SAFETY DATA SHEET

1. Identification

Material name: EXOAIR FLEX LEF FOAM SEALANT
Material: 584938FF700

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

Physical Hazards
  Flammable aerosol Category 1

Health Hazards
  Respiratory sensitizer Category 1
  Skin sensitizer Category 1
  Germ Cell Mutagenicity Category 1B
  Carcinogenicity Category 1A

Unknown toxicity - Health
  Acute toxicity, oral 51.45 %
  Acute toxicity, dermal 51.45 %
  Acute toxicity, inhalation, vapor 100 %
  Acute toxicity, inhalation, dust or mist 85 %

Label Elements

Hazard Symbol:
Signal Word: Danger

Hazard Statement: Extremely flammable aerosol. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. May cause genetic defects. May cause cancer. Pressurized container: May burst if heated.

Precautionary Statements

Prevention: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Avoid breathing dust/fume/gas/mist/vapors/spray. [In case of inadequate ventilation] wear respiratory protection. 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.

Response: If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER/doctor. 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: Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F. 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

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>CAS number</th>
<th>Content in percent (%)</th>
</tr>
</thead>
</table>

000000020149
4. First-aid measures

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

Inhalation: Call a physician or poison control center immediately. If breathing stops, provide artificial respiration. Move to fresh air. If breathing is difficult, give oxygen.

Skin Contact: If skin irritation occurs: Get medical advice/attention. Destroy or thoroughly clean contaminated shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an allergic skin reaction develops, get medical attention.

Eye contact: 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: Respiratory tract irritation.

Indication of immediate medical attention and special treatment needed

Treatment: Symptoms may be delayed.

5. Fire-fighting measures

General Fire Hazards: Use water spray to keep fire-exposed containers cool. Fight fire from a protected location. Move containers from fire area if you can do so without risk.

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: Vapors may travel considerable distance to a source of ignition and flash back.
Special protective equipment and precautions for firefighters

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Ventilate closed spaces before entering them. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep upwind. Evacuate area. See Section 8 of the SDS for Personal Protective Equipment. Keep unauthorized personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Methods and material for containment and cleaning up: Stop the flow of material, if this is without risk. Absorb with sand or other inert absorbent.

Environmental Precautions: Do not contaminate water sources or sewer. 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. Do not taste or swallow. Wash hands thoroughly after handling. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with eyes, skin, and clothing.

Conditions for safe storage, including any incompatibilities: Store locked up. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Type</th>
<th>Exposure Limit Values</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propane</td>
<td>PEL</td>
<td>1,000 ppm 1,800 mg/m³</td>
<td>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)</td>
</tr>
<tr>
<td>Isobutane</td>
<td>STEL</td>
<td>1,000 ppm</td>
<td>US. ACGIH Threshold Limit Values (03 2018)</td>
</tr>
<tr>
<td>Ethylene glycol - Aerosol, inhalable</td>
<td>STEL</td>
<td>10 mg/m³</td>
<td>US. ACGIH Threshold Limit Values (03 2017)</td>
</tr>
<tr>
<td>Ethylene glycol - Vapor fraction</td>
<td>TWA</td>
<td>25 ppm</td>
<td>US. ACGIH Threshold Limit Values (03 2017)</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>STEL</td>
<td>50 ppm</td>
<td>US. ACGIH Threshold Limit Values (03 2017)</td>
<td></td>
</tr>
<tr>
<td>Butane</td>
<td>STEL</td>
<td>1,000 ppm</td>
<td>US. ACGIH Threshold Limit Values (03 2018)</td>
</tr>
<tr>
<td>STEL</td>
<td>50 ppm</td>
<td>US. ACGIH Threshold Limit Values (03 2017)</td>
<td></td>
</tr>
<tr>
<td>Butane</td>
<td>STEL</td>
<td>1,000 ppm</td>
<td>US. ACGIH Threshold Limit Values (03 2018)</td>
</tr>
<tr>
<td>Ethylene glycol - Vapor.</td>
<td>CEILING</td>
<td>50 ppm</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>Ethylene glycol - Aerosol.</td>
<td>CEILING</td>
<td>100 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>Ethylene glycol - Particulate.</td>
<td>TWA</td>
<td>10 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>STEL</td>
<td>20 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>
<td></td>
</tr>
</tbody>
</table>
9. Physical and chemical properties
### Appearance

