

HEALTH	2
FLAMMABILITY	2
REACTIVITY	0

Section 1: PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product Name	Ethyl L lactate, Natural
Product Number	0244000
CAS-No.	687-47-8

1.2 Product Recommended Use **Flavorings**

1.3 Preparation Information

Company	Aurochemicals 7 Nicoll Street Washingtonville, NY 10992
Telephone	845-496-6065
Fax	845-496-6248

1.4 Emergency Telephone Number 1-800-535-5053
International - 1-352-323-3500 collect

Section 2: HAZARD(s) IDENTIFICATION

2.1 Classification of substance or mixture

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

Flammable liquids (Category 3), H226
Skin irritation (Category 2), H315
Serious eye damage (Category 1), H318
Specific target organ toxicity-single exposure (Category 3), Respiratory system, H335

2.2 GHS Label Elements, Including precautionary statements

Pictogram



Signal Statement **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
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses
P305+P351+P338 if present and easy to do. Continue rinsing.
Call a POISON CENTER or doctor / physician if you feel unwell
P312 If eye irritation persists: Get medical advice/attention

P337+P313

2.3 HNOC (Hazards not otherwise classified or not covered by GHS –None)**Section 3: COMPOSITION / INFORMATION ON INGREDIENTS****3.1 Substances**

Synonyms	(-)-Ethyl L lactate Lactic Acid Ethyl Ester
Formula	C ₅ H ₁₀ O ₃
Molecular Weight	118.13 g/mol
CAS-No	687-47-8
EC-No.	202-598-0

Hazardous Components

Component	Classification	Concentration
Decanal	Flammable liquids (3), H226 Serious eye damage (1), H318 Specific target organ toxicity-single exposure (3), Respiratory system, H335	

Section 4: FIRST AID MEASURES**4.1 Description of first aid measures**

General advice	Consult physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area
Inhalation	Provide fresh air; keep at rest and at a comfortable position to breathe. Consult a physician
Contact with skin:	Remove contaminated clothing. Rinse skin with cool water then wash with mild soap and warm water and contact a physician.
Contact with eyes:	Rinse thoroughly with plenty of water for at least 15 as a precaution and consult a physician.
Ingestion	DO NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Clothing contamination:	Remove contaminated clothing and wash before reuse.

4.2 Most important symptoms and effects both acute and delayed See section 2.2 and or section 11

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	For small (incipient) fires, use media such as alcohol foam, dry chemical, or carbon dioxides. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.
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| 5.2 | Special hazards arising from the substance or mixture | Carbon oxides |
| 5.3 | Advice for fire fighters | Wear self contained breathing apparatus for firefighting if necessary. Emits toxic fumes under fire conditions |
| 5.4 | Further information | Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surfaces |

Section 6: ACCIDENTAL RELEASE MEASURES

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| 6.1 | Personal precautions, protective equipment and emergency procedures | Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe area. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. |
| 6.2 | Environment precautions | Prevent further leakage or spillage if safe to do so. Do not allow to enter drains or sewage system. |
| 6.3 | Methods and materials for containment and clean up | Contain spillage. Sweep up with broom and shovel. Place in a suitable, closed container for disposal. |
| 6.4 | Specific end use(s) | Apart from the uses mentioned in section 1.2, no other specific uses are stipulated. |

Section 7: HANDLING AND STORAGE

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| 7.1 | Precautions for safe handling | Avoid contact with skin and eyes and clothing. Avoid Inhalation of vapor or mist. Keep away from sources of ignition-No Smoking. Take measures to prevent the buildup of electrostatic charge. |
| 7.2 | Conditions for Safe storage | Keep container tightly closed in a cool, dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. |
| 7.3 | Specific End use(s) | Flavorings |

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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| 8.1 | Control parameters | |
| | Components with workplace control parameters: | Contains no substances with occupational exposure limit values. |
| 8.2 | Exposure Controls | |
| | Appropriate Engineering Controls | Avoid contact with skin, eyes and clothing.
Handle in accordance with good industrial hygiene and safety practices.
Wash hands immediately after handling the product; before breaks and at the end of the day. |
| | Personal protective equipment | These recommendations are advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situations of anticipated use by our customers. They should not be construed as offering an approval or any specific use scenario. |

