SAFETY DATA SHEET

1. Identification

Material name: TREMFLEX 834 CLEAR
Material: 9418004 323

Recommended use and restriction on use
Recommended use: Sealant
Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information
Tremco Canadian Sealants
220 Wicksteed Ave
Toronto ON M4H 1G7
CA

Contact person: EH&S Department
Telephone: 1-800-263-6046
Emergency telephone number: 1-800-424-9300 (US); 1-613-996-6666 (Canada)

2. Hazard(s) identification

Hazard Classification

Unknown toxicity - Health
Acute toxicity, oral 38.33 %
Acute toxicity, dermal 39.06 %
Acute toxicity, inhalation, vapor 100 %
Acute toxicity, inhalation, dust or mist 98.02 %

Environmental Hazards
Acute hazards to the aquatic environment Category 3

Unknown toxicity - Environment
Acute hazards to the aquatic environment 97.94 %
Chronic hazards to the aquatic environment 100 %

Label Elements

Hazard Symbol: No symbol
Signal Word: No signal word.
Hazard Statement: Harmful to aquatic life.
Precautionary Statement: 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.
Other hazards which do not result in GHS classification: None.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>CAS number</th>
<th>Content in percent (%)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene glycol</td>
<td>57-55-6</td>
<td>1 - 5%</td>
</tr>
<tr>
<td>White mineral oil</td>
<td>8042-47-5</td>
<td>1 - 5%</td>
</tr>
<tr>
<td>Amorphous silica</td>
<td>7631-86-9</td>
<td>1 - 5%</td>
</tr>
<tr>
<td>Ammonium hydroxide</td>
<td>1336-21-6</td>
<td>0.1 - 1%</td>
</tr>
</tbody>
</table>

* 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.

Most important symptoms/effects, acute and delayed

Symptoms: May cause skin and eye irritation.

Indication of immediate medical attention and special treatment needed

Treatment: Get medical attention if symptoms occur.

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.

7. Handling and storage

Precautions for safe handling: Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. 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 away from incompatible materials. Store in original tightly closed container.

8. Exposure controls/personal protection

Control Parameters

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>type</th>
<th>Exposure Limit Values</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>White mineral oil - Inhalable fraction.</td>
<td>TWA</td>
<td>5 mg/m3</td>
<td>US. ACGIH Threshold Limit Values (2011)</td>
</tr>
<tr>
<td>White mineral oil - Mist.</td>
<td>PEL</td>
<td>5 mg/m3</td>
<td>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)</td>
</tr>
<tr>
<td>Amorphous silica</td>
<td>TWA</td>
<td>20 millions of particles per cubic foot of air</td>
<td>US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>0.8 mg/m3</td>
<td>US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)</td>
</tr>
<tr>
<td>Ammonium hydroxide</td>
<td>STEL</td>
<td>35 ppm</td>
<td>US. ACGIH Threshold Limit Values (2011)</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>25 ppm</td>
<td>US. ACGIH Threshold Limit Values (2011)</td>
</tr>
<tr>
<td>Chemical name</td>
<td>type</td>
<td>Exposure Limit Values</td>
<td>Source</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------</td>
<td>-----------------------</td>
<td>----------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>White mineral oil - Mist.</td>
<td>TWA</td>
<td>1 mg/m3</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)</td>
</tr>
<tr>
<td>White mineral oil - Mist.</td>
<td>TWAEV</td>
<td>5 mg/m3</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)</td>
</tr>
<tr>
<td></td>
<td>STEL</td>
<td>10 mg/m3</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)</td>
</tr>
<tr>
<td>White mineral oil - Mist.</td>
<td>TWA</td>
<td>5 mg/m3</td>
<td>Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)</td>
</tr>
<tr>
<td></td>
<td>STEL</td>
<td>10 mg/m3</td>
<td>Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)</td>
</tr>
<tr>
<td>Amorphous silica - Total</td>
<td>TWA</td>
<td>4 mg/m3</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)</td>
</tr>
<tr>
<td>Amorphous silica - Respirable.</td>
<td>TWA</td>
<td>1.5 mg/m3</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)</td>
</tr>
<tr>
<td>Amorphous silica</td>
<td>TWAEV</td>
<td>10 mg/m3</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)</td>
</tr>
<tr>
<td>Amorphous silica - Respirable dust.</td>
<td>TWA</td>
<td>6 mg/m3</td>
<td>Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)</td>
</tr>
<tr>
<td>Propylene glycol - Aerosol.</td>
<td>TWAEV</td>
<td>10 mg/m3</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)</td>
</tr>
<tr>
<td>Propylene glycol - Vapor and aerosol, inhalable fraction.</td>
<td>TWAEV</td>
<td>50 ppm 155 mg/m3</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)</td>
</tr>
</tbody>
</table>

