1. Identification

1.1. Product identifier

**Product Identity**
BioTherm Fluids® PGX

**Alternate Names**
Formerly IceClear® PGX

1.2. Relevant identified uses of the substance or mixture and uses advised against

**Intended use**
Anti-Freeze Fluid, Heat Transfer Fluid

**Application Method**
See Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet

**Company Name**
Orison Marketing, LLC
4801 South Danville Drive
Abilene, TX 79602

**Emergency CHEMTREC (USA)**
(800) 424-9300

**Emergency Telephone No.**
(325) 692-1135 or US: 800-460-2403

**Customer Service: Orison Marketing, LLC**
US: 800-460-2403

2. Hazard(s) identification

2.1. Classification of the substance or mixture

No applicable GHS categories.

2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.

No applicable GHS categories.

**[Prevention]**:
No GHS prevention statements

**[Response]**:
No GHS response statements

**[Storage]**:
No GHS storage statements

**[Disposal]**:
No GHS disposal statements
3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Ingredient/Chemical Designations</th>
<th>Weight %</th>
<th>GHS Classification</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerol</td>
<td>40 - 60</td>
<td>Not Classified</td>
<td>[1][2]</td>
</tr>
<tr>
<td>CAS Number: 0000056-81-5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>Balance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAS Number: 7732-18-5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

[1] Substance classified with a health or environmental hazard.
[2] Substance with a workplace exposure limit

*The full texts of the phrases are shown in Section 16.

4. First aid measures

4.1. Description of first aid measures

**General**
In all cases of doubt, or when symptoms persist, seek medical attention.
Never give anything by mouth to an unconscious person.

**Inhalation**
None required

**Eyes**
Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.

**Skin**
Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.

**Ingestion**
Do not induce vomiting. Drink water to dilute.

4.2. Most important symptoms and effects, both acute and delayed

**Overview**

Inhalation: None expected

Eye Contact: May cause slight irritation

Skin Contact: Irritation unlikely

Ingestion: Product is non-toxic. Single doses of greater than 50 grams may have a laxative effect.
See section 2 for further details.

5. Fire-fighting measures

5.1. Extinguishing media
Carbon Dioxide, Foam, Dry Chemical and Water Fog.
5.2. Special hazards arising from the substance or mixture
Hazardous decomposition: Oxides of Carbon

5.3. Advice for fire-fighters
Avoid breathing decomposition products. Fire fighters wear protective clothing and NIOSH approved respirator.
ERG Guide No. ----

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions
Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up
Spilled material may be slippery. Small spills can be washed into chemical sewers. Large spills should be collected for disposal. Dike area to contain spill. Absorb in sand, earth, vermiculite or similar material. Wear appropriate protective equipment.
Incinerate or dispose of in approved solid waste disposal area per current regulations.

7. Handling and storage

7.1. Precautions for safe handling
Handle containers carefully to prevent damage and spillage.

7.2. Conditions for safe storage, including any incompatibilities
Incompatible materials: Acids, strong oxidizing agents, and reducing agents.
Store in a dry location away from heat, sparks and other sources of ignition. Keep containers closed when not in use.

7.3. Specific end use(s)
No data available.
8. Exposure controls and personal protection

8.1. Control parameters

Exposure

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Ingredient</th>
<th>Source</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000056-81-5</td>
<td>Glycerol</td>
<td>OSHA</td>
<td>TWA 15 mg/m3 (total) TWA 5 mg/m3 (resp)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH</td>
<td>TWA: 3 mg/m3 (respirable) 10 mg/m3 (mist)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH</td>
<td>No established RELs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supplier</td>
<td>No Established Limit</td>
</tr>
</tbody>
</table>

Carcinogen Data

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Ingredient</th>
<th>Source</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000056-81-5</td>
<td>Glycerol</td>
<td>OSHA</td>
<td>Select Carcinogen: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NTP</td>
<td>Known: No; Suspected: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IARC</td>
<td>Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Respiratory  Normally not required. If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.

Eyes  Goggles recommended.

Skin  Rubber gloves recommended.

Engineering Controls  Provide local exhaust.

