

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 01.07.2013

Revision: 06.06.2011

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

1.1 Product identifier

Trade name **Ethyl acrylate**
 Stock number: A15493
 CAS Number: 140-88-5
 EC number: 205-438-8
 Index number: 607-032-00-X

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

Identified use: No further relevant information available.
 SU24 Scientific research and development

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: Alfa Aesar GmbH & Co.KG
 A Johnson Matthey Company
 Zeppelinstr. 7b
 76185 Karlsruhe / Germany
 Tel: +49 (0) 721 84007 280
 Fax: +49 (0) 721 84007 300
 Email: tech@alfa.com
 www.alfa.com
 Informing department: Product safety Tel + +049 (0) 7275 988687-0
 1.4 Emergency telephone number: Carechem 24: +44 (0) 1235 239 670 (Multi-language emergency number)
 Poison Information Center Mainz
 www.giftinfo.uni-mainz.de Telephone: +49(0)6131/19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Liq. 2, H225 Highly flammable liquid and vapour.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.
 Acute Tox. 4 H312 Harmful in contact with skin.
 Acute Tox. 4 H332 Harmful if inhaled.
 Skin Irrit. 2 H315 Causes skin irritation.
 Eye Irrit. 2 H319 Causes serious eye irritation.
 Skin Sens. 1 H317 May cause an allergic skin reaction.
 STOT SE 3 H335 May cause respiratory irritation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

☒ Xn; Harmful

R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.

☒ Xi; Irritant

R36/37/38: Irritating to eyes, respiratory system and skin.

☒ Xi; Sensitising

R43: May cause sensitisation by skin contact.

☒ F; Highly flammable

R11: Highly flammable.

Information concerning particular hazards for human and environment:

Other hazards that do not result in classification

Not applicable

No information known.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms

Signal word

Hazard statements

The substance is classified and labelled according to the CLP regulation.

GHS02, GHS07

Danger

H225 Highly flammable liquid and vapour.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H332 Harmful 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

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT:

Not applicable.

vPvB:

Not applicable.

SECTION 3: Composition/information on ingredients

3.1 Substances

CAS# Designation: 140-88-5 Ethyl acrylate
 Identification number(s):
 EC number: 205-438-8
 Index number: 607-032-00-X
 Impurities and stabilising additives: Stabilised with:
 MEHQ (CAS# 150-76-5)

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SECTION 4: First aid measures**4.1 Description of first aid measures**
After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

After skin contactSeek immediate medical advice.
Instantly wash with water and soap and rinse thoroughly.**After eye contact**

Seek immediate medical advice.

After swallowing

Rinse opened eye for several minutes under running water. Then consult doctor.

4.2 Most important symptoms and effects, both acute and delayed

Seek medical treatment.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

No further relevant information available.

SECTION 5: Firefighting measures**5.1 Extinguishing media**CO₂, sand, extinguishing powder. Do not use water.**Suitable extinguishing agents****5.2 Special hazards arising from the substance or mixture**If this product is involved in a fire, the following can be released:
Carbon monoxide and carbon dioxide**5.3 Advice for firefighters****Protective equipment:**Wear self-contained breathing apparatus.
Wear full protective suit.**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions:Ensure adequate ventilation
Keep away from ignition sources
Do not allow material to be released to the environment without proper governmental permits.
Do not allow product to reach sewage system or water bodies.
Do not allow to enter the ground/soil.**6.3 Methods and material for containment and cleaning up:**Keep away from ignition sources.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose of contaminated material as waste according to item 13.
Ensure adequate ventilation.**Prevention of secondary hazards:**
6.4 Reference to other sectionsKeep away from ignition sources.
See Section 7 for information on safe handling
See section 8 for information on personal protection equipment.
See Section 13 for information on disposal.**SECTION 7: Handling and storage****7.1 Precautions for safe handling**Keep containers tightly sealed.
Ensure good ventilation/exhaustion at the workplace.**Information about protection against explosions and fires:**Protect against electrostatic charges.
Fumes can combine with air to form an explosive mixture.**7.2 Conditions for safe storage, including any incompatibilities****Storage**
Requirements to be met by storerooms and containers:
Information about storage in one common storage facility:

