IVVA | particles per | 2016) |
| | | cubic foot of | 2010) |
| | | air | |
| | TWA | 5 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000) (03 |
| | | - mgc | 2016) |
| Clay - Total dust. | TWA | 15 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000) (03 |
| • | | • | 2016) |
| Calcium Carbonate | PEL | 15 mg/m3 | US. OSHA Table Z-1 Limits for Air |
| (Limestone) - Total dust. | | - | Contaminants (29 CFR 1910.1000) (02 2006) |
| Calcium Carbonate | PEL | 5 mg/m3 | US. OSHA Table Z-1 Limits for Air |
| (Limestone) - Respirable | | | Contaminants (29 CFR 1910.1000) (02 2006) |
| fraction. | | | |
| Stoddard solvent (Mineral | TWA | 100 ppm | US. ACGIH Threshold Limit Values (2011) |
| Spirits) | DEI | 500 0000 10 | 110 00114 T 11 7 4 1 '1 (A' |
| | PEL | 500 ppm 2,900 mg/m3 | US. OSHA Table Z-1 Limits for Air |
| Residual oils (petroleum) - | TWA | 5 mg/m3 | Contaminants (29 CFR 1910.1000) (02 2006) US. ACGIH Threshold Limit Values (03 2014) |
| Inhalable fraction. | IVVA | 5 mg/ms | US. ACGIR Threshold Little Values (US 2014) |
| Petroleum distillates - Non- | TWA | 200 mg/m3 | US. ACGIH Threshold Limit Values (2011) |
| aerosol as total | IVVA | 200 mg/mo | OC. ACCIT THESHOLD EITHE VALUES (2011) |
| hydrocarbon vapor | | | |
| , | TWA | 200 mg/m3 | US. ACGIH Threshold Limit Values (2011) |
| Crystalline Silica (Quartz)/ | TWA | 0.025 mg/m3 | US. ACGIH Threshold Limit Values (2011) |
| Silica Sand - Respirable | '''' | 0.020 mg/me | So. Needin missiona Emili valdos (Estri) |
| fraction. | | | |
| Crystalline Silica (Quartz)/ | TWA | 0.05 mg/m3 | US. OSHA Specifically Regulated Substances |
| Silica Sand - Respirable dust. | | | (29 CFR 1910.1001-1053) (03 2016) |
| • | OSHA_AC | 0.025 mg/m3 | US. OSHA Specifically Regulated Substances |
| | Τ _ | | (29 CFR 1910.1001-1053) (03 2016) |
| Crystalline Silica (Quartz)/ | PEL | 0.05 mg/m3 | US. OSHA Table Z-1 Limits for Air |
| Silica Sand - Respirable dust. | | | Contaminants (29 CFR 1910.1000) (03 2016) |
| Crystalline Silica (Quartz)/ | TWA | 2.4 millions | US. OSHA Table Z-3 (29 CFR 1910.1000) |
| Silica Sand - Respirable. | | of particles | (2000) |
| | | per cubic foot | |



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| | | | of air | |
|---|---------|---------|---|--|
| | TWA | | 0.1 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000) (2000) |
| Titanium dioxide | TWA | | 10 mg/m3 | US. ACGIH Threshold Limit Values (2011) |
| Titanium dioxide - Total dust. | PEL | | 15 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| 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/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016) |
| Titanium dioxide - Respirable fraction. | TWA | | 5 mg/m3 | 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) |
| 1,2,4-Trimethylbenzene | REL | 25 ppm | 125 mg/m3 | US. NIOSH: Pocket Guide to Chemical Hazards (2010) |
| | TWA | 25 ppm | 125 mg/m3 | US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989) |
| | TWA | 25 ppm | 125 mg/m3 | US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008) |
| | AN ESL | | 25 ppb | US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (07 2011) |
| | ST ESL | | 140 ppb | US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013) |
| | ST ESL | | 700 μg/m3 | US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013) |
| | AN ESL | | 125 μg/m3 | US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (07 2011) |
| | TWA PEL | 25 ppm | 125 mg/m3 | US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (08 2010) |
| | TWA | 25 ppm | | US. ACGIH Threshold Limit Values (2011) |
| Nonane | TWA | 200 ppm | | US. ACGIH Threshold Limit Values (02 2012) |
| Carbon Black - Inhalable fraction. | TWA | | 3 mg/m3 | US. ACGIH Threshold Limit Values (2011) |
| Carbon Black | PEL | | 3.5 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |

