



Material Safety Data Sheet – Crude Glycerin

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DRAFT

1. Product Identification

Common Name: Crude Glycerin **Formula:** HO-CH₂-CH(OH)-CH₂-OH
Chemical Name: Glycerol; 1,2,3-Propanetriol; Glyceritol; Glycic Alcohol; 1,2,3-Trihydroxypropane; 1,2,3-Propanetriol **Chemical Family:** CAS No: 56-81-5
Molecular Weight: 92.09 g/Mol

2. Ingredients and Hazardous Classification

Hazardous Components	Percent	CAS No.	OSHA PEL	ACGIH PEL
Glycerin	75/85%	56-81-5	15 mg/m ³ (mist)	10 mg/m ³ (mist)
Water	<1%	7732-18-5	Not Established	Not Established
Ash	<5%		N/A	N/A
Methanol	<1%	67-56-1	TWA 200ppm	TWA 200ppm
MONG	<10%			

*MONG (Material Organic, Non-glycerol) typically animal fat, vegetable oil or biodiesel (methyl-ester)

3. Physical/Chemical Characteristics

Boiling Point: 300°F
Vapor Pressure: <1 mm Hg
Vapor Density (Air = 1): 3.17
Solubility in Water: Miscible
Appearance and Odor: Clear, "Tea" Colored Liquid with moderately strong odor.
This product shall only be burned in AENV approved Energy Recovery Facilities

Specific Gravity (H₂O = 1): 1.23
Melting Point: 20 deg C
Energy Content (btu): 8,750

4. Fire and Explosion Hazard Data

Flash Point (Method Used): 49 deg Celsius
Flammable Limits: Unknown
HMIS Rating HEALTH: 1 **FIRE:** 1 **REACTIVITY:** 0
Extinguishing Media: Use water, carbon dioxide, foam or dry chemical
Special Fire Fighting Procedures: Wear fire fighting protective equipment and a full face self-contained breathing apparatus. Evacuate area, cool fire exposed containers with water spray.
Unusual Fire and Explosion Hazards: Combustion or heat may produce hazardous or toxic decomposition products and vapors.

5. Reactivity Data

Reactivity: Stable
Conditions to Avoid: Excessive heat, open flame
Incompatibility (Materials to Avoid): Strong Oxidizing agents
Hazardous Decomposition or By-products: Carbon monoxide and Carbon dioxide
Hazardous Polymerization: Will Not Occur



6. Health Hazard Data

LD50 glycerin: LD50 (oral rat) is 12,600 mg/kg

Route of Entry - Inhalation: No

Route of Entry - Skin: No

Route of Entry - Ingestion: No

Health Hazard Acute & Chronic: Target organs; Eye, Skin, Respiratory & GI Tracts. **Eye/Skin:** May cause irritation. **Inhalation:** May cause respiratory tract irritation. **Ingestion:** Mildly Toxic. May cause gastrointestinal discomfort. Chronic - Unknown.

Carcinogenicity: NTP: No

IARC: No

OSHA: No

Signs/Symptoms of Overexposure: Irritation, Nausea, Discomfort

Emergency First Aid: Get medical help if symptoms persist.

Inhaled: Remove to fresh air. Provide CPR/Oxygen if needed.

Eyes: Flush with water.

Ingestion: DO NOT INDUCE VOMITING. If conscious, drink plenty of water. Seek medical attention at once.

7. Ecological Information - Aquatic Toxicity

Glycerin eco-toxicity - Freshwater Fish Species Data

96 Hr LC50 rainbow trout: 50 mg/L; 96 Hr LC50 goldfish: >5000 mg/L – Not Acutely toxic

Methanol eco-toxicity - Freshwater Fish Species Data

96 Hr LC50 rainbow trout: >20,100 mg/L – Not acutely toxic

8. Precautions for Safe Handling and Use

Steps to be taken in case material is released or spilled: Wear protective equipment. Ventilate area. Remove open flames. Absorb with sand, vermiculite or similar material. Sweep up and place in an appropriate container. Hold for disposal. Wash contaminated spill area with water.

Waste Disposal Method: Recycle or dispose in approved facility. Observe all Local, Provincial and Federal Regulations.

Precautions To Be Taken in Handling and Storing: Store in a cool, ventilated place away from incompatible materials. Keep containers tightly closed.

Other Precautions: Wash thoroughly with soap and water after handling and before eating, drinking, or smoking.

This product shall not be used in space heaters due to the high flash point.

1. Control Measures

Respiratory Protection: None normally required

Ventilation: Mechanical

Protective Gloves: Rubber, Neoprene, PVC recommended

Eye Protection: Chemical splash goggles

Other Protective Clothing or Equipment: Lab coat

Work/Hygienic Practices: Observe good industrial Hygiene Practices and recommended procedures

2. Environmental

Minimum Combustion Temperature:

3. Transportation

DOT Code: N/A

DOT Shipping Name: Glycerin

Other Regulatory: Listed in TSCA inventory



**Western
Biodiesel
Inc.**

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