

# 1. Identification

1.1. Product identifier **Product Identity** BioFROST® Eco **Alternate Names** BioFROST® Eco, Cage Code: 1GZV7 1.2. Relevant identified uses of the substance or mixture and uses advised against Intended use Antifreeze/Coolant/Heat transfer fluid. 1.3. Details of the supplier of the safety data sheet **Company Name** Orison Marketing, LLC 4801 South Danville Drive Abilene, TX 79602 Emergency 24 hour 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

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

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
1,2-Propanediol CAS Number: 0000057-55-6	75 - 100	Not Classified	
Proprietary organic inhibitor blend CAS Number: Proprietary	5 - 10	Not Classified	

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret. \*PBT/vPvB - PBT-substance or vPvB-substance.

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

# Section 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	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
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 syr	nptoms 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.
	Treat symptomatically. Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.
	Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation, and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.



# Section 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

As with all fires, wear positive pressure, self-contained breathing apparatus, (SCBA) with a full face piece and protective clothing. Persons without respiratory protection should leave area. Wear SCBA during clean-up immediately after fire. No smoking.

Avoid breathing decomposition products. Fire fighters wear protective clothing and NIOSH approved respirator.

## ERG Guide No.

# Section 6. Accidental release measures

## 6.1. Personal precautions, protective equipment and emergency procedures

Remove sources of ignition, do not turn lights or unprotected electrical equipment on or off. In case of a major spill or spillage in a confined space evacuate the area and check that solvent vapor levels are below the Lower Explosive Limit before re-entering.

### 6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

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.

# Section 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.



# Section 8. Exposure controls / personal protection

## 8.1. Control parameters

Exposure				
CAS No.	Ingredient	Source	Value	
0000057-55-6 1,2-Propanediol		OSHA	No Established Limit	
	ACGIH	TWA(Aerosol): 10 mg/m <sup>3</sup>		
		NIOSH	No Established Limit	
Proprietary Proprietary organic inhibitor blend		OSHA	No Established Limit	
		ACGIH	No Established Limit	
		NIOSH	No Established Limit	

8.2. Exposure controls	
Respiratory	If workers are exposed to concentrations above the exposure limit, they must use the appropriate, certified respirators.
Eyes	Goggles recommended.
Skin	Overalls which cover the body, arms and legs should be worn. Skin should not be exposed. All parts of the body should be washed after contact. Rubber gloves recommended.
Engineering Controls	Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.
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.

# Section 9. Physical and chemical properties

# 9.1. Information on basic physical and chemical properties

Appearance	Color: Clear Physical State: Liquid
Odor	None
Odor threshold	Not determined
рН	8 - 10
Melting point / freezing point	<-60 F/ <-51 C
Initial boiling point and boiling range	311 F/155 C
Flash Point	219 F (PG)
Evaporation rate (Ether = 1)	> 1, same as water (ether = 1)
Flammability (solid, gas)	Not Applicable
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



Relative Density Solubility in Water Partition coefficient n-octanol/water (Log Kow) Auto-ignition temperature Decomposition temperature Viscosity (cSt) 9.2. Other information No other relevant information.

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Revision Date: 01/23/2023

1.04 – 1.05 Complete Not Measured Not Measured Not Measured 40 cPs (at 20 C)

# Section 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
Excessive heat and open flame.
10.5. Incompatible materials
Acids, strong oxidizing agents, and reducing agents.
10.6. Hazardous decomposition products
Oxides of Carbon

# Section 11. Toxicological information

# Acute toxicity

Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation, and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.



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).

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
1,2-Propanediol - (57-55-6)	22,000.00, Rat - Category: NA	> 2,000.00, Rabbit - Category: NA	No data available	No data available	No data available
Proprietary organic inhibitor blend - (Proprietary)	No data available	No data available	No data available	No data available	No data available

### **Carcinogen Data**

CAS No.	Ingredient	Source	Value			
0000057-55-6 1,2-Propanediol		OSHA	Regulated Ca	arcinogen: No;		
		NTP	Known: No;	Suspected: No;		
		IARC	Group 1: No;	Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;		
		ACGIH	No Established Limit			
Proprietary	Proprietary organic inhibitor blend	OSHA	Regulated Carcinogen: No;			
		NTP	Known: No;	Known: No; Suspected: No;		
		IARC	Group 1: No;	Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;		
		ACGIH	No Establish	ed Limit		
Classificatio	on	Category		Hazard Description		
Acute toxicity	y (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 sensitiz	ation			Not Applicable		
Germ cell m	utagenicity			Not Applicable		
Carcinogenicity				Not Applicable		
Reproductive toxicity				Not Applicable		
STOT-single exposure				Not Applicable		
STOT-repeated exposure				Not Applicable		
Aspiration hazard				Not Applicable		



# Section 12. Ecological information

# 12.1. Toxicity

No additional information provided for this product. See Section 3 for chemical specific data. Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/L	48 hr EC50 crustacea, mg/L	ErC50 algae, mg/L
1,2-Propanediol - (57-55-6)	40,613.00, Salmo gairdneri	18,340.00, Ceriodaphnia dubia	24,200.00 (72 hr), Raphidocelis subcapitata
Proprietary organic inhibitor blend - (Proprietary)	Not Available	Not Available	Not Available

### 12.2. Persistence and degradability

There is no data available on the preparation itself.

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.

# Section 13. Disposal considerations

## 13.1. Waste treatment methods

Observe all federal, state, and local regulations when disposing of this substance.

# Section 14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
14.1. UN number	Not Regulated	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 Sub Class: Not Applicable	IMDG: Not Applicable Sub Class: Not Applicable	Air Class: Not Applicable Sub Class: Not Applicable
14.4. Packing group	Not Applicable	Not Applicable	Not Applicable

#### 14.5. Environmental hazards

Marine Pollutant: No;



# 14.6. Special precautions for user

Not Applicable

# Section 15. Regulatory information

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

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

### 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.

### Proposition 65 Label Warning:

This product contains no chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

# Section 16. Other information

### Revision Date 01/10/2023

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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