

SAFETY DATA SHEET

Creation Date 26-Oct-2010

Revision Date 22-Aug-2022

Revision Number 6

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.

Details of the supplier of the safety data sheet

Company Fisher Scientific Company One Reagent Lane Fair Lawn, NJ 07410 Tel: (201) 796-7100

Acros Organics One Reagent Lane Fair Lawn, NJ 07410

Emergency Telephone Number

For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11 Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887

2. Hazard(s) identification

244322123

Classification

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

Flammable liquids	Category
Acute oral toxicity	Category
Acute dermal toxicity	Category
Acute Inhalation Toxicity - Vapors	Category
Skin Corrosion/Irritation	Category
Serious Eye Damage/Eye Irritation	Category
Skin Sensitization	Category
Carcinogenicity	Category
Specific target organ toxicity (single exposure)	Category
Target Organs - Respiratory system.	

Label Elements

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

If eye irrita

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

Disposal Dispose of contents/container to an approved waste disposal plant <u>Hazards not otherwise classified (HNOC)</u> Harmful to aquatic life with long lasting effects WARNING. Cancer - https://www.p65warnings.ca.gov/.

3. Composition/Information on Ingredients

Component	CAS No	Weight %
Ethyl acrylate	140-88-5	>95
	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 a attention is required.	at least 15 minutes. Immediate medical
Inhalation	Remove to fresh air. If not breathing, give artifi method if victim ingested or inhaled the substa pocket mask equipped with a one-way valve o Immediate medical attention is required.	ance; give artificial respiration with the aid of a
Ingestion	Do NOT induce vomiting. Call a physician or p	oison control center immediately.
Most important symptoms and effects	Difficulty in breathing. May cause allergic skin concentrations may cause symptoms like head vomiting: Symptoms of allergic reaction may in breathing, tingling of the hands and feet, dizzin pain or flushing	dache, dizziness, tiredness, nausea and nclude rash, itching, swelling, trouble
Notes to Physician	Treat symptomatically	

5. Fire-fighting measures

Suitable Extinguishing Media	Water spray. Carbon dioxide (CO $_2$). 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
Method -	No information available
Autoignition Temperature	399 °C / 750.2 °F
Explosion Limits Upper Lower Sensitivity to Mechanical Impac Sensitivity to Static Discharge	13% 1.8% t No information available No information available

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.

<u>NFPA</u> Health 3	Flammability 3	Instability 2	Physical hazards N/A
	6. Accidental rel	ease measures	
Personal Precautions	Use personal protective equipment as required. Ensure adequate ventilation. Keep per away from and upwind of spill/leak. Evacuate personnel to safe areas.		
Environmental Precautions	Should not be released into	the environment. See Section to the environment. Collect sp	n 12 for additional Ecological

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

	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.

Refrigerator/flammables. Keep container tightly closed. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Incompatible Materials. Acids. Bases. Peroxides.

8. Exposure controls / personal protection

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)
Ethyl acrylate	TWA: 5 ppm STEL: 15 ppm	(Vacated) TWA: 5 ppm (Vacated) TWA: 20 mg/m ³ (Vacated) STEL: 25 ppm (Vacated) STEL: 100 mg/m ³	IDLH: 300 ppm	TWA: 5 ppm STEL: 15 ppm
		Skin TWA: 25 ppm TWA: 100 mg/m ³		

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.

Skin and body protection	Wear appropriate protective gloves and clothing to prevent skin exposure.
Respiratory Protection	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

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

10. Stability and reactivity

Reactive Hazard	Yes
Stability	Light sensitive.
Conditions to Avoid	Keep away from open flames, hot surfaces and sources of ignition. Excess heat. Exposure to light. Incompatible products.
Incompatible Materials	Acids, Bases, Peroxides
Hazardous Decomposition Product	s Carbon monoxide (CO), Carbon dioxide (CO₂)
Hazardous Polymerization	Polymerization can occur.
Hazardous Reactions	None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ethyl acrylate	1120 mg/kg (Rat)	3049-5000 mg/kg (Rat)	<9.14 mg/L/4h (Rat) (vapour)
			25.8 mg/L/1h (Rat) (vapour)

Toxicologically Synergistic No information available

Products	
Delayed and immediate effe	cts as well as chronic effects from short and long-term exposure
Irritation	Irritating to over recoiratory system and skip

