Glycerine

Section 1 - Chemical Product and Company Identification

Products Name:	Glycerine
Synonyms:	Refined Glycerine
Company	Rolfes Chemicals
	A Division of Rolfes Group of Companies
	Cnr Brammer and Strachan, Industries East
	Germiston
Information (Product safety)	Telephone: +27 11 873 0157 Fax: +27 11 8738480
Emergency telephone	South Africa +27 (0)86 044 44 11

Section 2 - Composition, Information on Ingredients

CAS#

Chemical Name:

%

EINECS#

56-81-5

1, 2, 3 – Propanetriol Glycerol

99.5%

200-289-5

Hazard Symbols: None

Risk Phrases: None

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

This product is not classified as hazardous according to Directive 67/548/EEC

Potential Health Effects

Eye: Concentrated solutions may cause mild irritation.

Skin: May cause skin irritation. Heated product may cause burns on contact.

Ingestion: May cause irritation of the digestive tract if a large amount is ingested.

Inhalation: Not applicable at ambient temperature. May cause respiratory tract irritation if mist is inhaled.

Chronic: Not available

Chemical Hazards

Contact of glycerine with strong oxidizing agents such as chromium trioxide, potassium chlorate, potassium permanganate, or other strong acids such as nitric acid may cause an explosion.

Section 4 - First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: Get medical aid. Wash mouth out with water.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam.

Hazardous Decomposition/ At elevated temperatures there is a risk of exothermic polymerization (> 200°C).

Combustion Products: At temperature > 280°C acrolein may be formed.

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Environmental Should not be released into the environment. Prevent further leakage or

Precautions: spillage if safe to do so.

Methods for cleaning up: Soak up with inert absorbent material and dispose of as hazardous waste.

Section 7 - Handling and Storage

Handling: No special precautions required but avoid skin and eye contact. Prevent formation of mist. Eye and skin contact should be avoided if working at elevated temperatures.

Storage: Store in a cool, dry place. Store in a tightly closed container to avoid moisture from the air. Can be stored in aluminum, stainless steel and fiber glass containers.

Other Recommendations: Avoid contact with strong oxidizing agents such as chromium trioxide, potassium chlorate, potassium permanganate, or other strong acids such as

nitric acid.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits CAS# 56-81-5:

Personal Protective Equipment

Eyes: Wear chemical splash goggles.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State:

Liquid

Color:

Water white

Odor:

Odorless

pH:

Neutral

Vapor Pressure:

0.0025 mmHg @ 50°C

Viscosity:

1410 mPa.s @ 20°C

Boiling Point:

290°C @ 760mmHg

Freezing/Melting Point:

Approx. 18°C

Autoignition Temperature:

Approx. 400°C

Flash Point:

198.9°C (PMCC)

Explosion Limits: Lower:

N/A

Explosion Limits: Upper:

N/A

Decomposition Temperature:

>280°C

Solubility in water:

Fully Soluble

Specific Gravity/Density:

1.26

Molecular Formula:

C3H8O3

Molecular Weight:

92.09

Section 10 - Stability and Reactivity

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Temperatures >200°C (polymerization/decomposition). Keep away from sources of ignition and naked flames.

Incompatibilities with

Other Materials:

Strong oxidizing agents and acids.

Hazardous Decomposition

Products:

Acrolein (>280°C)

Hazardous Polymerization:

Will not occur.

Section 11 - Toxicological Information

RTECS#:

CAS# 56-81-5

LD50/LC50:

>2000 mg/kg (rat)

Skin:

Mildly irritating

Other:

See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Ecotoxicity:

- Fish	96h LC50: >5000 mg/l
- Algae	48h EC50: >2900 mg/l
- Bacteria	72h LC50: >10000 mg/l

Mobility: Low potential for absorption into soil. Glycerine will partition to water primarily.

Persistence and Degradability: Readily biodegradable (OECD 301).

Bioavailability: Low bioaccumulation potential and is not expected to bioaccumulate.

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

IATA

IMO

RID/ADR

SHIPPING NAME

Not regulated.

Not regulated.

Not regulated.

HAZARD CLASS

Not regulated.

Not regulated

Not regulated

UN NO.

Not regulated.

Not regulated

Not regulated

PACKING GROUP

Not regulated.

Not regulated

Not regulated

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: None

Risk Phrases: None

Safety Phrases: None

WGK (Water Danger/Protection) : CAS# 56-81-5: 1 Low hazard to water

Canada: CAS# 56-81-5 is listed on Canada's DSL List

US Federal:

TSCA : CAS# 56-81-5 is listed on the TSCA Inventory.

Section 16 - Other Information

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such

damage