



SAFETY DATA SHEET (SDS / MSDS)

Glycerin USP Grade

Product Name: Glycerin USP Grade

Chemical Name: Glycerol

CAS Number: 56-81-5

EC Number: 200-289-5

Molecular Formula: $C_3H_8O_3$

Molecular Weight: 92.09 g/mol

Product Form: Clear, colorless, viscous liquid

1. Identification of the Substance and Company

Product Identifier

Product Name: Glycerin USP Grade

Synonyms: Glycerol, 1,2,3-Propanetriol, Glycerine

Recommended Uses

Glycerin USP Grade is used as a raw material and formulation ingredient in pharmaceutical, cosmetic, personal-care, healthcare, and other industrial applications.

Supplier Information

Company Name: [Basekim]



2. Hazard Identification

GHS Classification

Based on available information, glycerin is generally not classified as hazardous under many GHS classification systems when handled under normal conditions.

Signal Word: Not applicable

Hazard Statements:

No significant hazards are expected under normal handling and storage conditions.

Precautionary Statements

- Avoid unnecessary contact with eyes.
- Avoid prolonged or repeated contact with skin.
- Do not ingest the product.
- Keep the container tightly closed when not in use.
- Store in a suitable, clean, and dry area.
- Follow good industrial hygiene practices.

Other Hazards

Glycerin is hygroscopic and can absorb moisture from the surrounding environment. Spilled material may create slippery surfaces.

3. Composition / Information on Ingredients

Component	CAS Number	Concentration
Glycerol	56-81-5	According to product specification
Water and permitted trace components	—	According to specification



Chemical Name: Glycerol

Molecular Formula: $C_3H_8O_3$

Molecular Weight: 92.09 g/mol

For exact composition and purity, refer to the product's current Certificate of Analysis (COA).

4. First-Aid Measures

Inhalation

Move the affected person to fresh air. If discomfort or unusual symptoms occur, seek medical attention.

Skin Contact

Wash the affected area with plenty of water. Remove contaminated clothing if necessary.

Eye Contact

Rinse cautiously with clean water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

Ingestion

Rinse the mouth with water. Do not induce vomiting unless directed by medical personnel. Seek medical advice if symptoms develop.

Most Important Symptoms

Direct contact may cause temporary irritation or discomfort, particularly in sensitive individuals.

Notes to Physician

Treat symptomatically.



5. Fire-Fighting Measures

Suitable Extinguishing Media

Use extinguishing media appropriate for the surrounding fire, such as:

- Water spray
- Foam
- Dry chemical
- Carbon dioxide (CO₂)

Unsuitable Extinguishing Media

No specific restriction is known. Select extinguishing media based on surrounding materials and fire conditions.

Specific Hazards

Combustion may produce carbon oxides and other decomposition products.

Protective Equipment

Firefighters should use appropriate protective equipment and self-contained breathing apparatus where required.

6. Accidental Release Measures

Personal Precautions

Avoid unnecessary contact with the spilled material. Wear suitable personal protective equipment. Be aware that spilled glycerin can make surfaces slippery.



Environmental Precautions

Prevent large quantities from entering drains, waterways, or the environment.

Methods for Containment and Cleaning

Contain the spill and collect the material using suitable absorbent material. Transfer recovered material into an appropriate container for disposal or recovery.

Wash the affected area with water after collecting the material.

7. Handling and Storage

Handling

- Handle according to good industrial hygiene practices.
- Avoid unnecessary eye and skin contact.
- Keep containers closed when not in use.
- Use suitable equipment for transferring the product.
- Clean spills promptly because glycerin can create slippery surfaces.

Storage

Store in tightly closed containers in a cool, dry, and well-ventilated area.

Protect the product from contamination and excessive moisture exposure.

Follow the storage conditions specified by the manufacturer.

Incompatible Materials

Avoid contact with strong oxidizing agents and other incompatible chemicals.



8. Exposure Controls / Personal Protection

Occupational Exposure Limits

No specific occupational exposure limit is provided here for glycerol. Applicable local and national occupational exposure regulations should be followed.

Engineering Controls

Provide adequate ventilation where necessary, particularly during handling operations that may generate vapors, aerosols, or mists.

Eye Protection

Safety glasses or chemical splash goggles should be used where eye contact is possible.

Skin Protection

Use appropriate protective gloves when prolonged or repeated contact is expected.

Respiratory Protection

Normally not required under ordinary handling conditions when adequate ventilation is available. Use suitable respiratory protection where workplace conditions require it.

