



Material Safety Data Sheet

According to EU Regulation 1907/2006 in the current version

Date 10/9/2015

Version 2.0

LACTIC ACID

1. Identification of the substance/preparation and the company

Trade name: Lactic acid
 Utilization: Cosmetic additive
 Supplier company: **Elemental SRL**, Piata Cazarmii no.15, 410188-Oradea, jud.Bihor, Romania
 identification: Tel/Fax: +40259-436.755, www.elemental.eu
 Emergency: RO: numar national pentru cazuri de urgenta: 021 3183606 Institutul de Sanatate Publica Bucuresti. 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: Skin corrosion (Category 1A), H314

Classification according to EU Directives 67/548/EEC or 1999/45/EC: C Corrosive R35

For the full text of the H and R-phrases mentioned in this Section, see Section 16.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word Danger

Hazard statement(s): H314 Causes severe skin burns and eye damage.

Precautionary statement(s): P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER or doctor/ physician.

According to European Directive 67/548/EEC as amended

Hazard symbol(s): C Corrosive

R-phrases: R35 Causes severe burns.

S-phrases: S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection. S45 In case of accident or if you feel unwell seek medical advice immediately (show the label where possible)

3. Composition / Information on ingredients

INCI name: lactic acid

CAS-No. : 79-33-4 EINECS-No. : 201-196-2 C&L: 02-2119752812-37-0000

3.1 Substance I-(+)-Lactic acid Formula: C3H6O3 >=78 - <= 92

Skin Irrit.2 Eye Dam.1 H315 H318 Xi; R38 R41

For the full text of the H-statements and R-phrases mentioned in this Section, see Section 16.

4. First Aid

4.1 Description of first aid measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact: Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician. Wash contaminated clothing before reuse.

In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in section 11.

4.3 Indication of any immediate medical attention and special treatment needed: treat symptomatically



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5. Fire-fighting Measures

5.1 Extinguishing media

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture: Carbon oxides

5.3 Advice for firefighters: Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information: No data available

6. Accidental release measures:

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.

6.2 Environmental precautions: Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up: Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal. Flush with plenty of water to clean spillage area.

6.4 Reference to other sections: For disposal see section 13.

7. Handling and Storage

7.1 Precautions for safe handling: Avoid inhalation of vapour or mist.

7.2 Conditions for safe storage, including any incompatibilities: Store in cool place. 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. Storage class (TRGS 510): Combustible, corrosive hazardous materials. Avoid strong alkalis.

7.3 Specific end use(s): Apart from the uses mentioned in section 1 no other specific uses are stipulated.

8. Exposure Controls and Personal Protection

Engineering control: Provide local exhaust or process enclosure ventilation system.

Personal protective equipment:

Respiratory protection: in case of inadequate ventilation wear respiratory protection.

Hand protection: wear protective gloves



Eye protection: wear approved safety goggles

Skin and body protection: wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures: handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

9. Physical and Chemical Properties

Appearance:	liquid
Colour:	colorless to light yellow
Odour:	mild odour
Melting point:	n/a
Boiling point:	> 120 °C
Flash point:	not applicable
pH value:	< 2 (25 °C)
Dynamic viscosity:	5 - 60 mPa.s
Density:	1,19 - 1,25 g/cm ³
Octanol Water Partition Coeff.	log Pow -0,62
Solubility:	in water



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Flammability: not flammable

10. Stability and Reactivity

Stability: stable under normal conditions of handling and under recommended storage conditions

Reactivity: reacts with alkali and generates heat

Hazardous decomposition products: not available

Conditions to avoid: heat above 200 °C

11. Toxicological Information

Acute Toxicity

LD50 4,875mg/kg (Mouse, Oral) for pure lactic acid

LD50 3,730mg/kg (Rat, Oral) for pure lactic acid

LD50 > 2000 mg/kg (Rabbit) for pure lactic acid

Skin corrosion/irritation: moderate irritation of the skin

Serious eye damage/eye irritation: risk of serious eye damage

Respiratory or skin sensitisation: no sensitisation

Carcinogenicity: not identified as probable, possible or confirmed human carcinogen

Mutagenicity: Ames test - Negative

Reproductive toxicity: No data available

Specific target organ toxicity - single exposure: No data available

Specific target organ toxicity - repeated exposure: No data available

Aspiration hazard: No data available

12. Ecological Information

12.1 Toxicity

EC50: 240 mg/l (Daphnae; 48 h)

CI50: 3500 mg/l (72 h)

12.2 Persistence and degradability: readily biodegradable

12.3 Bioaccumulative potential: bioaccumulation is not expected.

12.4 Mobility in soil: 44 - 50 mN/m (50 - 90 %)

12.5 Results of PBT and vPvB assessment: PBT/vPvB assessment not available as chemical safety assessment not conducted.

12.6 Other adverse effects

NOB: 0,45 mg/g, NOC: 0,90 mg/g

13. Disposal Considerations

Dispose of waste and residues in accordance with local authority requirements. Offer surplus and non-recyclable solutions to a licensed disposal company.

14. Transport Information

Land transport (ADR/RID): Not classified as dangerous in the meaning of transport regulations.

Inland waterway transport (ADN) : Not relevant

Air transport (IATA): Not classified as dangerous in the meaning of transport regulations.

Sea transport (IMDG): Not classified as dangerous in the meaning of transport regulations.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: n/a



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15. Additional Regulatory Information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

No data available

15.2 Chemical Safety Assessment: for this product a chemical safety assessment was not carried out

16. Other Information

Full text of H-Statements referred to above sections:

Eye Dam. - Serious eye damage

H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H318 Causes serious eye damage.

Skin Irrit. - Skin irritation

Full text of R-phrases referred to above sections:

Xi Irritant. R35 Causes severe burns. R38 Irritating to skin. R41 Risk of serious damage to eyes.

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.