

SAFETY DATA SHEET

ETHYL ACRYLATE

SECTION 1: Identification of the substance/mixture and of the company/undertaking Trade name:

1.1 Product identifier:	
CAS Number:	140-88-5
EC number:	205-438-8
1.2 SYNONYMS:	- Ethyl 2-propenoate - Acrylate of ethyl - Ethyl propenoate - Acrylic acid ethyl ester

SECTION 2: Hazards identification:

2.1 Classification of the substance or mixture:	Classification according to Regulation (EC) No 1272/2008 The substance is classified according to the CLP regulation.
2.2 Label elements:	Labelling according to Regulation (EC) No 1272/2008 Flammable liquids (Category 2) Acute toxicity, oral (Category 4) Acute toxicity, inhalation (Category 3) Acute toxicity, dermal (Category 4) Skin irritation, (Category 2) Eye irritation, (Category 2) Skin sensitization, (Category 1) Specific target organ toxicity, single exposure (Category 3) Long-term (chronic) aquatic hazard, (Category 3)
Hazard Pictograms:	
Signal Word:	Danger

Hazard statements:	H225: Highly flammable liquid and vapor. H302 + H312: Harmful if swallowed or in contact with skin. H315: Causes skin irritation. H317: May cause an allergic skin reaction. H319: Causes serious eye irritation. H331: Toxic if inhaled. H335: May cause respiratory irritation. H412: Harmful to aquatic life with long lasting effects.
Precautionary Statements:	P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P273: Avoid release to the environment. P280: Wear protective gloves/ protective clothing/ eye protection/ face protection. P301 + P312: IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. P303 + P361 + P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P304 + P340 + P311: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor.
2.3 Other hazards:	
Inhalation:	can cause respiratory irritation, dizziness, headaches, and central nervous system effects, with prolonged exposure potentially leading to lung damage.

Ingestion:	can cause nausea, vomiting, abdominal pain, and potentially severe gastrointestinal irritation or damage.
Skin Contact:	generally not harmful, but prolonged exposure to the powder may cause mild irritation or dryness in some individuals.
Eye contact:	can cause severe irritation, redness, pain, and possible damage to the cornea, leading to impaired vision.
Chronic Exposure:	can lead to respiratory issues, skin sensitization, liver and kidney damage, and potential carcinogenic effects with prolonged or repeated contact.
Aggravation of pre-existing conditions:	may aggravate pre-existing conditions such as respiratory disorders (e.g., asthma), skin conditions (e.g., eczema), or liver and kidney diseases.

SECTION 3: Composition/information on ingredients

3.1 Chemical characterisation:	Substances
CAS No:	Description: 140-88-5 ETHYL ACRYLATE
Identification number(s):	EC number: 205-438-8

SECTION 4: First aid measures

4.1 Description of first aid measures	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
General information:	
After inhalation:	

After skin contact:	Remove contaminated clothing. Wash with soap and water. Consult a physician.
After eye contact:	Immediately flush eyes with plenty of water for at least 15 minutes. consult a physician.
After swallowing:	Rinse mouth with water. Immediately after ingestion. Never give anything by mouth to an unconscious person. Do not induce vomiting. Consult a physician.
4.2 Most important symptoms and effects, both acute and delayed:	Acute exposure can cause irritation of the eyes, skin, and respiratory system, while delayed effects may include chronic respiratory issues, skin sensitization, and potential liver or kidney damage with prolonged exposure.
4.3 Indication of any immediate medical attention and special treatment needed:	Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media:	Carbon dioxide. Water spray. Alcohol-resistant foam, Dry powder.
5.2 Special hazards arising from the substance or mixture:	No data available
5.3 Advice for firefighters:	Wear fully protective suit, safety glasses and respiratory device. Cool tanks/drums with water spray/remove them into safety.
5.4 further information:	no data available

SECTION 6: Accidental release measures

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 areas. Beware of vapours accumulating to form explosive concentrations. Avoid dust accumulation. Seek medical attention.
6.2 Environmental precautions:	Do not enter this chemical into drains.
6.3 Methods and material for containment and cleaning up:	Take up spill into absorbent material, e.g.: sand, earth, vermiculite, powdered limestone. Scoop absorbed substance into closing containers. Spill must not return in its original container. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

SECTION 7: Handling and storage

7.1 Precautions for safe handling:	For use in are with adequate ventilation. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material Do not use in confined spaces. Electrostatic discharge protection. Minimize dust generation and accumulation. Avoid ingestion and inhalation.
7.2 Conditions for safe storage, including any incompatibilities:	Store in original containers. Keep containers securely sealed Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers.

