Glycerol



Section 1 Product Description

Product Name: Glycerol

Recommended Use: Science education applications
Synonyms: Glycerin, Glycerine, Trihydroxypropane
Carolina Biological Supply Company
2700 York Road, Burlington, NC 27215

1-800-227-1150

Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)

Chemtrec: 800-424-9300 (Transportation Spill Response 24 hours)

Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

WARNING

Causes eye irritation.

GHS Classification:

Serious Eye Damage/Eye Irritation Category 2B, Skin Corrosion/Irritation Category 3

Section 3 Composition / Information on Ingredients

 Chemical Name
 CAS #
 %

 Glycerol
 56-81-5
 100

Section 4 First Aid Measures

Emergency and First Aid Procedures

Inhalation: In case of accident by inhalation: remove casualty to fresh air and keep at rest.

Eyes: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Section 5 Firefighting Procedures

Extinguishing Media: Use dry chemical, CO2 or appropriate foam.

Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained

breathing apparatus.

Fire and/or Explosion Hazards: Fire or excessive heat may produce hazardous decomposition products.

Hazardous Combustion Products: Carbon dioxide, Carbon monoxide

Section 6 Spill or Leak Procedures

Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

Glycerol Page 1 of 4

Section 7 Handling and Storage

Wash thoroughly after handling. Keep container tightly closed in a cool, well-ventilated place. Keep away from ... Handling:

(incompatible materials to be indicated by the manufacturer).

Storage: Keep container tightly closed in a cool, well-ventilated place.

Storage Code: Green - general chemical storage

Section 8 Protection Information

> **ACGIH OSHA PEL**

Chemical Name (TWA) (STEL) (TWA) (STEL) Glycerol 15 mg/m3 TWA 10 mg/m3 N/A N/A

> (mist, total particulate); 5 mg/m3 TWA (mist, respirable fraction)

Control Parameters

Engineering Measures: No exposure limits exist for the constituents of this product. General room ventilation

might be required to maintain operator comfort under normal conditions of use.

Personal Protective Equipment (PPE): Lab coat, apron, eye wash, safety shower.

Respiratory Protection: No respiratory protection required under normal conditions of use.

Eye Protection: Wear chemical splash goggles when handling this product. Have an eye wash station

available.

Skin Protection: Avoid skin contact by wearing chemically resistant gloves, an apron and other protective

equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving

work.

Nitrile Gloves:

Section 9 Physical Data

Formula: C3H5(OH)3 Molecular Weight: 92.09

Appearance: Colorless, Oily Liquid

Odor: No data available

Odor Threshold: No data available

pH: 5.5 - 8

Melting Point: 18 C **Boiling Point: 290 C**

Flash Point: No data available 179 C

Flammable Limits in Air: N/A

Vapor Pressure: 0.0025 mmHg at 50 °C Evaporation Rate (BuAc=1): N/A Vapor Density (Air=1): 3.17 Specific Gravity: 1.262 at 20 °C

Solubility in Water: Soluble Log Pow (calculated): -1.76

Autoignition Temperature: No data available 392.78 C **Decomposition Temperature:** No data available

Viscosity: No data available Percent Volatile by Volume: 0

Section 10 Reactivity Data

Reactivity: No data available

Chemical Stability: Stable under normal conditions.

Conditions to Avoid: None known.

Incompatible Materials: Strong oxidizing agents, Caustics (bases)

Hazardous Polymerization: Will not occur

Section 11 Toxicitv Data

Inhalation, ingestion, eye or skin contact. **Routes of Entry**

Symptoms (Acute): Eye disorders, Liver disorders, Impaired Kidney Function

Delayed Effects: No data available

Glycerol Page 2 of 4

Acute Toxicity:

Chemical NameCAS NumberOral LD50Dermal LD50Inhalation LC50Glycerol56-81-5Oral LD50 MouseNot determinedNot determined

4090 mg/kg

Carcinogenicity:

Chemical NameCAS NumberIARCNTPOSHANo data available56-81-5Not listedNot listedNot listed

Chronic Effects:

Mutagenicity: No evidence of a mutagenic effect.

Teratogenicity: No evidence of a teratogenic effect (birth defect).

Sensitization: No evidence of a sensitization effect.

Reproductive: No evidence of negative reproductive effects.

Target Organ Effects:

Acute: See Section 2

Chronic: Not listed as a carcinogen by IARC, NTP or OSHA., Mutation data cited., Reproductive data cited.

Section 12 Ecological Data

Overview: This material is not expected to be harmful to the ecology.

Mobility:No dataPersistence:No dataBioaccumulation:No dataDegradability:No dataOther Adverse Effects:No data

Chemical Name CAS Number Eco Toxicity

Glycerol 56-81-5 24 HR EC50 DAPHNIA MAGNA > 500 MG/L

Section 13 Disposal Information

Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always

contact a permitted waste disposer (TSD) to assure compliance.

Waste Disposal Code(s): Not Determined

Section 14 Transport Information

Ground - DOT Proper Shipping Name: Air - IATA Proper Shipping Name:

Not dangerous goods Not dangerous goods

Section 15 Regulatory Information

TSCA Status: All components in this product are on the TSCA Inventory.

Chemical Name CAS § 313 Name § 304 RQ CERCLA RQ § 302 TPQ CAA 112(2)

Number TQ

No data available 56-81-5 No No No No No No

Section 16 Additional Information

Revised: 09/09/2015 Replaces: 09/05/2014 Printed: 10-29-2015

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

Glossary

Glycerol Page 3 of 4

ACGIH	American Conference of Governmental	NTP	National Toxicology Program
	Industrial Hygienists	OSHA	Occupational Safety and Health Administration
CAS	Chemical Abstract Service Number	PEL	Permissible Exposure Limit
CERCLA	Comprehensive Environmental Response,	ppm	Parts per million
	Compensation, and Liability Act	RCRA	Resource Conservation and Recovery Act
DOT	U.S. Department of Transportation	SARA	Superfund Amendments and Reauthorization Act
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
N/A	Not Available	TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health

Glycerol Page 4 of 4