Refrigerate

Further information about storage conditions:Store away from oxidizing agents.
Protect from heat.**7.3 Specific end use(s)**Keep container tightly sealed.
Refrigerate
No further relevant information available.**SECTION 8: Exposure controls/personal protection****Additional information about design of technical systems:**

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

8.1 Control parameters**Components with critical values that require monitoring at the workplace:****140-88-5 Ethyl acrylate (100,0%)**

AGW (Germany)

21 mg/m³, 5 ppm
2(l);DFG, EU, H, Y

PEL (USA)

100 mg/m³, 25 ppm
Skin

REL (USA)

See Pocket Guide App. A

TLV (USA)

Short-term value: 61 mg/m³, 15 ppm
Long-term value: 20 mg/m³, 5 ppm**Additional information:**

No data

8.2 Exposure controls**Personal protective equipment****General protective and hygienic measures**

The usual precautionary measures should be adhered to in handling the chemicals.

Keep away from foodstuffs, beverages and food.

Instantly remove any soiled and impregnated garments.

Wash hands during breaks and at the end of the work.

Avoid contact with the eyes and skin.

Maintain an ergonomically appropriate working environment.

Breathing equipment:

Use breathing protection with high concentrations.

Protection of hands:

Check protective gloves prior to each use for their proper condition.

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Material of gloves

Impervious gloves

Penetration time of glove material

Not determined

Eye protection:Safety glasses
Face protection(Contd. on page 3)
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Body protection: Protective work 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
 Smell: Pungent
 Odour threshold: Not determined.

pH-value: Not determined.

Change in condition

Melting point/Melting range: -71 °C
 Boiling point/Boiling range: 99-100 °C
 Sublimation temperature / start: Not determined

Flash point: -1 °C
 Inflammability (solid, gaseous): Not applicable.
 Ignition temperature: 350 °C
 Decomposition temperature: Not determined
 Self-inflammability: Not determined.

Critical values for explosion:

Lower: 1,7 Vol %
 Upper: 13 Vol %
 Steam pressure at 20 °C: 39 hPa
 Density at 20 °C: 0,924 g/cm³
 Relative density: Not determined.
 Vapour density: Not determined.
 Evaporation rate: Not determined.

Solubility in / Miscibility with
 Water at 20 °C: 20 g/l
 Partition coefficient (n-octanol/water): Not determined.

Viscosity:
 dynamic: Not determined.
 kinematic: Not determined.

9.2 Other information No further relevant information available.

SECTION 10: Stability and reactivity**10.1 Reactivity****10.2 Chemical stability**

Thermal decomposition / conditions to be avoided:

10.3 Possibility of hazardous reactions**10.5 Incompatible materials:**

10.6 Hazardous decomposition products: Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information**11.1 Information on toxicological effects****Acute toxicity:**

Harmful if inhaled.
 Harmful in contact with skin.
 Harmful if swallowed.
 Danger by skin resorption.
 The Registry of Toxic Effects of Chemical Substances (RTECS) contains acute toxicity data for components in this product.