**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.

9. Physical and chemical properties

Appearance
- Physical state: solid
- Form: Paste
- Color: Colorless
- Odor: Mild
- Odor threshold: No data available.
- pH: No data available.
- Melting point/freezing point: No data available.
- Initial boiling point and boiling range: No data available.
- Flash Point: No data available.
- Evaporation rate: Slower than Ether
- Flammability (solid, gas): No

Upper/lower limit on flammability or explosive limits
- Flammability limit - upper (%): No data available.
- Flammability limit - lower (%): No data available.
- Explosive limit - upper (%): No data available.
- Explosive limit - lower (%): No data available.

Vapor pressure: No data available.

Vapor density: Vapors are heavier than air and may travel along the floor and in the bottom of containers.

Relative density: 1.06

Solubility(ies)
- Solubility in water: Miscible with water.
- Solubility (other): No data available.

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

Auto-ignition temperature: No data available.

Decomposition temperature: No data available.

Viscosity: No data available.

10. Stability and reactivity

Reactivity: No data available.
Chemical Stability: Material is stable under normal conditions.

Possibility of Hazardous Reactions: No data available.

Conditions to Avoid: Avoid heat or contamination.

Incompatible Materials: 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

Ingestion: May be ingested by accident. Ingestion may cause irritation and malaise.

Inhalation: 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.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral Product: No data available.

Dermal Product: ATEmix: 40,737.95 mg/kg

Inhalation Product: No data available.

Repeated dose toxicity Product: No data available.

Skin Corrosion/Irritation Product: No data available.

Serious Eye Damage/Eye Irritation Product: No data available.
Specified substance(s):
- Propylene glycol (Human): Irritating
- White mineral oil in vivo (Rabbit, 24 - 72 hrs): Not irritating
- Amorphous silica in vivo (Rabbit, 24 hrs): Not irritating
- Ammonium hydroxide Severely Irritating

Respiratory or Skin Sensitization
Product: No data available.

Carcinogenicity
Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:
No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:
No carcinogenic components identified

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.
12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish
Product: No data available.

Specified substance(s):
- Propylene glycol
  LC 50 (Fathead minnow (Pimephales promelas), 96 h): 55,770 mg/l Mortality
- Ammonium hydroxide
  LC 50 (Western mosquitofish (Gambusia affinis), 96 h): 15 mg/l Mortality

Aquatic Invertebrates
Product: No data available.

Specified substance(s):
- Propylene glycol
  EC 50 (Water flea (Daphnia magna), 48 h): > 10,000 mg/l Intoxication
  EC 50 (Water flea (Daphnia magna), 24 h): > 10,000 mg/l Intoxication
  LC 50 (Brine shrimp (Artemia salina), 24 h): > 10,000 mg/l Mortality
- Ammonium hydroxide
  LC 50 (Water flea (Daphnia magna), 25 h): 60 mg/l Mortality
  LC 50 (Water flea (Ceriodaphnia dubia), 48 h): > 0 - 10 mg/l Mortality

Chronic hazards to the aquatic environment:

Fish
Product: No data available.

