




SECTION 1 - IDENTIFICATION

<b>Manufacturer:</b> Black Swan Mfg. Co. 4540 W. Thomas St. Chicago, IL 60651-3318 Tel.: 800-252-5796 Fax: 773-227-3705 Web Site : <a href="http://www.blackswanmfg.com">www.blackswanmfg.com</a> E-mail : <a href="mailto:info@blackswanmfg.com">info@blackswanmfg.com</a>	For any Transportation or Medical Chemical Emergencies call:  <p style="text-align: center;"><b>INFOTRAC</b></p> <p style="text-align: center;">(800) 535-5053 <b>OR</b> (352) 323-3500</p> <p style="text-align: center;">24 hours per day - 7 days a week</p>
<b>Product Name: Freeze-Guard Sub-Arctic</b>	<b>Recommended Use:</b> Prevents freezing in heating, cooling, and fresh water systems. Can be diluted with water to achieve the desired level of freeze and burst protection.

SECTION 2 – HAZARD(S) IDENTIFICATION

<b>Labels</b> None	<p style="text-align: center;"><b>NFPA</b></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;"> <b>HEALTH HAZARD</b>            4 – Deadly            3 – Extreme Danger            2 – Hazardous            1 – Slight Hazardous            0 – Normal Material         </td> <td style="width: 50%; border: none;"> <b>FIRE HAZARD</b>            Flash Points            4 – Below 73°F            3 – Below 100°F            2 – Above 100°F, Not exceeding 200°F            1 – Above 200°F            0 – Will not burn         </td> </tr> <tr> <td style="border: none;"> <b>SPECIFIC HAZARD</b>            Oxidizer OX            Acid ACID            Alkali ALK            Corrosive COR            Use NO WATER W            Radioactive R         </td> <td style="border: none;"> <b>REACTIVITY</b>            4 – May detonate            3 – Shock and heat may detonate            2 – Violent chemical change            1 – Unstable if heated            0 – Stable         </td> </tr> </table> 	<b>HEALTH HAZARD</b> 4 – Deadly 3 – Extreme Danger 2 – Hazardous 1 – Slight Hazardous 0 – Normal Material	<b>FIRE HAZARD</b> Flash Points 4 – Below 73°F 3 – Below 100°F 2 – Above 100°F, Not exceeding 200°F 1 – Above 200°F 0 – Will not burn	<b>SPECIFIC HAZARD</b> Oxidizer OX Acid ACID Alkali ALK Corrosive COR Use NO WATER W Radioactive R	<b>REACTIVITY</b> 4 – May detonate 3 – Shock and heat may detonate 2 – Violent chemical change 1 – Unstable if heated 0 – Stable	<p style="text-align: center;"><b>GHS Classification</b></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;"> <p style="text-align: center;"><b>Health</b></p>           Acute Toxicity: Not Established            Skin Irritation: Cat. 3            Eye Irritation: Cat. 2B            Skin Sensitization: NO         </td> <td style="width: 50%; border: none;"> <p style="text-align: center;"><b>Environmental</b></p>           Acute Aquatic Toxicity: Not Established            Chronic Aquatic Toxicity: Not Established         </td> </tr> <tr> <td colspan="2" style="border: none;"> <p style="text-align: center;"><b>Physical</b></p>           None         </td> </tr> </table>	<p style="text-align: center;"><b>Health</b></p> Acute Toxicity: Not Established Skin Irritation: Cat. 3 Eye Irritation: Cat. 2B Skin Sensitization: NO	<p style="text-align: center;"><b>Environmental</b></p> Acute Aquatic Toxicity: Not Established Chronic Aquatic Toxicity: Not Established	<p style="text-align: center;"><b>Physical</b></p> None	
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<b>Signal Word</b> None	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;"> <p style="text-align: center;"><b>Hazardous Statements</b></p>           H316: Causes mild skin irritation            H320: Causes eye irritation         </td> <td style="width: 50%; border: none;"> <p style="text-align: center;"><b>Precautionary Statements</b></p>           P102 : Keep out of reach of children         </td> </tr> </table>	<p style="text-align: center;"><b>Hazardous Statements</b></p> H316: Causes mild skin irritation H320: Causes eye irritation	<p style="text-align: center;"><b>Precautionary Statements</b></p> P102 : Keep out of reach of children							
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SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Chemicals	CAS#	EINECS#	REACH Pre-registration Number	Approx %
1,2-PROPANEDIOL	57-55-6	N/A	N/A	90-95 %

\*Unlisted ingredients are not classified as hazardous according to OSHA 1910.1200.

