



**Material Safety Data Sheet**  
according to Regulation (EU) No. 1907/2006

## GLYCERIN

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

Trade name: **Glycerin, vegetable**  
Article indication: Glycerin min. 99.5% Eur.Ph. /USP/FCC/E422

Use of the substance/  
the preparation : raw material for cosmetic industry

Information of registration: Exemption after Art. 2 (7) b, Annex V

Supplier: Elemental SRL  
Piata Cazarmii nr.15  
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### 2. Hazards identification

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

### 3. Composition – information on ingredients

Synonym: Glycerol, Glycerol waterless  
CAS-No.: 56-81-5  
EC-no.: 200-289-5  
M: 92.10 g/mol  
Formula (Hill): C<sub>3</sub>H<sub>8</sub>O<sub>3</sub>

### 4. First aid measures

After inhalation: Fresh air.  
After skin contact: Remove contaminated clothing, wash off with plenty of water.  
After eye contact: Rinse out with plenty of water with eyelid wide open.  
After swallowing: Make victim drink plenty of water. Consult doctor if feeling unwell.

### 5. Fire-fighting measures

Suitable fire extinguishing media: Water, CO<sub>2</sub>, foam, powder.



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Special risks: Inflammable. Vapours heavier than air. Forms explosive mixtures with air on intense heating.

Dangerous combustible gases or steams possible. The following may develop in event of fire: Acrolein.

Special protective equipment for fire fighting:

Stay in the danger area only with self-contained breathing apparatus.

Avoid skin contact by keeping a safety distance and wear suitable protective clothing.

Other references:

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

### 6. Accidental release measures

Personal:	Do not inhale vapours/aerosols.
Environmental:	Do not allow to enter sewerage system.
Procedures for cleaning:	Take up with liquid-absorbing material. Clean up affected area.

### 7. Handling and storage

Handling:	No further requirements.
Storage:	Tightly closed. At +5°C to 30°C

### 8. Exposure controls and personal protection equipment

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The chemical resistance must be coordinated with the supplier.

Respiratory protection:	Required when vapours/aerosols are generated, filter A-filter P.
Eye protection:	Required.
Hand protection:	Rubber gloves, nitrile rubber, 0,11mm, breakthrough time >480min.

### 9. Physical and chemical characteristics

Form	liquid
Colour	colourless
Odour	odourless
Melting point	18°C
Boiling point	>290°C (1013mbar)
Density	1.26 g/cm <sup>3</sup> (20°C)
Vapour pressure	< 0.001 hPa (20°C)
Viscosity dyn.	approx 1500 mPa*s (20°C)
Solubility in water	completely mixable
Flash point	approx. 180°C o.c., approx. 199°C c.c
Ignition temperature	approx. 400°C



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lower explosion limit	approx. 2.6 Vol%
upper explosion limit	approx. 11.3 Vol%
pH value	at 100g/l approx. 7 to 7,5
log Pow	-1.8 (computes, related to pure substance)

### 10. Stability and reactivity

Under normal conditions stable.

Conditions to be avoided: Strong heating.

Substances to be avoided: Halogens, strong oxidizing agents, peroxi compounds, nitric acid/conc. sulphuric acid, hydrogen peroxide, perchlorates, nitriles.

Forms explosive mixtures with air on intense heating.

### 11. Toxicological information

*Chronic toxicity:* No unfavourable health effects.

*Acute toxicity:*

LD50 (oral rat): 12600 mg/kg (related to pure substance)

LD50 (dermal rabbit): >18700 mg/kg (related to pure substance)

Eye irritation test (rabbit): No irritation.

Skin irritation test (rabbit): No irritation.

*Sensitization:*

Patch test (humans): Negative.

*Further toxicological information:*

After inhalation of vapours: Slight irritations of: respiratory tract, lungs.

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

The product should be handled with the care usual when dealing with chemicals.

### 12. Ecological information

Biologic degradation: > 60% /14 d.  
Readily biodegradable (reduction: DOC > 70%; BOD > 60%; BOD5 to COD > 50%).

Behavior in environmental compartments:

Distribution: log Pow: -1,8 (computes).

No bioaccumulation is to be expected (log Pow <1).

Ecotoxic effects:

Fish toxicity: C. auratus LC50: >5000 mg/l/24 h.

Daphnia toxicity: Daphnia magna EC50: >10000 mg/l /24 h.



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Maximum permissible toxic concentration:

Algal toxicity:	Sc. quadricauda IC5: >10000 mg/l/7 d.
Bacterial toxicity:	Ps. putida EC5: >10000 mg/l /16 h.
Protozoa:	E. sulcatum EC5: 3200 mg/l /72 h.

Further ecologic data:  
BOD 71% from TOD/5d.  
COD 95% from TOD.  
TOD: 1.217g/g

No ecological problems are to be expected when the product is handled and used with due care and attention.

### 13. Disposal considerations

Take up with liquid-absorbing material.  
Dispose of in compliance with the local and/or national safety regulations.

### 14. Transport information

Not subject to transport regulations.

### 15. Regulatory information

*Labelling according to EC Directives*

Symbol	none
R-phrases	none
S-phrases	none

### 16. Other information

This material safety data sheet does not constitute a guarantee of the properties of the product and is not a contractual legal report. The information is given in good faith on the basis of our best knowledge of the product at the indicated time. However, we cannot accept responsibility or liability for any consequences arising from its use, no warranty for correctness and completeness is given. We caution the users against the incurred possible risks when the product is used at other ends than the use for which it was initially planned. It is the user's responsibility during handling, storage and product use to consult the main regulatory texts in force regarding workers and environment protection.