



## Material safety data sheet

According to EU Regulation 1907/2006 in the current version

### GLYCOLIC ACID

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

Trade name:	Glycolic acid
I.N.C.I.	Glycolic acid, Aqua
CAS No. :	79-14-1
EINESCS No. :	201-180-5
REACH pre-registration No. :	01-2119485579-17-XXXX
Utilization:	Raw material for cosmetic or professional use
Supplier company identification:	Elemental SRL, Piața Cazărmii no.15, 410188-Oradea, jud.Bihor, Romania Tel/Fax: +40259-436.755, www.elemental.eu
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

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

Classification according to Regulation (EC) No 1272/2008

Acute toxicity, Inhalation (Category 4), H332

Skin corrosion (Sub-category 1B), H314

Serious eye damage (Category 1), H318

For the full text of the H-Statements mentioned in this Section, see Section 16.

##### 2.2. Label elements Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms



Signal words: Danger

H314 Causes severe skin burns and eye damage.

H332 Harmful if inhaled.

Precautionary statement(s)

P260 Do not breathe dusts or mists.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

Supplemental Hazard Statements: none

##### 2.3. Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher

#### 3. Declaration of ingredients

##### 3.1. Substances

not relevant



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#### 3.2. Mixtures

Identification	Conc. %	Classification 1272/2008 (CLP)
GLYCOLIC ACID CAS 79-14-1	$70 \leq x < 74$	Acute Tox. 4 H332, Skin Corr. 1B H314, Eye Dam. 1 H318
Aqua	$26 \leq x < 30$	

The full wording of hazard (H) phrases is given in section 16 of the sheet

#### 4. First aid measures

##### 4.1. Description of first aid measures

**EYES:** Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

**SKIN:** Remove contaminated clothing. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.

**INHALATION:** Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.

**INGESTION:** Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless authorised by a doctor.

##### 4.2. Most important symptoms and effects, both acute and delayed

Specific information on symptoms and effects caused by the product are unknown

##### 4.3. Indication of any immediate medical attention and special treatment needed

Information not available

#### 5. Fire fighting measures

##### 5.1 Means of extinction

**SUITABLE EXTINGUISHING EQUIPMENT** The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

**UNSUITABLE EXTINGUISHING EQUIPMENT** None in particular

##### 5.2 Special hazards arising from the substance or mixture

**HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE** Do not breathe combustion products.

##### 5.3 Recommendations for fire-fighters

**GENERAL INFORMATION** Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

**SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS** Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137)

##### 5.4 Further information

Evacuate personnel to safe areas. Evacuate personnel and keep upwind of fire.

#### 6. Accidental release measures

##### 6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard. Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.



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#### 6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

#### 6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material. Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

#### 6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13

### 7. Handling and storage

#### 7.1 Precautions for safe handling

Avoid inhalation of vapour or mist. For precautions see section 2

#### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in cool place. Recommended storage temperature 15 -25 °C Storage class (TRGS 510): 8B: Non-combustible, corrosive hazardous materials. No aluminium, tin, or zinc containers.

7.3. Specific end use(s): Apart from the uses mentioned in section 1 no other specific uses are stipulated. See the exposure scenarios attached to this safety datasheet.

### 8. Exposure controls / personal protection

#### 8.1 Control parameters

Predicted no-effect concentration - PNEC

Normal value in fresh water: 0,0321mg/l

Normal value in marine water: 0,0031mg/l

Normal value for fresh water sediment: 0,115mg/kg

Normal value for marine water sediment: 0,0115mg/kg

Normal value of STP microorganisms: 7mg/l

Normal value for the food chain (secondary poisoning): 16,66mg/kg

Normal value for the terrestrial compartment: 0,007mg/kg

#### 8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration. When choosing personal protective equipment, ask your chemical substance supplier for advice. Personal protective equipment must be CE marked, showing that it complies with applicable standards. Provide an emergency shower with face and eye wash station.

##### HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374). The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability. The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

##### SKIN PROTECTION

Wear category III professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

##### EYE PROTECTION

Wear a hood visor or protective visor combined with airtight goggles (see standard EN 166).

##### RESPIRATORY PROTECTION



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If the threshold value (e. g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with atype A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc. ) combined filters are required. Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited. If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

#### ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

## 9. Physical and chemical properties

### 9.1 Information on physical and chemical properties

Appearance: liquid  
Colour: incolore  
Odour: odourless  
Odour threshold: Not available  
pH (1% sol): 2,3  
Melting point / freezing point: >10°C  
Initial boiling point: 112°C  
Boiling range: Not available  
Flash point: >112°C  
Evaporation Rate: Not available  
Flammability of solids and gases: not applicable  
Lower inflammability limit: Not available  
Upper inflammability limit: Not available  
Lower explosive limit: Not available  
Upper explosive limit: Not available  
Vapour pressure: 27,5hPa 25°C  
Vapour density: Not available  
Relative density: 1,25  
Solubility: freely soluble in water  
Partition coefficient: n-octanol/water < 0  
Auto-ignition temperature: Not available  
Decomposition temperature: > 100 °C  
Viscosity: 6,15 mm<sup>2</sup>/s (OECD 114)  
Explosive properties: not explosive  
Oxidising properties: not oxidizing

### 9.2. Other information

Molecular weight: 58,635  
VOC (Directive 2010/75/EC) : 70,00 % - 882,00g/litre  
VOC (volatile carbon) : 22,09 % - 278,34g/litre

## 10. Stability and reactivity

### 10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

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Stable in normal conditions of use and storage. Non vi sono pericoli che debbano essere specificatamente menzionati.

