

1 Identification of the substance/mixture and of the company

- **Product identifier**
- **Trade name:** ELThinner
- **Product number:** M010100
- **CAS Number:**
97-64-3
- **EC number:**
202-598-0
- **Index number:**
607-129-00-7
- **Application of the substance / the mixture** Thinner, Diluent
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
MicroChem Corp.
200 Flanders Road
Westborough, MA 01581 USA
- **Information department:**
Product Safety
Email: productsafety@microchem.com
- **Emergency telephone number:**
MicroChem Corp : 617-965-5511
Chemtrec USA Emergency : 800-424-9300
Chemtrec International Emergency : 703-527-3887

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Flam. Liq. 3 H226

Flammable liquid and vapor.



GHS05 Corrosion

Eye Dam. 1 H318

Causes serious eye damage.



GHS07

STOT SE 3 H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

- **Label elements**

- **GHS label elements**

The substance is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS02



GHS05



GHS07

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USA

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· **Signal word** *Danger*· **Hazard-determining components of labeling:***Ethyl lactate*· **Hazard statements***H226 Flammable liquid and vapor.**H318 Causes serious eye damage.**H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.*· **Precautionary statements***P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.**P261 Avoid breathing dust/fume/gas/mist/vapours/spray.**P280 Wear protective gloves/protective clothing/eye protection/face protection.**P233 Keep container tightly closed.**P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.**P312 Call a POISON CENTER or doctor/physician if you feel unwell.**P370+P378 In case of fire: Use for extinction: Alcohol resistant foam.**P370+P378 In case of fire: Use for extinction: Fire-extinguishing powder.**P370+P378 In case of fire: Use for extinction: Carbon dioxide.**P403+P235 Store in a well-ventilated place. Keep cool.**P501 Dispose of contents/container in accordance with local/regional/national/international regulations.*· **Classification system:**· **NFPA ratings (scale 0 - 4)***Health = 2**Fire = 2**Reactivity = 0*· **HMIS-ratings (scale 0 - 4)***Health = 2**Fire = 2**Reactivity = 0*· **Other hazards**· **Results of PBT and vPvB assessment**· **PBT:** *Not applicable.*· **vPvB:** *Not applicable.***3 Composition/information on ingredients**· **Chemical characterization: Substances**· **CAS No. Description***97-64-3 ethyl lactate*· **Identification number(s)**· **EC number:** *202-598-0*· **Index number:** *607-129-00-7***4 First-aid measures**· **Description of first aid measures**· **General information:** *Immediately remove any clothing soiled by the product.*

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- **After inhalation:**
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water and then consult a doctor.
- **After swallowing:**
Do not induce vomiting unless instructed to do so by a physician. Wash out mouth with water and keep person at rest. Seek immediate medical attention.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
Alcohol resistant foam
Fire-extinguishing powder
Carbon dioxide
- **For safety reasons unsuitable extinguishing agents:**
Water with full jet
Water
- **Special hazards arising from the substance or mixture**
Containers may explode due to pressure increase when container is exposed to extreme heat. Vapors may travel a considerable distance to a source of ignition and flash back along vapor trail.
- **Advice for firefighters**
- **Protective equipment:** Wear SCBA.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Keep away from ignition sources
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
Dispose contaminated material as waste according to Section 13.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Keep receptacles tightly sealed.
Ensure good ventilation/exhaust at the workplace.

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- Keep away from heat and direct sunlight.
- **Information about protection against explosions and fires:**
 - Keep ignition sources away - Do not smoke.
 - Use explosion-proof apparatus / fittings and spark-proof tools.
 - Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and containers:**
 - No special requirements.
 - Store in a cool location.
- **Information about storage in one common storage facility:**
 - Do not store together with oxidizing and acidic materials.
 - Do not store together with alkalis (caustic solutions).
- **Further information about storage conditions:**
 - Keep container tightly sealed.
 - Protect from heat and direct sunlight.
 - Store receptacle in a well ventilated area.
 - Store under lock and key and with access restricted to technical experts or their assistants only.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
 - Keep away from food and beverages.
 - Immediately remove all soiled and contaminated clothing.
 - Wash hands before breaks and at the end of work.
 - Avoid contact with the eyes.
- **Respiratory equipment:**
 - In case of low exposure, use cartridge respirator. In case of intensive or longer exposure, use SCBA.
- **Protection of hands:**



Protective gloves

- The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
- Contact glove manufacturer for break-through time.
- **Material of gloves**
 - Butyl rubber, BR
 - Nitrile rubber, NBR
- **Penetration time of glove material** Contact glove manufacture for break-through time.

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· Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Liquid
Color:	Colorless
Odor:	Fruit-like
Odour threshold:	Not determined.

· pH-value at 20 °C (68 °F): 4

· Change in condition

Melting point/Melting range:	-25 °C (-13 °F)
Boiling point/Boiling range:	154 °C (309 °F)

· Flash point: 46 °C (115 °F)

· Flammability (solid, gaseous): Not applicable.