Hygiene Measures

Wash hands thoroughly after handling. Do not eat, drink, or smoke while handling chemicals.



9. Physical and Chemical Properties

Property	Description
Appearance	Clear, colorless liquid
Odor	Odorless or nearly odorless
Chemical Name	Glycerol
CAS Number	56-81-5
Molecular Formula	C ₃ H ₈ O ₃
Molecular Weight	92.09 g/mol
Solubility	Miscible with water
Density	Approximately 1.26 g/cm ³ at 20°C
Melting Point	Approximately 18°C
Boiling Point	Approximately 290°C
Flash Point	Approximately 160°C (closed/open-cup method may vary)
pH	Generally near neutral depending on concentration and test method
Vapor Pressure	Very low at ambient temperature
Odor Threshold	Not established

Viscosity High; temperature dependent

Note: Actual specifications may vary according to product grade, manufacturing process, and applicable pharmacopeial requirements.

10. Stability and Reactivity

Reactivity

No hazardous reaction is expected under normal conditions of use and storage.

Chemical Stability

Stable under recommended storage conditions.



Possibility of Hazardous Reactions

Hazardous polymerization is not expected under normal conditions.

Conditions to Avoid

Avoid excessive heat, contamination, and contact with incompatible materials.

Incompatible Materials

Strong oxidizing agents and other chemically incompatible substances.

Hazardous Decomposition Products

Thermal decomposition or combustion may generate carbon oxides.

11. Toxicological Information

Acute Toxicity

Glycerol generally has low acute toxicity when handled appropriately.

Skin Corrosion/Irritation

Prolonged or repeated contact may cause irritation in sensitive individuals.

Serious Eye Damage/Irritation

Direct contact may cause temporary eye discomfort or irritation.

Respiratory Sensitization

No significant respiratory sensitization is expected under normal handling conditions.

Skin Sensitization

No significant sensitization is expected based on available information.



Carcinogenicity

Glycerol is not generally classified as carcinogenic by major regulatory classification systems based on available information.

Mutagenicity

No significant mutagenic hazard is expected under normal conditions based on available information.

Reproductive Toxicity

No classification as a reproductive hazard is indicated based on available information.

12. Ecological Information

Ecotoxicity

No significant environmental hazard is expected from normal use. Avoid uncontrolled release of large quantities into the environment.

Persistence and Degradability

Glycerol is expected to be biodegradable under appropriate environmental conditions.

Bioaccumulative Potential

Significant bioaccumulation is not expected.

Mobility in Soil

Glycerol is highly soluble in water and may move through aqueous environmental systems.

Other Environmental Effects

Avoid unnecessary discharge into drains, waterways, and soil.



13. Disposal Considerations

Dispose of unused product, contaminated material, and packaging according to applicable local, regional, and national regulations.

Do not discharge large quantities into drains or waterways.

Empty containers should be handled according to local waste-management requirements.

14. Transport Information

UN Number

Not regulated as dangerous goods under typical transport conditions, subject to applicable regulations.

Proper Shipping Name

Glycerol / Glycerin

Transport Hazard Class

Not classified as a dangerous good under typical transport regulations.

Packing Group

Not applicable.

Marine Pollutant

Not generally classified as a marine pollutant.

Important: Confirm transport classification with the current product SDS and the regulations applicable to the destination country before shipment.



15. Regulatory Information

This product should be handled in accordance with applicable chemical safety, occupational health, environmental, pharmaceutical, and product-quality regulations.

The USP designation indicates that the product is intended to meet the applicable United States Pharmacopeia requirements for the specified material. USP status should be verified against the current product specification and Certificate of Analysis.

Applicable regulations may differ between countries and regions.

16. Other Information

Product: Glycerin USP Grade

Chemical: Glycerol

CAS No.: 56-81-5

Recommended Use

Pharmaceutical, cosmetic, personal-care, healthcare, and industrial applications according to the applicable product specification.

Disclaimer

The information provided in this Safety Data Sheet is intended as general safety information for the handling, storage, transportation, and use of Glycerin USP Grade.

The information is based on available technical and safety data and is not a guarantee of specific product properties or suitability for a particular application. Users are responsible for determining the suitability of the product for their intended use and for complying with all applicable laws and regulations.

For the most accurate information, always refer to the latest SDS, Certificate of Analysis (COA), technical specification, and manufacturer's documentation for the specific batch.

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