#### 10.2. Chemical stability

The product is stable in normal conditions of use and storage.

GLYCOLIC ACID Stable in normal conditions of use and storage. Stabile

10.3. Possibility of hazardous reactions No hazardous reactions are foreseeable in normal conditions of use and storage.

GLYCOLIC ACID Stable in normal conditions of use and storage.

10.4. Conditions to avoid: None in particular. However the usual precautions used for chemical products should be respected

#### 10.5. Incompatible materials

Avoid contact with: oxidising agents, alkaline earth metals.

#### 10.6. Hazardous decomposition products

In decomposition develops: carbon oxides.

## 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification. It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

#### 11.1. Information on toxicological effects

Metabolism, toxicokinetics, mechanism of action and other information Information not available Information on likely routes of exposure. Delayed and immediate effects as well as chronic effects from short and long-term exposure

Interactive effects: Information not available

Acute oral toxicity LD50, rat: 1,950mg/kg

Acute inhalation toxicity LC50, rat: 3.6mg/l, 4 h

Acute dermal toxicity No data available

Skin irritation Causes severe skin irritation and burns.

Eye irritation Causes serious eye damage. Risk of blindness.

Sensitization No data available

Genotoxicity in vitro No data available

Mutagenicity No data available

Specific organ toxicity -single exposure No data available

Specific organ toxicity -repeated exposure No data available

Aspiration hazard No data available

#### 11.2 Further information

This product contains no substances present at levels greater than or equal to the 0.1% threshold (de minimis) that are identified as probable, possible, potential or confirmed carcinogens by ACGIH, IARC, NTP or OSHA. No data is available regarding the mutagenicity or teratogenicity of this product, nor is there any available data that indicates it causes adverse developmental or fertility effects. Handle in accordance with good industrial hygiene and safety practice.

## 12. Ecological information

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#### Toxicity

GLYCOLIC ACID

LC50 - for Fish 164 mg/l/96h *Pimephales promelas*

EC50 - for Crustacea 141 mg/l/48h *daphnia magna*

EC50 - for Algae / Aquatic Plants 44 mg/l/72h green algae

#### 12.2. Persistence and degradability

GLYCOLIC ACID

Rapidly degradable OECD Test

#### 12.3. Bioaccumulative potential

GLYCOLIC ACID: no bioaccumulation potential ( $\log K_o/w < 1$ ).

#### 12.4. Mobility in soil

No data available

#### 12.5. Results of PBT and vPvB assessment

Not classified

#### 12.6 Other adverse effects

Harmful to aquatic life.

### 13. Disposal considerations

#### 13.1 Waste treatment methods

Product Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. Contaminated packaging Dispose of as unused product.

### 14. Transport information

#### 14.1 UN number

ADR/RID: 3261

IMDG: 3261

IATA: 3261

#### 14.2 UN proper shipping name

ADR/RID: CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.

IMDG: CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.

IATA: Corrosive solid, acidic, organic, n.o.s.

#### 14.3 Transport hazard class(es)

ADR/RID: 8 IMDG: 8 IATA: 8

#### 14.4 Packaging group

ADR/RID: II IMDG: II IATA: II

#### 14.5 Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

#### 14.6 Special precautions for user:

ADR / RID: HIN - Kemler: 80 Limited Quantities: 1 L Tunnel restriction code: (E) Special Provision: -IMDG: EMS: F-A, S-B

Limited Quantities: 1 L IATA: Cargo: Maximum quantity: 30 L Packaging instructions: 855 Pass.: Maximum quantity: 1 L

Packaging instructions: 851 Special Instructions: A3, A803

#### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code: Information not relevant

### 15. Regulatory information

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture None



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Seveso Category - Directive 2012/18/EC:

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006 Product 3 Point

Substances in Candidate List (Art. 59 REACH) On the basis of available data, the product does not contain any SVHC in percentage greater than 0,1%.

Substances subject to authorisation (Annex XIV REACH) None  
Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012: None

Substances subject to the Rotterdam Convention: None

Substances subject to the Stockholm Convention: None

Healthcare controls: Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

German regulation on the classification of substances hazardous to water (AwSV, vom 18. April 2017) WGK 1: Low hazard to waters

15.2. Chemical safety assessment

No chemical safety assessment has been processed for the mixture and the substances it contains

## 16. Additional information

### 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.

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.

TLV: Threshold Limit Value

TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.

TWA STEL: Short-term exposure limit

TWA: Time-weighted average exposure limit

VOC: Volatile organic Compounds

vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation

WGK: Water hazard classes (German)

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Acute Tox. 4 Acute toxicity, category 4

Skin Corr. 1B Skin corrosion, category 1B

Skin Corr. 1 Skin corrosion, category 1

Eye Dam. 1 Serious eye damage, category 1

H332 Harmful if inhaled.



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H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

#### **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.