· Ignition temperature: 400 °C (752 °F)

· Decomposition temperature: Not determined.

· Auto igniting: Not determined.

· Danger of explosion: Not determined.

· Explosion limits:

Lower:	1 Vol %
Upper:	17 Vol %

· Vapor pressure at 20 °C (68 °F): 2 hPa (2 mm Hg)

· Density at 20 °C (68 °F): 1.03 g/cm³ (8.595 lbs/gal)

· Relative density: Not determined.

· Vapour density: Not determined.

· Evaporation rate: < 1

· Solubility in / Miscibility with

Water: Fully miscible.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

Dynamic: Not determined.

Kinematic: Not determined.

Organic solvents: 0.0 %

· Other information: No further relevant information available.

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10 Stability and reactivity

- **Reactivity**
- **Chemical stability** Stable under normal use conditions
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** Heat, flames and sparks. Extremes of temperature and direct sunlight.
- **Incompatible materials:** Strong Oxidizing Agents, Strong Acids, Strong Bases
- **Hazardous decomposition products:** Carbon monoxide and carbon dioxide

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· LD/LC50 values that are relevant for classification:

97-64-3 Ethyl lactate		
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Oral	LD50	8200 mg/kg (Rat)
Dermal	LD50	5000 mg/kg (rabbit)
Inhalative	LC50 8 hr	5.4 mg/l (Rat)

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Strong irritant with the danger of severe eye injury.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**

- **Carcinogenic categories**

· IARC (International Agency for Research on Cancer)

Substance is not listed.

· NTP (National Toxicology Program)
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Substance is not listed.

12 Ecological information

- **Toxicity**

· Aquatic toxicity:

97-64-3 Ethyl lactate	
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LC50/96 h	320 mg/l (zebra fish)
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- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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· **Other adverse effects** No further relevant information available.**13 Disposal considerations**

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of as regular garbage/trash. Do not allow product to reach sewage system.
Disposal must be made in accordance with Federal, State, and Local regulations.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made in accordance with Federal, State, and Local regulations.

14 Transport information

- **UN-Number**
- **DOT, ADR, IMDG, IATA** UN1192
- **UN proper shipping name**
- **DOT, IMDG, IATA** ETHYL LACTATE
- **ADR** 1192 ETHYL LACTATE

· **Transport hazard class(es)**· **DOT**

- **Class** 3 Flammable liquids.
- **Label** 3

· **ADR, IMDG, IATA**

- **Class** 3 Flammable liquids
- **Label** 3

- **Packing group**
- **DOT, ADR, IMDG, IATA** III

- **Environmental hazards:**
- **Marine pollutant:** No

- **Special precautions for user** Warning: Flammable liquids
- **Danger code (Kemler):** 30
- **EMS Number:** F-E,S-D

- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

- **UN "Model Regulation":** UN1192, ETHYL LACTATE, 3, III

USA

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15 Regulatory information

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

- Sara

- Section 355 (extremely hazardous substances):

Substance is not listed.

- Section 313 (Specific toxic chemical listings):

Substance is not listed.

- TSCA (Toxic Substances Control Act):

Substance is listed.

- Proposition 65

- Chemicals known to cause cancer:

Substance is not listed.

- Chemicals known to cause reproductive toxicity for females:

Substance is not listed.

- Chemicals known to cause reproductive toxicity for males:

Substance is not listed.

- Chemicals known to cause developmental toxicity:

Substance is not listed.

- Carcinogenic categories

- EPA (Environmental Protection Agency)

Substance is not listed.

- TLV (Threshold Limit Value established by ACGIH)

Substance is not listed.

- NIOSH-Ca (National Institute for Occupational Safety and Health)

Substance is not listed.

- OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

- Massachusetts State Right To Know List

97-64-3 Ethyl lactate

- New Jersey State Right To Know List

97-64-3 Ethyl lactate

- Pennsylvania Hazardous Substances List

97-64-3 Ethyl lactate

- California SCAQMD Rule 443.1 VOC's: 1032 g/l

- GHS label elements

The substance is classified and labeled according to the Globally Harmonized System (GHS).

- Hazard pictograms



GHS02 GHS05 GHS07

- Signal word *Danger*

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- **Hazard-determining components of labeling:**

Ethyl lactate

- **Hazard statements**

H226 Flammable liquid and vapor.

H318 Causes serious eye damage.

H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

- **Precautionary statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

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

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P233 Keep container tightly closed.

P305+P351+P338 **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P370+P378 In case of fire: Use for extinction: Alcohol resistant foam.

P370+P378 In case of fire: Use for extinction: Fire-extinguishing powder.

P370+P378 In case of fire: Use for extinction: Carbon dioxide.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing MSDS:** Product safety department

- **Contact:** Mr. Cole

- **Revision History:**

The business address of the manufacturer in Section 1 was updated. The contact person in Section 16 was updated.

- **Date of preparation / last revision** 10/21/2014 / -

- **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organization

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent