

Printing date 02/01/2022

1 Identification

- · Product identifier
- Trade name: <u>EL-Thinner</u>
- 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: Kayaku Advanced Materials, Inc. 200 Flanders Road Westborough, MA 01581 Tel: (617) 965-5511 Fax: (617) 965-5818
- Information department: Product Safety Email: productsafety@kayakuAM.com • Emergency telephone number: Kayaku Advanced Materials : 617-965-5511 Chemtrec USA Emergency : 800-424-9300 Chemtrec International Emergency : 703-527-3887

2 Hazard(s) identification

· Classification of the su	ibstance or mixture	
GHS02 Flan	10	
Flam. Liq. 3 H226	Flammable liquid and vapor.	
GHS05 Corr	rosion	
Eye Dam. 1 H318	Causes serious eye damage.	
GHS07		
Skin Irrit. 2 H315	Causes skin irritation.	
STOT SE 3 H335-H3	36 May cause respiratory irritation. May cause drowsiness or dizziness.	
• Label elements • GHS label elements The substance is classi	fied and labeled according to the Globally Harmonized System (GHS).	(Contd. on page 2)

Safety Data Sheet

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Trade name: EL-Thinner (Contd. of page 1) · Hazard pictograms GHS02 GHS05 GHS07 · Signal word Danger · Hazard-determining components of labeling: Ethvl lactate · Hazard statements H226 Flammable liquid and vapor. H315 Causes skin irritation. 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/vapors/spray P280 Wear protective gloves/protective clothing/eye protection/face protection. P301+P310 If swallowed: Immediately call a poison center/doctor. P302+P352 If on skin: Wash with plenty of soap and water. P304+P341 If inhaled: If breathing is difficult, 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. If skin irritation or rash occurs: Get medical advice/attention. P333+P313 *P337+P313* If eye irritation persists: Get medical advice/attention. In case of fire: Use to extinguish: Alcohol resistant foam, Fire-extinguishing powder, Carbon P370+P378 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 = 3Fire = 2Reactivity = 0· HMIS-ratings (scale 0 - 4) HEALTH *3 Health = *32 Fire = 2FIRE Reactivity = 0REACTIVITY 0 • Other hazards · Results of PBT and vPvB assessment

• *PBT*: Not applicable.

• **vPvB:** Not applicable.

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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.
- 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:

Wash eyes immediately with a large amount of water or normal saline, occasionally lifting upper and lower eye lids until no evidence of chemical remains (about 20 minutes). Remove contact lenses if present and easy to remove. Seek immediate medical attention.

· 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 Treat symptomatically.

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*

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- 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. 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.

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(Contd. of page 4) 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. • Material of gloves Nitrile rubber, NBR • Penetration time of glove material Contact glove manufacture for break-through time. • Eye protection: • Tightly sealed goggles

9 Physical and chemical properties

General Information Appearance:		
Form:	Liquid	
Color:	Colorless	
Odor:	Fruit-like	
Odor threshold:	Not determined.	
<i>pH-value at 20 °C (68 °F):</i>	4	
Change in condition		
Melting point/Melting range:	-25 °C (-13 °F)	
Boiling point/Boiling range:	154 °C (309.2 °F)	
Flash point:	46 °C (114.8 °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 (1.5 mm Hg)	
<i>Density at 20 °C (68 °F):</i>	1.03 g/cm ³ (8.59535 lbs/gal)	
Relative density	Not determined.	
Vapor density	Not determined.	



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• Evaporation rate	< 1	
· Solubility in / Miscibility with		
Water:	Fully miscible.	
· Partition coefficient (n-octanol/water): Not determined.		
· Viscosity:	Not determined.	
Dynamic: Kinematic:	Not determined. Not determined	
Organic solvents:	100.0 %	
• Other information	No further relevant information available.	

10 Stability and reactivity

• *Reactivity* No further relevant information available.

- · Chemical stability Stable
- 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. Contact with incompatible materials.

- · 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

Oral	LD50	8200 mg/kg (Rat)
Dermal		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)

Substance is not listed.

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· OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

12 Ecological information

· Toxicity

· Aquatic toxicity:

97-64-3 Ethyl lactate

LC50/96 h 320 mg/l (zebra fish)

· 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 (Assessment by list): 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.
- 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.

· UN-Number		
DOT, ADR, IMDG, IATA	UN1192	
· UN proper shipping name		
DOT, ÎMDG, ÎATĂ	ETHYL LACTATE	
ADR	1192 ETHYL LACTATE	



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		(Contd. of page
· 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	
· Hazard identification number (Kemler o		
• EMS Number:	F-E,S-D	
• Transport in bulk according to Annex I MARPOL73/78 and the IBC Code	I of Not applicable.	
	UN1192, ETHYL LACTATE, 3, III	

15 Regulatory information

 \cdot Safety, health and environmental regulations/legislation specific for the substance or mixture \cdot 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**): All ingredients are listed or comply with TSCA regulations. • **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.

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Chemicals known to cause developmental toxicity:

Substance is not listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

Substance is not listed.

• TLV (Threshold Limit Value)

Substance is not listed. • NIOSH-Ca (National Institute for Occupational Safety and Health)

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



· Signal word Danger

• Hazard-determining components of labeling: Ethyl lactate

· Hazard statements

H226 Flammable liquid and vapor.

H315 Causes skin irritation.

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/vapors/spray

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

P301+P310 If swallowed: Immediately call a poison center/doctor.

P302+P352 If on skin: Wash with plenty of soap and water.

P304+P341 If inhaled: If breathing is difficult, 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.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

- *P337+P313* If eye irritation persists: Get medical advice/attention.
- *P370+P378* In case of fire: Use to extinguish: Alcohol resistant foam, Fire-extinguishing powder, Carbon dioxide.

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OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit Flam. Liq. 3: Flammable liquids – Category 3 Skin Irrit. 2: Skin corrosion/irritation - Category 2 Eye Dam. 1: Serious eye damage/eye irritation – Category 1

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

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Printing date 02/01/2022 Reviewed on 02/01/2022 Trade name: EL-Thinner (Contd. of page 9) P403+P235 Store in a well-ventilated place. Keep cool. Dispose of contents/container in accordance with local/regional/national/international P501 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 SDS: Product safety department · Contact: Tom Cole, EHS Manager (tcole@kayakuAM.com) · Revision History: The manufacturer's information in Section 1, the product hazard information in Section 2 and the component hazard information in Section 3 have been updated. · Date of preparation / last revision 02/01/2022 / 2 • 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 Organisation ADR: Accord relatif au transport international 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 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 PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety