

## Material safety data sheet

According to EU Regulation 1907/2006 in the current version

### GLYCERIN

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

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Trade name: Glycerin  
I.N.C.I. Glycerin  
CAS No.: 56-81-5  
EC No.: 200-289-5  
REACH pre-registration No. : n.a., product exempted from compulsory registration  
Utilization: Raw material for Cosmetics industry, Chemical industry  
Supplier company identification: Elemental SRL, Piața Cazărmii no.15, 410188-Oradea, jud.Bihor, Romania  
Tel/Fax: +40259-436.755, [www.ellemental.com](http://www.ellemental.com)  
Emergency: RO: număr național pentru cazuri de urgență: 021 3183606 Institutul de Sănătate Publică București.  
International emergency number: +49 180 2273-112

#### 2. Hazards Identification

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##### 2.1 Classification of the substance or mixture

This product is classified as not hazardous according to regulation (EC) 1272/2008 [GHS] and European Regulation 67/548/CEE or 1999/45/EC, as amended

##### 2.2 Label elements

Label in accordance with Regulation (EC) No 1272/2008.

GHS Label None.

Signal Word None.

Contains None.

Hazards Statement None.

Signal Word None.

Precautionary Statements None.

Supplementary Precautionary Statements None.

##### 2.3 Other hazards

No information available

#### 3. Declaration of ingredients

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##### 3.1. Substances

Glycerol > 99.5 %

##### 3.2. Mixtures

Not Applicable

#### 4. First aid measures

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##### 4.1 First-aid measures

###### 4.1.1. General

In all cases of doubt, or when symptoms persist, seek medical attention.

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#### 4.1.2. Inhalation

This is only possible in case of exposure to hot product. Move to fresh air, rest half upright position and loosen clothing. Use oxygen or artificial respiration if there is difficulty in breathing. Seek medical advice after significant exposure. Symptomatic treatment is advised.

#### 4.1.3. Skin contact

Remove contaminated clothing and shoes. Seek medical advice if irritation develops. Launder clothes before re-use. After contact with skin, wash immediately with plenty of water.

#### 4.1.4. Eye contact

Rinse thoroughly with plenty of water. Eyelids should be held away from eyeball to ensure thorough rinsing. Seek medical advice if irritation develops.

#### 4.1.5. Ingestion

No typical symptoms and effects known. Do not induce vomiting.

#### 4.2 Most important symptoms/effects

No typical symptoms and effects known.

#### 4.3 Need to get medical advice

Advice to physician: symptomatic treatment is advised.

## 5. Fire fighting measures

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#### 5.1 Extinguishing media

- Suitable extinguishing media: to fight fire use alcohol resistant foam, carbon dioxide, dry powder.
- Unsuitable extinguishing media: to avoid frothing, do not use water jet.

#### 5.2 Specific hazard arising from the chemical

- Special exposure hazards: vapours cause coughing.
- Hazardous decomposition / combustion products: at elevated temperatures there is a risk of exothermic polymerization ( $T > 200\text{ }^{\circ}\text{C}$ ). At temperatures  $> 250\text{ }^{\circ}\text{C}$  acrolein may be formed.

#### 5.3 Special protective action for fire-fighters

- Protective equipment: no specific recommendations.
- Other information: avoid contact with oxidizing agents. Cool closed containers with water.

## 6. Accidental release measures

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#### 6.1 Personal precautions

Usual precautions for handling chemicals should be observed.

#### 6.2 Environmental precautions

No specific recommendations.

#### 6.3 Methods and materials for containment and cleaning up

Collect as much as possible in a clean container for (preferable) reuse or disposal.

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#### 6.4 Reference to other sections

Refer to protective measures listed in sections 7 and 8.

### 7. Handling and storage

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#### 7.1 Precautions for safe handling

- Handling: usual precautions for handling chemicals should be observed.
- Fire and explosion prevention: no specific recommendation. Avoid contact with oxidizing agents.

#### 7.2 Conditions of storage including incompatibilities

- Storage requirements: to maintain quality store at ambient temperature. Avoid elevated temperatures. Avoid contact with air (the product is hygroscopic).