| Chemical name | Туре | Exposure Limit Values | Source |
|--|------|-----------------------|---|
| 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 fraction. | TWA | 2 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Clay - Respirable dust. | TWA | 5 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| Calcium Carbonate (Limestone) - Total dust. | STEL | 20 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical 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 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 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 the Quality of the Work Environment) (09 2017) |
| Stoddard solvent (Mineral Spirits) | STEL | | 580 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| | TWA | | 290 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Stoddard solvent (Mineral Spirits) | TWA | 100 ppm | | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Stoddard solvent (Mineral Spirits) | TWA | 100 ppm | 525 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| Residual oils (petroleum) - Mist. | TWA | | 1 mg/m3 | Canada. British Columbia OELs. (Occupational 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) |
| Residual oils (petroleum) - Inhalable fraction. | TWA | | 5 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015) |
| Petroleum distillates - Non- aerosol as total hydrocarbon vapor | TWA | | 200 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Petroleum distillates | TWA | | 525 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Petroleum distillates - Non- aerosol as total hydrocarbon vapor | TWA | | 200 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| | TWA | | 200 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |



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| 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) |
| Titanium dioxide - Total dust. | TWA | | 10 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Titanium dioxide - Respirable fraction. | TWA | | 3 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Titanium dioxide | TWA | | 10 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Titanium dioxide - Total dust. | TWA | | 10 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| 1,2,4-Trimethylbenzene | TWA | 25 ppm | 123 mg/m3 | Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009) |
| 1,2,4-Trimethylbenzene | TWA | 25 ppm | | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| 1,2,4-Trimethylbenzene | TWA | 25 ppm | | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| 1,2,4-Trimethylbenzene | TWA | 25 ppm | 123 mg/m3 | 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) |

| Chemical name | Туре | Exposure Limit Values | Source |
|--|------|-----------------------|---|
| 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 fraction. | TWA | 2 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Clay - Respirable dust. | TWA | 5 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| Calcium Carbonate (Limestone) - Total dust. | STEL | 20 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical 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 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 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 the Quality of the Work Environment) (09 2017) |
| Stoddard solvent (Mineral Spirits) | STEL | | 580 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| | TWA | | 290 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Stoddard solvent (Mineral Spirits) | TWA | 100 ppm | | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Stoddard solvent (Mineral Spirits) | TWA | 100 ppm | 525 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| Residual oils (petroleum) - Mist. | TWA | | 1 mg/m3 | Canada. British Columbia OELs. (Occupational 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) |
| Residual oils (petroleum) - Inhalable fraction. | TWA | | 5 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015) |
| Petroleum distillates - Non- aerosol as total hydrocarbon vapor | TWA | | 200 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Petroleum distillates | TWA | | 525 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Petroleum distillates - Non- aerosol as total hydrocarbon vapor | TWA | | 200 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| | TWA | | 200 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |



| 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) |
| Titanium dioxide - Total dust. | TWA | | 10 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Titanium dioxide - Respirable fraction. | TWA | | 3 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Titanium dioxide | TWA | | 10 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Titanium dioxide - Total dust. | TWA | | 10 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| 1,2,4-Trimethylbenzene | TWA | 25 ppm | 123 mg/m3 | Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009) |
| 1,2,4-Trimethylbenzene | TWA | 25 ppm | | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| 1,2,4-Trimethylbenzene | TWA | 25 ppm | | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| 1,2,4-Trimethylbenzene | TWA | 25 ppm | 123 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| Nonane | TWA | 200 ppm | | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (05 2013) |
| Nonane | TWA | 200 ppm | | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015) |
| Nonane | TWA | 200 ppm | 1,050 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008) |
| 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) |
| Xylene | TWA | 100 ppm | 434 mg/m3 | Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009) |
| | STEL | 150 ppm | 651 mg/m3 | Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009) |
| Xylene | TWA | 100 ppm | | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| | STEL | 150 ppm | | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |



