

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**

Trade name **2-Hydroxyethyl acrylate**
 Stock number: B248T5
 CAS Number: 818-61-1
 EC number: 212-454-9
 Index number: 607-072-00-8

1.2 Relevant identified uses of the substance

or mixture and uses advised against. No further relevant information available.
 Identified use: 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
 Product safety Tel + +049 (0) 7275 988687-0
 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

Informing department:

1.4 Emergency telephone number:

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture**


Classification according to Regulation (EC) No 1272/2008

 GHS06 skull and crossbones

Acute Tox. 3 H311 Toxic in contact with skin.

 GHS05 corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.


 GHS09 environment

Aquatic Acute 1 H400 Very toxic to aquatic life.


 GHS07

Skin Sens. 1 H317 May cause an allergic skin reaction.


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

 T; Toxic


R24: Toxic in contact with skin.

 C; Corrosive

R34: Causes burns.

 Xi; Sensitising

R43: May cause sensitisation by skin contact.

 N; Dangerous for the environment

R50: Very toxic to aquatic organisms.

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.

GHS05, GHS06, GHS09

Danger

H311 Toxic in contact with skin.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H400 Very toxic to aquatic life.

P260

Do not breathe dust/fume/gas/mist/vapours/spray.

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.

Remove/Take off immediately all contaminated clothing.

P361

Store locked up.

P405

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

P501 regulations.

Precautionary statements**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: 818-61-1 2-Hydroxyethyl acrylate

Identification number(s):

212-454-9

EC number:

607-072-00-8

Index number:

Impurities and stabilising additives:

Stabilised with:

4-Methoxyphenol (CAS# 150-76-5)

SECTION 4: First aid measures**4.1 Description of first aid measures****General information**

Instantly remove any clothing soiled by the product.

Safety data sheet
according to 1907/2006/EC, Article 31

Revision: 12.02.2013

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After inhalation

In case of irregular breathing or respiratory arrest provide artificial respiration. Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

After skin contact

Seek immediate medical advice. Instantly wash with water and soap and rinse thoroughly.

After eye contact

Seek immediate medical advice. Rinse opened eye for several minutes under running water. Then consult doctor.

After swallowing

Seek medical treatment.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures**5.1 Extinguishing media
Suitable extinguishing agents**

Use carbon dioxide, extinguishing powder or foam. Water may be ineffective but may be used for cooling exposed containers.

5.2 Special hazards arising from the substance or mixture

Danger of containers bursting upon heating. 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. Ensure adequate ventilation

6.2 Environmental precautions:

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:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Use neutralizing agent. Dispose of contaminated material as waste according to item 13. Ensure adequate ventilation.

Prevention of secondary hazards:

No special measures required.

6.4 Reference to other sections

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:

No information known.

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:**

No special requirements.

Further information about storage conditions:

Store away from oxidizing agents. Store in the dark. Protect from heat.

7.3 Specific end use(s)

Keep container tightly sealed. Store in cool, dry conditions in well sealed containers. Protect from the effects of light. Store in a locked cabinet or with access restricted to technical experts or their assistants. 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:****818-61-1 2-Hydroxyethyl acrylate (100,0%)**

MAK (Germany) | vgl. Abschn. IV

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. Store protective clothing separately. Avoid contact with the eyes and skin. Maintain an ergonomically appropriate working environment. Use breathing protection with high concentrations.

Breathing equipment:**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**Penetration time of glove material**

Impervious gloves

Eye protection:

Not determined
Tightly sealed safety glasses.

Body protection:

Full face protection
Protective work clothing.

DE/E

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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: < -60 °C
Boiling point/Boiling range: 192 °C
Sublimation temperature / start: Not determined

Flash point: 101 °C
Inflammability (solid, gaseous): Not applicable.
Ignition temperature: Not determined
Decomposition temperature: Not determined
Self-inflammability: Not determined.

Critical values for explosion:

Lower: Not determined
Upper: Not determined

Steam pressure: Not determined
Density at 20 °C: 1,106 g/cm³
Relative density: Not determined.
Vapour density: Not determined.
Evaporation rate: Not determined.

