

# Safety data sheet

according to 1907/2006/EC, Article 31

Date Printed 21.10.2020

Version number 1

Revision Date 21.10.2020

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

- **1.1 Product identifier**
- **Trade name: Methyl Methacrylate**
- **Article number:** AGR1049
- **CAS Number:**  
80-62-6
- **EC number:**  
201-297-1
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the preparation:**  
Laboratory chemicals, Manufacture of substances
- **1.3 Details of the supplier of the safety data sheet**
- **Supplier.**  
Agar Scientific Ltd  
Parsonage Lane  
Stansted CM24 8GF  
United Kingdom  
sales@agarscientific.com  
Tel: +44 (0) 1279 813 519
- **Further information obtainable from:** Technical Support
- **1.4 Emergency telephone number:** 24 hours: +44 (0)1856 407333

## 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

Skin Irrit. 2 H315 Causes skin irritation.  
 Skin Sens. 1 H317 May cause an allergic skin reaction.  
 STOT SE 3 H335 May cause respiratory irritation.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
The substance is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS02 GHS07

- **Signal word** Danger
- **Hazard statements**  
H225 Highly flammable liquid and vapour.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H335 May cause respiratory irritation.

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- **Precautionary statements**

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P241 Use explosion-proof [electrical/ventilating/lighting] equipment.
- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
- 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 Chemical characterisation: Substances**

- **CAS No. Description**

Methyl Methacrylate  
 Consisting of: 80-62-6 methyl methacrylate (100%)

- **Identification number(s)**

- **EC number:** 201-297-1

## SECTION 4: First aid measures

- **4.1 Description of first aid measures**

- **After inhalation:**

Supply fresh air.  
 If not breathing give artificial respiration. Consult a physician.

- **After skin contact:** Wash with water and soap and rinse thoroughly.

- **After eye contact:** Rinse opened eye for several minutes under running water.

- **After swallowing:**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

- **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 water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

- **5.2 Special hazards arising from the substance or mixture**

Carbon oxides

Flash back possible over considerable distance. Container explosion may occur under fire conditions.

- **5.3 Advice for firefighters**

- **Protective equipment:** Wear self-contained breathing apparatus for firefighting if necessary.

- **Additional information** Use water spray to cool unopened containers.

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## SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.
- **6.2 Environmental precautions:**  
Do not allow to enter sewers/ surface or ground water.  
Prevent further leakage or spillage if safe to do so.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Ensure adequate ventilation.
- **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 disposal information.

## SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**  
Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.  
Keep away from sources of ignition - No smoking. Take measures to prevent build up of electrostatic charge.
- **Information about fire - and explosion protection:** Protect against electrostatic charges.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Store in a cool location.  
Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.  
Recommended storage temperature 2 - 8 °C
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**  
Keep container tightly sealed.  
Store in cool, dry conditions in well sealed receptacles.
- **7.3 Specific end use(s)** No further relevant information available.

## SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Keep away from foodstuffs, beverages and feed.  
Remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Avoid contact with the skin.  
Avoid contact with the eyes and skin.
- **Respiratory protection:**  
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

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**Protection of hands:**


Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

**Material of gloves**

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.

**Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection:**


Tightly sealed goggles

## SECTION 9: Physical and chemical properties

**9.1 Information on basic physical and chemical properties**
**General Information**
**Appearance:**

Form:	Liquid
Colour:	Colourless
Odour:	Pungent
Odour threshold:	Not determined.

pH-value: Not determined.

**Change in condition**

Melting point/freezing point:	-48 °C
Initial boiling point and boiling range:	98-100 °C

Flash point: 9 °C

Flammability (solid, gas): Not applicable.

Ignition temperature: 400 °C

Decomposition temperature: Not determined.

Auto-ignition temperature: Not determined.

Explosive properties: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

**Explosion limits:**

Lower:	2.12 %
Upper:	12.5 °C

Vapour pressure at 20 °C: 37 hPa

Density: Not determined.

