Safety Data Sheet

Ethyl Acrylate

Version 1.06 Revision Date 20.11.2023

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
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

REGULATION (EC) No 1272/2008

Classification	Flammable liquids	Category 2
	Acute oral toxicity	Category 4
	Acute dermal toxicity	Category 4
	Acute inhalation toxicity	Category 4
	Skin irritation	Category 2
	Eye irritation	Category 2
	Skin sensitisation	Category 1
	Specific target organ toxicity - single exposure (Respiratory system)	Category 3

Label elements

REGULATION (EC) No 1272/2008

Certain substances which are susceptible to spontaneous polymerisation or decomposition are generally placed on the market in a stabilised form. It is in this form that they are listed in Part 3. However, such substances are sometimes placed on the market in a non-stabilised form. In this case, the supplier must state on the label the name of the substance followed by the words "non-stabilised".

Hazard pictograms :

Signal word : Danger

Hazard statements :

H225 Highly flammable liquid and vapour.
H302 + H312 + H332 Harmful 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.
H335 May cause respiratory irritation.

Precautionary statements

Prevention

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P233 Keep container tightly closed.
P241 Use explosion-proof electrical/ ventilating/ lighting equipment.
P264 Wash the contact area thoroughly after handling.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P240 Ground and bond container and receiving equipment.
P242 Use non-sparking tools.
P243 Take action to prevent static discharges.
P271 Use only outdoors or in a well-ventilated area.
P270 Do not eat, drink or smoke when using this product.

Response

P370 + P378 In case of fire: Use alcohol-resistant foam, carbon dioxide or dry sand to extinguish.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P302 + P352 IF ON SKIN: Wash with plenty of water.
P332 + P317 If skin irritation occurs: Get medical advice/ attention.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304 + P340 + P317 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical help.
P301 + P317 + P330 IF SWALLOWED: Get medical help. Rinse mouth.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P337 + P317 If eye irritation persists: Get medical advice/ attention.

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.

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 H302 H312 H332 H315 H319 H317 H335*

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.
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

Components	Type	Control parameters	Update	Basis
ETHYL ACRYLATE	TWA	20 mg/m3	1995	South Africa RELs
ETHYL ACRYLATE	TWA	5 ppm	1995	South Africa RELs
ETHYL ACRYLATE	STEL	60 mg/m3	1995	South Africa RELs
	STEL	15 ppm	1995	South Africa RELs

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 - 85; 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 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)
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	This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (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

USA TSCA Inventory	All chemical constituents are listed in: USA TSCA Inventory (See chapter 3)
Canadian Domestic Substances List (DSL)	All chemical constituents are listed in: Canadian Domestic Substances List (DSL) (See chapter 3)

Australian Inv. of Chem. Substances (AICS)	All chemical constituents are listed in: Australian Inv. of Chem. Substances (AICS) (See chapter 3)
New Zealand Inventory of Chemicals (NZIoC)	All chemical constituents are listed in: New Zealand Inventory of Chemicals (NZIoC) (See chapter 3)
Jap. Inv. of Exist. & New Chemicals (ENCS)	All chemical constituents are listed in: Jap. Inv. of Exist. & New Chemicals (ENCS) (See chapter 3)
Japan. Industrial Safety & Health Law (ISHL)	All chemical constituents are listed in: Japan. Industrial Safety & Health Law (ISHL) (See chapter 3)
Korea. Existing Chemicals Inventory (KECI)	All chemical constituents are listed in: Korea. 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 Inv. Existing Chemical Substances (IECSC)	All chemical constituents are listed in: China Inv. Existing Chemical Substances (IECSC) (See chapter 3)

SECTION 16. Other information

Full text of H-Statements

H225 Highly flammable liquid and vapour.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.

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.

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