Safety data sheet

ChemiPURE Glycerol

Product name ChemiPURE Glycerol	Catalog no. G1L, G500
Synonyms Glycerin; Glycerine; 1,2,3-Propanetriol	SDS revision -
CAS no. 56-81-5	Format version / date 3 / 25 October 2026

01 PRODUCT AND COMPANY IDENTIFICATION

Product identifier	ChemiPURE Glycerol
Product code	G1L (1 L); G500 (500 ml)
CAS number	56-81-5
EC number	200-289-5
Recommended use	For research use only. Laboratory reagent used in enzyme and protein stabilization, cryopreservation preparations and electrophoresis loading buffers.
Supplier	EcoTech Biotechnology
Website	www.ecotechbiotech.com
Address	Universite Mah. İpekyolu Cad. Ata Teknokent Sitesi B Blok No: Z10, Yakutiye, Erzurum, Türkiye
Telephone	0090 544 327 34 97
SDS contact	info@ecotechbiotech.com
Emergency telephone	0090 544 327 34 97
Available	Monday-Saturday/08:00-20:00/GMT+3
Languages	Turkish/English
Outside these hours	Contact: info@ecotechbiotech.com

02 HAZARDS IDENTIFICATION

Classification	Not classified as hazardous under Regulation (EC) No. 1272/2008 (CLP).
Label elements	No hazardous labelling required.
Symbols / pictograms	None
Signal word	None
Hazard statements	None
Precautionary statements - Prevention	Follow good laboratory hygiene. Avoid generating aerosols or mist; use gloves and safety eyewear. Wash hands after handling.
Precautionary statements - Response	Rinse affected skin or eyes thoroughly with water. If irritation persists or symptoms develop, seek medical advice.
Other hazards	Spills create slippery surfaces. Mist may irritate eyes or airways. Combustible when strongly heated; keep away from strong oxidizing agents.

Composition & response

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03 COMPOSITION / INFORMATION ON INGREDIENTS

Product name	ChemiPURE Glycerol
Synonyms	Glycerol; Glycerin; Glycerine; 1,2,3-Propanetriol; Propane-1,2,3-triol
Concentration	Glycerol purity: ≥99% (as supplied).
Formula	C3H8O3
Molecular weight	92.09 g/mol
Mixture statement	Substance: glycerol (CAS 56-81-5; EC 200-289-5), ≥99%. Identity and concentrations of any residual impurities: No data available.

04 FIRST AID MEASURES

4.1 Description of first aid measures

Eye contact	Immediately rinse with water, also beneath eyelids, for at least 15 minutes. Remove contact lenses if easy to do. Seek advice if irritation persists.
Skin contact	Wash with plenty of water and soap. Remove contaminated clothing. Seek medical advice if symptoms occur.
Inhalation	Move to fresh air if mist or vapour is inhaled. Seek medical advice if discomfort or irritation persists.
Ingestion	Rinse mouth with water. Do not induce vomiting. Seek medical advice if feeling unwell.
Self-protection of first aider	Use suitable laboratory gloves and protective eyewear. Avoid breathing mist.
Most important symptoms / effects	No significant effects expected during normal handling; direct eye contact or aerosol exposure may cause temporary irritation.
Notes to physicians	Treat symptomatically.

05 FIREFIGHTING MEASURES

Suitable extinguishing media	Water spray, alcohol-resistant foam, dry chemical powder or carbon dioxide.
Unsuitable extinguishing media	Avoid a high-pressure water jet that could spread the fire.
Special hazards arising from the substance or mixture	Combustible liquid when strongly heated. Combustion may produce carbon oxides; severe overheating may produce irritating acrolein vapour.
Explosion data	Not classified as explosive. No product-specific explosion limits established.
Advice for firefighters	Wear self-contained breathing apparatus and full protective clothing. Cool nearby containers using water spray.

Safe use & protection

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06 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Use protective gloves, safety glasses and suitable footwear. Ensure ventilation. Wet glycerol spills make floors extremely slippery.
Environmental precautions	Avoid discharge of large quantities to drains, surface water and soil.
Methods and materials for containment and cleaning up	Contain the liquid. Absorb with sand, vermiculite or inert absorbent; collect into closed, labelled containers. Clean affected surfaces thoroughly.
Reference to other sections	See Sections 8 and 13 for personal protection and waste disposal.

07 HANDLING AND STORAGE

Precautions for safe handling	Use adequate ventilation and good laboratory hygiene. Avoid splashes and mist generation; do not eat, drink or smoke during handling.
Conditions for safe storage	Store at 15-25 °C in a dry location. Keep the container tightly closed to minimize moisture uptake. Keep away from strong oxidizing agents and excessive heat.
Container labeling	Store in original or correctly labelled, tightly sealed containers.

08 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Workplace exposure limits may apply to airborne glycerol mist. UK WEL (8 h TWA): 10 mg/m3 (mist). US OSHA PEL: 15 mg/m3 (total mist) and 5 mg/m3 (respirable mist). Follow applicable local limits.

