

<b>ROYAL CHEMICALS COMPANY</b>	<b>QC Department</b>	<b>Material Safety Data Sheet</b>
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# Material Safety Data Sheet

## Glycerin MSDS

### Section 1: Chemical Product and Company Identification

**Product Name:** Glycerin  
**Pre-registration #:**05-2115592308-38-0000  
**CAS#:** 56-81-5  
**Company name:** Royal Chemicals  
**TSCA:** TSCA 8(b) inventory: Glycerin  
**CI#:** Not available. **Synonym:** 1,2,3-Propanetriol; Glycerol  
**Chemical Name:** Glycerin  
**Chemical Formula:** C<sub>3</sub>H<sub>5</sub>(OH)<sub>3</sub>

### Section 2: Composition and Information on Ingredients

#### Composition:

**Name:** Glycerin

**CAS #:** 56-81-5

### Section 3: Hazards Identification

**Potential Acute Health Effects:** Slightly hazardous in case of skin contact (irritant, permeator), of eye contact (irritant), of ingestion, of inhalation.

#### Potential Chronic Health Effects:

MUTAGENIC EFFECTS: Not available.

TERATOGENIC EFFECTS: Not available

DEVELOPMENTAL TOXICITY: Not available

The substance may be toxic to kidneys.

Repeated or prolonged exposure to the substance can produce target organs damage.

### Section 4: First Aid Measures

#### Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention if irritation occurs.

#### Skin Contact:

Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

Reviewer -Amr Diab -islam	Dep. Leader Mohammed Elkhodery	QA Plant Leader Marawan Salman
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## Section 5: Toxicological information

**Routes of Entry:** Absorbed through skin. Eye contact.

**Toxicity to Animals:**

WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE.

Acute oral toxicity (LD50): 4090 mg/kg [Mouse].

Acute dermal toxicity (LD50): 10000 mg/kg [Rabbit].

Acute toxicity of the mist (LC50): >570 mg/m<sup>3</sup> 1 hours [Rat].

**Chronic Effects on Humans:** May cause damage to the following organs: kidneys.

**Other Toxic Effects on Humans:** Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.

**Special Remarks on Toxicity to Animals:** TDL (human) - Route: Oral; Dose: 1428 mg/kg

**Special Remarks on Chronic Effects on Humans:**

Glycerin is transferred across the placenta in small amounts. May cause adverse reproductive effects based on animal data (Paternal Effects (Rat): Spermatogenesis (including genetic material, sperm morphology, motility, and count), Testes, epididymis, May affect genetic material. sperm duct).

**Special Remarks on other Toxic Effects on Humans:**

**Acute Potential Health Effects:**

Low hazard for normal industrial handling or normal workplace conditions.

**Skin:**

May cause skin irritation. May be absorbed through skin

**Eyes:**

May cause eye irritation with stinging, redness, burning sensation, and tearing, but no eye injury.

**Ingestion:**

Low hazard. Low toxicity except with very large doses. When large doses are ingested, it can cause gastrointestinal tract irritation with thirst (dehydration), nausea or vomiting diarrhea. It may also affect behavior/central

nervous system/nervous system (central nervous system depression, general anesthetic, headache, dizziness, confusion, insomnia, toxic psychosis, muscle weakness, paralysis/convulsions), urinary system/kidneys (renal failure, hemoglobinuria), cardiovascular system (cardiac arrhythmias), live

**Inhalation:**

Due to low vapor pressure, inhalation of the vapors at room temperature is unlikely. Inhalation of mist may r. It may also cause elevated blood sugar cause respiratory tract irritation.

Reviewer  
-Amr Diab  
-Islam

Dep. Leader  
Mohammed Elkhodery

QA Plant Leader  
Marawan Salman

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**Chronic Potential Health Effects:**

**Ingestion:**

Prolonged or repeated ingestion may affect the blood(hemolysis, changes in white blood cell count), endocrine system (changes in adrenal weight), respiratory system, and may cause kidney injury.

## **Section 6: Ecological Information**

**Ecotoxicity: Ecotoxicity in water (LC50): 58.5 ppm 96 hours [Trout].**

**BOD5 and COD: Not available.**

**Products of Biodegradation:**

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the Products of Biodegradation:** The products of degradation are less toxic than the product itself.

**Special Remarks on the Products of Biodegradation:** Not available.

Reviewer -Amr Diab -islam	Dep. Leader Mohammed Elkhodery	QA Plant Leader Marawan Salman
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