



Safety Data Sheet

BioTherm Fluids[®] Fire 48

SDS Revision Date:

08/01/2017

1. Identification

1.1. Product identifier

Product Identity BioTherm Fluids[®] Fire 48
Alternate Names Fire 48

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



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3. Composition/information on ingredients

Ingredient/Chemical Designations	Vol %	GHS Classification	Notes
Glycerol CAS Number: 0000056-81-5	47 - 48	Not Classified	[1][2]
Water CAS Number: 7732-18-5	Balance		
Orange Dye	<0.0001%		

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

Carbon Dioxide, Foam, Dry Chemical and Water Fog.



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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

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

Appearance	Clear Semi-Viscous Liquid
Odor	Odorless
Odor threshold	Not Measured
pH	6 – 8.5
Melting point / freezing point	-15 F (-26 C)
Initial boiling point and boiling range	224 F (107 C)
Flash Point	Not Measured
Evaporation rate (Ether = 1)	< 1 (Ether = 1)
Flammability (solid, gas)	Not Applicable



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Upper/lower flammability or explosive limits

Lower Explosive Limit: Not Measured

Upper Explosive Limit: Not Measured

Vapor pressure (Pa)

Not Measured

Vapor Density

Not Measured

Specific Gravity

1.135 – 1.14 (Water = 1)

Solubility in Water

Complete

Partition coefficient n-octanol/water (Log Kow)

Not Measured

Auto-ignition temperature

Not Measured

Decomposition temperature

Not Measured

Viscosity (cSt)

5.5 cSt (at 20 C)

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

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate



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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 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

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	<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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