Safety Data Sheet

Ethyl Acrylate

Version 1.07 Revision Date 26.07.2024

SECTION 1. Identification of the substance/mixture and of the company/undertaking

Product identifier

Trade name	Ethyl Acrylate
Synonyms	Acrylic acid ethyl ester, Ethoxy carbonyl ethylene; Ethyl-2 propenoate
Product code	5012
CAS-No.	140-88-5

Relevant identified uses of the substance or mixture and uses advised against

Use	Industrial use.

Manufacturer or supplier's details

Company	Sasol Chemicals, a division of Sasol South Africa Ltd
Address	Sasol Place, 50 Katherine Street Sandton 2090 South Africa
Telephone	+27103445000
E-mail address	sasolchem.info.sa@sasol.com
Supplier's details	Sasol Chemicals Japan KK Toshin Shoji Building, 5F 2-12-6 Kyobashi, Chuo-ku Tokyo, 104-0031 Japan
Telephone	+81 - 3 - 6263-2061
E-mail address	info.sg@sasol.com

Emergency Phone Number

Emergency telephone number	+44 (0)1235 239 670 (Europe, Israel, Africa, Americas) +44(0)1235 239 671 (Middle East, Arabic African countries) +65 3158 1074 (Asia Pacific)

+86 400 120 6011 (China)

+27 (0)17 610 4444 (South Africa)

0800 112 890 RSA-Local only

+61 (2) 8014 4558 (Australia)

SECTION 2. Hazards identification

Classification of the substance or mixture

GHS Classification

	GHS Classification and labelling according to JIS Z 7252-2019 and JIS Z 7253-2019 (GHS 2015)	
Classification	Flammable liquids	Category 2
	Acute oral toxicity	Category 3
	Acute inhalation toxicity	Category 3
	Acute dermal toxicity	Category 3
	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2
	Skin sensitisation	Category 1
	Carcinogenicity	Category 2
	Specific target organ toxicity - single exposure	Category 3
	Specific target organ toxicity - repeated exposure	Category 1
	Short-term (acute) aquatic hazard	Category 2
	Long-term (chronic) aquatic hazard	Category 2

GHS label elements

Hazard pictograms :

Signal word : Danger

Hazard statements : H225 Highly flammable liquid and vapour.
H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled.

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H372 Causes damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**
P210 Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/ eye protection/ face protection.

Response:
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P337 + P317 If eye irritation persists: Get medical advice/ attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
P304 + P340 + P317 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical help.
P305 + P354 + P338 + P317 IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical help.
P301 + P317 + P330 IF SWALLOWED: Get medical help. Rinse mouth.
P391 Collect spillage.

Storage:
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

Disposal:
P501 Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3. Composition/information on ingredients

HAZARDOUS INGREDIENTS

Ethyl Acrylate

Contents: 100.00 %W/W

CAS-No. 140-88-5 **Index-No.** 607-032-00-X **EC-No.** 205-438-8
Hazard statements *H225 H301 H331 H311 H315 H319 H317 H351 H335 H336 H372 H411*

SECTION 4. First aid measures

Description of necessary first-aid measures

Inhalation	Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. Call a physician immediately.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before re-use. If skin irritation persists, call a physician.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
Ingestion	If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

Most important symptoms/effects, acute and delayed

Refer to SECTION 11

SECTION 5. Firefighting measures

Suitable extinguishing media	Alcohol-resistant foam Dry chemical Carbon dioxide (CO2)
Unsuitable extinguishing media	Do NOT use water jet.
Special hazards arising from the substance or mixture	Flash back possible over considerable distance. Evacuate area. Increased temperature causes runaway reaction due to uncontrolled polymerization leading to explosion.

Special protective equipment for firefighters	Wear self-contained breathing apparatus and protective suit.

SECTION 6. Accidental release measures

Personal precautions	Keep people away from and upwind of spill/leak. Remove all sources of ignition. Do not breathe vapours or spray mist. Material can create slippery conditions.
Environmental precautions	Should not be released into the environment. Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Soak up with inert absorbent material and dispose of as hazardous waste.
Reference to other sections	Refer to Section 8 and 13

SECTION 7. Handling and storage

Safe handling advice	Wear personal protective equipment. Avoid contact with skin and eyes. Keep away from sources of ignition - No smoking.
Advice on protection against fire and explosion	Use explosion-proof equipment.Take precautionary measures against static discharges.Do not allow to enter drains (danger of explosion).Explosion protection equipment required.To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded.Keep away from heat and sources of ignition.Vapours may form explosive mixtures with air.Keep away from sources of ignition - No smoking.
Requirements for storage areas and containers	The stabiliser is only effective in the presence of oxygen.Keep containers tightly closed in a cool, well-ventilated place.Keep away from heat.
Advice on common storage	Keep in a cool, well-ventilated place.

