

AERCHEM INC.
320 N. Walnut St.
Bloomington, IN 47404

Telephone: 812.334.9996

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Emergency: 800.424.9300

SECTION 1: IDENTIFICATION

Effective Date: 1/8/97
Product Name: Glycerin
Common Name:

Chemical Formula: C₃H₅(OH)₃
CAS No.: 56-81-5

SECTION 2: HAZARDOUS INGREDIENTS:

none

Acute Health effects: Very slightly to slightly dangerous in case of skin contact (irritant, permeator), of eye contact (irritant), of ingestion, of inhalation.

SECTION 3: PHYSICAL DATA

Physical Data:

Appearance and Odor:	clear, viscous liquid; little or no odor
Boiling point: (760 mm Hg)	decomposes (290 °C or 554 °F)
Vapor Pressure (mmHg):	<0.001 @ 25°C
Specific Gravity (Water=1):	1.3 (water =1)
Solubility in water: (by weight)	easily soluble in cold water
Melting Point:	17.9 °C (64.2 °F)
Volatility:	n/a
Vapor Density:	3.17 (air=1)
molecular weight	

SECTION 4: FIRE AND EXPLOSION DATA

Fire and Explosion Information:

Flash point:	closed cup: 160 °C (320 °F), open cup: 177 °C (350 °F)
Flammable limit:	lower: 0.9%
Extinguishing Media:	SMALL FIRE: dry chemicals, CO ₂ , water spray, foam

LARGE FIRE: water spray fog or foam. Do not use water jet.
Unusual Fire and Explosion Hazards: Product is flammable in presence of open flames and sparks, of heat, oxidizing materials. Auto-ignition temp = 393 °C (739.4 °F)
of

SECTION 5: REACTIVITY DATA

Reactivity Data:

Stable X Unstable

Conditions to Avoid:

Incompatibilities:

n/a

Decomposition or byproducts:

products of combustion are carbon oxides (CO, CO₂)

Hazardous Polymerization:

none

Corrosivity

non-corrosive in presence of glass

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SECTION 6: HEALTH HAZARD DATA

Threshold Limit Value (TLV): TWA 10 mg/m³ (glycerin mist)
Permissible Exposure Limit: TWA 10 (mg/m³) from OSHA(glycerin mist-total dust)

Toxicity:

Oral LD50 (rat): Acute oral toxicity (LD₅₀): 12600 mg/kg (rat), 17.0-27.2 g/kg (rabbit)

Repeated excessive exposure may cause increased fat levels in blood. Observations in animals include kidney, liver, and gastrointestinal effects with very large oral doses. Did not cause cancer in long-term animal studies. Birth defects unlikely. Reproductive effects seen in females are believed to be due to altered nutritional states resulting from extremely high doses in their diets.

SECTION 7: SPILLAGE AND DISPOSAL PROCEDURES

First Aid:

- Eyes:** Flush eyes with running water for at least 15 minutes, keeping eyelids open. cold water may be used.
- Skin:** If it gets onto clothing, remove clothing, protecting your own hands and body. Place victim under deluge shower. If it touches exposed skin, gently and thoroughly wash skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cold water may be used. Cover irritated skin with emollient. Seek medical attention if irritation persists.
- Inhalation:** Allow victim to rest in well-ventilated area.
- Ingestion:** Remove any dentures. Have conscious person drink several glasses of water or milk. Induce vomiting by sticking finger in throat.

Spillage: Dilute with water and mop up, or absorb with an inert dry material and place in appropriate waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Disposal: Recycle to process, if possible. Consult your local or regional authorities.

SECTION 8: PRECAUTION TO BE TAKEN IN HANDLING AND STORING

Other Precautions: Keep away from heat, sources of ignition, strong oxidizing agents. Keep in cool, dry place. Ground all equipment containing material. Do not breathe gas, fumes, vapor or spray.

SECTION 9: SPECIAL PROTECTION INFORMATION

Ventilation: Provide exhaust ventilation or other engineering controls to keep airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash station and safety shower is proximal to workstation location.

Eye Protection: safety goggles

Protective Gloves: in case of large spill

Respiratory Protection:

SECTION 10: TRANSPORT INFORMATION

Not regulated by DOT