

## ENGLISH

### SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1 Product identifiers

Product name: Lactic Acid 10 % Solution  
 Product Number: 80303

#### 1.2 Identified uses of the relevant substance or mixture and uses advised against

Identified uses relevant: Professional uses, Health Services, scientific research and development

#### 1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: Liofilchem®  
 Address: Via Scozia, 64026 - Roseto degli Abruzzi (TE)  
 Telephone number: 085/8930745  
 Fax number: 085/8930330  
 E-mail address: liofilchem@liofilchem.com

#### 1.4 Emergency telephone number

+39 02-66101029 (Centro Antiveleni Niguarda Cà Granda - Milano).

### SECTION 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

##### Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Skin Irrit. 2, Skin Irritation (Category 2); H315  
 Eye Dam. 1, Serious eye damage (Category 1); H318

#### 2.2 Label elements

##### Labelling according Regulation (EC) No 1272/2008 [CLP]

##### Pictogram



**Signal word** Danger

##### Hazard statement(s)

H315 Causes skin irritation.  
 H318 Causes serious eye damage.

##### Precautionary statement(s)

P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  
 P362 Take off contaminated clothing and wash before reuse.  
 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.

**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.

### SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

#### 3.2 Mixtures:

##### Hazardous substances

CAS n°	EC n°	Index n°	Registration number REACH	Concentration	Classification according Regulation (EC) No 1272/2008
<b>Lactic acid</b>					
79-33-4	201-196-2	-	-	10.0 %	Skin Irrit. 2; Eye Dam. 1; H315, H318

#### Additional Information:

For full text of H-statements, see SECTION 16

## SECTION 4. FIRST AID MEASURES

### 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:** Flush skin and hair with running water and soap if available, Seek medical attention in event of irritation.

**In case of eye contact:** Rinse carefully and thoroughly with water for at least 15 minutes and consult a physician. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician

**If swallowed:** 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

no data available

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

no data available

## SECTION 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 fire fighting if necessary.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

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

Use personal protective equipment. Ensure adequate ventilation.

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided

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

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

For information on safe handling, see Chapter 7.

For information on personal protection equipment see Chapter 8.

For disposal information see Chapter 13.

## SECTION 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes as precaution. Do not eat, drink or smoke in work areas, wash hands after use; and remove contaminated clothing and protective equipment before entering areas where you eat.

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

Recommended storage temperature, see the product label.

### 7.3 Specific end uses

Apart from the uses described in section 1.2 are not covered other specific uses.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

No data available

### 8.2 Exposure controls

#### Exposure controls

Handle in accordance with good hygiene and safety practice. Wash hands before breaks and at the end of workday.

## Personal protective equipment

Eyes/Face Protection: It is advisable wear safety goggles

Skin protection: Handle with gloves

Body Protection: Use protective clothes in accordance with laboratory good practices.

Respiratory protection: It is advisable wear dust mask.

## Environmental exposure control

For information relating to environmental precautions, see chapter 6.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

#### Appearance

Form Liquid  
Color Clear

#### Odour

No data available

#### pH

No data available

#### Melting point/ freezing point

No data available

#### Initial boiling point and boiling range

No data available

#### Evaporation rate

No data available

#### Flammability (solid, gas)

No data available

#### Upper / lower flammability or explosive limits

No data available

#### Flash point

No data available

#### Auto-ignition temperature

No data available

#### Decomposition temperature

No data available

#### Vapour pressure

No data available

#### Vapour density

No data available

#### Relative density

No data available

#### Water solubility

Soluble

#### Partition coefficient: n-octanol/water

Not applicable

#### Viscosity

No data available

#### Explosive properties

No data available

#### Oxidizing properties

No data available

### 9.2 Other safety information

no data available

## SECTION 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

no data available

### 10.2 Chemical stability

Stable under recommended storage conditions

### 10.3 Possibility of hazardous reactions

no data available

### 10.4 Conditions to avoid

no data available

### 10.5 Incompatible materials

no data available

### 10.6 Hazardous decomposition products

No decomposition when used for the intended uses.

## SECTION 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute toxicity:

- **Lactic acid (CAS 79-33-4)**  
LD50 (Oral - Rat) 3750 mg/kg  
LD50 (Skin - Rabbit) >2000 mg/kg  
LC50 (Inhalation - Rat) > 7,94 mg/L 4 h

**Skin corrosion/irritation:** causes skin irritation

**Serious eye damage/eye irritation:** causes serious eye damage

**Respiratory or skin sensitization:** no data available

**Germ cell mutagenicity:** no data available,

**Carcinogenicity:** : no data available

**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

**Additional information:** RTECS: no data available

**11.2 Information on other hazards:** no data available

## SECTION 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

- **Lactic acid (CAS 79-33-4)**  
LC50: 100 - 180 mg/L, 96h static (Oncorhynchus mykiss)  
LC50: 100 - 180 mg/L, 96h static (Lepomis macrochirus)  
EC50: 180 - 320 mg/L, 48h Static (Daphnia magna)  
EC50: = 240 mg/L, 48h (Daphnia magna)  
EC50 = 3500 mg/L 72 h (Freshwater algae)

### 12.2 Persistence and degradability

no data available

### 12.3 Bioaccumulative potential

no data available

### 12.4 Mobility in soil

no data available

### 12.5 Results of PBT and vPvB assessment

This mixture contains no substances evaluated PBT or vPvB

### 12.6 Endocrine disrupting properties

The mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### 12.7 Other adverse effects

no data available

## SECTION 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

#### Product

Not be disposed of with household waste. Do not discharge into sewers.

The product must be specially treated adhering to official regulations administrative. Offer surplus and non-recyclable solutions to a licensed disposal company.

#### Contaminated packaging

Dispose of as unused product.

## SECTION 14. TRANSPORT INFORMATION

### 14.1 UN number

ADR/RID: -

IMDG: -

IATA: -

### 14.2 UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

#### 14.3 Transport hazard class(es)

ADR/RID: -                      IMDG: -                      IATA: -

#### 14.4 Packaging group

ADR/RID: -                      IMDG: -                      IATA: -

#### 14.5 Environmental hazards

ADR/RID: no                      IMDG: no                      IATA: no

#### 14.6 Special precautions for user

no data available

#### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available

### 15. REGULATORY INFORMATION

This safety datasheet complies with:

- the requirements of European Parliament and of the Council Regulation (EC) No. 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) and Commission Regulation (EU) No. 453/2010 amending Commission Regulation (EC) No. 1907/2006.
- the requirements of Commission Regulation EU 2020/878

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

The product is classified, coded and labeled in accordance with EU Regulation on Hazardous Materials.

#### 15.2 Chemical Safety Assessment

This product has not been made a chemical safety assessment.

### 16. OTHER INFORMATION

#### Text of H code(s) mentioned in Section 3

Skin Irrit. 2, Skin Irritation (Category 2);

Eye Dam. 1, Serious eye damage (Category 1);

H315 Causes skin irritation

H318 Causes serious eye damage

#### Abbreviations and acronyms

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure

#### Training advice

The product must be used by qualified personnel. It is recommended to provide basic training with regard to safety and health at work to ensure proper handling of the product.

## Further information

The information in this document is based on the present state of our knowledge. The user must ensure the accuracy and completeness of such information in relation to the specific use intended.

Liofilchem® shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.liofilchem.com](http://www.liofilchem.com). for additional terms and conditions of sale.

Previous date: 03.10.2016

Revision date: 19.10.2023

Revision Number: rev. 1