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state:</td>
<td>Aerosols</td>
</tr>
<tr>
<td>Form:</td>
<td>Aerosols</td>
</tr>
<tr>
<td>Color:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Odor:</td>
<td>Strong petroleum/solvent</td>
</tr>
<tr>
<td>Odor threshold:</td>
<td>No data available.</td>
</tr>
<tr>
<td>pH:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Melting point/freezing point:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Initial boiling point and boiling range:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Flash Point:</td>
<td>-97 °C -143 °F</td>
</tr>
<tr>
<td>Evaporation rate:</td>
<td>Slower than Ether</td>
</tr>
<tr>
<td>Flammability (solid, gas):</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### 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.

### Upper/lower limit on flammability or explosive limits

- 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: 0.99

### Solubility(ies)

- Solubility in water: Practically Insoluble
- Solubility (other): No data available.
- Partition coefficient (n-octanol/water): No data available.

### 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).

#### Hazardous Decomposition Products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.
11. Toxicological information

Information on likely routes of exposure

Inhalation: In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.

Skin Contact: May be harmful in contact with skin. Causes mild skin irritation. May cause an allergic skin reaction.

Eye contact: Eye contact is possible and should be avoided.

Ingestion: Harmful if swallowed.

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: ATEmix: 2,045.57 mg/kg

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

Specified substance(s): 2-Propanol, 1-chloro-, phosphate (3:1)
LD 50 (Rabbit): > 2,000 mg/kg

Ethylene glycol
LD 50 (Rabbit): 9,530 mg/kg

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

Specified substance(s): 2-Propanol, 1-chloro-, phosphate (3:1)
LC 50 (Rat): > 5 mg/l

Repeated dose toxicity Product: No data available.

Skin Corrosion/Irritation
Product: No data available.

Specified substance(s):
- 2-Propanol, 1-chloro-, phosphate (3:1) in vivo (Rabbit): Slightly irritating Experimental result, Supporting study
- Ethylene glycol in vivo (Rabbit): Not irritant Experimental result, Key study

Serious Eye Damage/Eye Irritation
Product: No data available.
Specified substance(s):
- 2-Propanol, 1-chloro-, phosphate (3:1) Rabbit, 24 hrs: Not irritating
- Propane Irritating
- Ethylene glycol Rabbit, 24 hrs: Not irritating

Respiratory or Skin Sensitization
Product: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- May cause sensitization by inhalation.

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
12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish
Product: No data available.

Specified substance(s):
Ethylene glycol
LC 50 (Rainbow trout, donaldson trout (Oncorhynchus mykiss), 96 h): 36,000 - 47,000 mg/l Mortality

Aquatic Invertebrates
Product: No data available.

Specified substance(s):
Ethylene glycol
LC 50 (Water flea (Ceriodaphnia dubia), 48 h): 11,700 - 16,600 mg/l Mortality

Chronic hazards to the aquatic environment:

Fish
Product: No data available.

Specified substance(s):
Ethylene glycol
NOAEL (Pimephales promelas, 7 d): 15,380 mg/l Experimental result, Weight of Evidence 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.

Specified substance(s):
Ethylene glycol Crayfish (Procambarus), Bioconcentration Factor (BCF): 0.42 (Flow through)

Partition Coefficient n-octanol / water (log Kow)
Product: No data available.

Specified substance(s):
Methyl ether (Dimethyl ether) Log Kow: 0.10
Propane Log Kow: 2.36
Isobutane Log Kow: 2.76
Butane Log Kow: 2.89
Ethylene glycol Log Kow: -1.36

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

TDG:
UN1950, AEROSOLS, 2.1

CFR / DOT:
UN1950, Aerosols, 2.1

IMDG:
UN1950, AEROSOLS, 2.1

Further Information:
000000020149
The above shipping description may not be accurate for all container sizes and all modes of transportation. Please refer to Bill of Lading.