#### 7.3 Specific use(s) For further information please contact supplier.

### 8. Exposure controls / personal protection

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#### 8.1 Control parameters

##### 8.1.1 Exposure limit values

- UK EH40 workplace exposure limits (WELs) 2007

Time weighted average = 10 mg/m<sup>3</sup>

Remarks = mist

- US ACGIH threshold limit values 2009

Time weighted average = 10 mg/m<sup>3</sup>

Remarks = mist

#### 8.2 Exposure controls

8.2.1 Appropriate engineering controls: usual precautionary measures for handling chemicals should be observed.

##### 8.2.2 Individual protection measures

- Respiratory protection: no special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation.
- Hand protection: use rubber gloves.
- Eye protection: safety glasses.
- Skin and body protection: no specific recommendation.
- Other information: usual precautions for handling chemicals should be observed.

8.2.3 Environmental exposure controls: environmental manager must be informed of all major spillages.

### 9. Physical and chemical properties

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#### 9.1 Physical and chemical properties

- Appearance at 20°C: liquid, colourless or almost colourless
- Odour : odourless
- pH value/range: 6÷8
- Melting point/range: 18°C, tends to supercooling
- Boiling point/range: 130 ÷ 290 °C
- Flash point: > 100 °C, Pensky-Martens closed cup

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- Evaporation rate: no data available
- Flammability (solid, gas): not applicable
- Flammability: not flammable
- Explosion limits: no data available
- Vapour pressure at 20 °C: < 0,1 Pa
- Vapour density: no data available
- Density at 20°C: > 1.222 kg/m<sup>3</sup>
- Solubility: soluble in water, alcohol
- Partition coefficient n-octanol-water: log Pow -1,76
- Autoignition temperature: ~400 °C
- Decomposition temperature: no data available
- Viscosity at 20°C: 1410 mPa\*s
- Explosive properties: none known
- Oxidizing properties: none known

#### 9.2 Other information

No information available

### 10. Stability and reactivity

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- 10.1 Reactivity Stable under normal operational procedure.
- 10.2 Chemical stability No decomposition if stored and handled properly.
- 10.3 Possible dangerous reactions Will not occur.
- 10.4 Conditions to avoid Temperature > 200 °C (polymerization, decomposition).
- 10.5 Materials to avoid Avoid contact with strong oxidizing agents.
- 10.6 Hazardous decomposition products Acrolein (T > 250 °C).

### 11. Toxicological information

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#### 11.1 Information about toxicological effects

Acute toxicity: DL50/oral/rat >10 g/kg

Irritation: Skin Mildly irritating (Lit.)

Eye Mildly irritating (Lit.)

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

STOT – single exposure Not Applicable.

STOT – repeated exposure Not Applicable.

Aspiration hazard Not Applicable.

Other information Not Applicable.

### 12. Ecological information

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#### 12.1 Toxicity

Fishes, *Carassius auratus*: 24h, LC50 > 5 g/l

Crustaceans, *Daphnia magna*: 24h, LC50 > 10 g/l

Bacteria, *Pseudonias putida*: 16h, EC50 > 10 g/l

12.2 Persistence and degradability Readily biodegradable.

12.3 Bioaccumulative potential Low bioaccumulation potential.

12.4 Mobility Low potential for sorption to soil. Glycerol will partition primarily to water.

12.5 Other adverse effects No data available

#### 13. Disposal considerations

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##### 13.1 Waste treatment methods

Waste disposal methods: Re-use/recycling of waste highly recommended. Disposal according to local regulations.

Contaminated packaging: Disposal according to local regulations.

#### 14. Transport information

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Not classified as dangerous substance.

Not classified under IMDG or ADR regulations.

Warning icon Road (ADR), Rail (RID), Sea (IMDG) and Air (ICAO), transport not restricted in drums or food tankers.

Shipping Name Not Applicable.

UN Number (Road) Not Applicable.

ADR Class Not Applicable.

Hazard Number (ADR) Not Applicable.

Hazchem Code Not Applicable.

UN Number (Sea) Not Applicable.

IMDG Class Not Applicable.

IMDG Pack GR. Not Applicable.

EMS Not Applicable.

UN Number (Air) Not Applicable.

Air Class Not Applicable.

Air Pack GR. Not Applicable.

#### 15. Regulatory information

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15.1 Regulations and legislation on health, safety and environment specific to the substance or mixture  
European Union

This product is not dangerous according to EU Regulations (67/548/EEC – 88/379/EEC)

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Authorizations and/or restrictions on use:

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV)

This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants: Not applicable

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#### 15.2 Chemical safety assessment.

No information available

#### 16. Additional information

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##### 16.1 Abbreviations:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

IMDG: International Maritime Code for Dangerous Goods.

INCI: International Nomenclature of Cosmetic Ingredients.

LTE: Long-term exposure.

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

STE: Short-term exposure.

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

##### Disclaimer:

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.