



## MATERIAL SAFETY DATA SHEET

### CRUDE GLYCERINE

#### PRODUCT IDENTIFICATION

Product Name	Crude Glycerine
Synonym(s)	1,2,3-Propanetriol, Crude Glycerol
CAS No.	56-81-5
Intended use	Raw material for manufacturing oleochemical derivatives

#### HAZARD IDENTIFICATION

Product is non-hazardous

#### COMPOSITION/ INFORMATION OF INGREDIENTS

Formula	C <sub>3</sub> H <sub>8</sub> O <sub>3</sub>	
Molecular weight	92.09 g/mol	
EINECS No.	200-289-5	
<b>Chemical Name</b>	<b>CAS No.</b>	<b>Percentage, %</b>
Glycerol	56-81-5	Min 80
Water	7732-18-5	Max 15
Sodium Chloride	7647-14-5	Max 7
Methanol	67-56-1	Max 0.5



## FIRST AID MEASURES

### DESCRIPTION OF FIRST AID MEASURES

First-aid measures general	Consult a physician. Show this safety data sheet to the doctor in attendance
First-aid measures after eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician
First-aid measures after skin contact	Wash off with soap and plenty of water. Consult a physician
First-aid measures after inhalation	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
First-aid measures after ingestion	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Prolonged or repeated exposures may cause: Nausea, Headache, Vomiting. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

### FIRE FIGHTING MEASURES

Suitable extinguishing media	Water spray, alcohol-resistant foam, dry chemical or carbon dioxide
Unsuitable extinguishing media	Do not use straight water stream
Advice for fire fighters	Wear self-contained breathing apparatus for fire fighting if necessary
Further information	No data available



#### ACCIDENTAL RELEASE MEASURES

Personal Precaution	Use personal protective equipment. Avoid breathing vapours, mist, or gas. Ensure adequate ventilation
Exposure Limit Values	Do not let product enter drains
Procedure for Spill / Leak Clean - Up	Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal

#### HANDLING AND STORAGE

General	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist
Handling	Use gloves and wear goggles when handling
Storage	Store in cool and dry place, avoid extreme heat and cold. Keep container tightly closed in a dry and well-ventilated place. Hygroscopic
Specific Use	Not applicable

#### EXPOSURE CONTROL/ PERSONAL PROTECTION

##### PERMISSIBLE EXPOSURE LIMIT

Chemical Name	CAS No.	Value	Control parameters	Basis
Glycerol	56-81-5	TWA	10 mg/m <sup>3</sup>	Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) regulations 2000.



### EXPOSURE CONTROLS- PERSONAL PROTECTIVE EQUIPMENT

Eye/ Face Protection	Safety glasses with side-shields conforming to EN166 Use equipments for eye protection tested and approved under appropriate government standards such as NIOSH (US) or En166 (EU)
Skin Protection	<p>Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.</p> <p>The selected protective gloves must satisfy the specifications of EU Directive 89/686/EEC and the standard EN374 derived from it.</p> <p>Full contact Material : Nitrile rubber Minimum layer thickness : 0.11 mm Break through time : 480 min</p> <p>Splash contact Material : Nitrile rubber Minimum layer thickness : 0.11 mm Break through time : 480 min</p> <p>If used with solutions or mixed with other substances, and under conditions which differ from EN374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by customers. It should not be construed as offering an approval for any specific use scenario.</p>
Body Protection	Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full face supplied air respirator. Use respirator and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)
Thermal hazards	No data available



#### PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Viscous clear brownish liquid
Odour	Characteristics odours
pH	5.5 – 8.0
Melting point/ freezing point	17.0 °C
Initial boiling point and boiling range	>230.0 °C
Flash Point	160 °C – closed cup
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/ lower explosive limits	Lower explosion limit: 0.9 % (V)
Vapour Pressure	0.01 Pa @ 25°C
Vapour density	3.18 g/L (Air = 10)
Relative density	1.25 g/cm <sup>3</sup>
Water solubility	Miscible
Partition Coefficient (n-octanol-water)	No data available
Auto Ignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available

#### STABILITY AND REACTIVITY

Reactivity	The product is non-reactive under normal conditions.
Chemical stability	The material is stable at 70°F (21°C ), 760 mmHg pressure
Possibility of hazardous reactions	None under normal processing
Conditions to avoid	Excessive heat, sources of ignition, open flame. Water contamination during storage
Incompatible materials	Strong oxidizing agents, strong bases
Hazardous Reactions	None known under normal conditions of use



### TOXICOLOGICAL INFORMATION

Acute toxicity	LD50 Oral- Rat- 12.600 mg/kg LD50 Dermal – Rabbit - >10.000 mg/kg
Skin corrosion/ irritation	Skin- Rabbit – Mild skin irritation – 24 h
Serious eye damage/ eye irritation	Eyes – Rabbit – Mild eye irritation – 24 h
Respiratory or skin sensitisation	No data available
Germ cell mutagenicity	No data available
Carcinogenicity	IARC: None of the component of this product presents at levels greater than or equal to 0.1 % is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity	No data available
Specific target organ toxicity- single exposure	No data available
Specific target organ toxicity- repeated exposure	No data available
Aspiration hazard	No data available
Potential health effects	<b>Inhalation</b> May be harmful if inhaled. May cause respiratory tract irritation. <b>Ingestion</b> May be harmful if swallowed. <b>Skin</b> May be harmful if absorbed through skin. May cause skin irritation. <b>Eyes</b> Cause eye irritation
Signs and Symptoms of Exposure	Prolonged or repeated exposure may cause; Nausea, Headache, Vomiting, To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.
Additional Information	No data available



#### ECOLOGICAL INFORMATION

Ecotoxicity	No data available
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
Other adverse effects	Strong bases, Strong oxidizing agents

#### DISPOSAL CONSIDERATIONS

Disposal is to be PERFORMED IN COMPLIANCE WITH ALL FEDERAL, STATE / PROVINCIAL AND LOCAL REGULATIONS. Do not dispose via sinks, drains or the immediate environment.

#### TRANSPORT INFORMATION

Not classified in ADR / RID, IMDG, IATA

#### REGULATORY INFORMATION

No data available

#### OTHER INFORMATION

##### Abbreviations and acronyms:

ADR = Land transport  
RID = Land transport  
IMDG = Sea transport  
IATA = Air transport

#### DISCLAIMER

The information provided is in good faith as a guide for handling of the product and should be treated only under the condition lay out. We cannot anticipate all conditions under which the information or our product may be used. We assume no liability or responsibility for loss or damage resulting from improper use or handling of our product, from incompatible product contamination or from the failure to follow instructions, warnings and advisories in the Material Safety Data.