Specified substance(s):
- Propylene glycol
  NOAEL (Pimephales promelas, 7 d): 11,530 mg/l experimental result
- White mineral oil
  NOAEL (Oncorhynchus mykiss, 28 d): >= 1,000 mg/l QSAR

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):
Propylene glycol Log Kow: -0.92
Mobility in Soil: No data available.
Other Adverse Effects: Harmful 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)

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>OSHA hazard(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formaldehyde</td>
<td>Acute toxicity</td>
</tr>
<tr>
<td></td>
<td>Skin irritation</td>
</tr>
<tr>
<td></td>
<td>Skin sensitization</td>
</tr>
<tr>
<td></td>
<td>Flammability</td>
</tr>
<tr>
<td></td>
<td>respiratory tract irritation</td>
</tr>
<tr>
<td></td>
<td>Respiratory sensitization</td>
</tr>
<tr>
<td></td>
<td>Cancer</td>
</tr>
<tr>
<td></td>
<td>Eye irritation</td>
</tr>
</tbody>
</table>

CERCLA Hazardous Substance List (40 CFR 302.4):

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Reportable quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium hydroxide</td>
<td>1000 lbs.</td>
</tr>
<tr>
<td>Formaldehyde</td>
<td>100 lbs.</td>
</tr>
<tr>
<td>Ethyl alcohol</td>
<td>100 lbs.</td>
</tr>
<tr>
<td>Ethyl Acrylate</td>
<td>1000 lbs.</td>
</tr>
<tr>
<td>Ammonia</td>
<td>100 lbs.</td>
</tr>
</tbody>
</table>

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Not listed.

SARA 302 Extremely Hazardous Substance

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Reportable quantity</th>
<th>Threshold Planning Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formaldehyde</td>
<td>100 lbs.</td>
<td>500 lbs.</td>
</tr>
<tr>
<td>Ammonia</td>
<td>100 lbs.</td>
<td>500 lbs.</td>
</tr>
</tbody>
</table>

SARA 304 Emergency Release Notification

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Reportable quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium hydroxide</td>
<td>1000 lbs.</td>
</tr>
<tr>
<td>Formaldehyde</td>
<td>100 lbs.</td>
</tr>
<tr>
<td>Ethyl alcohol</td>
<td>100 lbs.</td>
</tr>
<tr>
<td>Ethyl Acrylate</td>
<td>1000 lbs.</td>
</tr>
<tr>
<td>Ammonia</td>
<td>100 lbs.</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazardous Chemical

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Threshold Planning Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formaldehyde</td>
<td>500 lbs.</td>
</tr>
<tr>
<td>Ammonia</td>
<td>500 lbs.</td>
</tr>
<tr>
<td>Propylene glycol</td>
<td>500 lbs.</td>
</tr>
<tr>
<td>White mineral oil</td>
<td>500 lbs.</td>
</tr>
<tr>
<td>Amorphous silica</td>
<td>500 lbs.</td>
</tr>
<tr>
<td>Ammonium hydroxide</td>
<td>500 lbs.</td>
</tr>
</tbody>
</table>

SARA 313 (TRI Reporting)
None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)
None present or none present in regulated quantities.

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

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Reportable quantity</th>
</tr>
</thead>
</table>
Formaldehyde  15000 lbs  
Ammonia  10000 lbs  
Ammonia  20000 lbs  

US State Regulations  

**US. California Proposition 65**  
This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.  

**US. New Jersey Worker and Community Right-to-Know Act**  
**Chemical Identity**  
White mineral oil  
Propylene glycol  
Amorphous silica  

**US. Massachusetts RTK - Substance List**  
**Chemical Identity**  
White mineral oil  
Amorphous silica  
Chlorothalonil  
Formaldehyde  
Ethyl Acrylate  
Ammonia  

**US. Pennsylvania RTK - Hazardous Substances**  
**Chemical Identity**  
White mineral oil  
Propylene glycol  
Amorphous silica  

**US. Rhode Island RTK**  
No ingredient regulated by RI Right-to-Know Law present.  

**Other Regulations:**  

<table>
<thead>
<tr>
<th>Regulatory VOC (less water and exempt solvent):</th>
<th>13 g/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC Method 310:</td>
<td>0.70 %</td>
</tr>
</tbody>
</table>

**Inventory Status:**  

<table>
<thead>
<tr>
<th>Australia AICS:</th>
<th>One or more components in this product are not listed on or exempt from the Inventory.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada DSL Inventory List:</td>
<td>All components in this product are listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>EINECS, ELINCS or NLP:</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>Japan (ENCS) List:</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>China Inv. Existing Chemical Substances:</td>
<td>One or more components in this product are</td>
</tr>
</tbody>
</table>
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: 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.

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.

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

Revision Date: 07/30/2015
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.