SAFETY DATA SHEET

1. Identification

Product Name
Ethyl acrylate, stabilized

Cat No. :
AC117980000; AC117980010; AC117980025; AC117980100; AC117980250

CAS No
140-88-5

Synonyms
2-Propenoic acid, ethyl ester.

Recommended Use
Laboratory chemicals.

Uses advised against
Food, drug, pesticide or biocidal product use.

2. Hazard(s) identification

Classification
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammable liquids</td>
<td>Category 2</td>
</tr>
<tr>
<td>Acute oral toxicity</td>
<td>Category 4</td>
</tr>
<tr>
<td>Acute dermal toxicity</td>
<td>Category 4</td>
</tr>
<tr>
<td>Acute Inhalation Toxicity - Vapors</td>
<td>Category 3</td>
</tr>
<tr>
<td>Skin Corrosion/Irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Serious Eye Damage/Eye Irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Skin Sensitization</td>
<td>Category 1</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Category 2</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
<td>Category 3</td>
</tr>
<tr>
<td>Target Organs - Respiratory system.</td>
<td></td>
</tr>
</tbody>
</table>
Signal Word
Danger

Hazard Statements
Highly flammable liquid and vapor
Causes skin irritation
Causes serious eye irritation
May cause an allergic skin reaction
Toxic if inhaled
May cause respiratory irritation
Suspected of causing cancer
Harmful if swallowed or in contact with skin

Precautionary Statements
Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Contaminated work clothing should not be allowed out of the workplace
Keep away from heat/sparks/open flames/hot surfaces. - No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Keep cool
Wear protective gloves/protective clothing/eye protection/face protection

Response
IF exposed or concerned: Get medical attention/advice
Inhalation
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physician
Skin
Call a POISON CENTER or doctor/physician if you feel unwell
If skin irritation or rash occurs: Get medical advice/attention
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
Eyes
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
Ingestion
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth
Fire
In case of fire: Use CO2, dry chemical, or foam for extinction
Storage
Store locked up
Store in a well-ventilated place. Keep container tightly closed
Ethyl acrylate, stabilized

Revision Date 22-Aug-2022

Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC).
Harmful to aquatic life with long lasting effects
WARNING. Cancer - https://www.p65warnings.ca.gov/

3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl acrylate</td>
<td>140-88-5</td>
<td>&gt;95</td>
</tr>
</tbody>
</table>

4. First-aid measures

General Advice
Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

Eye Contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Skin Contact
Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.

Inhalation
Remove to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.

Ingestion
Do NOT induce vomiting. Call a physician or poison control center immediately.

Most important symptoms and effects
Difficulty in breathing. May cause allergic skin reaction. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

Notes to Physician
Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media
Water spray. Carbon dioxide (CO₂). Dry chemical. Alcohol resistant foam. Chemical foam. Water mist may be used to cool closed containers.

Unsuitable Extinguishing Media
No information available

Flash Point
16 °C / 60.8 °F

Autoignition Temperature
399 °C / 750.2 °F

Specific Hazards Arising from the Chemical
Flammable. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Containers may explode when heated. Vapors may form explosive mixtures with air.

**Hazardous Combustion Products**
Carbon monoxide (CO). Carbon dioxide (CO₂).

**Protective Equipment and Precautions for Firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

**NFPA**

<table>
<thead>
<tr>
<th></th>
<th>Health</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### 6. Accidental release measures

**Personal Precautions**
Use personal protective equipment as required. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.

**Environmental Precautions**
Should not be released into the environment. See Section 12 for additional Ecological Information. Avoid release to the environment. Collect spillage.

**Methods for Containment and Clean**
Keep in suitable, closed containers for disposal. Soak up with inert absorbent material.

### 7. Handling and storage

**Handling**
Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance.

**Storage.**

### 8. Exposure controls / personal protection

**Exposure Guidelines**

<table>
<thead>
<tr>
<th>Component</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
<th>Mexico OEL (TWA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl acrylate</td>
<td>TWA: 5 ppm STEL: 15 ppm</td>
<td>(Vacated) TWA: 5 ppm</td>
<td>IDLH: 300 ppm</td>
<td>TWA: 5 ppm STEL: 15 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Vacated) TWA: 20 mg/m³</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Vacated) STEL: 25 ppm</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Vacated) STEL: 100 mg/m³</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Skin</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA: 25 ppm</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA: 100 mg/m³</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Legend**

ACGIH - American Conference of Governmental Industrial Hygienists
OSHA - Occupational Safety and Health Administration
NIOSH IDLH: NIOSH - National Institute for Occupational Safety and Health

**Engineering Measures**
Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. Use explosion-proof electrical/ventilating/lighting equipment.

