SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS REVISION #: 001

PRODUCT NAME: Crude Glycerin, Recovered

PRODUCT CLASS: Polyol

DISTRIBUTED BY: Freedom Industries, Inc.
1015 Barlow Drive
Charleston, WV 25311

PHONE NUMBERS: Business - (304) 720-8065
ChemTrec - (800) 424-9300

SECTION 2 - HAZARDS IDENTIFICATION

********** **EMERGENCY OVERVIEW** **********

Caution! Product is an amber liquid with little or no odor. The material may cause mild skin and eye irritation. Avoid contact with skin, eyes and clothing. Wear protective goggles and gloves when handling this product. Wash thoroughly after handling.

****

This product is considered hazardous under the OSHA HazCom Standard (29 CFR 1910.1200)

POTENTIAL HEALTH EFFECTS

LIKELY ROUTES OF EXPOSURE:
Eye and skin contact

EYES:
Can cause mild irritation.

SKIN:
Prolonged or repeated contact may cause mild irritation. Persons with pre-existing skin conditions are particularly susceptible.

INGESTION (swallowing):
May cause mild irritation, nausea, vomiting and diarrhea.

Section 2 continued on next page

SECTION 2 - HAZARDS IDENTIFICATION (continued)

INHALATION (breathing):
Spray or mist can cause irritation to the nose, throat and lungs.

CHRONIC EFFECTS/CARCINOGENICITY:
This product (or component) is not listed in IARC Monographs, the NTP Eleventh Report on Carcinogens or the ACGIH TLVs as a carcinogen or potential carcinogen. OSHA does not regulate it as a carcinogen.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Component	%	CAS No.
Glycerin	80-95	56-81-5
Water	5-20	7732-18-5

SECTION 4 - FIRST AID MEASURES

EYE CONTACT:
Flush with large amounts of water for at least 15 minutes, lifting upper and lower lids occasionally. Get medical attention.

SKIN CONTACT:
Wash exposed area with soap and water. Remove contaminated clothing and launder before reuse.

INGESTION (swallowing):
If irritation or nausea develops, contact a physician.

INHALATION (breathing):
If affected, move to fresh air.

SECTION 5 - FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES:

This material meets the NFPA definition of a Class IIIB – combustible liquid. Although difficult to ignite, this material, if involved in a fire or heated sufficiently, will burn.

EXTINGUISHING MEDIA:

Use water fog, alcohol foam, dry chemical or carbon dioxide.

PROTECTION OF FIREFIGHTERS:

Keep personnel removed from and upwind. Wear full protective clothing and self-contained breathing apparatus with full face-piece. Cool containers with water. Water or foam may cause frothing which can be violent, especially if sprayed into containers of hot burning liquid. Combustion products include carbon monoxide and carbon dioxide.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Persons not wearing protective equipment should be excluded from the area of the spill until clean up has been completed. Dike area of spill to prevent spreading and pump liquid to salvage tank. Absorb remaining liquid on vermiculite, floor absorbent or other absorbent material and shovel into containers.

SECTION 7 - HANDLING AND STORAGE

HANDLING:

Avoid contact with skin, eyes and clothing. Wash thoroughly after handling.

STORAGE:

Keep in closed or covered containers when not in use. Store in cool dry place with adequate ventilation.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES:

Glycerin (CAS# 56-81-5)	OSHA PEL - 15 mg/M^3 (mist) OSHA PEL - 5 mg/M^3 (respirable fraction) ACGIH TLV - 10 mg/M^3 (mist)

ENGINEERING CONTROLS:

Provide sufficient ventilation to maintain exposure below established exposure limits.

EYE / FACE PROTECTION:

Chemical splash goggles in compliance with OSHA regulations are advised when handling any chemical substance.

SKIN PROTECTION:

Wear protective gloves such as Neoprene or Buna-N.

