



# Safety Data Sheet

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## Section 1: Product & Company Identification

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- 1.1** Product Name: **ETHYL LEVULINATE**  
Chemical name: Ethyl levulinate  
Product Number: 9159  
Brand: **Elan Inc.**  
CAS Number: **539-88-8**  
EC Number: **208-728-2**  
FEMA Number: N/A
- 1.2** Recommended use of chemical: Intermediate chemical used in flavor and food application
- 1.3** Supplier details: Elan Inc.  
268 Doremus Avenue  
Newark, NJ 07105  
U.S.A.  
(973) 344-8014  
[jbissonette@elan-chemical.com](mailto:jbissonette@elan-chemical.com)
- 1.4** Emergency telephone: (800) 424-9300 (Chemtrec)

## Section 2: Hazard(s) Identification

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- 2.1** Classification of the mixture: GHS classification in accordance to 29 CFR 1910 (OSHA HCS)

Physical Hazard(s): N/A

Health Hazard(s): N/A

Environmental Hazard(s): N/A

- 2.2** Label Elements:

Pictogram(s): No Pictogram needed

Signal word: N/A

**Hazard Statement(s):**

**Physical Hazard(s)** N/A

**Health hazard(s)** N/A

**Environmental hazard(s)** N/A

**Precautionary Statement(s):**

**Prevention:** N/A

**Storage:** N/A

**Disposal:** N/A

### 2.3 Other Hazards:

No additional information available

## Section 3: Composition/Information on Ingredients

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### 3.1 Substances:

Identity:	Ethyl levulinate		
Synonyms:	Ethyl levulate		
CAS Number:	539-88-8		
EC Number:	208-728-2		
Purity:	98.0% min.		
Molecular Formula:	<b>C7H12O3</b>	Molecular Weight:	144.17 g/mol

### 3.2 Mixtures:

Not applicable

## Section 4: First Aid Measures

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### 4.1 Description of necessary measures:

Inhalation Exposure: If inhaled, move to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Consult a physician.

Skin Exposure: In case of contact, immediately wash skin with soap and copious amounts of water. Consult a physician.

Eye Exposure: In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes as a precaution.

Oral Exposure: If swallowed; do not induce vomiting. Wash out mouth with water provided person is conscious. Call a physician.

### 4.2 Most important symptoms/effects, acute and delayed: If you feel unwell, seek medical advice (show the label where possible)

### 4.3 Indication of immediate medical attention and special treatment, if necessary: If the person is unconscious immediately call 911. Never give anything by mouth to an unconscious person.

## Section 5: Fire Fighting Measures

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### 5.1 Extinguishing media:

Suitable:	For smaller fires use:	Foam Carbon Dioxide Dry Chemical Powder
	For Larger fires use:	From a distance use very large quantities of misted water (flooding).
Unsuitable:	Unknown	

### 5.2 Specific hazards arising from the chemical: Sealed containers may build up pressure under heat (fire).

### 5.3 Special protective equipment and precautions for fire-fighters: No additional specialized equipment advised.

5.4 Further information: Use flooding water to cool unopened containers

## Section 6: Accidental Release Measures

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6.1 Personal Precautions, Protective equipment, and emergency procedures: Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of vapors, mist or gas. Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves. Remove all sources of ignition. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in lower areas.

6.2 Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up: Contain spillage and ventilate.

Collect with a properly grounded dedicated wet vacuum and place in container for waste disposal (see company waste SOP)

## Section 7: Handling and Storage Procedures

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7.1 Precautions for safe handling: Do not breathe vapor. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. No smoking! Avoid any electrostatic charges. All equipment used when handling the product must be grounded. Contaminated rags and cloths must be put in fireproof containers for disposal.

7.2 Conditions for safe storage, including any incompatibilities: Keep container tightly closed. Keep away from heat and open flame. Store container(s) in a cool & dry place.

## Section 8: Exposure Controls/Personal Protection

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8.1 Control parameters: Avoid exposing to high temperatures and maintain adequate local and general ventilation where product is used.

8.2 Appropriate Engineering Controls: Local and general ventilation

8.3 Individual protection measures (PPEs):

Eye Protection:	Chemical Safety goggles
Skin (Hand) Protection:	Chemical resistant gloves
Respiratory protection:	If exposure limits are exceeded or irritation is experienced, NIOSH approved respirator protection should be worn
Other Information:	Wash contaminated clothing before reuse
	Wash thoroughly after handling
	When using do not eat, drink or smoke

## Section 9: Physical/Chemical Properties

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Appearance:	Colorless to slightly yellow liquid
Odor:	N/A
Odor Threshold:	N/A
pH:	N/A
Melting point/freezing point:	N/A
Initial Boiling Point and Boiling:	199-201
Flash Point:	201.2 °F 94.0 °C
Evaporation Rate:	N/A
Flammability (solid, gas):	N/A
Upper/lower flammability or explosive limits:	N/A
Vapor pressure:	N/A
Vapor Density:	N/A

