

BioFROST® Concentrate

SDS Revision Date: 08/01/2017

1. Identification

1.1. Product identifier

Product IdentityBioFROST® ConcentrateAlternate NamesCage Code: 1GZV7

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

Intended useAntifreeze/Heat transfer fluidApplication MethodSee 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

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 |
|--|----------|--------------------|-------|
| Propylene Glycol CAS Number: 0000057-55-6 | 90 - 100 | Not Classified | [1] |
| Phosphoric acid, dipotassium salt CAS Number: 0007758-11-4 | 1.0 - 10 | Not Classified | [1] |

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.

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.

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

seek medical attention.

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

recognized skin cleanser.

May be harmful if swallowed. Rinse mouth with water and then drink plenty of water. Ingestion

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

Overview Eye: None

Ingestion: Nausea

Inhalation: None

Skin: None

See section 2 for further details.

^[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.



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5. Fire-fighting measures

5.1. Extinguishing media

Carbon Dioxide, Dry Chemicals, Foam

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: Oxides of Carbon

5.3. Advice for fire-fighters

Wear SCBA and all protective equipment

ERG Guide No. ----

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Floor may be slippery.

Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions

None needed

6.3. Methods and material for containment and cleaning up

Filter and reuse or dispose according to local, state, and/or federal regulations.

7. Handling and storage

7.1. Precautions for safe handling

Avoid contact with eyes.

7.2. Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

Incompatible materials: Avoid contact with strong oxidizing agents or other reactive materials.

Viscosity of material will increase in cold temperatures.

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 |
|--------------|-----------------------------------|----------|------------------------------------|
| 0000057-55-6 | Propylene Glycol | OSHA | No Established Limit |
| | | ACGIH | TWA(Aerosol): 10 mg/m3 |
| | | NIOSH | No Established Limit |
| | | Supplier | 10 mg/m3 TWA (listed as AIHA WEEL) |
| 0007758-11-4 | Phosphoric acid, dipotassium salt | OSHA | No Established Limit |
| | | ACGIH | No Established Limit |
| | | NIOSH | No Established Limit |
| | | Supplier | No Established Limit |

Carcinogen Data

| CAS No. | Ingredient | Source | Value | |
|--------------|-----------------------------------|---|--|--|
| 0000057-55-6 | Propylene Glycol | OSHA | A Select Carcinogen: No | |
| | | NTP Known: No; Suspected: No | | |
| | | IARC | Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No; | |
| 0007758-11-4 | Phosphoric acid, dipotassium salt | OSHA | Select Carcinogen: No | |
| | | NTP | Known: No; Suspected: No | |
| | | IARC Group 1: No; Group 2a: No; Group 2b: No; Group 3 | | |

8.2. Exposure controls

Respiratory Provide adequate ventilation, avoid breathing vapors or mist.

Eyes Protective safety glasses recommended

Skin Gloves for repeated exposure.

Engineering Controls General room ventilation is satisfactory. Product slippery when spilled.

using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.



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9. Physical and chemical properties

Appearance Clear Liquid

Odor None

Odor threshold Not Measured

8.5 - 11.0 Hq < -60 F/-51 C

Melting point / freezing point Initial boiling point and boiling range > 310 F/154 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

1.048 **Specific Gravity**

Solubility in Water Complete Partition coefficient n-octanol/water (Log Kow) Not Measured Auto-ignition temperature Not Measured **Decomposition temperature** Not Measured Viscosity (cSt) 43 cP (at 20 C)

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

Heat, flames and sparks. Extremes of temperature and direct sunlight.

10.5. Incompatible materials

Avoid contact with strong oxidizing agents or other reactive materials.

10.6. Hazardous decomposition products

Oxides of Carbon



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11. Toxicological information

Acute toxicity

Non-toxic. BioFROST Concentrate[®] tested to be non-toxic when orally dosed at a concentration of 5 g/kg in rats. None of the test animals showed any adverse effects to the test article. At the study's completion, all rats were necropsied and each animal appeared normal for gross pathology.

There are no GHS Toxicological Hazard Classifications for this product

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 |
|---|--------------------------------|----------------------------------|--|
| Propylene Glycol - (57-55-6) | 40,613.00, Oncorhynchus mykiss | 18,340.00, Ceriodaphnia dubia | 19,000.00 (96 hr), Pseudokirchneriella subcapitata |
| Phosphoric acid, dipotassium salt - (7758-11-4) | Not Available | Not Available | Not Available |

12.2. Persistence and degradability

Readily biodegradable and generally recognized as safe (GRAS)

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.



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14. Transport information

DOT (Domestic Surface

Transportation)

Not Applicable

Not Regulated

ICAO/IATA

14.1. UN number 14.2. UN proper shipping

Not Regulated

Not Regulated Not Regulated Not Regulated

class(es)

14.3. Transport hazard **DOT Hazard Class: Not**

Applicable

IMDG: Not Applicable Sub Class: Not Applicable

IMO / IMDG (Ocean

Transportation)

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

Not Regulated

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

All components of this material are either listed or exempt from listing on the TSCA

Control Act (TSCA) Inventory.

WHMIS Classification **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%):



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

New Jersey RTK Substances (>1%):

Propylene Glycol

Pennsylvania RTK Substances (>1%):

Propylene Glycol

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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