**Personal Protective Equipment**

**Eye/face Protection**
Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Colorless</td>
</tr>
<tr>
<td>Odor</td>
<td>Stench</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No information available</td>
</tr>
<tr>
<td>pH</td>
<td>No information available</td>
</tr>
<tr>
<td>Melting Point/Range</td>
<td>-71 °C / -95.8 °F</td>
</tr>
<tr>
<td>Boiling Point/Range</td>
<td>99 °C / 210.2 °F @ 760 mmHg</td>
</tr>
<tr>
<td>Flash Point</td>
<td>16 °C / 60.8 °F</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammability or explosive limits</td>
<td></td>
</tr>
<tr>
<td>Upper</td>
<td>13%</td>
</tr>
<tr>
<td>Lower</td>
<td>1.8%</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>29.5 mmHg @ 20 °C</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>3.45</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.920</td>
</tr>
<tr>
<td>Solubility</td>
<td>No information available</td>
</tr>
<tr>
<td>Partition coefficient; n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>399 °C / 750.2 °F</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No information available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>0.58 cP at 20 °C</td>
</tr>
<tr>
<td>Molecular Formula</td>
<td>C5 H8 O2</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>100.12</td>
</tr>
</tbody>
</table>

10. Stability and reactivity

Reactive Hazard: Yes
Stability: Light sensitive.
Incompatible Materials: Acids, Bases, Peroxides
Hazardous Decomposition Products: Carbon monoxide (CO), Carbon dioxide (CO₂)
Hazardous Polymerization: Polymerization can occur.
Hazardous Reactions: None under normal processing.

11. Toxicological information

Acute Toxicity

<table>
<thead>
<tr>
<th>Component</th>
<th>LD50 Oral (mg/kg) (Rat)</th>
<th>LD50 Dermal (mg/kg) (Rat)</th>
<th>LC50 Inhalation (mg/L) (Rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl acrylate</td>
<td>1120</td>
<td>3049-5000</td>
<td>&lt;9.14 (vapour)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>25.8 mg/L/1h (vapour)</td>
</tr>
</tbody>
</table>

Toxicologically Synergistic: No information available
Products  
Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation  
Irritating to eyes, respiratory system and skin

Sensitization  
May cause sensitization by skin contact

Carcinogenicity  
The table below indicates whether each agency has listed any ingredient as a carcinogen. Limited evidence of a carcinogenic effect.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>IARC</th>
<th>NTP</th>
<th>ACGIH</th>
<th>OSHA</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl acrylate</td>
<td>140-88-5</td>
<td>Group 2B</td>
<td>Not listed</td>
<td>Not listed</td>
<td>X</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

**IARC (International Agency for Research on Cancer)**
- Group 1 - Carcinogenic to Humans
- Group 2A - Probably Carcinogenic to Humans
- Group 2B - Possibly Carcinogenic to Humans

Mutagenic Effects  
No information available

Reproductive Effects  
No information available.

Developmental Effects  
No information available.

Teratogenicity  
No information available.

STOT - single exposure  
Respiratory system

STOT - repeated exposure  
None known

Aspiration hazard  
No information available

**Symptoms / effects, both acute and delayed**  
Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting; Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

Endocrine Disruptor Information  
No information available

Other Adverse Effects  
The toxicological properties have not been fully investigated.

**12. Ecological information**

**Ecotoxicity**  
The product contains following substances which are hazardous for the environment. Contains a substance which is: Toxic to aquatic organisms.

<table>
<thead>
<tr>
<th>Component</th>
<th>Freshwater Algae</th>
<th>Freshwater Fish</th>
<th>Microtox</th>
<th>Water Flea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl acrylate</td>
<td>EC50: = 48 mg/L, 72h (Desmodesmus subspicatus)</td>
<td>LC50: 2.31 - 2.7 mg/L, 96h flow-through (Pimephales promelas)</td>
<td>EC50 = 1536 mg/L 17 h</td>
<td>EC50: = 7.9 mg/L, 48h (Daphnia magna)</td>
</tr>
</tbody>
</table>

**Persistence and Degradability**  
Persistence is unlikely

**Bioaccumulation/ Accumulation**  
No information available.

**Mobility**  
Will likely be mobile in the environment due to its water solubility.

<table>
<thead>
<tr>
<th>Component</th>
<th>log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl acrylate</td>
<td>1.18</td>
</tr>
</tbody>
</table>

