



## Safety Data Sheet

### BioTherm Fluids® HD

SDS Revision Date:

08/01/2017

## 1. Identification

### 1.1. Product identifier

**Product Identity** BioTherm Fluids® HD

**Alternate Names**

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

**Intended use** Engine Coolant, 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



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### 3. Composition/information on ingredients

| Ingredient/Chemical Designations                              | Weight % | GHS Classification | Notes  |
|---|----------|--------------------|--------|
| Glycerol<br>CAS Number: 0000056-81-5                          | 50 - 65  | Not Classified     | [1][2] |
| Proprietary inhibitor blend (no single ingredient above 0.5%) | <2       |                    |        |
| Water<br>CAS Number: 7732-18-5                                | Balance  |                    |        |

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

[3] PBT-substance or vPvB-substance.

\*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



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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. Absorbin 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.



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## 8. Exposure controls and personal protection

### 8.1. Control parameters

#### Exposure

| CAS No.      | Ingredient | Source   | Value                                     |
|--------------|------------|----------|---|
| 0000056-81-5 | Glycerol   | OSHA     | TWA 15 mg/m3 (total) TWA 5 mg/m3 (resp)   |
|              |            | ACGIH    | TWA: 3 mg/m3 (respirable) 10 mg/m3 (mist) |
|              |            | NIOSH    | No established RELs                       |
|              |            | Supplier | No Established Limit                      |

#### Carcinogen Data

| CAS No.      | Ingredient | Source | Value  |
|--------------|------------|--------|--|
| 0000056-81-5 | Glycerol   | OSHA   | Select Carcinogen: No  |
|              |            | NTP    | Known: No; Suspected: No   |
|              |            | IARC   | Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No; |

### 8.2. Exposure controls

|                             |   |
|-----------------------------|---|
| <b>Respiratory</b>          | Normally not required. If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.                      |
| <b>Eyes</b>                 | Goggles recommended.  |
| <b>Skin</b>                 | Rubber gloves recommended.  |
| <b>Engineering Controls</b> | Provide local exhaust.  |
| <b>Other Work Practices</b> | 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

|  |                                 |
|--|---------------------------------|
| <b>Appearance</b>                              | Yellow/Gold Semi-Viscous Liquid |
| <b>Odor</b>                                    | Odorless                        |
| <b>Odor threshold</b>                          | Not Measured                    |
| <b>pH</b>                                      | 9 – 10.9                        |
| <b>Freezing point</b>                          | -31 F (-35 C)                   |
| <b>Initial boiling point and boiling range</b> | 228 F (109 C)                   |
| <b>Flash Point</b>                             | Not Measured                    |
| <b>Evaporation rate (Ether = 1)</b>            | < 1 (Ether = 1)                 |
| <b>Flammability (solid, gas)</b>               | Not Applicable                  |



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|  |  |
|--|--|
| <b>Upper/lower flammability or explosive limits</b>    | <b>Lower Explosive Limit:</b> Not Measured<br><b>Upper Explosive Limit:</b> Not Measured |
| <b>Vapor pressure (Pa)</b>                             | 565 mmHg (at 100 C)  |
| <b>Vapor Density</b>                                   | Not Measured   |
| <b>Specific Gravity</b>                                | 1.15 – 1.16 (Water = 1)  |
| <b>Solubility in Water</b>                             | Complete   |
| <b>Partition coefficient n-octanol/water (Log Kow)</b> | Not Measured   |
| <b>Auto-ignition temperature</b>                       | Not Measured   |
| <b>Decomposition temperature</b>                       | Not Measured   |
| <b>Viscosity (cSt)</b>                                 | 11 cSt (at 20 C)   |
| <b>% Volatile incl. water (by volume)</b>              | 40 - 50%   |

**9.2. Other information**

No other relevant information.

## 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**

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



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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).

| Classification                | Category | Hazard Description |
|-------------------------------|----------|--------------------|
| Acute toxicity (oral)         | ---      | Not Applicable     |
| Acute toxicity (dermal)       | ---      | Not Applicable     |
| Acute toxicity (inhalation)   | ---      | Not Applicable     |
| Skin corrosion/irritation     | ---      | Not Applicable     |
| Serious eye damage/irritation | ---      | Not Applicable     |
| Respiratory sensitization     | ---      | Not Applicable     |
| Skin sensitization            | ---      | Not Applicable     |
| Germ cell mutagenicity        | ---      | Not Applicable     |
| Carcinogenicity               | ---      | Not Applicable     |
| Reproductive toxicity         | ---      | Not Applicable     |
| STOT-single exposure          | ---      | Not Applicable     |
| STOT-repeated exposure        | ---      | Not Applicable     |
| Aspiration hazard             | ---      | Not Applicable     |

## 12. Ecological information

### 12.1. Toxicity

Non-toxic, non-hazardous, safe for the environment.

### Aquatic Ecotoxicity

| Ingredient           | 96 hr LC50 fish, mg/l          | 48 hr EC50 crustacea, mg/l | ErC50 algae, mg/l |
|----------------------|--------------------------------|----------------------------|-------------------|
| Glycerol - (56-81-5) | 67,500.00, Oncorhynchus mykiss | 10,000.00, Daphnia magna   | Not Available     |

### 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



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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

|                                    | DOT (Domestic Surface Transportation) | IMO / IMDG (Ocean Transportation)                 | ICAO/IATA                 |
|------------------------------------|---------------------------------------|---|---------------------------|
| 14.1. UN number                    | Not Applicable                        | Not Regulated                                     | Not Regulated             |
| 14.2. UN proper shipping name      | Not Regulated                         | Not Regulated                                     | Not Regulated             |
| 14.3. Transport hazard class(es)   | DOT Hazard Class: Not Applicable      | IMDG: Not Applicable<br>Sub Class: Not Applicable | Air Class: Not Applicable |
| 14.4. Packing group                | Not Applicable                        | Not Applicable                                    | Not Applicable            |
| 14.5. Environmental hazards        |                                       |   |                           |
| IMDG                               | Marine Pollutant: No                  |   |                           |
| 14.6. Special precautions for user | No further information                |   |                           |

## 15. Regulatory information

|  |   |
|--|---|
| <b>Regulatory Overview</b>                 | The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.                   |
| <b>Toxic Substance Control Act ( TSCA)</b> | All components of this material are either listed or exempt from listing on the TSCA Inventory.                                     |
| <b>WHMIS Classification</b>                | Not Regulated   |
| <b>US EPA Tier II Hazards</b>              | <p>Fire: No</p> <p>Sudden Release of Pressure: No</p> <p>Reactive: No</p> <p>Immediate (Acute): No</p> <p>Delayed (Chronic): No</p> |

### 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.



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**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.

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