MATERIAL SAFETY DATA SHEET

SECTION I NAME
Product: Glycerin

SECTION II INGREDIENTS OF MIXTURES
Principal Component(s) % TLV Units
Glycerin > 99.5% See Section V.

SECTION III PHYSICAL DATA
Melting Point (°F) 18°C (64°F) Specific Gravity (H₂O = 1) 1.2607 (25/25°C)
Boiling Point (°F) - 260°C (554°F) Percent Volatile by Volume (%) N/A
Vapor Pressure (mm Hg) < 0.01 mbar @ 20°C Evaporation Rate (Ether = 1) Greater than 1.
Vapor Density (Air=1) N/A
Solubility in Water Complete (100%).
Appearance & Odor Clear, water white liquid; no odor. Hygroscopic.

SECTION IV FIRE AND EXPLOSION HAZARD DATA
Flash Point (Method Used) 177°C (351°F) COC Flammable Limits in Air % by Volume N/A
Extinguisher Media Carbon dioxide; dry chemical; water spray; alcohol foam.

SPECIAL FIREFIGHTING PROCEDURES
In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus.

SECTION V HEALTH HAZARD DATA
Threshold Limited Value
As mist: TWA: 10 mg/m³ (ACGIH 2001).
Effects of Overexposure
INGESTION: Very low hazard. Estimating from data, the lethal dose for a 100 pound person may be a quart or more. EYE CONTACT: No significant irritation. SKIN: No significant irritation. Not absorbed through skin. INHALATION: Mists are irritating to respiratory tract. Target organs: None known.

Emergency and First Aid Procedures
INGESTION: Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person. EYES: Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention. SKIN: Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention. INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

SECTION VI REACTIVITY DATA
Stability Unstable Conditions to Avoid Absorbs moisture from air. Excessive temperature and heat.
Incompatibility (Materials to Avoid)
Hazardous Decomposition Products Acrolein fumes.
Hazardous Polymerization Conditions to Avoid Avoid a condition of excessive heat (in excess of 200°C) while exposed to atmospheric oxygen.

SECTION VII SPILL OR LEAK PROCEDURES
Steps to be taken in case material is released or spilled
Small spills: Flush to sewer with copious amounts of water. Large spills: Absorb in sand, vermiculite or other available material and place in a suitable container for disposal by incineration.

Waste Disposal Method
Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities only. Dispose of in an approved incinerator or contract with a licensed waste disposal service.

SECTION VIII SPECIAL PROTECTION INFORMATION
Respiration Protection (Specify Type) None needed in normal laboratory handling at room temperature and a liquid state.
Ventilation Local Exhaust None needed. Special No.
Mechanical (General) None needed. Other No.
Protective Gloves None needed. Eye Protection Chemical safety glasses.
Other Protective Equipment Smock, apron, eye wash station, goggles, fire extinguisher.

SECTION IX SPECIAL PRECAUTIONS
Precautions to be Taken in Handling & Storing
Store in a cool, dry place away from strong oxidizers and fire hazards. Wash thoroughly after handling.
Other Precautions

UNUSUAL FIRE AND EXPLOSION HAZARDS
During burning poisonous Acrolein may be formed. Can react vigorously with oxidizing materials. Contact with strong oxidizing agents such as chromium trioxide, potassium chlorate, or potassium permanganate may produce explosion.

D.O.T. NON-REGULATED.
Approved by U.S. Department of Labor "essentially similar" to form OSHA-20

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