

# Safety Data Sheet

## 1. Identification of the substance or mixture and of the supplier:

<b>Product name:</b>	<b>Glycerine, 99%</b>	
<b>Product identifier/synonyms:</b>	<b>Glycerine 1,2,3-trihydroxypropoane</b>	<b>CAS# 56-81-5 EC# 200-289-5</b>
<b>Product description:</b>	Mixture of C16-C18 unsaturated fatty acids derived from linseed oil	
<b>Intended use:</b>	Substance, usually water-white when refined, obtained commercially from vegetable oils. Commercial product comprises 99% glycerol content, the remainder as water and minor components.	
<b>Manufacturer:</b>	Industrial Oleochemical Products, (Pty) Ltd., 323 Chamberlain Road, Jacobs, 4052, KZN, South Africa Tel: +27-(0)31-4618680, Fax:: +27-(0)31-461-3743	
<b>Emergency telephone number:</b>	031-461-8721 (Monday-Friday 08.00 to 16.30hr) 031-461-8680 (after normal working hours) 071-483-7688 (medical emergency)	

### Hazard ratings

Extreme	4					
High	3					
Moderate	2					
Low	1				1	
Min/Nil	0	1	1	1	1	1
		Flammability	Toxicity	Contact	Reactivity	Chronic

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## 2. Hazard identification:

This substance is not classified in the Annex of Directive 67/548/EEC nor according to South African National Standard SANS 10234:2007, Globally Harmonized System of classification and labelling of chemicals (GHS).

### Flammability:

Hazard category	Criteria	Hazard communication elements		
Not classified	Flash point (COC) 180°C	No symbol	No warning	<b>No statement</b>

## 3. Composition/information on ingredients:

Substance/preparation:		Substance			
Ingredient name:	CAS no.	EC no.	%	Exposure limits	
Glycerol	56-81-5	200-289-5	99	TLV (US) 10mg/m <sup>3</sup> (8hr)	TWA (US) none assigned

## 4. First aid measures:

<b>Inhalation: hot vapours</b>	Remove patient from exposure into fresh air. Keep person warm and at rest. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if symptoms occur. If unconscious, place in a recovery position and get medical attention immediately.
<b>Ingestion:</b>	NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. Wash out mouth with water. Remove dentures, if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel, due to risk of aspiration.
<b>Skin contact:</b>	Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes before reuse.
<b>Eye contact:</b>	Remove contact lenses, if any. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Obtain medical attention if irritation persists.
<b>Protection for first-aiders:</b>	No action shall be taken involving any personal risk without suitable training

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## 5. Fire fighting measures:

<b>Extinguishing media:</b>	Water fog, foam, carbon dioxide, powder
<b>Unsuitable extinguishing media:</b>	None known
<b>Special fire-fighting protective equipment:</b>	A self-contained breathing apparatus and suitable protective clothing must be worn in fire conditions with full face piece operated in positive pressure mode
<b>Fire and explosion hazards:</b>	Non-flammable liquid
<b>Combustion products:</b>	Thermal decomposition may produce fumes of carbon monoxide if burning
<b>Explosion data</b>	No data available. However, experience suggests that the substance does not exhibit explosive properties.
<b>Sensitivity to mechanical impact:</b>	Not to be expected
<b>Sensitivity to static discharge:</b>	Not to be expected

## 6. Accidental release measures:

<b>Personal precautions:</b>	For small spills, good working practice suggests that safety goggles, and impervious gloves should be worn to protect eyes and skin. Respiratory protection should not be necessary if adequate ventilation is maintained where hot vapours of this substance are present. For large spills, no special personal protective equipment above that required for small spills is required.
<b>Environmental precautions:</b>	Avoid dispersal of spilt liquid and run-off and contact with soil, waterways, drains and sewers. Material is soluble in water. No data is available for this substance to define it as an environmental hazard.
<b>Clean up methods:</b>	For small spills, add absorbent (soil may be used in the absence of any other materials). Scoop up material and place in a sealable container for disposal. For large spills, otherwise contain material to ensure runoff does not reach a waterway. Add absorbent (soil may be used in the absence of any other materials). Scoop up material and place in a sealable container for disposal. Wash the spillage area with water and detergent. The appropriate regulatory body must be alerted to spillages of uncontrolled discharges into watercourses.