	Protect containers against physical damage and check regularly for leaks. Store in a dry and dark area.
Requirements to be met by storerooms and receptacles:	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
7.3 Specific end uses:	no data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters	
Additional information about design of technical facilities:	A system of local and general exhaust is recommended.
8.2 Exposure controls	
Appropriate engineering controls	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Personal protective equipment:	Dust respirator, protective masks, wearing anti chemical gloves, rubber gloves, etc.
General protective and hygienic measures:	Eyes, body and hand protection, maintain indoor air unobstructed. Wear protective equipment.
	Respiratory protection: Required.
Protection of hands:	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws. Wash and dry hands.
	Eye protection: Required

Protection of Body:	Complete suit protecting against chemicals, Flame retardant antistatic protective clothing.
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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties	
General Information	
Appearance: Form:	Liquid
Colour:	Colourless
Odour:	Pungent, acrid odour
pH-value:	6
Melting point/Melting range:	-74.5°C
Boiling point/Boiling range:	99.5°C
Flammability (solid, gaseous):	Highly flammable.
Ignition temperature:	405°C
Decomposition temperature:	Not determined
Self-igniting:	None
Flash point:	4°C
Danger of explosion:	Yes
Explosion limits: Lower:	2.1%
Explosion limits: Upper:	11.5%
Vapour pressure:	6.1 kPa at 20°C
Density at 20 °C:	0.92 g/cm ³
Relative density:	0.92
Vapour density:	3.5
Evaporation rate:	3.3
Solubility in / Miscibility with- water at 20 °C:	Slightly Soluble
Partition coefficient:(n- octanol/water)	2.25
Viscosity:	0.45 cP at 20°C

SECTION 10: Stability and reactivity

10.1 Reactivity	No reaction under normal conditions.
10.2 Chemical stability	This chemical is stable under storage conditions.
10.3 Possibility of hazardous reactions	Can undergo polymerization reaction when heated.
10.4 Conditions to avoid	High heat, light, strong oxidizers, strong bases
10.5 Incompatible materials	Strong oxidizing agents, strong bases, Peroxides, Reactive metals.
10.6 Hazardous decomposition products	Carbon monoxide, Carbon dioxide Acrid smoke and fumes, Unstable polymerized products can decompose, releasing toxic gases.

SECTION 11: Toxicological information

11.1 Information on toxicological effects	
Acute Toxicity:	LD50 (Oral, Rat): 1120 mg/kg LD50 (Dermal, Rabbit): 1800 mg/kg LC50 (Inhalation, Rat): 9.14 mg/l (4hr)
Skin corrosion/Irritation:	May cause irritation.
Serious eye damage/irritation:	may cause irritation
Respiratory damage/irritation:	may cause respiratory irritation
Ingestion:	may lead to gastrointestinal irritation.
Germ cell mutagenicity:	No data available
Carcinogenicity:	No data available
Reproductive toxicity:	No data available
Specific target organ toxicity - single exposure:	May cause respiratory irritation.
Specific target organ toxicity - repeated exposure:	In high concentrations, it May strain the kidneys
Aspiration hazard:	No data available
Signs and Symptoms of Exposure:	Refer section 2.3
11.2 Additional toxicological information	

Biodegradability:	Readily Biodegradable
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SECTION 12: Ecological information

12.1 Toxicity Aquatic toxicity:	LC50(fish): 1.81 mg/l (96hr) EC50(daphnia): 1.3 mg/l (48 hr) ErC50(algae): 5.28 mg/l (72 hr)
12.2 Persistence and degradability:	Readily Biodegradable
12.3 Bioaccumulative potential:	Low bioaccumulative
12.4 Mobility in soil:	Moderate mobility
12.5 Other adverse effects:	No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods	
Uncleaned packaging Recommendation:	dispose of in accordance with local hazardous waste regulations
Recommended cleansing agents:	Water and soap, detergents, acetone, isopropyl alcohol.

SECTION 14: Transport information

14.1 UN-Number · ADR, ADN, IMDG, IATA:	1910
14.2 UN proper shipping name · ADR, ADN, IMDG, IATA:	Ethyl acrylate
14.3 Transport hazard class(es) · ADR, ADN, IMDG, IATA :	3
14.4 Packing group · ADR, IMDG, IATA:	2
14.5 Environmental hazards:	Yes, harmful for aquatic life.
14.6 Special precautions for user:	Handle responsibly.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Directive 2012/18/EU	Directive 2012/18/EU, under that this substance is classified in listed substance as hazardous substance.
Named dangerous substances:	This substance is listed in the annex 1 to the directive.
15.2 Chemical safety assessment:	Chemical assessment has not been carried out.

SECTION 16: Other information

The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information.

However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user's reference.

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