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)
None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Reportable quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl ether (Dimethyl ether)</td>
<td>100 lbs.</td>
</tr>
<tr>
<td>Propane</td>
<td>100 lbs.</td>
</tr>
<tr>
<td>Isobutane</td>
<td>100 lbs.</td>
</tr>
<tr>
<td>Ethylene glycol</td>
<td>5000 lbs.</td>
</tr>
<tr>
<td>Butane</td>
<td>100 lbs.</td>
</tr>
</tbody>
</table>

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
- Fire Hazard
- Delayed (Chronic) Health Hazard
- Immediate (Acute) Health Hazards
- Flammable (gases, aerosols, liquids, or solids)
- Respiratory or Skin Sensitization
- Germ Cell Mutagenicity
- Carcinogenicity

SARA 302 Extremely Hazardous Substance
None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Reportable quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl ether (Dimethyl ether)</td>
<td>100 lbs.</td>
</tr>
<tr>
<td>Propane</td>
<td>100 lbs.</td>
</tr>
<tr>
<td>Isobutane</td>
<td>100 lbs.</td>
</tr>
<tr>
<td>Ethylene glycol</td>
<td>5000 lbs.</td>
</tr>
<tr>
<td>Butane</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>Diphenylmethane diisocyanate</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>2-Propanol, 1-chloro-, phosphate (3:1)</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>Methyl ether (Dimethyl ether)</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>Propane</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>Isobutane</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>Butane</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>Ethylene glycol</td>
<td>10000 lbs</td>
</tr>
</tbody>
</table>

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)

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Reportable Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl ether (Dimethyl ether)</td>
<td>lbs</td>
</tr>
<tr>
<td>Propane</td>
<td>lbs</td>
</tr>
<tr>
<td>Isobutane</td>
<td>lbs</td>
</tr>
<tr>
<td>Butane</td>
<td>lbs</td>
</tr>
</tbody>
</table>

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
Reproductive Harm - www.P65Warnings.ca.gov

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

<table>
<thead>
<tr>
<th>Chemical Identity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diphenylmethane diisocyanate</td>
</tr>
<tr>
<td>Methyl ether (Dimethyl ether)</td>
</tr>
<tr>
<td>Propane</td>
</tr>
<tr>
<td>Isobutane</td>
</tr>
</tbody>
</table>

US. Massachusetts RTK - Substance List

<table>
<thead>
<tr>
<th>Chemical Identity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl ether (Dimethyl ether)</td>
</tr>
<tr>
<td>Propane</td>
</tr>
<tr>
<td>Isobutane</td>
</tr>
</tbody>
</table>

US. Pennsylvania RTK - Hazardous Substances

<table>
<thead>
<tr>
<th>Chemical Identity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl ether (Dimethyl ether)</td>
</tr>
<tr>
<td>Propane</td>
</tr>
<tr>
<td>Isobutane</td>
</tr>
</tbody>
</table>
US. Rhode Island RTK

Chemical Identity
Methyl ether (Dimethyl ether)
Propane

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) : 153 g/l
VOC Method 310 : 15.47 %
### Inventory Status:

<table>
<thead>
<tr>
<th>Country/Region</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia AICS</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>Canada DSL Inventory List</td>
<td>One or more components in this product are not 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 not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>Korea Existing Chemicals Inv. (KECI)</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>Canada NDSL Inventory</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>Philippines PICCS</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>US TSCA Inventory</td>
<td>All components in this product are listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>New Zealand Inventory of Chemicals</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>Japan ISHL Listing</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>Japan Pharmacopoeia Listing</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>Mexico INSQ</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>Ontario Inventory</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>Taiwan Chemical Substance Inventory</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
</tbody>
</table>
### 16. Other information, including date of preparation or last revision

<table>
<thead>
<tr>
<th>Revision Date:</th>
<th>01/16/2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version #:</td>
<td>1.1</td>
</tr>
<tr>
<td>Further Information:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Disclaimer:</td>
<td>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.</td>
</tr>
</tbody>
</table>