**13. Disposal considerations**

Waste Disposal Methods  
Chemical waste generators must determine whether a discarded chemical is classified as a
hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

<table>
<thead>
<tr>
<th>Component</th>
<th>RCRA - U Series Wastes</th>
<th>RCRA - P Series Wastes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl acrylate - 140-88-5</td>
<td>U113</td>
<td>-</td>
</tr>
</tbody>
</table>

### 14. Transport information

**DOT**
- **UN-No**: UN1917
- **Proper Shipping Name**: ETHYL ACRYLATE, STABILIZED
- **Hazard Class**: 3
- **Packing Group**: II

**TDG**
- **UN-No**: UN1917
- **Proper Shipping Name**: ETHYL ACRYLATE, STABILIZED
- **Hazard Class**: 3
- **Packing Group**: II

**IATA**
- **UN-No**: UN1917
- **Proper Shipping Name**: ETHYL ACRYLATE, STABILIZED
- **Hazard Class**: 3
- **Packing Group**: II

**IMDG/IMO**
- **UN-No**: UN1917
- **Proper Shipping Name**: ETHYL ACRYLATE, STABILIZED
- **Hazard Class**: 3
- **Packing Group**: II

### 15. Regulatory information

#### United States of America Inventory

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>TSCA</th>
<th>TSCA Inventory notification - Active-Inactive</th>
<th>TSCA - EPA Regulatory Flags</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl acrylate</td>
<td>140-88-5</td>
<td>X</td>
<td>ACTIVE</td>
<td>-</td>
</tr>
</tbody>
</table>

Legend:
- **TSCA**: US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)
- **X**: Listed
- **-**: Not Listed

**TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT)**

**TSCA 12(b) - Notices of Export**

Not applicable

**International Inventories**
- Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>DSL</th>
<th>NDSL</th>
<th>EINECS</th>
<th>PICCS</th>
<th>ENCS</th>
<th>ISHL</th>
<th>AICS</th>
<th>IECSC</th>
<th>KECL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl acrylate</td>
<td>140-88-5</td>
<td>X</td>
<td>-</td>
<td>205-438-8</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>KE-29507</td>
</tr>
</tbody>
</table>

**KECL**: NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

#### U.S. Federal Regulations

**SARA 313**

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>Weight %</th>
<th>SARA 313 - Threshold Values %</th>
</tr>
</thead>
</table>

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Page 7 / 9
<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>California Prop. 65</th>
<th>Prop 65 NSRL</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl acrylate</td>
<td>140-88-5</td>
<td>Carcinogen</td>
<td>-</td>
<td>Carcinogen</td>
</tr>
</tbody>
</table>

### California Proposition 65
This product contains the following Proposition 65 chemicals.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>California Prop. 65</th>
<th>Prop 65 NSRL</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl acrylate</td>
<td>140-88-5</td>
<td>Carcinogen</td>
<td>-</td>
<td>Carcinogen</td>
</tr>
</tbody>
</table>

### U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Component</th>
<th>Massachusetts</th>
<th>New Jersey</th>
<th>Pennsylvania</th>
<th>Illinois</th>
<th>Rhode Island</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl acrylate</td>
<td>X</td>
<td>x</td>
<td>X</td>
<td>x</td>
<td>X</td>
</tr>
</tbody>
</table>

### U.S. Department of Transportation

- Reportable Quantity (RQ): Y
- DOT Marine Pollutant: N
- DOT Severe Marine Pollutant: N

### U.S. Department of Homeland Security
This product does not contain any DHS chemicals.

### Other International Regulations

- Mexico - Grade: No information available

### Authorisation/Restrictions according to EU REACH

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl acrylate</td>
<td>140-88-5</td>
<td>Use restricted. See item 75. (see link for restriction details)</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>


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

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>OECD HPV</th>
<th>Persistent Organic Pollutant</th>
<th>Ozone Depletion Potential</th>
<th>Restriction of Hazardous Substances (RoHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl acrylate</td>
<td>140-88-5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Ethyl acrylate, stabilized

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl acrylate</td>
<td>140-88-5</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

16. Other information

Prepared By
Regulatory Affairs
Thermo Fisher Scientific
Email: EMSDS.RA@thermofisher.com

Creation Date
26-Oct-2010

Revision Date
22-Aug-2022

Print Date
22-Aug-2022

Revision Summary
This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of SDS