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 ingr

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

Ethyl acrylate140-88-5Group 2BNot listedNot listedXNot listedIARC (International Agency for Research on Cancer)IARC (International Agency for Research on Cancer)IARC (International Agency for Research on Cancer)Group 1 - Carcinogenic to Humans Group 2B - Probably Carcinogenic to Humans Group 2B - Possibly Carcinogenic to HumansMutagenic EffectsNo information availableReproductive EffectsNo information available.Developmental EffectsNo information available.TeratogenicityNo information available.STOT - single exposure STOT - repeated exposure Mone knownRespiratory system None knownAspiration hazardNo information availableSymptoms / effects,both acute and delayedInhalation 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, o pain, muscle pain or flushingCharacter Disruptor InformationNo information availableOther Adverse EffectsThe toxicological properties have not been fully investigated.	Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico	
Group 1 - Carcinogenic to Humans Group 2A - Probably Carcinogenic to Humans Group 2B - Possibly Carcinogenic to Humans Group 2B - Possibly Carcinogenic to HumansMutagenic EffectsNo information availableReproductive EffectsNo information available.Developmental EffectsNo information available.TeratogenicityNo information available.STOT - single exposure STOT - repeated exposureRespiratory system None knownAspiration hazardNo information availableSymptoms / effects,both acute and delayedInhalation 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, or pain, muscle pain or flushingEndocrine Disruptor InformationNo information available						, , , , , , , , , , , , , , , , , , ,	Not listed	
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•	· ·	,both acute and	tiredness, nausea swelling, trouble b	and vomiting: Sym reathing, tingling o	ptoms of allergic r	eaction may includ	e rash, itching,	
Other Adverse Effects The toxicological properties have not been fully investigated.	Endocrine Disruptor	r Information	No information ava	ailable				
	Other Adverse Effect	cts	The toxicological p	properties have not	been fully investig	jated.		

12. Ecological information

Ecotoxicity

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

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Ethyl acrylate	EC50: = 48 mg/L, 72h (Desmodesmus subspicatus)	LC50: 2.31 - 2.7 mg/L, 96h flow-through (Pimephales promelas) LC50: = 4.6 mg/L, 96h (Oncorhynchus mykiss)	EC50 = 1536 mg/L 17 h EC50 = 46.8 mg/L 24 h	EC50: = 7.9 mg/L, 48h (Daphnia magna)

Persistence and Degradability

Persistence is unlikely

Bioaccumulation/Accumulation

No information available.

Mobility

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

Component	log Pow
Ethyl acrylate	1.18

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.

Component		RCRA - U Series Wastes	RCRA - P Series Wastes
Ethyl acrylate - 140-88-	5	U113	-
	14. T	Fransport information	
DOT			
UN-No	UN1917		
Proper Shipping Name	ETHYL ACR	YLATE, STABILIZED	
Hazard Class	3		
Packing Group	II		
TDG			
UN-No	UN1917		
Proper Shipping Name	ETHYL ACR	YLATE, STABILIZED	
Hazard Class	3		
Packing Group	II		
IATA			
UN-No	UN1917		
Proper Shipping Name	ETHYL ACR	YLATE, STABILIZED	
Hazard Class	3		
Packing Group	II		
IMDG/IMO			
UN-No	UN1917		
Proper Shipping Name	ETHYL ACR	YLATE, STABILIZED	
Hazard Class	3		
Packing Group	II		

United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
Ethyl acrylate	140-88-5	Х	ACTIVE	-

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

Not applicable

International Inventories

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

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Ethyl acrylate	140-88-5	Х	-	205-438-8	Х	Х	Х	Х	Х	KE-29507

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

U.S. Federal Regulations

SARA 313

Component	CAS No	Weight %	SARA 313 - Threshold Values %
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Ethyl acrylate	140-88-5	>95	0.1
	110 00 0	200	0.1

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable

Clean Air Act

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Ethyl acrylate	Х		-

OSHA - Occupational Safety and Not applicable Health Administration

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs
Ethyl acrylate	1000 lb	-

California Proposition 65

This product contains the following Proposition 65 chemicals.

Component	CAS No	California Prop. 65	Prop 65 NSRL	Category
Ethyl acrylate	140-88-5	Carcinogen	-	Carcinogen
U.S. State Right-to-Know	1			

Regulations

	Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Γ	Ethyl acrylate	Х	Х	Х	Х	Х

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

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization		REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Ethyl acrylate	140-88-5	-	Use restricted. See item 75. (see link for restriction details)	-

https://echa.europa.eu/substances-restricted-under-reach

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

Ethyl acrylate	140-88-5	Listed	Not applicable	Not applicable	Not applicable
Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Ethyl acrylate	140-88-5	Not applicable	Not applicable	Not applicable	Not applicable

16. Other information		
Prepared By	Regulatory Affairs Thermo Fisher Scientific Email: EMSDS.RA@thermofisher.com	
Creation Date Revision Date Print Date Revision Summary	26-Oct-2010 22-Aug-2022 22-Aug-2022 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