Solubility in / Miscibility with

Water: Fully miscible
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**

No information known.

10.2 Chemical stability

Stable under recommended storage conditions.

Thermal decomposition / conditions to be avoided:

Danger of containers bursting upon heating.

Stable until:

Depletion of inhibitor.

10.3 Possibility of hazardous reactions

Danger of polymerisation

10.5 Incompatible materials:

Heat
 Light
 Ultraviolet radiation
 Free radical initiators

10.6 Hazardous decomposition products:

Carbon monoxide and carbon dioxide

Additional information:

Unless inhibited, the product can polymerize resulting in a temperature and pressure increase that may rupture the container.

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

Danger by skin resorption.

Toxic in contact with skin.

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

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	548 mg/kg (rat)
Dermal	LD50	298 mg/kg (rabbit)

Skin irritation or corrosion:

Causes severe skin burns.

Eye irritation or corrosion:

Causes serious eye damage.

Sensitization:

May cause an allergic skin reaction.

Germ cell mutagenicity:

The Registry of Toxic Effects of Chemical Substances (RTECS) contains mutation data for components in this product.

Carcinogenicity:

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

Reproductive toxicity:

The Registry of Toxic Effects of Chemical Substances (RTECS) contains reproductive data for components in this product.

Specific target organ system toxicity - repeated exposure:

No effects known.

Specific target organ system toxicity - single exposure:

No effects known.

Aspiration hazard:

No effects known.

Additional toxicological information:

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

Toxic in contact with skin.

SECTION 12: Ecological information**12.1 Toxicity**

No further relevant information available.

Aquatic toxicity:

No further relevant information available.

12.2 Persistence and degradability

No further relevant information available.

12.3 Bioaccumulative potential

No further relevant information available.

12.4 Mobility in soil

No further relevant information available.

Ecotoxicological effects:**Remark:**

Very toxic for fish

Additional ecological information:**General notes:**

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 danger class 3 (Self-assessment): extremely hazardous for water.
 Do not allow product to reach ground water, water bodies or sewage system, even in small quantities.
 Danger to drinking water if even extremely small quantities leak into soil.
 Also poisonous for fish and plankton in water bodies.
 Avoid transfer into the environment.

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DE/E

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12.5 Results of PBT and vPvB assessment

Very toxic for aquatic organisms

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.

Recommended cleaning agent:

Water, if necessary with cleaning agent.

SECTION 14: Transport information**UN-Number****ADR, IMDG, IATA**

UN2927

14.2 UN proper shipping name**ADR**

2927 TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (2-Hydroxyethyl acrylate)

IMDG, IATA

TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (2-Hydroxyethyl acrylate)

14.3 Transport hazard class(es)**ADR****Class****Label****IMDG, IATA**6.1 (TC1) Toxic substances.
6.1+8**Class****Label**6.1 Toxic substances.
6.1+8**Packing group****ADR, IMDG, IATA**

II

14.5 Environmental hazards:

Environmentally hazardous substance, liquid

14.6 Special precautions for user**Kemler Number:**Warning: Toxic substances.
68**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):**

E4

Limited quantities (LQ)

100 ml

Transport category

2

Tunnel restriction code

D/E

UN "Model Regulation":

UN2927, TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (2-Hydroxyethyl acrylate), 6.1 (8), II

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

Substance is listed.

Substances**Standard for the Uniform Scheduling of**

Substance is not listed.

Drugs and Poisons**National regulations****Information about limitation of use:**

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

Technical instructions (air):

Class	Share in %
I	100.0

Water hazard class:

Water danger class 3 (Self-assessment): extremely hazardous for water.

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

Substance is not listed.

Substances)**Substances of very high concern (SVHC)**

Substance is not listed.

according to REACH, Article 57

Substance is listed.

REACH - Pre-registered substances

A Chemical Safety Assessment has not been carried out.

15.2 Chemical safety assessment:**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: Health, Safety and Environmental Department.**Abbreviations and acronyms:**

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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent