



Serving Scientific Community  
Since 1985



**TECHNO PHARMCHEM**

An ISO 9001 : 2008 Certified Company

Registered Off. : 101-A, Deep Enclave, Pocket 'D', Ashok Vihar, Phase-III, Delhi-110 052 (India)  
Corporate Off. : 152, Vardhman City Centre, Near Shakti Nagar Underbridge, Delhi-110052 (India)  
Works : Plot No.1022, Modern Industrial Estate, Bahadurgarh-124507, Haryana (India)  
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Website : www.technopharmchem.com

## GLYCEROL

### 1. Product Identification

Synonyms: Glycerin; glycol alcohol; glycerol, anhydrous

CAS No.: 56-81-5

Molecular Weight: 92.09

Chemical Formula:  $C_3H_5(OH)_3$

Product Codes: 31454, 31455

### 2. Composition/Information on Ingredients

Ingredient	CAS No	Percent
Glycerol	56-81-5	90 - 100%

### 3. Hazards Identification

Potential Health Effects

Inhalation: Due to the low vapor pressure, inhalation of the vapors at room temperatures is unlikely.

Inhalation of mist may cause irritation of respiratory tract.

Ingestion: Low toxicity. May cause nausea, headache, diarrhea.

Skin Contact : May cause irritation.

Eye Contact: May cause irritation.

Chronic Exposure: May cause kidney injury.

Aggravation of Pre-existing Conditions: Persons with pre-existing skin disorders or eye problems or impaired liver or kidney function may be more susceptible to the effects of the substance.

### 4. First Aid Measures

Inhalation: Remove to fresh air. Get medical attention for any breathing difficulty.

Ingestion: Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.

Skin Contact: Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation develops.

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention if irritation persists.

### 5. Fire Fighting Measures

Fire: Not considered to be a fire hazard.

Explosion: No information found

Fire Extinguishing Media: Water spray, dry chemical, alcohol foam, or carbon dioxide.

Water spray may be used to keep fire exposed containers cool.

Special Information: In the event of a fire, wear full protective clothing and NIOSH-approved self contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.



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## 6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Contain and recover liquid when possible. Collect liquid in an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer!

## 7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances.

## 8. Exposure Controls/Personal Protection

**Ventilation System:** A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.

**Personal Respirators :** If the exposure limit is exceeded and engineering controls are not feasible, a half facepiece particulate respirator (NIOSH type P95 or R95 filters) may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest.. A full-face piece particulate respirator (NIOSH type P100 or R100 filters) may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. Please note that N filters are not recommended for this material.

**Skin Protection:** Wear protective gloves and clean body-covering clothing.

**Eye Protection:** Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

## 9. Physical and Chemical Properties

**Appearance:** Clear oily liquid.

**Odor:** Odorless.

**Solubility:** Miscible in water.

**Specific Gravity:** 1.26 @ 20C/4C

**pH:** (neutral to litmus)

**% Volatiles by volume @ 21C (70F):** 0

**Boiling Point:** 290C (554F)

**Melting Point:** 18C (64F)

**Vapor Density (Air=1):** 3.17

**Vapor Pressure (mm Hg):** 0.0025 @ 50C (122F)

**Evaporation Rate (BuAc=1):** No information found.

## 10. Stability and Reactivity

**Stability:** Stable under ordinary conditions of use and storage.

**Hazardous Decomposition Products:** No information found

**Hazardous Polymerization:** Will not occur.

**Incompatibilities:** Strong oxidizers and alkali metal hydrides.

**Conditions to Avoid:** Heat, flames, ignition sources and incompatibles.



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### 11. Toxicological Information

Oral rat LD50: 12,600 mg/kg. Investigated as a mutagen, reproductive effector.

-----\Cancer Lists\-----

---NTP Carcinogen---

Ingredient	Known	Anticipated	IARC Category
Glycerol (56-81-5)	No	No	None

### 12. Ecological Information

Environmental Fate: When released into the soil, this material is expected to readily biodegrade. When released into the soil, this material is not expected to evaporate significantly. When released into water, this material is expected to readily biodegrade. This material is not expected to significantly bioaccumulate. When released into the air, this material may be moderately degraded by reaction with photochemically produced hydroxyl radicals.

When released into the air, this material may be removed from the atmosphere to a moderate extent by Wet deposition.

Environmental Toxicity: This material is not expected to be toxic to aquatic life.

### 13. Disposal Considerations

Dispose of container and unused contents in accordance with federal, state and local requirements.

### 14. Transport Information

Not regulated.

### 15. Regulatory Information

Safety, health and environmental : Ensure all national/local regulations are observed. regulations/legislation specific for the substance or mixture

REACH Restrictions : The components of this product are not subject to restrictions.

REACH Authorisation : The components of this product are not subject to authorization.

Chemical Safety Assessment : It has not been carried out.

### 16. Other Information

Product Use:

Laboratory Reagent.