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## 7. Handling and storage:

<b>Handling:</b>	<p>Ensure the use of personal protective equipment (see Section 8) Handle and open container with care.</p> <p>Keep away from heat and sources of ignition. The material is not classified as flammable.</p> <p>Wash thoroughly after handling.</p> <p>Do not eat and drink or smoke while handling this material.</p>	
<b>Storage:</b>	<p>Store in original containers and keep containers tightly closed until ready for use. Store in a cool, dry, well-ventilated place. Note that storage under cool conditions may cause separation of natural waxes which may render the product slightly hazy</p>	
<b>Incompatible materials:</b>	<p>Oxidizing materials.</p>	

## 8. Exposure controls/personal protection:

Occupational exposure limit values:					
Chemical name	Type of limit	Limit value		Short-term exposure	
Glycerol	TLV (US)	10mg/m3 (8hr)	-	No workplace exposure limit assigned	-
<b>Engineering measures:</b>	No special ventilation requirements. Good general ventilation should be sufficient to control airborne levels.				
<b>Eye protection:</b>	Good working practice suggest that safety goggles be used				
<b>Skin protection:</b>	Good working practice suggest that Impervious PVC gloves. overalls/dust coat be used				
<b>Respiratory protection:</b>	Respiratory protection is not required if good ventilation is maintained.				

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## 9. Physical and chemical properties:

<b>Appearance:</b>	Water white clear liquid @ 25°C
<b>Odour:</b>	Very mild to odourless
<b>Odour threshold:</b>	No data
<b>pH:</b>	Neutral
<b>Melting/freezing point:</b>	18°C
<b>Initial boiling point/range:</b>	>290°C (decomposes)
<b>Flash point:</b>	175°C (closed cup)
<b>Evaporation rate:</b>	>1 (butyl acetate =1)
<b>Flammability:</b>	No data available
<b>Flammable limits:</b>	No data available. Explosive behaviour is not to be expected
<b>Vapour pressure:</b>	<0.003 hPa (50°C)
<b>Vapour density:</b>	No data available, suggested to be negligible
<b>Relative density:</b>	1.26 (20°C)
<b>Solubility:</b>	Soluble in water. Miscible with most lower aliphatic alcohols
<b>Partition coefficient n-octanol/water:</b>	Log Pow -2.66
<b>Autoignition temp:</b>	370°C
<b>Decomposition temp:</b>	>300°C
<b>Viscosity:</b>	1410 mPa.s (20°C)

## 10. Stability and reactivity:

<b>Stability:</b>	Stable under normal ambient and anticipated storage and handling conditions. No stabilizers are added or deemed necessary.
<b>Conditions to avoid:</b>	Excessive heating.
<b>Hazardous reactions:</b>	None known.
<b>Materials to avoid:</b>	Strong oxidizing/reducing agents.
<b>Hazardous decomposition products:</b>	Thermal decomposition will evolve irritant vapours, carbon monoxide and carbon dioxide and acrolein.
<b>Hazardous polymerization:</b>	Not known to occur

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## 11. Toxicological information:

### Acute toxicity:

Hazard category	Criteria	Hazard communication elements		
Oral Not assigned	LD <sub>50</sub> oral No data available	No symbol required	No signal word required	<b>No warning phrase required</b>
No precautionary statements required				
Dermal Not assigned	LD <sub>50</sub> dermal no data available	No symbol required	No signal word required	<b>No warning phrase required</b>
No precautionary statements required				
Inhalation Not assigned	LC <sub>50</sub> inhalation no data available	No symbol required	No signal word required	<b>No warning phrase required</b>
No precautionary statements required				

### Skin corrosion/irritation:

Hazard category	Criteria	Hazard communication elements		
Not irritating	Animal test data indicate that the substance is not irritating	No symbol required	Warning	<b>No warning phrase required</b>
No precautionary statements required				

### Serious eye damage/eye irritation:

Hazard category	Criteria	Hazard communication elements		
Eye Not irritating	Animal(rabbit) experience or test data indicate that the substance is not irritating	No symbol required	Warning	<b>No warning phrase required</b>
No precautionary statements required				

### Respiratory sensitizer:

Hazard category	Criteria	Hazard communication elements		
No information is available	No information is available	No symbol	No information	No information
No precautionary statements				

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<b>Skin sensitizer:</b>				
<b>Hazard category</b>	<b>Criteria</b>	<b>Hazard communication elements</b>		
No information is available	No information is available	No symbol	No information	No information
No precautionary statements				
<b>Germ cell mutagenicity:</b>				
<b>Hazard category</b>	<b>Criteria</b>	<b>Hazard communication elements</b>		
No information is available	No information is available	No symbol	No information	No information
No precautionary statements				
<b>Carcinogenicity:</b>				
<b>Hazard category</b>	<b>Criteria</b>	<b>Hazard communication elements</b>		
No information is available	No information is available	No symbol	No information	No information
No precautionary statements				
<b>Toxic to reproduction:</b>				
<b>Hazard category</b>	<b>Criteria</b>	<b>Hazard communication elements</b>		
No affect on reproductive efficiency	Rat (12 weeks dose 200mg/kg/day)	No symbol	No warning	No information
No precautionary statements				
<b>Specific target organ toxicity: single exposure</b>				
<b>Hazard category</b>	<b>Criteria</b>	<b>Hazard communication elements</b>		
No information is available	No information is available	No symbol	No information	No information
No precautionary statements				
<b>Specific target organ toxicity: repeated exposure</b>				
<b>Hazard category</b>	<b>Criteria</b>	<b>Hazard communication elements</b>		
No information is available	No information is available	No symbol	No information	No information
No precautionary statements				

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Specific target organ toxicity: repeated exposure				
Hazard category	Criteria	Hazard communication elements		
No information is available	No information is available	No symbol	No information	No information
No precautionary statements				
Aspiration hazard:				
Hazard category	Criteria	Hazard communication elements		
No information is available	No information is available	No symbol	No information	No information
No precautionary statements				

12. Ecological information:				
Aquatic toxicity (acute)				
Hazard category	Criteria	Hazard communication elements		
Not toxic to aquatic organisms	LC <sub>50</sub> carrasius auratus fish (>5000 mg/L)	No symbol	No warning	<b>No hazard statement required</b>
No precautionary statements				
Aquatic toxicity (chronic)				
Hazard category	Criteria	Hazard communication elements		
No information is available	No information is available	No symbol	No information	No information
No precautionary statements				
Persistence and degradability:	Type	Concentration	Degradation	
Readily biodegradable	Aerobic OECD 301C 63% after 14 days	100mg/L	Readily biodegradable	
Bioaccumulative potential:	No information is available			
Mobility in soil:	No information is available			



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## 13. Disposal considerations:

<b>Methods of disposal:</b>	The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material or runoff and contact with soil, waterways, drains, and sewers. Disposal of product should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.
<b>Contaminated packaging:</b>	Empty containers retain product residue. Do not distribute, make available or reuse empty container except for storage and shipment of original product. Remove all product residue from container before disposal according to local regulations.
<b>Hazardous waste:</b>	This material is not flammable and is not considered harmful to the aquatic environment.

## 14. Transport information:

### Special precautions for user:

This product is not classified as hazardous goods according to SANAS 10228:2003

UN number	U.N. Proper shipping name	Transport hazard class	Packaging group	Environmental hazards	Special precautions
Not assigned	Not assigned	Not regulated	Not regulated	Not regulated	None required

## 15. Regulatory information:

<b>EU regulations:</b>	Not classified (Directive 67/548/EEC).
<b>International regulations:</b>	
<b>United States (TSCA):</b>	Listed TSCA 8(b): Glycerol
<b>Canada (DSL):</b>	Listed CEPA DSL: Glycerol
<b>Australia AICS):</b>	No information available
<b>WGK:</b>	0

## 16. Other information:

This data sheet was prepared in accordance with the Globally Harmonized System of classification and labeling of chemicals (SANS 10234:2007)	
<b>Date of revision:</b>	20 July 2015
<b>Date of previous issue:</b>	27 September 2015
<b>Version:</b>	03
<b>Compiled by:</b>	E. Bond (Innovation & Technical Services Director)

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**Notice to reader:**

**To the best of our knowledge of this substance and on current EC and international regulations, the information contained herein is accurate. However, neither the above-named supplier nor any of its subsidiaries or agents assumes liability whatsoever for the accuracy or completeness of the information contained herein.**

**References:**

European Chemical Substances Information System (ESIS)