

**RNRF
LIMITED**



MATERIAL SAFETY DATA SHEET

SECTION I – PRODUCT IDENTIFICATION

SUPPLIER	
NAME	RNRF Ltd
ADDRESS	Suite 10 Vulindlela Village, Addo Road, Motherwell 6211, Eastern Cape, South Africa
TELEPHONE	+27 41 461 2795
PRODUCT	
NAME	Glycerin
DESCRIPTION	Alcohol C ₃ H ₅ (OH) ₃
SYNONYMS	Glycerine, glycerol, 1,2,3-propane triol, propan-1,2,3-triol, trihydroxypropane.
CAS NUMBER	56-81-5

SECTION II – INGREDIENTS AND HAZARD CLASSIFICATION

Ingredients Glycerin (100%)

TSCA status This product is listed on TSCA.

SARA Title III Section 312 Extremely Hazardous Substances: None
Section 311/312 Hazardous Categories: Non-hazardous
Section 313 Toxic Chemicals: None

Not classified as hazardous according to NOHSC criteria.

SECTION III – HEALTH INFORMATION

EFFECTS OF OVEREXPOSURE

Inhalation	Low toxicity. Hazard might be presented with direct eye contact, prolonged and repeated skin contact or inhalation of mist.
Ingestion	Low toxicity. Do not induce vomiting. Wash mouth with water. No hazards from ingestion due to industrial exposure. Seek medical attention if symptoms develop.
Eye contact	Low irritant. In the event of eye contact irrigate with water for 10 – 15 minutes. Exposure may result in mild irritation. Direct eye contact may result in pain, redness and lacrimation. Seek medical attention if symptoms persist.
Skin contact	Low irritant. Mild irritation may result due to prolonged exposure.
Toxicological information	LD50 (dermal, rabbit) > 10 000mg/kg; LD50 (oral, rat) 12 600mg/kg; LD50 (oral, mouse) 4 090mg/kg

SECTION IV – OCCUPATIONAL EXPOSURE LIMITS

PEL:	TWA: 15 mg/m ³ from OSHA (Total inhalation)
PELTLV:	TWA: 10 mg/m ³ from ACGIH (Total inhalation)

SECTION V – EMERGENCY FIRST AID PROCEDURE

FOLLOW STANDARD FIRST AID PROCEDURES

Ingestion	Do not induce vomiting. Give person one or two glasses of water to drink. If gastro-intestinal symptoms develop call physician or Poison Control Centre.
Skin contact	Wash affected area with water. Seek medical attention if irritation develops.
Eye contact	Flush eyes with cool water for at least 15 – 20 minutes. Do not let person rub eyes. Seek medical attention if irritation develops.
Inhalation	Remove person to fresh air. Seek medical attention if symptoms persist.

SECTION VI – PHYSICAL PROPERTIES

Physical state	Liquid	Vapour density	3.17 (Air = 1)
Appearance	Colourless to brown	Evaporation rate	N/A
Water solubility	Soluble	Flash point	> 160°C
Odour	Odourless to mild	Boiling point	290°C
Specific gravity	1.26 (Water = 1)	Melting point	17.9°C
pH value	N/A	Flammability limits	Not known
Vapour pressure	0.0025 mm Hg @ 50°C	Molecular Weight	92.1 g.mol ⁻¹

SECTION VII – FIRE AND EXPLOSION HAZARDS

Flash point and method used	> 160°C (ASTM93)
Auto-ignition temperature	393°C
Flammability	Not flammable
Flammability limits	Not known
HMS rating	HEALTH: 1; FIRE: 1; REACTIVITY: 0
Extinguishing media	Foam, dry chemical, carbon dioxide and water spray

Special fire fighting procedures and precautions: Combustible. Suitable extinguishing agents are dry agent, carbon dioxide and foam. Fire fighters should use self-contained breathing apparatus to avoid exposure to smoke and fumes.

Unusual fire & explosion hazards: Toxic gases such as hydrocarbons and carbon oxides may evolve when heated.

SECTION VIII – REACTIVITY

Stability	Stable
Hazardous polymerization	Will not occur
Materials to avoid	Strong oxidizing agents and moisture. Material is hygroscopic.
Hazardous decomposition products	Combustion produces CO ₂ , CO and thick smoke.
Conditions to avoid	None known

SECTION IX – PERSONAL PROTECTION/EXPOSURE CONTROL

Respiratory protection	Always ensure that workplace has adequate ventilation. In case of mist formation, wear appropriate respiratory protective equipment as determined by expert opinion.
Skin protection	Chemically resistant gloves made from materials such as PVC should be worn to prevent skin contact. Remove contaminated clothing and wash with soap and water before re-using. Chemically resistant aprons can be worn to avoid contact with clothes.
Eye protection	Always wear approved safety glasses when working. Full face protective shields can be worn to avoid contact with face. Eye wash stations should be provided and regularly inspected.
Footwear	Wear chemically resistant footwear as specified by workplace regulations.
Additional measures	Practice good personal hygiene by washing exposed skin regularly with soap and water. Wash hand before consuming any food or drink.

SECTION X – ENVIRONMENTAL PROTECTION

Environmental precautions	Glycerol may react with photochemically produced hydroxyl radicals in the atmosphere. Glycerol is expected to degrade at a moderate rate and can be toxic to aquatic organisms at high concentrations. Not expected to bioconcentrate in fish or other aquatic organisms.
Spill or leak precautions	Contain spilled material using appropriate measures. Transfer to secure containers. Where necessary, collect material using absorbent media. Slippery when spilt.
Waste disposal	Dispose spilled or contaminated material according to federal, state and/or local requirements. Do not release into drains.

SECTION XI – TRANSPORT INFORMATION

Transport information	Not classified as Dangerous.
U.N. Hazard class	Not applicable.
Shipping classification	Not regulated
Shipping name	Not applicable
Identification number	Not applicable

SECTION XII – HANDLING, STORAGE AND USAGE

Storage temperature	5°C – 30°C
General	Store away from excessive heat, ignition sources (sparks and flames) and strong oxidising agents. Store in a cool, dry and well-ventilated environment. Do not store in direct sunlight. Close containers when not in use. Where appropriate protective clothing when emptying containers.

SECTION XIII – DISCLAIMER

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process. The stated MSDS is reliable to the best of the company's knowledge and believed accurate as of the date indicated. However, no representation, warranty or guarantee of any kind, express or implied, is made as to its accuracy, reliability or completeness and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of use. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use.

(18 March 2008)