



SECTION 1 - IDENTIFICATION

Manufacturer: Black Swan Mfg. Co. 4540 W. Thomas St. Chicago, IL 60651-3318... For any Transportation or Medical Chemical Emergencies call: INFOTRAC (800) 535-5053 OR (352) 323-3500... Product Name: Freeze-Guard Sub-Arctic Recommended Use: Prevents freezing in heating, cooling, and fresh water systems.

SECTION 2 - HAZARD(S) IDENTIFICATION

Labels: None Signal Word: None HMIS: HEALTH 1, FLAMMABILITY 1, REACTIVITY 0 NFPA: HEALTH HAZARD 1, FIRE HAZARD 1, REACTIVITY 0 GHS Classification: Health: Acute Toxicity: Not Established, Skin Irritation: Cat. 3, Eye Irritation: Cat. 2B, Skin Sensitization: NO Environmental: Acute Aquatic Toxicity: Not Established, Chronic Aquatic Toxicity: Not Established Physical: None Hazardous Statements: H316: Causes mild skin irritation, H320: Causes eye irritation Precautionary Statements: P102: Keep out of reach of children

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Table with 5 columns: Chemicals, CAS#, EINECS#, REACH Pre-registration Number, Approx %. Row 1: 1,2-PROPANEDIOL, 57-55-6, N/A, N/A, 90-95 %

SECTION 4 - FIRST-AID MEASURES

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. Skin: Wash with soap and water. Eyes: Immediately flush eyes with plenty of water. Ingestion: DO NOT INDUCE VOMITING. Do not give liquids.

SECTION 5 - FIRE-FIGHTING MEASURES

Fire Hazard: Heat from fire may generate flammable vapor. Combustion Products: None. Extinguishing Media: Carbon Dioxide, Dry Chemical, Foam, Water Fog. Unsuitable Extinguishing Media: None known. Protective Equipment: Wear a self-contained breathing apparatus & protective clothing. Special Fire Fighting Procedures: Do not use direct water stream as it will spread fire.

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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. Incompatible Materials: Strong oxidizing agents.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

<u>Hazardous Chemicals</u>	<u>ACGIH-TLV</u>	<u>ACGIH-STEL</u>	<u>OSHA-PEL</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

Appearance: Red	Flash Point: > 200°F	Vapor Pressure: Not Established
Odor: Odorless	Specific Gravity: 1.05	Flammability: Not Established
pH: 8.5-9.5	Solubility (H₂O): Not Established	Flammability Limits: LEL – 2%
Melting Point: Not Established	Evaporation Rate: Not Established	UEL – 13%
Freezing Point: Not Established	Vapor Density: Not Established	
Boiling Point: 370°F	VOC: 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>LC₅₀</u>
1,2-PROPANEDIOL	<u>LD₅₀</u> 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.

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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: 01/01/2019