

GARMAN COMPANY
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For Customer Service call: (314) 567-5155
Emergency Telephone: (800) 255-3924

LEAK DETECTOR LOW-TEMP

HMIS: 1-0-0

NFPA: 1-0-0

Data Sheet: 112
 Prepared: 5/15/01
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This Material Safety Data Sheet complies with OSHA Hazard Communication Standard 29 CFR 1910.1200.

SECTION 1: COMPOSITION / INFORMATION ON INGREDIENTS

If present, IARC, NTP, and OSHA Carcinogens, are identified with an asterisk (*) in this Section.

<u>Ingredient(s)</u>	<u>Exposure Limits</u>	<u>Percent</u>	<u>Note</u>
Ethylene Glycol Mixture	Not established	15-30%	Ethylene glycol ACGIH ceiling limit -- 50 ppm
Water CAS#: 7732-18-5	Not established	>60%	

SECTION 2: HAZARDS IDENTIFICATION

Permissible Exposure Limits: Not established for this product. See Section 1 for Component PELs and TLVs.

Effects of Acute Overexposure:

Eyes: Exposure to liquid, vapor, or mist may cause eye irritation. Symptoms may include stinging, tearing, redness, and swelling.

Skin: Exposure may cause mild skin irritation. Symptoms may include redness, burning, and itching. Skin absorption is possible.

Breathing: Exposure to vapor may cause irritation of the respiratory tract. Symptoms of exposure can occur when air borne concentrations exceed the recommended exposure limits. Symptoms may include: irritation of the respiratory tract (nose, throat and lungs), coughing, and central nervous system (CNS) effects including dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness.

Swallowing: Exposure may be harmful or fatal. Symptoms of exposure include gastrointestinal irritation (nausea, vomiting, and diarrhea), CNS depression, liver and kidney damage, convulsions, coma and death. Three distinct stages of toxicity may occur: the initial stage characterized by drunken-like behavior and CNS effects; the second stage is cardiopulmonary failure; and the third stage is renal failure.

Primary Route(s) of Entry: Skin contact, skin absorption, eye contact, and inhalation.

Effects of Chronic Overexposure: Animal studies reveal that ethylene glycol is toxic. The organs generally affected at toxic level doses including the liver and kidney resulting in irreversible damage to these organ systems. The components in this material are not listed as a carcinogen by IARC, NTP, OSHA, or ACGIH.

Medical Conditions Aggravated by Exposure: Skin contact may aggravate existing dermatitis or other significant skin conditions. Inhalation may adversely affect existing respiratory conditions.

SECTION 3: FIRST AID MEASURES

Eyes: Immediately remove individual from exposure area and into fresh air. Flush eyes with water for at least 30 minutes while holding eyelids apart. Seek medical attention.

Skin: Remove contaminated clothing. Wash exposed area with large amounts of soap and water. If irritation persists or open sores develop, get medical attention.

Breathing: If affected, remove individual to fresh air. If breathing is difficult, administer oxygen (if you have been trained in its use). If breathing has stopped give artificial respiration. Keep person warm, quiet and get medical attention. If possible do not leave person unattended.

Swallowing: If conscious, induce vomiting by giving two glasses of water and syrup of ipecac or touching two fingers gently to the back of the throat. Keep victim's head below hips. Get immediate medical attention.

SECTION 4: FIRE FIGHTING MEASURES

Flash Point: >200°F by TCC (by component)

Explosive Limit: Lower 3.2%

Extinguishing Media: Alcohol foam, CO₂, dry chemical and water.

Hazardous Decomposition Products: May form toxic materials including, but not limited to the following: carbon monoxide and carbon dioxide.

Fire Fighting Procedures: Wear Self Contained Breathing Apparatus with a full face piece operated in a positive pressure demand mode with body protective clothing when fire fighting.

Special Fire and Explosion Hazards: This product contains a large amount of water and will not burn under normal fire conditions. Ethylene glycol (100%) involved in fires may burn at approximately 246°F which may cause frothing when foam or water are placed on a fire. Use water to cool fire-exposed containers.

SECTION 5: ACCIDENTAL RELEASE MEASURES

Small Spill: Absorb liquid with vermiculite, floor absorbent, or other absorbent material. Ventilate area well before re-entry. Appropriate personal protective equipment should be worn.

Large Spill: Only personnel trained in spill clean-up under 29 CFR 1910.120 should be involved with spill clean-up procedures. Prevent material from entering drains, sewers, streams, or other bodies of water. Prevent from spreading. If run-off occurs notify appropriate authorities as required. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product on absorbency materials. Transfer contaminated absorbent and other materials to container for neutralization. Neutralize spilled material. Follow Local, State, and Federal regulations for proper disposal.

SECTION 6: HANDLING AND STORAGE

Minimize temperature extremes. Keep containers closed when not in use. Do not transfer to unmarked containers. Loosen closure carefully.

SECTION 7: EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory Protection: Not required under normal conditions of use; however, if sprayed or used in confined areas, a NIOSH / MSHA approved respirator may be advised in absence of proper environmental control. OSHA regulations also permit other NIOSH / MSHA respirators under specified conditions -- see 29 CFR 1910.134 or your safety equipment supplier. Engineering and/or administrative controls should be implemented to reduce exposure.

Ventilation: Provide sufficient mechanical ventilation (general and/or local exhaust) to maintain exposure below the recommended exposure limits.

Protective Gloves: Wear chemical resistant gloves such as rubber. Contact your safety equipment supplier.

Eye Protection: Chemical splash goggles and a face shield to prevent splash on to the face, in compliance with OSHA regulations, are advised.

Other Protective Equipment: To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

SECTION 8: PHYSICAL AND CHEMICAL PROPERTIES

<u>Property</u>	<u>Measurement</u>	<u>Property</u>	<u>Measurement</u>
Boiling Point	212 °F @ 760 mmHg (component)	Specific Gravity	>1 @ 77°F
Vapor Pressure	17.5 mmHg @ 68°F (component)	Percent Volatiles	>60 %
Vapor Density	<1(Air = 1)	Evaporation Rate	Slower than
Ether			
Solubility In Water	Soluble	Appearance	Green liquid
pH	Not available		

SECTION 9: STABILITY AND REACTIVITY

Hazardous Polymerization: Can not occur.

Stability: Stable.

Incompatibility: Avoid contact with strong oxidizers. Do not mix with any products.

SECTION 10: TOXICOLOGICAL INFORMATION

No data available at this time.

SECTION 11: ECOLOGICAL INFORMATION

No data available at this time.

SECTION 12: DISPOSAL CONSIDERATIONS

Dispose of in accordance with all Local, State, and Federal Regulations. It is not anticipated that this product meets the criteria as a RCRA characteristic waste if discarded in its purchased form. However, testing will be required to determine waste characterization on any unused portion of the product.

SECTION 13: TRANSPORTATION INFORMATION

DOT Hazard Classification: None required.

SECTION 14: REGULATORY INFORMATION

SARA Title III, Section 313 chemicals: None

SARA Title III, Section 312 Health -- Acute (Yes) Chronic (Yes) Fire (No) Reactivity (No).

Proposition 65:

No

SECTION 15: OTHER INFORMATION

Containers used to transport and store this material may be hazardous when emptied. Residue (Vapor, Liquid, and/or Solid) may be present in the emptied container. All hazard precautionary measures should be followed.

The information accumulated and reflected in this Material Safety Data Sheet is believed to be accurate but is not warranted to be, whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.