

# Safety data sheet

according to 1907/2006/EC, Article 31

Revision: 24.01.2007

Printing date 01.07.2013

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

### 1.1 Product identifier

Trade name

**Methyl acrylate**

Stock number:

AT3128, L04081

CAS Number:

96-33-3

EC number:

202-500-6

Index number:

607-034-00-0

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

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

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:

96-33-3 Methyl acrylate

Identification number(s):

EC number:

202-500-6

Index number:

607-034-00-0

## 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.  
Seek immediate medical advice.

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**After skin contact**

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**

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**CO<sub>2</sub>, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.**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.  
Ensure adequate ventilation  
Keep away from ignition sources**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:**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.**Prevention of secondary hazards:****6.4 Reference to other sections**Ensure adequate ventilation.  
Keep 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.  
Store in cool, dry place in tightly closed containers.  
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:**

Store in cool location.

**Information about storage in one common storage facility:**Store away from oxidizing agents.  
Store in the dark.**Further information about storage conditions:**Keep container tightly sealed.  
Store in cool, dry conditions in well sealed containers.  
Protect from the effects of light.**7.3 Specific end use(s)**

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.

**Components with critical values that require monitoring at the workplace:**

Methyl acrylate  
ppm

ACGIH TLV	2 (skin)
Belgium TWA	10 (skin)
Denmark TWA	10 (skin)
Finland TWA	10, 20-STEEL (skin)
France TWA	10, 20-STEEL (skin)
Germany TWA	5
Hungary TWA	20 mg/m <sup>3</sup> , 40mg/m <sup>3</sup> -STEEL (skin)
Ireland TWA	10
Netherlands TWA	5 (skin)
Poland TWA	20 mg/m <sup>3</sup>
Russia TWA	5 mg/m <sup>3</sup>
Sweden TWA	10, 15-STEEL (skin)
Switzerland TWA	5, 10-STEEL (skin)
United Kingdom TWA	10
USA PEL	10

**8.1 Control parameters****Components with critical values that require monitoring at the workplace:****96-33-3 Methyl acrylate (100,0%)**

AGW (Germany)	18 mg/m <sup>3</sup> , 5 ppm 1(l);DFG, EU, H
PEL (USA)	35 mg/m <sup>3</sup> , 10 ppm Skin
REL (USA)	35 mg/m <sup>3</sup> , 10 ppm Skin
TLV (USA)	7 mg/m <sup>3</sup> , 2 ppm Skin; SEN

**Additional information:**

No data

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**8.2 Exposure controls****Personal protective equipment****General protective and hygienic measures****Breathing equipment:****Protection of hands:****Material of gloves****Penetration time of glove material****Eye protection:****Body protection:**

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.

Use breathing protection with high concentrations.

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.

Impervious gloves

Not determined

Safety glasses

Face protection

Protective work clothing.

**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:** -75 °C**Boiling point/Boiling range:** 79-81 °C**Sublimation temperature / start:** Not determined**Flash point:** -3 °C**Inflammability (solid, gaseous)** Not determined.**Ignition temperature:** 415 °C**Decomposition temperature:** Not determined**Self-inflammability:** Not determined.**Critical values for explosion:****Lower:** 2,4 Vol %**Upper:** 18,6 Vol %**Steam pressure at 20 °C:** 89 hPa**Density at 20 °C** 0,95 g/cm<sup>3</sup>**Relative density** Not determined.**Vapour density** Not determined.**Evaporation rate** Not determined.**Solubility in / Miscibility with****Water at 20 °C:** 60 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:**

No information known.

Stable under recommended storage conditions.

No decomposition if used and stored according to specifications.

No dangerous reactions known

Light

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.

**LD/LC50 values that are relevant for****classification:****Skin irritation or corrosion:****Eye irritation or corrosion:****Sensitization:****Germ cell mutagenicity:****Carcinogenicity:**

No data

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

No effects known.

EPA-D: Not classifiable as to human carcinogenicity: inadequate human and animal evidence of

carcinogenicity or no data are available.

IARC-3: Not classifiable as to carcinogenicity to humans.

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.

No effects known.

**Reproductive toxicity:****Specific target organ system toxicity -****repeated exposure:****Specific target organ system toxicity - single****exposure:****Aspiration hazard:****Other information (about experimental****toxicology):****Additional toxicological information:**

No effects known.

May cause respiratory irritation.

No effects known.

Mutagenic effects have been observed on tests with laboratory animals.

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:**

No further relevant information available.

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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.

Do not allow material to be released to the environment without proper governmental permits.  
Water hazard class 1 (Self-assessment): slightly hazardous for water.  
Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.  
Avoid transfer into the environment.

12.5 Results of PBT and vPvB assessment  
PBT:  
vPvB:  
12.6 Other adverse effects

Not applicable.  
Not applicable.  
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

UN1919

14.2 UN proper shipping name  
ADR  
IMDG, IATA

1919 METHYL ACRYLATE, STABILIZED  
METHYL 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:

Warning: Flammable liquids.  
339

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":

UN1919, METHYL 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.

Water hazard class:  
Other regulations, limitations and prohibitive  
regulations  
ELINCS (European List of Notified Chemical  
Substances)  
Substances of very high concern (SVHC)  
according to REACH, Article 57  
REACH - Pre-registered substances  
15.2 Chemical safety assessment:

Water hazard class 1 (Self-assessment): slightly hazardous for water.  
Substance is not listed.  
Substance is not listed.  
Substance is listed.  
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: Health, Safety and Environmental Department.

Abbreviations and acronyms:

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

D/E