SECTION 4 – FIRST-AID MEASURES

<p><b>Inhalation:</b> Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.</p> <p><b>Skin:</b> Wash with soap and water. Get medical attention if irritation develops or persists.</p> <p><b>Eyes:</b> Immediately flush eyes with plenty of water. Get medical attention if irritation persists.</p> <p><b>Ingestion:</b> DO NOT INDUCE VOMITING. Do not give liquids. Get medical attention.</p>
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SECTION 5 – FIRE-FIGHTING MEASURES

<p><b>Fire Hazard:</b> Heat from fire may generate flammable vapor.</p> <p><b>Combustion Products:</b> None.</p> <p><b>Extinguishing Media:</b> Carbon Dioxide, Dry Chemical, Foam, Water Fog.</p> <p><b>Unsuitable Extinguishing Media:</b> None known.</p> <p><b>Protective Equipment:</b> Wear a self-contained breathing apparatus &amp; protective clothing.</p> <p><b>Special Fire Fighting Procedures:</b> Do not use direct water stream as it will spread fire. Cool fire exposed containers and structures with water.</p>
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## GHS SAFETY DATA SHEET

### SECTION 6 – ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Minimize skin contact.  
**Protective Equipment:** None.  
**Emergency Procedures:** Ventilate spill area.  
**Environmental Precautions:** Keep product out of sewers and waterways.  
**Methods for Cleaning Up:** Absorb spill with inert material, then place in a chemical waste container.

### SECTION 7 – HANDLING AND STORAGE

<u>Handling</u>	<u>Storage</u>
Keep out of reach of children. Handle in accordance with good industrial hygiene and safety practices. Low hazard for usual industrial handling or commercial handling by trained personnel.	Store in a cool, well ventilated place. Keep away from heat, sparks, and flame. Keep container closed when not in use. <b>Incompatible Materials:</b> Strong oxidizing agents.

### SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

<u>Hazardous Chemicals</u>	<u>Exposure Limits</u>		<u>OSHA-PEL</u>
	<u>ACGIH-TLV</u>	<u>ACGIH-STEL</u>	
1,2-PROPANEDIOL	N/A	N/A	N/A

**Engineering Controls:** A source of running water to flush or wash the eyes and skin in case of contact. Showers. Ventilated systems.  
**Ventilation:** Local exhaust adequate.  
**Personal Protective Equipment – Respiratory:** A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. **Skin:** Impervious gloves. **Eyes:** Safety glasses/Goggles/Face Shield.

### SECTION 9 – PHYSICAL & CHEMICAL PROPERTIES

<b>Appearance:</b> Red	<b>Flash Point:</b> > 200°F	<b>Vapor Pressure:</b> Not Established
<b>Odor:</b> Odorless	<b>Specific Gravity:</b> 1.05	<b>Flammability:</b> Not Established
<b>pH:</b> 8.5-9.5	<b>Solubility (H<sub>2</sub>O):</b> Not Established	<b>Flammability Limits:</b> LEL – 2% UEL – 13%
<b>Melting Point:</b> Not Established	<b>Evaporation Rate:</b> Not Established	
<b>Freezing Point:</b> Not Established	<b>Vapor Density:</b> Not Established	
<b>Boiling Point:</b> 370°F	<b>VOC:</b> 0 g/l	

### SECTION 10 – STABILITY AND REACTIVITY

**Stability:** Stable.  
**Hazardous polymerization:** Will not occur.  
**Conditions to avoid:** None known.  
**Incompatible materials:** Strong oxidizing agents.  
**Hazardous decomposition products:** Burning may produce Carbon Monoxide, Carbon Dioxide and unidentified Hydrocarbons.

### SECTION 11 – TOXICOLOGICAL INFORMATION

<u>Hazardous Chemicals</u>	<u>Toxicity</u>
	<u>LD<sub>50</sub></u> <u>LC<sub>50</sub></u>
1,2-PROPANEDIOL	N/A                      N/A

**Likely Routes of Exposure:** Skin Contact and Eye Contact.  
**Symptoms and Effect – Inhalation:** Inhalation of heated vapors or mists may cause irritation of the nose, throat and upper respiratory tract. **Skin Contact:** May cause mild irritation. **Eye Contact:** May cause moderate irritation. **Ingestion:** May cause nausea, vomiting and diarrhea. Repeated ingestion may cause central nervous system effects.  
**Long-Term Effect:** None.  
**Pre-Existing Conditions:** None.

### SECTION 12 – ECOLOGICAL INFORMATION

**Ecotoxicity:** Non-Toxic to aquatic organisms.  
**Persistence & Degradability:** Will rapidly biodegrade.  
**Bioaccumulative Potential:** None known.  
**Mobility in soil:** In normal use, emission of Volatile Organic Compounds (VOC's) to the air takes place, typically at a rate of 0 g/l.

## GHS SAFETY DATA SHEET

### SECTION 13 – DISPOSAL CONSIDERATION

Dispose of product or container in accordance with federal, state or local regulations.

### SECTION 14 – TRANSPORTATION INFORMATION

D.O.T. (U.S.): Not Regulated.

### SECTION 15 – REGULATORY INFORMATION

**Precautionary Label Information:** None.

**Risk Phrases:** None.

**Safety Phrases:** S2-Keep out of reach of children.

### SECTION 16 – OTHER INFORMATION

Information on this form is furnished solely for the purpose of compliance with the Occupational Safety and Health Act and shall not be used for any other purpose. Black Swan Mfg. Co. urges the customers receiving this Material Safety Data Sheet to study it carefully to become aware of the hazards, if any, of the product involved. In the interest of safety, you should notify your employees, agents and contractors of the information on the sheets.

**DATE: 01/01/2021**