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| Xylene | TWA | 100 ppm | | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
|--------------|------|---------|-----------|---|
| | STEL | 150 ppm | | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Xylene | STEL | 150 ppm | 651 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| | TWA | 100 ppm | 434 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| Naphthalene | STEL | 15 ppm | | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| | TWA | 10 ppm | | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Naphthalene | TWA | 10 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) |
| Naphthalene | TWA | 10 ppm | 52 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| | STEL | 15 ppm | 79 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| Ethylbenzene | TWA | 20 ppm | | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (09 2011) |
| Ethylbenzene | TWA | 20 ppm | | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015) |
| Ethylbenzene | STEL | 125 ppm | 543 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017) |
| | TWA | 100 ppm | 434 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: 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.



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9. Physical and chemical properties

Appearance

Physical state: solid
Form: Paste
Color: Dark gray
Odor: Slight odor

Odor threshold:

pH:

No data available.

Vo °C 752 °F

Flash Point:

No data available.

Slower than Ether

Flammability (solid, gas):

No
Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%):

Flammability limit - lower (%):

Explosive limit - upper (%):

No data available.

No data available.

No data available.

Vapor pressure:

No data available.

Vapor density: Vapors are heavier than air and may travel along the floor and

in the bottom of containers.

Relative density: 1.62

Solubility(ies)

Solubility in water: Practically Insoluble
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: Avoid contact with oxidizing agents (e.g. nitric acid, peroxides and

chromates).



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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.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

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

Specified substance(s):

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

Residual oils (petroleum) LD 50 (Rat): > 5,000 mg/kg

Petroleum distillates LD 50 (Rat): > 5,000 mg/kg

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

1,2,4-Trimethylbenzene LD 50 (Rat): 3,280 mg/kg

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

Carbon Black LD 50 (Rat): > 8,000 mg/kg

Dermal



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

Specified substance(s):

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

Residual oils (petroleum) LD 50 (Rabbit): > 5,000 mg/kg

Petroleum distillates LD 50 (Rabbit): > 2,000 mg/kg

1,2,4-Trimethylbenzene LD 50 (Rat): 3,440 mg/kg

Nonane LD 50 (Rabbit): > 2,000 mg/kg

Inhalation

Product: ATEmix: 21.02 mg/l

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: No data available.

Specified substance(s):

Residual oils (petroleum)

in vivo (Rabbit): Not irritant Experimental result, Key study

Petroleum distillates in vivo (Rabbit): Irritating Experimental result, Key study

Titanium dioxide in vivo (Rabbit): Not irritant Experimental result, Supporting study

1,2,4-Trimethylbenzene in vivo (Rabbit): Irritating Read-across from supporting substance (structural

analogue or surrogate), Key study

Nonane in vivo (Rabbit): Irritating Read-across based on grouping of substances

(category approach), Key study

Carbon Black in vivo (Rabbit): Not irritant Experimental result, Key study

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):



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Residual oils (petroleum)

Rabbit, 24 hrs: Not irritating

Petroleum distillates Rabbit, 24 - 72 hrs: Not irritating

Titanium dioxide Rabbit, 24 hrs: Not irritating

1,2,4-Trimethylbenzene Rabbit, 30 min: Not irritating

Nonane Rabbit, 24 - 72 hrs: Not irritating

Carbon Black Rabbit, 24 - 72 hrs: Not irritating

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

Residual oils Overall evaluation: Not classifiable as to carcinogenicity to humans. Overall

(petroleum) evaluation: Carcinogenic to humans.

Crystalline Silica

(Quartz)/ Silica

Sand

Overall evaluation: Carcinogenic to humans.

Titanium dioxide Overall evaluation: Possibly carcinogenic to humans.

Carbon Black Overall evaluation: Possibly carcinogenic to humans.