8.2 Exposure controls

Engineering measures	General laboratory ventilation is usually sufficient. Provide an eyewash station; use local exhaust if glycerol mist is generated.
Hygiene measures	Wash hands after handling. Remove contaminated clothing; do not eat, drink or smoke in work areas.
Eye / face protection	Safety glasses with side protection or goggles where splashing is possible.
Hand protection	Use appropriate protective gloves for repeated or prolonged contact.
Skin and body protection	Wear a laboratory coat and closed footwear; promptly clean spills to prevent slips.
Respiratory protection	Usually unnecessary in normal use. If mist is generated, use suitable ventilation and protection according to the exposure assessment.

Material properties

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09 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Clear, colorless, viscous liquid
Odor	Odorless
Odor threshold	No data available
pH	Approx. 5 (100 g/L aqueous solution at 20 °C)
Melting point / freezing point	Approx. 18-20 °C (pure substance; supercooling possible)
Initial boiling point and boiling range	Approx. 290 °C (with decomposition)
Flash point	Approx. 160 °C
Evaporation rate	No data available
Flammability (solid, gas)	Not applicable to a liquid; combustible on strong heating
Upper / lower flammability or explosive limits	No data available
Vapor pressure	<0.001 hPa at 20 °C
Vapor density	Approx. 3.17 (air = 1)
Relative density	Approx. 1.26 g/cm3 at 20 °C
Solubility(ies)	Completely miscible with water; hygroscopic
Partition coefficient: n-octanol / water	log Pow approx. -1.75
Auto-ignition temperature	Approx. 400 °C
Decomposition temperature	Above approx. 290 °C
Viscosity	Approx. 1,069 mPa.s at 20 °C
Explosive properties	Not classified as explosive
Oxidizing properties	Not classified as oxidizing

10 STABILITY AND REACTIVITY

Reactivity	Not reactive under normal storage and handling conditions; may react vigorously with strong oxidizers.
Chemical stability	Stable at 15-25 °C in tightly closed containers.
Possibility of hazardous reactions	Reactions with strong oxidizing agents may be vigorous; none expected under normal laboratory use.
Conditions to avoid	Excessive heat, ignition sources, contamination and unnecessary moisture exposure.
Incompatible materials	Strong oxidizers, including chlorates, permanganates and chromium trioxide.
Hazardous decomposition products	On excessive heating or combustion: carbon oxides and potentially irritating acrolein.

Health & environment

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11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity	Oral LD50 (rat): approx. 12,600 mg/kg (glycerol). Not classified for acute toxicity under CLP.
Skin corrosion / irritation	Not classified for skin corrosion or irritation; repeated contact may dry or mildly irritate skin.
Serious eye damage / eye irritation	Not classified; splashes may produce transient mechanical irritation.
Carcinogenicity	No evidence supporting a classification as carcinogenic based on available information.
Reproductive toxicity	Classification criteria not met based on available data.
STOT - SE	Classification criteria not met based on available data.
STOT - RE	Classification criteria not met based on available data.
Aspiration hazard	Classification criteria not met based on available data.

11.2 Potential health effects

Ingestion: Large quantities may cause gastrointestinal discomfort.
Inhalation: Aerosols or mist may irritate the respiratory tract.
Skin: Repeated exposure may cause mild irritation or dryness.
Eyes: Direct splashes may cause transient irritation.

11.3 Additional information

No additional toxicological data available for this product.

12 ECOLOGICAL INFORMATION

Ecotoxicity	Not classified as hazardous to the aquatic environment; avoid uncontrolled large releases.
Persistence and degradability	Readily biodegradable.
Bioaccumulative potential	Low; bioaccumulation is unlikely (log Pow approx. -1.75).
Mobility in soil	Expected to be mobile in soil due to high water solubility.
Results of PBT and vPvB assessment	Not considered PBT or vPvB.

13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product	Collect unused product and contaminated absorbents for disposal according to applicable local and national waste requirements. Avoid discharging large quantities to drains.
Contaminated packaging	Empty containers completely. Dispose of according to local requirements; do not reuse for unrelated materials.

Transport & reference

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14 TRANSPORT INFORMATION

Mode	UN no.	UN proper shipping name	Hazard class	Packing group	Environmental hazards
ADR/RID	-	Not regulated	-	-	No
IMDG	-	Not regulated	-	-	No
IATA	-	Not regulated	-	-	No

15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation	Regulation (EC) No. 1907/2006 (REACH) and Regulation (EC) No. 1272/2008 (CLP). Glycerol (CAS 56-81-5) is not classified as hazardous under CLP.
Environmental hazards	Not classified as environmentally hazardous.
Chemical safety assessment	No product-specific chemical safety assessment available.

16 OTHER INFORMATION

Key to abbreviations and acronyms

STOT-SE	Specific Target Organ Toxicity - Single Exposure
STOT-RE	Specific Target Organ Toxicity - Repeated Exposure
PBT	Persistent Bioaccumulative and Toxic
vPvB	very Persistent very Bioaccumulative and toxic
ADR	European Agreement concerning the international carriage of Dangerous goods by Road
CAS	Chemical Abstracts Service
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime code for Dangerous Goods
REACH	Registration, Evaluation, Authorization and restriction of Chemicals
RID	Regulations concerning the International transport of Dangerous goods by rail