

SAFETY DATA SHEET

Version: v1

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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 : Laboratory chemicals, Manufacture of substances.

1.3 Company

Company : ALADDIN SCIENTIFIC CORPORATION
Address : 14078 Meridian Parkway,
Riverside, CA. 92518
Telephone : +1 (833) 552-7181
Fax : no data available

1.4 Emergency telephone number

CHEMTREC®, Inside the USA : 1-800-424-9300
CHEMTREC®, Outside the USA :

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)

P210 Keep away from heat, hot surface, sparks, open flames and other ignition sources. - No smoking.

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P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof [electrical/ventilating/lighting/.../] equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	IF ON SKIN (or hair): Take off Immediately all contaminated clothing. Rinse SKIN with water [or shower].
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P370+P378	In case of fire: Use ... to extinguish.
P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container to an approved waste disposal plant.
P264+P265	Wash hands [and ...] thoroughly after handling. Do not touch eyes.
P305+P354+P338	IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P317	Get emergency medical help.
P319	Get medical help if you feel unwell.

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%

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

Show this material safety data sheet to the doctor in attendance.

If inhaled

Transfer to fresh air If breathing stops, perform artificial respiration If symptoms appear, seek medical treatment.

In case of skin contact

Rinse with soap and plenty of water. Consult a doctor.

In case of eye contact

Thoroughly rinse with plenty of water for at least 15 minutes and consult a doctor.

If swallowed

Rinse your mouth with water and then drink a large amount of water If symptoms appear, seek medical treatment

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: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water, Foam, Carbon dioxide (CO₂), Dry powder

Unsuitable extinguishing media

no data available

5.2 Special hazards arising from the substance or mixture

no data available

5.3 Advice for firefighters

no data available

5.4 Further information

Cool unopened containers with water spray.

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

Eye/face 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

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

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10.5 Incompatible materials

strong oxidant

10.6 Hazardous decomposition products

no data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

no data available

Skin corrosion/irritation

May be harmful if absorbed through skin. May cause skin irritation.

Serious eye damage/eye irritation

Causes eye burns.

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

Cell Mutability - In vitro Test - Ames Test - Salmonella typhimurium - With or without metabolic activation - Negative

Carcinogenicity

There are no components in this product at levels greater than or equal to 0.1% that have been identified by IARC as possible or definite human carcinogens.

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

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

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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

Prepared By	Regulatory Affairs ALADDIN SCIENTIFIC CORPORATION Email: QualityAssurance@aladdinsci.com
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SDS sections updated v1

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