



Safety Data Sheet

Ethyl Lactate

SECTION 1: Identification

1.1 GHS Product identifier

Product name Ethyl Lactate

1.2 Other means of identification

lactic acid ethyl ester

1.3 Recommended use of the chemical and restrictions on use

For laboratory and manufacturing use only.

1.4 Supplier's details

Name High Purity Products
Address 14546 N. Lombard Street
Portland OR 97203
United States of America

Telephone 503-227-1616
email help.desk@highpp.com

1.5 Emergency phone number

CHEMTREC: 1-800-424-9300

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS classification in accordance with: OSHA (29 CFR 1910.1200)

- Flammable liquids, Cat. 3
- Eye damage/irritation, Cat. 1
- Specific target organ toxicity (single exposure), Cat. 3
- Respiratory tract irritation, Cat. 3

2.2 GHS label elements, including precautionary statements

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Pictogram



Signal word

Danger

Hazard statement(s)

H226 Flammable liquid and vapor
H318 Causes serious eye damage
H335 May cause respiratory irritation
H370 Target Organ Toxicity [respiratory system] Single exposure

Precautionary statement(s)

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P240 Ground and bond container and receiving equipment.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P308+P313 IF exposed or concerned: Get medical attention.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.

SECTION 3: Composition/information on ingredients

3.1 Mixture

Constituents	CAS Number	Concentration (Weight)
Propanoic acid, 2-hydroxy-, ethyl ester	97-64-3	100%

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

If inhaled Move to fresh air. Treat symptomatically. Get medical attention if symptoms persist.

In case of skin contact Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing. Call a physician if irritation develops. Wash clothing before reuse.

In case of eye contact Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes.

If swallowed Do not give liquids if victim is unconscious or drowsy. Otherwise, have victim drink water or milk to dilute. NEVER GIVE ANYTHING BY MOUTH IF UNCONSCIOUS OR CONVULSING. Call doctor or Poison Control immediately. Induce vomiting only if advised by doctor or Poison Control.

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SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Use water spray, dry chemical, carbon dioxide, foam.

5.2 Specific hazards arising from the chemical

In case of fires, hazardous combustion gases are formed:
Carbon monoxide (CO)

5.3 Special protective actions for fire-fighters

Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece in positive pressure mode.

SECTION 6: Accidental release measures

6.1 Large spill:

Remove all sources of ignition and provide ventilation. Handling equipment must be grounded to prevent sparking. Evacuate the hazard area of unprotected personnel. Wear appropriate respirator and protective clothing as given in Section 8. Stop source of leak only if safe to do so. Dike and contain. If vapor cloud forms, water fog may be used to suppress. Contain run-off. Remove with vacuum truck or pump to storage/salvage vessels. Absorb residue or small spills with inert material (clay, sand). Place in non-leaking containers for proper disposal. Flush area with water to remove trace residue. Dispose of flush solutions as above. Prevent contamination of surface waters.

6.2 General procedures:

Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area.

SECTION 7: Handling and storage

7.1 General procedures:

Keep away from heat, sparks, and flame. Surfaces that are hot may ignite even liquid product in the absence of sparks or flame. Extinguish pilot lights, cigarettes and turn off other sources of ignition prior to use and until all vapors are gone.

7.2 Precautions for safe handling:

Avoid contact with skin and eyes. Do not inhale vapors. Keep away from heat and open flame. Wash thoroughly with soap and water after handling. Store tightly closed containers in cool, dry place. Use inert gas blanket.

7.3 Conditions for safe storage:

Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Not Applicable

8.2 Individual protection measures, such as personal protective equipment (PPE)

Pictograms



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Personal Protective Equipment

Eyes and Face: Chemical splash goggles and face shield in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. (Consult your industrial hygienist.)

Skin: Wear resistant gloves (consult your safety equipment supplier). To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

Respiratory: If exposure may or does exceed occupational exposure limits (Sec. 8) use a NIOSH approved respirator to prevent overexposure. In accord with 29 CFR 1910.134 use either an atmosphere-supplying respirator or an air-purifying respirator for organic vapors. Use a positive pressure, air-supplying respirator if there is potential for uncontrolled release, exposure levels are not known, or other circumstances where air-purifying respirators may not provide adequate protection.

Work Hygienic Practices: Use good personal hygiene when handling this product. Wash hands after use, before eating, drinking, smoking, or using the toilet.

Other Use Precautions: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

SECTION 9: Physical and chemical properties and safety characteristics

Physical state	Liquid
Appearance	Liquid
Color	Colorless
Odor	Characteristic odor
Odor threshold	No data available.
pH	N/A
Melting point/freezing point	-26 °C
Boiling point or initial boiling point and boiling range	154 °C
Flash point	115° F
Evaporation rate	No data available.
Lower explosion limit / flammability limit	1.5%
Upper explosion limit / flammability limit	11.4%
Vapor Pressure	No data available.
Relative vapor density	Heavier than Air
Density and/or relative density	1.03
Solubility	Complete
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Kinematic viscosity	No data available.
Explosive properties	No data available.

Particle characteristics

No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

Yes

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

Heat, flames and sparks.

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10.5 Incompatible materials

Strong oxidizers.

10.6 Hazardous decomposition products

No data available.

SECTION 11: Toxicological information

Information on toxicological effects

Acute Toxicity

Propanoic acid, 2-hydroxy-, ethyl ester:

LD50 – oral – mouse – 2500 mg/kg

Skin corrosion/irritation

May cause skin irritation.

Serious eye damage/irritation

Causes serious eye irritation.

Germ cell mutagenicity

No data available.

Carcinogenicity

No data available.

Reproductive toxicity

No data available.

STOT-single exposure

Yes, irritates

STOT-repeated exposure

No data available.

Aspiration hazard

No data available.

SECTION 12: Ecological information

Toxicity

LC50 Pimephales promelas (Fathead minnow, age 32 days, mean length 18.4 mm, mean weight 0.095 g) 1240 mg/L/96 hr (95% confidence limit: 1190-1290 mg/L); flow through, 24.4 °C, pH 7.7, dissolved oxygen 7.2 mg/L, hardness 44.5 mg/L CaCO₃, alkalinity 42.6 mg/L CaCO₃ /97% purity

Persistence and degradability

No data available.

Bioaccumulative potential

No data available.

Mobility in soil

No data available.

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SECTION 13: Disposal considerations

Disposal methods

Product disposal

Product disposal Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies, if necessary, before disposing of waste product container or residue.

SECTION 14: Transport information

DOT (US)

UN Number: UN1192

Class: 3

Packing Group: III

Proper Shipping Name: Ethyl Lactate

IMDG

UN Number: UN1192

Class: 3

Packing Group: III

Proper Shipping Name: Ethyl Lactate

IATA

UN Number: UN1192

Class: 3

Packing Group: III

Proper Shipping Name: Ethyl Lactate

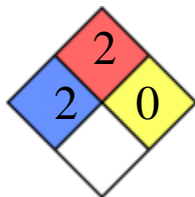
SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

HMIS Rating

Ethyl Lactate	
HEALTH	2
FLAMMABILITY	2
PHYSICAL HAZARD	0
PERSONAL PROTECTION	

NFPA Rating



SECTION 16: Other information

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