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

Residual oils Known To Be Human Carcinogen.

(petroleum)

Crystalline Silica Known To Be Human Carcinogen.

(Quartz)/ Silica

Sand

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

Crystalline Silica

(Quartz)/ Silica Cancer

Sand

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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.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

Petroleum distillates LC 50 (Rainbow trout, donaldson trout (Oncorhynchus mykiss), 96 h): 2.9

mg/l Mortality

1,2,4-Trimethylbenzene LC 50 (Fathead minnow (Pimephales promelas), 96 h): 7.19 - 8.28 mg/l

Mortality

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

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

Chronic hazards to the aquatic environment:



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Fish

Product: No data available.

Specified substance(s):

Residual oils (petroleum) NOAEL (Oncorhynchus mykiss, 14 d): >= 1,000 mg/l QSAR QSAR,

Supporting study

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Specified substance(s):

Stoddard solvent (Mineral Log Kow: 3.16 - 7.15

Spirits)

Nonane Log Kow: 5.46

Mobility in soil: No data available.

Other adverse effects: No data available.

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



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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)

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

immune system effects

Cancer

CERCLA Hazardous Substance List (40 CFR 302.4):

Chemical IdentityReportable quantityNonane100 lbs.Xylene100 lbs.Naphthalene100 lbs.Ethylbenzene1000 lbs.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Delayed (Chronic) Health Hazard Germ Cell Mutagenicity Carcinogenicity

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

Chemical Identity Reportable quantity

Nonane 100 lbs. Xylene 100 lbs. Naphthalene 100 lbs. Ethylbenzene 1000 lbs.



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SARA 311/312 Hazardous Chemical

| Chemical Identity | Threshold Planning Quantity |
|------------------------------|-----------------------------|
| Clay | 10000 lbs |
| Calcium Carbonate | 10000 lbs |
| (Limestone) | |
| Stoddard solvent (Mineral | 10000 lbs |
| Spirits) | |
| Residual oils (petroleum) | 10000 lbs |
| Petroleum distillates | 10000 lbs |
| Crystalline Silica (Quartz)/ | 10000 lbs |
| Silica Sand | |
| Titanium dioxide | 10000 lbs |
| 1,2,4-Trimethylbenzene | 10000 lbs |
| Nonane | 10000 lbs |
| Carbon Black | 10000 lbs |

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

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)

Chemical IdentityReportable quantityXyleneReportable quantity: lbs.

US State Regulations

US. California Proposition 65



WARNING

Cancer - www.P65Warnings.ca.gov

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

Chemical Identity

Clay

Calcium Carbonate (Limestone)

Stoddard solvent (Mineral Spirits)

Petroleum distillates

Crystalline Silica (Quartz)/ Silica Sand

Carbon Black

US. Massachusetts RTK - Substance List

Chemical Identity

Clay

Calcium Carbonate (Limestone)

Stoddard solvent (Mineral Spirits)

Petroleum distillates

Crystalline Silica (Quartz)/ Silica Sand



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US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

Clay

Calcium Carbonate (Limestone) Stoddard solvent (Mineral Spirits) Petroleum distillates

US. Rhode Island RTK

Chemical Identity

Clay

Calcium Carbonate (Limestone)
Stoddard solvent (Mineral Spirits)
Petroleum distillates

International regulations

Montreal protocol

Not applicable

Stockholm convention

Not applicable

Rotterdam convention

Not applicable

Kyoto protocol

Not applicable

VOC:

Regulatory VOC (less water and : 155 g/l

exempt solvent)

VOC Method 310 : 9.58 %



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Inventory Status:

Australia AICS: All components in this product are 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: All components in this product are listed on or

exempt from the Inventory.

Korea Existing Chemicals Inv. (KECI): All components in this product are 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: All components in this product are 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: All components in this product are 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.



Revision Date: 10/02/2018

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

Revision Date: 10/02/2018

Version #: 1.1

Further Information: No data available.

Disclaimer: For Industrial Use Only. Keep out of Reach of Children. The hazard

information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including

the safe use of the product under every foreseeable condition.