

SAFETY DATA SHEET

Version: v1

Revision Date: 2023-11-

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : (-)-Ethyl L-lactate
 Product Number : E104553
 Brand : aladdin
 CAS-No. : 687-47-8

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : 仅供科研用途，不作为药物、家庭备用药或其它用途。

1.3 Details of the supplier of the safety data sheet

Company : Shanghai Aladdin Biochemical Tech Co.,Ltd
 Address : 36 Xinjinqiao Road, Shanghai
 Telephone : 400-620-6333
 Fax : no data available

1.4 Emergency telephone number

Emergency Phone : 0532-83889090

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s)

H226 Flammable liquid and vapor
 H318 Causes serious eye damage
 H335 May cause respiratory irritation

Precautionary statement(s)

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
 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.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

SECTION 3: Composition/information on ingredients

3.1 Substances

| | |
|------------------|---|
| Synonyms | : (-)-Ethyl (S)-2-hydroxypropionate (S)-(-)-2-Hydroxypropionic acid ethyl ester L-Lactic acid ethyl ester |
| Formula | : C ₅ H ₁₀ O ₃ |
| Molecular weight | : 118.13 |
| CAS No. | : 687-47-8 |
| EC-NO. | : 211-694-1 |

| Component | Classification | Concentration |
|---------------------|-------------------|---------------------------|
| (-)-Ethyl L-lactate | no data available | photoresist grade, ≥99.0% |

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

请教医生。向到现场的医生出示此安全技术说明书。

If inhaled

将受害者移到新鲜空气处，保持呼吸通畅，休息。若感不适请求医就诊。

In case of skin contact

用肥皂和大量的水冲洗。请教医生。

In case of eye contact

用大量水彻底冲洗至少15分钟并请教医生。

If swallowed

用水雾,抗乙醇泡沫,干粉或二氧化碳灭火。

4.2 Most important symptoms and effects, both acute and delayed

主要症状和影响，急性和迟发效应据我们所知，此化学，物理和毒性性质尚未经完整的研究。

4.3 Indication of any immediate medical attention and special treatment needed

no data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

用水雾,抗乙醇泡沫,干粉或二氧化碳灭火。

Unsuitable extinguishing media

no data available

5.2 Special hazards arising from the substance or mixture

使用个人防护用品。避免吸入蒸气、烟雾或气体。保证充分的通风。移去所有火源。人员疏散到安全区域。谨防蒸气积累达到可爆炸的浓度。蒸气能在低洼处积聚。

5.3 Advice for firefighters

用水喷雾冷却未打开的容器。

5.4 Further information

用水喷雾冷却未打开的容器。

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Contain the overflow, collect it with an anti electric vacuum cleaner or wet brush, and place it in a container for disposal according to local regulations (see Part 13). Place in a suitable closed container for processing

6.2 Environmental precautions

Do not allow the product to enter the sewer.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

No data available

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool place. Keep the container tightly closed and store in a dry and ventilated place. The opened container must be carefully resealed and kept in an upright position to prevent leakage.

7.3 Specific end use(s)

no data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Appropriate engineering controls

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

Personal protective equipment

Eyeface protection

no data available

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of Regulation (EU)2016/425 and the standard EN 374 derived from it.

Body Protection

no data available

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a fullface particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection,use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN(EU).

Control of environmental exposure

no data available

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| | |
|---|--|
| a) Appearance | form: clear liquid color: colorless |
| b) Odour | no data available |
| c) Odour Threshold | no data available |
| d) pH | 4 at 50 g/l at 20 °C (68 °F) |
| e) Melting point/freezing point | -26°C |
| f) Initial boiling point and boiling range | 154°C |
| g) Flash point | 46°C |
| h) Evaporation rate | no data available |
| i) Flammability (solid, gas) | no data available |
| j) Upper/lower flammability or explosive limits | no data available |
| k) Vapour pressure | 2.1 hPa (1.6 mmHg) at 20 °C (68 °F) |
| l) Vapour density | 4.08 - (Air = 1.0) |
| m) Relative density | 1.034 g/cm ³ at 20 °C (68 °F) |
| n) Water solubility | no data available |
| o) Partition coefficient: n-octanol/water | log Pow: 0.06 |
| p) Auto-ignition temperature | no data available |
| q) Decomposition temperature | no data available |

| | |
|---------------------------|-------------------|
| r) Viscosity | no data available |
| s) Explosive properties N | no data available |
| t) Oxidizing properties N | no data available |

9.2 Other safety information

no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

强氧化剂

10.2 Chemical stability

在建议的贮存条件下是稳定的

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

吸入可能有害。引起呼吸道刺激。

10.5 Incompatible materials

如服入是有害的。

10.6 Hazardous decomposition products

半数致死剂量(LD50) 经口- 大鼠- 雄性和雌性- > 2,000 mg/kg 半数致死浓度 (LC50) 吸入- 大鼠- 雄性和雌性- 4 h - > 5.4 mg/l

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

no data available

Skin corrosion/irritation

无数据资料

Serious eye damage/eye irritation

通过皮肤吸收可能有害。可能引起皮肤刺激。

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

此产品中无大于或等于0.1%含量的组分被IARC鉴别为可能的或肯定的人类致癌物。

Carcinogenicity

细胞突变性-体外试验-Ames试验 (艾姆斯试验) -鼠伤寒沙门氏菌-有或没有代谢活化作用-阴性

Reproductive toxicity

化学物质毒性作用登记:无数据资料

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

引起眼睛灼伤。

Aspiration hazard

no data available

Additional Information

no data available

SECTION 12: Ecological information

12.1 Toxicity

no data available

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

No data available

12.6 Other adverse effects

No data available

SECTION 13:

13.1 Disposal considerations

Product

no data available

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

DOT (US)

UN number: 1192

Packing group: III

Class: 3

Proper shipping name: ETHYL
LACTATE

Reportable Quantity(RQ): no data
available

Poison Inhalation Hazard: No

Environmental Hazards: No

IMDG

UN number: 1192

Packing group: III

EMS-No: No

Proper shipping name: ETHYL LACTATE

IATA

UN number: 1192

Packing group: III

Class: 3

Proper shipping name: ETHYL LACTATE

SECTION 15: Regulatory information

no data available

SECTION 16: Other information

Further information

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