



Nonfood Compounds
HT1



AUG 31, 2023

TECHNICAL DATA REPORT

See SDS for complete safety/technical data

VAPCO PART NO.

| Part Number | Size |
|-------------|-------------|
| APHT-1 | 1 gal 4/cs |
| APHT-5 | 5 gallons |
| APHT-55 | 55 gallons |
| APHT-275 | 275 gallons |

ARCTIC PROTECTION

HT-1 PROPYLENE GLYCOL

DESCRIPTION

ARCTIC PROTECTION is a Propylene Glycol based antifreeze that provides burst and freeze protection for chilled water, hydronic and other closed systems at temperatures as low as -100° F. Nontoxic, noncorrosive and safe for other closed systems where potable water exists. Arctic Protection Glycol is NSF registered as a HT-1 heat transfer fluid. Available in various percentages; ships at 95% unless otherwise requested. The fluid is manufactured with ingredients classified as Generally Regarded as Safe (GRAS) by the FDA.

FEATURES AND BENEFITS

- Non-Toxic
- Non-Corrosive
- Burst and Freeze Protection
- NSF registered as a HT-1 heat transfer fluid
- Ingredients classified as GRAS by FDA

SPECIFICATIONS

Form: Blue-Green Liquid | **Odor:** No Distinct Odor | **Boiling/Freezing Point:** 360°F (182°C)/ -76°F (-60°C) | **Flammability:** Not considered a flammable liquid by OSHA | **Flash Point:** > 200°F (93°C) | **Autoignition Temperature:** 700°F (371°C) | **Vapor Pressure (mm Hg):** 20°C:<0.1 mmhg | **Vapor Density (AIR=1):** 2.6 | **Evaporation Rate:** < 0.8 (Slow) | **Specific Gravity (H2O=1):** 1.05 | **pH:** 9.5-10.5 @ 25 °C | **Density:** 8.757 lb/gl @ 68°F (20°C) | **Solubility in Water:** 100% | **Volatility Including Water (%):** 98% | **Volatility Organic Compounds (VOC):** 0% | **Viscosity:** 45 mPa.s @ 20 °C(68°F)

LABEL INFORMATION

ARCTIC PROTECTION provides burst and freeze protection for chiller and glycoler systems at temperatures as low as -100° F depending on the PG% of Arctic Protection. It is a propylene glycol-based antifreeze that is non-toxic, non-corrosive and safe for other closed systems where potable water exists. It is a heat transfer solution for use on hydronic, heat pump and solar heating systems. Arctic Protection will not operate and leave deposits on heat transfer surfaces causing an inefficient system. Its lubricating qualities extend the component file.

DIRECTIONS: Determine the system volume in gallons. Using the chart, determine the volume % for either freeze protection or burst protection based on the desired temperature of protection. Find the PG% on the front label and then multiply by system volume. This will give the number of Arctic Protection gallons required. Volume % / PG% X system volume = amount of Arctic Protection required in gallons. The remaining volume would be filled with water.

DANGERS: Read and understand the product's label and Safety Data Sheet. **Keep out of reach of children.** Do not mix with other unknown corrosion inhibiting products.

| | |
|--------------|---|
| Health | 0 |
| Flammability | 1 |
| Reactivity | 0 |
| Personal | A |



First Aid Measures

Inhalation: Move to fresh air. If breathing is difficult, administer oxygen. If not breathing administer artificial respiration or at any sign of loss of consciousness **seek immediate medical attention.**

Skin contact: First aid is not normally required.

Eye Contact: Remove contact lenses. Flush with water for at least 15 minutes.

Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water. Do not induce vomiting unless directed by medical authority. **Seek medical attention.**

Precautions

Keep out of reach of children. Do not mix with other unknown corrosion inhibiting products. Wear safety glasses when using product. Provide adequate ventilation.

Storage

Keep out of reach of children. Store in a cool, dry area away from extremes of temperature. Keep container tightly sealed when not in use. Store locked up.

In Case of Fire

Use water or appropriate media for surrounding fire. Wear NIOSH approved Self Contained Breathing Apparatus with a full face piece operated in a positive pressure demand mode with full body protective clothing when fighting fires.

Disposal

Dispose in accordance with local, state and federal laws. Non-hazardous. This product is biodegradable.

NOTE:

GLYCOL IS NFS REGISTERED AS A HT-1 HEAT TRANSFER FLUID.