Relative density: 0.943

Vapour density: Not determined.

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· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with water at 20 °C:</b>	15.3 g/l
· <b>Partition coefficient: n-octanol/water:</b>	0.13988
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
· <b>9.2 Other information</b>	No further relevant information available.

## SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
 Polymerizes with evolution of heat. Avoid contact with incompatible materials. Unless inhibited, product can polymerize, raising temperature and pressure, possibly rupturing container. Check inhibitor content often adding to bulk liquid if needed. Do not blanket or mix with oxygen-free gas as it renders inhibitor ineffective.  
 Stable under recommended storage conditions.
- **10.3 Possibility of hazardous reactions** Polymerizes readily unless inhibited.
- **10.4 Conditions to avoid**  
 Heat. May polymerize on exposure to light.  
 Heat, flames and sparks.
- **10.5 Incompatible materials:**  
 Oxidising agents, Peroxides, Amines, Bases, Acids, Reducing agents, Halogens
- **10.6 Hazardous decomposition products:**  
 Other decomposition products - No data available  
 Hazardous decomposition products formed under fire conditions - Carbon oxides

## SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **Skin corrosion/irritation**  
 Causes skin irritation.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation**  
 May cause an allergic skin reaction.  
 May cause respiratory irritation.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure**  
 May cause respiratory irritation.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

## SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.

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**12.2 Persistence and degradability**

 Biodegradability Result: > 95% - Readily biodegradable  
(OECD Test Guideline 302B)

Biochemical Oxygen Demand (BOD) 140 mg/g

**12.3 Bioaccumulative potential** No further relevant information available.

**12.4 Mobility in soil** No further relevant information available.

**Additional ecological information:**
**General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

**12.5 Results of PBT and vPvB assessment**

PBT: Not applicable.

vPvB: Not applicable.

**12.6 Other adverse effects** Harmful to aquatic life.

## SECTION 13: Disposal considerations

**13.1 Waste treatment methods**
**Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as material is highly flammable.

**Recommendation:** Disposal must be made according to official regulations.

## SECTION 14: Transport information

**14.1 UN-Number**

ADR, IMDG, IATA UN1247

**14.2 UN proper shipping name**

 ADR 1247 METHYL METHACRYLATE MONOMER, STABILIZED  
 IMDG, IATA METHYL METHACRYLATE MONOMER, STABILIZED

**14.3 Transport hazard class(es)**
**ADR, IMDG, IATA**


Class 3 Flammable liquids.

Label 3

**14.4 Packing group**

ADR, IMDG, IATA II

**14.5 Environmental hazards:** Not applicable.

**14.6 Special precautions for user** Warning: Flammable liquids.

Danger code (Kemler): 33

EMS Number: F-E,S-D

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· <b>Stowage Category</b>	C
· <b>Stowage Code</b>	SW1 Protected from sources of heat. SW2 Clear of living quarters.
· <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	
· <b>ADR</b>	
· <b>Limited quantities (LQ)</b>	1L
· <b>Excepted quantities (EQ)</b>	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· <b>Transport category</b>	2
· <b>Tunnel restriction code</b>	D/E
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	1L
· <b>Excepted quantities (EQ)</b>	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· <b>UN "Model Regulation":</b>	UN 1247 METHYL METHACRYLATE MONOMER, STABILIZED, 3, II

## SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** Substance is not listed.
- **Seveso category** P5c FLAMMABLE LIQUIDS
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 5,000 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 50,000 t
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 40
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## SECTION 16: Other information

This information is based on our present knowledge and should assist the user with the safe handling of this material when properly applied. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing SDS:** Sales department
- **Contact:**  
sales@agarscientific.com  
Tel: +44 (0) 1279 813 519
- **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 Harmonised 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)  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
Flam. Liq. 2: Flammable liquids – Category 2  
Skin Irrit. 2: Skin corrosion/irritation – Category 2  
Skin Sens. 1: Skin sensitisation – Category 1

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STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

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· \* **Data compared to the previous version altered.**

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