Relative Density:	1.009-1.014
Refractive index:	1.420-1.425
Solubility (ies):	N/A
Partition coefficient: n-octanol/water:	N/A
Auto-ignition Temperature:	N/A
Decomposition Temperature:	N/A
Viscosity:	N/A

## Section 10: Stability and Reactivity

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10.1 <u>Reactivity:</u>	no data available
10.2 <u>Chemical Stability:</u>	Stable under recommended storage conditions.
10.3 <u>Possibility of hazardous reactions:</u>	no data available
10.4 <u>Conditions to avoid:</u>	no data available
10.5 <u>Incompatible material(s):</u>	Avoid oxidizing agents and strong bases
10.6 <u>Hazardous Decomposition Products:</u>	no data available

## Section 11: Toxicological Information

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11.1 <u>Information on the likely routes of exposure:</u>	
Inhalation:	No testing on this product.
Ingestion:	No testing on this product.
Skin Contact:	No testing on this product.
Skin Absorption:	No testing on this product.
Eye Contact:	No testing on this product.
11.2 <u>Symptoms related to the physical, chemical and toxicological characteristics:</u>	None
11.3 <u>Delayed and immediate effects and also chronic effects from short and long term exposure:</u>	Consult physician, specialist and/or Chemtrec.
11.4 <u>Numerical measures of toxicity (acute estimates):</u>	To the best of our knowledge there are no toxicological estimates for this product.

## Section 12: Ecological Information

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12.1 <u>Ecotoxicity (aquatic and terrestrial):</u>	None to our knowledge
12.2 <u>Persistence and degradability:</u>	None to our knowledge
12.3 <u>Bioaccumulative potential:</u>	None to our knowledge
12.4 <u>Mobility in soil:</u>	None to our knowledge
12.5 <u>Other adverse effects:</u>	None to our knowledge

## Section 13: Disposal Considerations

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Disposal Instructions:	Do not discharge into drains, water courses or onto the ground. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national and international regulations.
Local disposal regulations:	Dispose in accordance with all applicable regulations.
Hazardous waste code:	Not established.
Waste from residues/unused products:	Empty containers or liners may retain some product residues. This material and its products container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging:	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is empty.

## Section 14: Transportation Information

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DOT (US)	Not dangerous goods
IMDG	Not dangerous goods
IATA	Not dangerous goods

## Section 15: Regulatory Information

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SARA 302 Components	not listed
SARA 313 Components	not regulated
SARA 311/312 Hazards	not regulated
Massachusetts Right to Know Components	not regulated
Pennsylvania Right to Know Components	not regulated
New Jersey Right to Know Components	not regulated
California Prop. 65 Components	not listed

## Section 16: Other Information

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### Classification according to EU Directives 67/548/EEC or 1999/45/EC

#### Symbol(s):

N/A N/A

#### R - phrase(s):

N/A N/A

#### S - phrase(s):

S: 23 24/25 Do not breathe vapor. Avoid contact and inhalation.

#### HMIS Rating

Health hazard: 0  
 Chronic Health hazard: \*  
 Flammability: 1  
 Physical hazard: 0

#### NFPA Rating

Health hazard: 0  
 Fire hazard: 1  
 Reactivity hazard: 0

**FEMA GRAS™ (Generally Recognized As Safe) status for the use of a flavor ingredient in food only stipulates current regulatory acceptability for oral ingestion as a food item and does not provide regulatory authority and/or acceptability in the U.S for the use of the flavor ingredient in devices which cause the flavorant to be inhaled.**

**Elan, Inc. does not represent or suggest that this flavor ingredient is safe for use in E-cigarettes.**

*This safety data sheet is intended to meet the specific requirements of GHS and should be used accordingly. While the information has been obtained from sources believed to be accurate and reliable, no warranty, expressed or implied, can be made with regard to its completeness, correctness or accuracy. Any users or handlers of this product who are not under the direct control of Elan Inc. are responsible for evaluating this information in light of their particular situation and are responsible for all losses, damages or expenses that result while this material is under their control. It is also the responsibility of the users and handlers to observe any and all laws and regulations (Global, Federal, State and Local) concerning the transportation, use, handling, storage and disposal of this product.*

1. Globally Harmonized System of Classification and Labelling of Chemicals (GHS) Sixth revised edition, United Nations, 2015.
2. ISO 11014:2009 Safety data sheet for chemical products -- Content and order of sections.
3. American National Standard for Hazardous Industrial Chemicals-MSDS Preparation (ANSI Z400.1/Z129.1-2010)
4. U.S. DOL, OSHA, 29 CFR 1910.1200, HAZCOM.