RESPIRATORY PROTECTION:

Not required under normal conditions of use; however, a NIOSH/MSHA approved respirator with organic vapor cartridge is recommended where there is insufficient ventilation to maintain exposure below established exposure limits.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Amber liquid @ 68° F (20° C)
Odor: Little or no odor
Specific Gravity: 1.2-1.3 @ 77° F (25° C)
Evaporation Rate: Slower
(Ethyl Ether = 1)
Solubility in Water: 100%
Vapor Pressure: 17.5 @ 68° F (20° C)
(water)

Initial Boiling Point: >212° F (100° C)
Volatile %: 5-20
pH: Unavailable
Flash Point: >212° F (100° C) PMCC
Upper Explosion Limit: Unavailable
Lower Explosion Limit: Unavailable
Autoignition Temperature: Unavailable

SECTION 10 - STABILITY AND REACTIVITY

STABILITY (conditions to avoid):
Stable under normal conditions of 70° F (21° C) and 14.7 psig (760 mm Hg)

INCOMPATIBILITIES (materials to avoid):
Avoid contact with strong oxidizing agents.

DECOMPOSITION:
Carbon dioxide, carbon monoxide, acrid smoke and fumes

HAZARDOUS POLYMERIZATION:
Not known to occur

SECTION 11 - TOXICOLOGICAL INFORMATION

IRRITATION DATA
Skin, rabbit: Not irritating
Eye, rabbit: Not irritating

SECTION 12 - ECOLOGICAL INFORMATION

ECOTOXICITY (based on literature information for glycerin)
24-hr LC_{50} – *Carassius auratus* (Goldfish): >5,000 mg/L
48-hr LC_0 – *leuciscus idus* (Golden Orfe): >250 mg/L
96-hr LC_{100} - *Oncorhynchus mykiss* (Rainbow trout): 51,000-57,000 mg/L
24-hr EC_{50} - *Daphnia Magna*: >10,000 mg/L
24-hr EC_0 - *Daphnia Magna*: >500 mg/L

Microorganisms
48-hr NOEC – *Chlimonas paramaecium*: >10,000 mg/L
72-hr NOEC – *Entosiphon sulcatum*: 3200 mg/L
16-hr NOEC – *Pseudomonas putida*: >10,000 mg/L
20-hr NOEC – *Uronema parduzci*: >10,000 mg/L

Algae
8-day NOEC – *Microcystis aeruginosa*: 2900 mg/L
8-day EC_0 – *Scenedesmus quadricauda*: >10,000 mg/L

Section 12 continued on next page

SECTION 12 - ECOLOGICAL INFORMATION (continued)

MOBILITY

Low potential for sorption to soil. 1,2,3-Propanetriol will partition primarily to water.

PERSISTANCE & DEGRADABILITY

Readily biodegradable (OECD 301)

BIOACCUMULATIVE POTENTIAL

BCF: 3.162 (calculated)

SECTION 13 - DISPOSAL CONSIDERATIONS

Incineration is the recommended disposal method for all chemical wastes. Material collected on absorbent material may be deposited in a landfill in accordance with all applicable local, state and federal regulations.

This product, if disposed of, is not considered a hazardous waste under current RCRA definitions.

SECTION 14 - TRANSPORT INFORMATION

Not regulated under current U.S DOT, TDG (Canadian), ICAO (air) or IMO (water) transport regulations.

SECTION 15 - REGULATORY INFORMATION

TSCA INFORMATION:

All components in this product are in compliance with TSCA Inventory requirements.

Section 15 continued on next page

SECTION 15 - REGULATORY INFORMATION (continued)

SARA 313 INFORMATION:

SARA requires submission of annual reports of release of toxic chemicals that appear in 40 CFR 372. This information must be included in all MSDS that are copied and distributed for this material.

Components present in this product at a level that could require reporting under the statute are: None

SECTION 16 - OTHER INFORMATION

HAZARD RATING:

HEALTH	1	0 - LEAST
FIRE	1	1 - SLIGHT
REACTIVITY	0	2 - MODERATE
OTHER	-	3 - HIGH
		4 - EXTREME

HAZARD RATING METHOD: NFPA

REASON FOR REVISION:

Reviewed and updated.

The product information contained herein is believed to be accurate as of the date of the Material Safety Data Sheet, and is provided without warranty, expressed or implied, as to the results of use of this information or the product to which it relates. Recipient assumes all responsibility for the use of this information and the use (alone or in combination with any other product), storage or disposal of the product, including any resultant personal injury or property damage.

END OF REPORT