SECTION 8. Exposure controls/personal protection

Components with workplace control parameters

NATIONAL OCCUPATIONAL EXPOSURE LIMITS

Contains no substances with occupational exposure limit values.

Exposure controls

Engineering measures

Provide sufficient air exchange and/or exhaust in work rooms.

Personal protective equipment

Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.
Hand protection	Gloves suitable for permanent contact.: Material: butyl-rubber Break through time: 142 min Material thickness: 0.7 mm RECOMMENDATION: use an in-liner or cotton glove inside the butyl rubber glove.
Eye protection	Safety glasses with side-shields
Skin and body protection	Protective suit Safety shoes
Hygiene measures	Wash hands before breaks and immediately after handling the product.

SECTION 9. Physical and chemical properties

Information on basic physical and chemical properties

Form	Liquid
State of matter	Liquid; at 20 °C; 1,013 hPa
Colour	Colourless
Odour	pungent
Odour Threshold	No data available
pH	Not applicable
Melting point/range	< -75 °C
Boiling point/boiling range	100 °C; ASTM D86

Flash point	9 °C; ASTM D 93; closed cup;
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Auto-ignition temperature	No data available
Decomposition Temperature	No data available
Lower explosion limit	1.7 %(V)
Upper explosion limit	13 %(V)
Vapour pressure	39.1 hPa; 20 °C
Relative vapour density	3.45(Air = 1.0)
Density	0.921 g/cm3; 20 °C; ASTM D4052
Water solubility	partly soluble
Partition coefficient: n-octanol/water	No data available
Viscosity, kinematic	0.62 mm2/s; 20 °C; ASTM D 445

SECTION 10. Stability and reactivity

Reactivity	Stable under normal conditions.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Polymerises with risk of fire and explosion.Polymerisation occurs when exposed to white light, ultraviolet light or heat.Hazardous polymerization may occur upon depletion of inhibitor - may cause heat and pressure build-up in closed containers.Self-accelerating polymerization temperature (SAPT) for stabilized Sasol Ethyl Acrylate was determined at Kinetica Laboratories in the USA for various package sizes (drum, isotainer and 1000 and 3000 m3 tanks) and found to be >50°C for all package sizes. Therefore Sasol Ethyl Acrylate can be shipped at ambient temperature.
Conditions to avoid	Heat, flames and sparks. Keep away from combustible material.
Materials to avoid	Reducing agents Oxidizing agents Amines Azo-compounds Caustic alkali solutions. Peroxides Ketones Acetic anhydride Mineral acids. Aldehydes Thiols. Potassium hydroxide. Sodium hydroxide. Inorganic

	halides. Ethers containing peroxides. Conjugated polyunsaturated acids and esters. Nitrogen Inert Gas
Hazardous decomposition products	Stable under recommended storage conditions.

SECTION 11. Toxicological information

Acute oral toxicity	Ethyl Acrylate: LD50 Rat: 300 - 2,000 mg/kg; (literature value)
Acute oral toxicity	Ethyl Acrylate: Acute toxicity estimate : 500 mg/kg; Converted acute toxicity point estimate;
Acute inhalation toxicity	Ethyl Acrylate: LC50 Rat: 4 h; vapour; 2 - 10 mg/l; OECD Test Guideline 403; The component/mixture is toxic after short term inhalation.; (literature value)
Acute dermal toxicity	Ethyl Acrylate: LDLo Rat: 1,000 - 2,000 mg/kg; (literature value)
Acute dermal toxicity	Ethyl Acrylate: LD50 Rabbit: 1,000 - 2,000 mg/kg; (literature value)
Acute dermal toxicity	Ethyl Acrylate: Acute toxicity estimate : 1,100 mg/kg; Converted acute toxicity point estimate;
Skin irritation	Ethyl Acrylate: Rabbit: irritating; OECD Test Guideline 404 (literature value)
Eye irritation	Ethyl Acrylate: Rabbit: irritating (literature value)
Sensitisation	Ethyl Acrylate: Maximisation Test; Humans: Sensitizing; (literature value)
Mutagenicity	Ethyl Acrylate: Ames test: Salmonella typhimurium; Not mutagenic; (literature value)

SECTION 12. Ecological information

Toxicity to fish	Ethyl Acrylate: flow-through test; Cyprinodon variegatus; 96 h; LC50; 1 - 10 mg/l; OECD Test Guideline 203; GLP: yes; (literature value)
Toxicity to daphnia and other aquatic invertebrates	Ethyl Acrylate: Daphnia magna (Water flea); 48 h; EC50; 1 - 10 mg/l(literature value)
Toxicity to algae	Ethyl Acrylate: 96 h; ErC50; > 1 mg/l; OECD Test Guideline 201; (literature value)
Biodegradability	Ethyl Acrylate: aerobic; Activated sludge, domestic, non-adapted; 100 mg/l; > 60 %; 28 d; Readily biodegradable.; OECD Test Guideline 310; (literature value)
Mobility in soil	No data available
Results of PBT and vPvB assessment	Substance is not persistent, bioaccumulative, and toxic (PBT). Substance is not very persistent and very bioaccumulative (vPvB).

SECTION 13. Disposal considerations

Product	In accordance with local and national regulations. Do not contaminate ponds, waterways or ditches with chemical or used container. The product should not be allowed to enter drains, water courses or the soil.
Packaging	Dispose of spent product packaging responsibly and lawfully with due consideration for health, safety and the environment.

SECTION 14. Transport information

DG Pictogram

ADR

UN number: 1917

Class:	3
Packaging group:	II; F1;
Proper shipping name:	ETHYL ACRYLATE, STABILIZED
RID	
UN number:	1917
Class:	3
Packaging group:	II; F1
Proper shipping name:	ETHYL ACRYLATE, STABILIZED
ADNR	
UN number:	1917
Class:	3
Packaging group:	II; F1
Proper shipping name:	ETHYL ACRYLATE, STABILIZED
IMDG	
UN number:	1917
Class:	3
EmS:	F-E, S-D
Packaging group:	II
Proper shipping name:	ETHYL ACRYLATE, STABILIZED
Marine pollutant	Not a Marine Pollutant
ICAO/IATA	
UN number :	1917
Class:	3
Packaging group:	II
Proper shipping name:	ETHYL ACRYLATE, STABILISED

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Ethyl Acrylate POLLUTION CATEGORY: Y Ship Type: 2

SECTION 15. Regulatory information

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

United States TSCA Inventory	All chemical constituents are listed in: United States TSCA Inventory (See chapter 3)
Canadian Domestic Substances List (DSL)	All chemical constituents are listed in: Canadian Domestic Substances List (DSL) (See chapter 3)
Australia Inventory of Chemical Substances (AICS)	All chemical constituents are listed in: Australia Inventory of Chemical Substances (AICS) (See chapter 3)
New Zealand. Inventory of Chemical Substances	All chemical constituents are listed in: New Zealand. Inventory of Chemical Substances (See chapter 3)
Japan. ENCS - Existing and New Chemical Substances Inventory	All chemical constituents are listed in: Japan. ENCS - Existing and New Chemical Substances Inventory (See chapter 3)
Japan. ISHL - Inventory of Chemical Substances	All chemical constituents are listed in: Japan. ISHL - Inventory of Chemical Substances (See chapter 3)
Korea. Korean Existing Chemicals Inventory (KECI)	All chemical constituents are listed in: Korea. Korean Existing Chemicals Inventory (KECI) (See chapter 3)
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	All chemical constituents are listed in: Philippines Inventory of Chemicals and Chemical Substances (PICCS) (See chapter 3)
China. Inventory of Existing Chemical Substances in China (IECSC)	All chemical constituents are listed in: China. Inventory of Existing Chemical Substances in China (IECSC) (See chapter 3)

SECTION 16. Other information

Full text of H-Statements

H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H311	Toxic 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.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H372	Causes damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

All reasonable efforts were exercised to compile this SDS in accordance with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). The SDS only provides information regarding the health, safety and environmental hazards at the date of issue, to facilitate the safe receipt, use and handling of this product in the workplace and does not replace any product information or product specifications. Since Sasol and its subsidiaries cannot anticipate or control all conditions under which this product may be handled, used and received in the workplace, it remains the obligation of each user, receiver or handler to, prior to usage, review this SDS in the context within which this product will be received, handled or used in the workplace. The user, handler or receiver must ensure that the necessary mitigating measures are in place with respect to health and safety. This does not substitute the need or requirement for any relevant risk assessments to be conducted. It further remains the responsibility of the receiver, handler or user to communicate such information to all relevant parties that may be involved in the receipt, use or handling of this product.
Although all reasonable efforts were exercised in the compilation of this SDS, Sasol does not expressly warrant the accuracy of, or assume any liability for incomplete information contained herein or any advice given. When this product is sold, risk passes to the purchaser in accordance with the specific terms and conditions of sale.

Industrial Safety and Health Act
• Dangerous or Harmful Substances subject to be Notified their names. (Article 57-2 of Act, appended table 9 of article 18-2 of Order).
• Dangerous/Inflammable Substances (Attached Table 1-4 of Order).
Pollutant Release and Transfer Register (PRTR) Law
• Class 1 Designated Chemical Substance
Fire Service Act
•Category IV inflammable liquids, Class 1 petroleums
Water-insoluble liquid
(Article 2-7 of Act, Appended table 1 of Act.)