

Safety Data Sheet

Glycerol

CAROLINA[®]
www.carolina.com

Section 1 Product Description

Product Name: Glycerol

Recommended Use: Science education applications

Synonyms: Glycerin, Glycerine, Trihydroxypropane

Distributor: 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;

GHS Classification:

Other Safety Precautions: Not a dangerous substance according to GHS classification criteria.

Section 3 Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
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: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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

Methods for Clean-up 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.

Section 7 Handling and Storage

Handling: Keep container tightly closed in a cool, well-ventilated place. Keep away from ... (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

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Section 8

Protection Information

<u>Chemical Name</u>	<u>ACGIH</u>	<u>OSHA PEL</u>
Glycerol	<u>(TWA)</u> 10 mg/m3 <u>(STEL)</u> N/A	<u>(TWA)</u> 15 mg/m3 TWA (mist, total particulate); 5 mg/m3 TWA (mist, respirable fraction) <u>(STEL)</u> N/A

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.

Gloves:

Nitrile

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

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Section 11

Toxicity Data

Routes of Entry: Inhalation, ingestion, eye or skin contact.
Symptoms (Acute): , Eye disorders, Liver disorders, Impaired Kidney Function
Delayed Effects: No data available

Acute Toxicity:

Chemical Name	CAS Number	Oral LD50	Dermal LD50	Inhalation LC50
Glycerol	56-81-5	Oral LD50 Mouse 4090 mg/kg	Not determined	Not determined

Carcinogenicity:

Chemical Name	CAS Number	IARC	NTP	OSHA
No data available				

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 data
Persistence: No data
Bioaccumulation: No data
Degradability: No data
Other Adverse Effects: No data

Chemical Name	CAS Number	Eco Toxicity
Glycerol	56-81-5	96 HR LC50 ONCORHYNCHUS MYKISS 51 - 57 ML/L [STATIC] 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

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Section 15

Regulatory Information

TSCA Status:

All components in this product are on the TSCA Inventory.

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

No data available

California Prop 65:

No California Proposition 65 ingredients

Section 16

Additional Information

Revised: 02/26/2025**Replaces: 11/27/2024****Printed: 02-28-2025**

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

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