LD/LC50 values that are relevant for classification:

Oral	LD50	800 mg/kg (rat)
Dermal	LD50	462 mg/kg (rabbit)
Inhalative	LC50/4H	5,89 mg/l/4H (rat)

Skin irritation or corrosion:**Eye irritation or corrosion:****Sensitization:****Germ cell mutagenicity:****Carcinogenicity:****Reproductive toxicity:****Specific target organ system toxicity - repeated exposure:****Specific target organ system toxicity - single exposure:****Aspiration hazard:****Experience with humans:****Additional toxicological information:**

Causes skin irritation.
 Causes serious eye irritation.
 May cause an allergic skin reaction.
 The Registry of Toxic Effects of Chemical Substances (RTECS) contains mutation data for components in this product.
 IARC-2B: Possibly carcinogenic to humans: limited evidence in humans in the absence of sufficient evidence in experimental animals.
 ACGIH A4: Not classifiable as a human carcinogen: Inadequate data on which to classify the agent in terms of its carcinogenicity in humans and/or animals.
 The Registry of Toxic Effects of Chemical Substances (RTECS) contains tumorigenic and/or carcinogenic and/or neoplastic data for this product.
 The Registry of Toxic Effects of Chemical Substances (RTECS) contains reproductive data for components in this product.
 No effects known.
 May cause respiratory irritation.
 No effects known.
 The Registry of Toxic Effects of Chemical Substances (RTECS) contains multiple dose toxicity data for components in this product.
 To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

SECTION 12: Ecological information**12.1 Toxicity****Aquatic toxicity:****12.2 Persistence and degradability****12.3 Bioaccumulative potential****12.4 Mobility in soil****Additional ecological information:****General notes:**

No further relevant information available.
 No further relevant information available.
 No further relevant information available.
 No further relevant information available.

Do not allow product to reach ground water, water bodies or sewage system.
 Do not allow material to be released to the environment without proper governmental permits.
 Water hazard class 2 (Assessment by list): hazardous for water.
 Danger to drinking water if even small quantities leak into soil.
 Avoid transfer into the environment.

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12.5 Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.
12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations**13.1 Waste treatment methods**

Recommendation Hand over to disposers of hazardous waste.
 Must be specially treated under adherence to official regulations.
 Consult state, local or national regulations for proper disposal.

Uncleaned packagings:
Recommendation:

Disposal must be made according to official regulations.

SECTION 14: Transport information

UN-Number
ADR, IMDG, IATA

UN1917

14.2 UN proper shipping name
ADR
IMDG, IATA

1917 ETHYL ACRYLATE, STABILIZED
 ETHYL ACRYLATE, STABILIZED

14.3 Transport hazard class(es)
ADR



Class
Label
IMDG, IATA

3 (F1) Flammable liquids.
 3



Class
Label

3 Flammable liquids.
 3

Packing group
ADR, IMDG, IATA

II

14.5 Environmental hazards:

Not applicable.

14.6 Special precautions for user
Kemler Number:
EMS Number:

Warning: Flammable liquids.
 339
 F-E,S-D

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC
Code

Not applicable.

Transport/Additional information:

ADR
Excepted quantities (EQ):
Limited quantities (LQ)
Transport category
Tunnel restriction code

E2
 1L
 2
 D/E

UN "Model Regulation":

UN1917, ETHYL ACRYLATE, STABILIZED, 3, II

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

Australian Inventory of Chemical
Substances
Standard for the Uniform Scheduling of
Drugs and Poisons
National regulations
Information about limitation of use:

Substance is listed.

Substance is not listed.

Employment restrictions concerning young persons must be observed.
 For use only by technically qualified individuals.

Classification according to VbF:
Technical instructions (air):

A 1

Class	Share in %
NK	100,0

Water hazard class:

Water hazard class 2 (Assessment by list): hazardous for water.

Other regulations, limitations and prohibitive
ELINCS (European List of Notified Chemical
Substances)

Substance is not listed.

Substances of very high concern (SVHC)
according to REACH, Article 57

Substance is not listed.

REACH - Pre-registered substances

Substance is listed.

15.2 Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Department issuing data specification sheet:
Abbreviations and acronyms:

Health, Safety and Environmental Department.
 RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 ICAO: International Civil Aviation Organization
 ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 VbF: Verordnung über brennbare Flüssigkeiten, Österreich (Ordinance on the storage of combustible liquids, Austria)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent

DE/E