Eye/face protection	Wear appropriate safety glasses with side shields. Use equipment for eye protection
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tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin protection	Wear chemically resistant, Nitrile rubber gloves, 0.3mm, when handling this product. Use proper glove removal techniques (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use. Wash and dry hands.
Body protection	Impervious clothing of flame retardant antistatic material, protecting against chemicals, should be selected specifically for the work place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.
Respiratory protection	Where risk assessment shows air purifying respirators are appropriate use a full face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a back up 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 governmental standards such as NIOSH (US) or CEN (EU).
Control of environmental exposure	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a	Appearance	Colorless liquid
b	Odor	Fruity, butterscotch
c	Odor Threshold	No data available
d	pH	No data available
e	Melting Point /Freezing Point	No data available
f	Boiling Point	154°C
g	Flash Point	49°C closed cup
h	Evaporation Rate	No data available
i	Flammability (Solid, Gas)	No data available
j	Upper/lower Flammability Limit	No data available
k	Vapor pressure	No data available
l	Vapor density	No data available
m	Relative density at 25°C	1.029-1.040
n	Solubility	Soluble in alcohol, ether, chloroform, water
o	Partition coefficient: n-octanol/water	No data available
p	Auto-ignition Temp.	No data available
q	Decomposition Temp.	No data available
r	Viscosity	No data available
s	Explosive properties	No data available
t	Oxidizing properties	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	Heat, Flames, Sparks
10.5 Incompatible materials	Strong oxidizing agents
10.6 Hazardous decomposition products	Formed under fire conditions – Carbon Oxides
10.7 Further Information	No data available

Section 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity

LD50-Oral –Rat	8,200 mg/kg
LC50-Inhalation	No data available
LD50-Dermal –Rabbit	>5,000 mg/kg
Skin corrosion/irritation	Human – Mild skin irritation – 48 hr Rabbit – Moderate skin irritation – 24 hr

Serious eye damage/eye irritation	No data available
Respiratory or skin sensitization	No data available
Germ Cell mutagenicity	No data available

Carcinogenicity

IARC	No component of this product, present levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH	No component of this product, present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP	No component of this product, present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA	No component of this product, present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity	No data available
Specific target organ toxicity-single exposure (GHS)	Inhalation: May cause respiratory irritation
Specific target organ toxicity-repeated exposures (GHS)	No data available
Aspiration Hazards	No data available
Signs and Symptoms of Exposure	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated
Synergistic effect	No data available
RTECS:	OD5075000

Section 12: ECOLOGICAL INFORMATION

12.1 Toxicity	To Fish: LC-50 – Danio rerio (zebra fish) – 320 mg/l 96 hr Mortality NOEC – Danio rerio (zebra fish) 180 mg/l 96 hr To Daphnia and other aquatic invertebrates EC-50 Daphnia magna (Water Flea) 560 mg/l 48 hr
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	PBT/vPvB assessment not available as chemical safety assessment not required / not conducted
12.6 Other adverse effects	No data available

Section 13: DISPOSAL CONSIDERATIONS

13.1 Disposal methods	
Product:	According to local regulations
Packaging	According to local regulations

Section 14: TRANSPORT INFORMATION

DOT (US)	UN-Number: 1192 Class: 3 Packing Group: III
Proper shipping name:	Flammable liquid (Ethyl Lactate)
Marine Pollutant:	No
Poison Inhalation Hazard:	No
IMDG	UN-Number: 1192 Class: 3 Packing Group: III
Proper shipping name:	FLAMMABLE LIQUID (Ethyl Lactate)
Marine Pollutant:	No
IATA	UN-Number: 1192 Class: 3 Packing Group: III
Proper shipping name:	Flammable Liquid (Ethyl Lactate)

Section 15: REGULATORY INFORMATION

Reach No.	A registration number is not available for this substance as its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.
SARA 302 Components	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302
SARA 313 Components	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
SARA 311/312 Hazards	Fire Hazard, Acute health hazard
Massachusetts Right to Know components	No components are subject to the Massachusetts Right to Know Act

Safety Data Sheet

Pennsylvania Right to Know components Hexyl Formate CAS# 629-33-4 Rev. Date:

New Jersey Right to Know components Hexyl Formate CAS# 629-33-4 Rev. Date:

California Prop. 65 components This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16: OTHER INFORMATION

HMIS Rating

Health hazard 2
Chronic Health Hazard
Flammability 2
Physical Hazard 0

Further Information

Aurochemicals provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. Aurochemicals makes no representations or warranties, either expressed or implied, including without limitation any warranties of merchantability, fitness for a particular purpose with respect to the information set forth herein or the product to which the information refers. Accordingly, Aurochemicals will not be responsible, nor held liable, for damages resulting from use of or reliance upon this information.

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