

Safety Data Sheet

1. Identification of the substance/preparation and of the company/undertaking

Identification of the product

Product name: Glycerol about 80%

Use of the substance/preparation

Technical glycerol suitable for further processing

Company/undertaking identification

Company: Energea Umwelttechnologie GmbH, Klosterneuburg, A-3400 Austria
Tel.: +43 2243 26960 Fax: +43 2243 26960 -40

2. Composition/information on ingredients

Aqueous solution with

Organic impurities (MONG):	<2.5%	
Potassium sulphate dissolved:		<4.5%
Methanol:	<0.5%	

Synonyms Glycerine

3. Hazards identification

No hazardous product as specified in Directive 67/548/EEC.

4. First aid measures

After inhalation: fresh air.

After skin contact: wash off with plenty of water. Remove contaminated clothing.

After eye contact: rinse out with plenty of water with the eyelid held wide open.

After swallowing: make victim drink plenty of water. Consult doctor if feeling unwell.

5. Fire-fighting measures

Suitable extinguishing media: Water, CO₂, foam, powder.

Special risks:

Combustible. Vapours heavier than air. Forms explosive mixtures with air on intense heating. Development of hazardous combustion gases or vapours possible in the event of fire. The following may develop in event of fire: Acrolein

Special protective equipment for fire fighting:

Do not stay in dangerous zone without self-contained breathing apparatus.

Other information:

Cool container with spray water from a safe distance. Contain escaping vapours with water. Prevent fire-fighting water from entering surface water or groundwater.

6. Accidental release measures

Person-related precautionary measures: Do not inhale vapours/aerosols.

Environmental-protection measures: Do not allow to enter sewerage system.

Procedures for cleaning / absorption:

Take up with liquid-absorbent material (e.g. Chemizorb®). Forward for disposal. Clean up affected area.

7. Handling and storage

Handling:

No further requirements.

Storage:

Tightly closed. At +5°C to +30°C.

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8. Exposure controls/personal protection

Personal protective equipment:

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Respiratory protection: required when vapours/aerosols are generated.
Filter A (acc. to DIN 3181) for vapours of organic compounds
Filter P 1 (acc. to DIN 3181) for solid particles of inert substances.

Eye protection: required.

Hand protection: In full contact:
Glove material: **nitrile rubber**
Layer thickness: 0.11 mm
Breakthrough time: > 480 Min.
In splash contact:
Glove material: **nitrile rubber**
Layer thickness: 0.11 mm
Breakthrough time: > 480 Min.

Industrial hygiene:

Change contaminated clothing. Wash hands after working with substance.

9. Physical and chemical properties

Form:	liquid			
Colour:	Colourless to brown			
Odour:	Smell of feedstock possible			
pH value at 100 g/l H ₂ O	(20 °C)	~5		
Viscosity dynamic	(20 °C)	~150	mPa*s	
Melting point		-10	°C	
Boiling point	(1013 hPa)	>130	°C	
Ignition temperature		~429	°C	
Flash point		~180	°C	o.c.
		199	°C	c.c.
		c.c.		
Explosion limits	lower	not applicable		
	upper	not applicable		
Temperature class		T3 (due to small content of FAME)		
Vapour pressure	(20 °C)	~8	HPa	
Density	(20 °C)	1.23	g/cm ³	
Solubility in water	(20 °C)	soluble		
Thermal decomposition		>130	°C	

10. Stability and reactivity

Conditions to be avoided: Strong heating.

Substances to be avoided

strong oxidizing agents, nitric acid / cone, sulphuric acid, phosphorus oxides, peroxi compounds, hydrogen peroxide, halogens.

Hazardous decomposition products in the event of fire: See chapter 5.

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Further information

Explosible with air in a vaporous/gaseous state when heated.

11. Toxicological information

Acute toxicity

LD₅₀ (dermal, rabbit): >10000 mg/kg (calculated on the pure substance). LD₅₀ (oral, rat): 12600 mg/kg (calculated on the pure substance).

Specific symptoms in animal studies:

Eye irritation test (rabbit): Slight irritations.

Skin irritation test (rabbit): Slight irritations.

Subacute to chronic toxicity

Sensitization:

Patch test (humans): No sensitizing effect.

Further toxicological information

Properties to be expected on the basis of the main component of the preparation:

After inhalation: Irritation symptoms in the respiratory tract.

After skin contact: Slight irritations.

After eye contact: Slight irritations.

After swallowing of large amounts: vomiting, gastric pain, headache, drowsiness, diarrhoea, cyanosis.

12. Ecological information

Biologic degradation:

Biodegradation: >60 % /28 d (closed bottle test);

Readily biodegradable (reduction: DOC >70 %; BOD >60 %; BOD₅ to COD >50 %).

Behaviour in environmental compartments:

No bioaccumulation is to be expected (log P(o/w) <1).

Biological effects:

Fish toxicity: *C. auratus* LC₅₀: >5000 mg/1724 h (calculated on the pure substance).

13. Disposal considerations

Product:

Chemicals must be disposed of in compliance with the respective national regulations.

Packaging:

Product packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system.

14. Transport information

Not subject to transport regulations.

15. Regulatory information

16. Other information

Regional representation:

This information is given on the authorised Safety Data Sheet for your country.

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.