Other Work Practices  Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear Semi-Viscous Liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not Measured</td>
</tr>
<tr>
<td>pH</td>
<td>6 – 8.5</td>
</tr>
<tr>
<td>Melting point / freezing point</td>
<td>-30 F (-34 °C)</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>228 F (109 °C)</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not Measured</td>
</tr>
<tr>
<td>Evaporation rate (Ether = 1)</td>
<td>&lt; 1 (Ether = 1)</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>Lower Explosive Limit: Not Measured</td>
</tr>
</tbody>
</table>
10. Stability and reactivity

10.1. Reactivity
Hazardous Polymerization will not occur.

10.2. Chemical stability
Stable under normal circumstances.

10.3. Possibility of hazardous reactions
No data available.

10.4. Conditions to avoid
Keep away from oxidizing agents, excessive heat, and ignition sources.

10.5. Incompatible materials
Acids, strong oxidizing agents, and reducing agents.

10.6. Hazardous decomposition products
Oxides of Carbon

11. Toxicological information

Acute toxicity – non toxic

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Oral LD50, mg/kg</th>
<th>Skin LD50, mg/kg</th>
<th>Inhalation Vapor LC50, mg/L/4hr</th>
<th>Inhalation Dust/Mist LC50, mg/L/4hr</th>
<th>Inhalation Gas LC50, ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerol - (56-81-5)</td>
<td>12,600.00, Rat - Category: NA</td>
<td>10,000.00, Rabbit - Category: NA</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
</tbody>
</table>

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).
<table>
<thead>
<tr>
<th>Classification</th>
<th>Category</th>
<th>Hazard Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity (oral)</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Acute toxicity (dermal)</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Acute toxicity (inhalation)</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Respiratory sensitization</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>STOT-single exposure</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>STOT-repeated exposure</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

### 12. Ecological information

#### 12.1. Toxicity
Non-toxic, non-hazardous, safe for the environment.

**Aquatic Ecotoxicity**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>96 hr LC50 fish, mg/l</th>
<th>48 hr EC50 crustacea, mg/l</th>
<th>ErC50 algae, mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerol - (56-81-5)</td>
<td>67,500.00, <em>Oncorhynchus mykiss</em></td>
<td>10,000.00, Daphnia magna</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

#### 12.2. Persistence and degradability
The product is readily biodegradable

#### 12.3. Bioaccumulative potential
Not Measured

#### 12.4. Mobility in soil
No data available.

#### 12.5. Results of PBT and vPvB assessment
This product contains no PBT/vPvB chemicals.

#### 12.6. Other adverse effects
No data available.
13. Disposal considerations

13.1. Waste treatment methods
Observe all federal, state and local regulations when disposing of this substance.

14. Transport information

<table>
<thead>
<tr>
<th>DOT (Domestic Surface Transportation)</th>
<th>IMO / IMDG (Ocean Transportation)</th>
<th>ICAO/IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Applicable</td>
<td>Not Regulated</td>
<td>Not Regulated</td>
</tr>
<tr>
<td>Not Regulated</td>
<td>Not Regulated</td>
<td>Not Regulated</td>
</tr>
</tbody>
</table>

14.1. UN number: Not Applicable
14.2. UN proper shipping name: Not Regulated
14.3. Transport hazard class(es): DOT Hazard Class: Not Applicable
| IMDG: Not Applicable |
| Sub Class: Not Applicable |
| Air Class: Not Applicable |
| Not Applicable |
| Not Applicable |

14.4. Packing group: Not Applicable
14.5. Environmental hazards
IMDG Marine Pollutant: No

14.6. Special precautions for user
No further information

15. Regulatory information

Regulatory Overview
The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Toxic Substance Control Act (TSCA)
All components of this material are either listed or exempt from listing on the TSCA Inventory.

WHMIS Classification
Not Regulated

US EPA Tier II Hazards
Fire: No
Sudden Release of Pressure: No
Reactive: No
Immediate (Acute): No
Delayed (Chronic): No

EPCRA 311/312 Chemicals and RQs:
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 302 Extremely Hazardous:
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.
Proposition 65 - Carcinogens (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

New Jersey RTK Substances (>1%):
  Glycerol

Pennsylvania RTK Substances (>1%):
  Glycerol

16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

Not applicable

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and is not valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Document