We create chemistry

# Safety data sheet





## 1. Identification

### Product identifier

## METHOXYPROPYLACETATE

Chemical name: 1-methoxy-2-propylacetate
INDEX-Number: 607-195-00-7
CAS Number: 108-65-6

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

Relevant identified uses: process chemical, solvent(s)

### Details of the supplier of the safety data sheet

Company:
BASF SE
67056 Ludwigshafen
GERMANY
Operating Division Petrochemicals

Telephone: +49 621 60-42151
E-mail address: sds-petrochemicals@basf.com

### Emergency telephone number

International emergency number:
Telephone: +49 180 2273-112

## 2. Hazards Identification

## Classification of the substance or mixture

According to UN GHS criteria

Flam. Liq. 3
STOT SE 3 (May cause drowsiness and dizziness.)

For the classifications not written out in full in this section the full text can be found in section 16.

## Label elements

Globally Harmonized System (GHS)

Pictogram:

Signal Word:
Warning

Hazard Statement:

| | |
|---|---|
| H226 | Flammable liquid and vapour. |
| H336 | May cause drowsiness or dizziness. |

Precautionary Statements (Prevention):

| | |
|---|---|
| P271 | Use only outdoors or in a well-ventilated area. |
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P280 | Wear protective gloves and eye protection or face protection. |
| P261 | Avoid breathing mist or vapour or spray. |
| P243 | Take action to prevent static discharges. |
| P241 | Use explosion-proof electrical, ventilating and lighting equipment. |
| P240 | Ground and bond container and receiving equipment. |
| P242 | Use non-sparking tools. |

Precautionary Statements (Response):

| | |
|---|---|
| P312 | Call a POISON CENTER or physician if you feel unwell. |
| P304 + P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P303 + P361 + P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. |
| P370 + P378 | In case of fire: Use … to extinguish. |

Precautionary Statements (Storage):

| | |
|---|---|
| P233 | Keep container tightly closed. |
| P403 + P235 | Store in a well-ventilated place. Keep cool. |
| P405 | Store locked up. |

Precautionary Statements (Disposal):

| | |
|---|---|
| P501 | Dispose of contents and container to hazardous or special waste collection point. |

### Other hazards

According to UN GHS criteria

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

See section 12 - Results of PBT and vPvB assessment.

## 3. Composition/Information on Ingredients

### Substances

Chemical nature

2-Methoxy-1-methylethyl acetate (Content (W/W): >= 99,5 %)
CAS Number: 108-65-6
EC-Number: 203-603-9
INDEX-Number: 607-195-00-7

stabilized with:
2,6-di-tert-Butyl-p-cresol
CAS Number: 128-37-0
EC-Number: 204-881-4

Hazardous ingredients (GHS)
According to UN GHS criteria

2-Methoxy-1-methylethyl acetate

| | |
|---|---|
| Content (W/W): >= 99,5 % - < 100 % | Flam. Liq. 3 |
| CAS Number: 108-65-6 | STOT SE 3 (drowsiness and dizziness) |
| EC-Number: 203-603-9 | H226, H336 |
| INDEX-Number: 607-195-00-7 | |

2-Methoxypropyl acetate

| | |
|---|---|
| Content (W/W): >= 0 % - < 0,3 % | Flam. Liq. 3 |
| CAS Number: 70657-70-4 | Repr. 1B (unborn child) |
| EC-Number: 274-724-2 | STOT SE 3 (irr. to respiratory syst.) |
| INDEX-Number: 607-251-00-0 | H226, H335, H360 |

For the classifications not written out in full in this section the full text can be found in section 16.

### Mixtures

Not applicable

## 4. First-Aid Measures

### Description of first aid measures

First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately remove contaminated clothing.

If inhaled:
Keep patient calm, remove to fresh air, seek medical attention.

On skin contact:
Wash thoroughly with soap and water

On contact with eyes:
Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

On ingestion:
Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

### Most important symptoms and effects, both acute and delayed

Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.

Hazards: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11. (Further) symptoms and / or effects are not known so far

### Indication of any immediate medical attention and special treatment needed

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

## 5. Fire-Fighting Measures

### Extinguishing media

Suitable extinguishing media:
dry powder, water spray, carbon dioxide, alcohol-resistant foam

Unsuitable extinguishing media for safety reasons:
water jet

Additional information:

Use extinguishing measures to suit surroundings.

### Special hazards arising from the substance or mixture

Flammable liquid Cool endangered containers with water-spray. See SDS section 7 - Handling and storage.

### Advice for fire-fighters

Special protective equipment:
Wear a self-contained breathing apparatus. Special protective equipment for firefighters

Further information:
Evacuate area of all unnecessary personnel. Fight fire from maximum distance.

Extend fire extinguishing measures to the surroundings. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

## 6. Accidental Release Measures

High risk of slipping due to leakage/spillage of product.

Release of substance/product can cause fire or explosion. Shut off or stop source of leak. Shut off or stop released substance/product under safe conditions.

Pack in tightly closed containers for disposal.

### Personal precautions, protective equipment and emergency procedures

Handle in accordance with good industrial hygiene and safety practice.

Avoid all sources of ignition: heat, sparks, open flame. Use antistatic tools.

### Environmental precautions

Discharge into the environment must be avoided.

### Methods and material for containment and cleaning up

Pick up with suitable appliance and dispose of. Spills should be contained, solidified, and placed in suitable containers for disposal. Dispose of absorbed material in accordance with regulations.

## 7. Handling and Storage

### Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice.

Protection against fire and explosion:
Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

### Conditions for safe storage, including any incompatibilities

Unsuitable materials for containers: Low density polyethylene (LDPE), Paper/Fibreboard
Further information on storage conditions: Containers should be stored tightly sealed in a dry place.

## 8. Exposure Controls/Personal Protection

### Control parameters

Components with occupational exposure limits

No substance specific occupational exposure limits known.

### Exposure controls

Personal protective equipment

Respiratory protection:
Wear respiratory protection if ventilation is inadequate. Gas filter for gases/vapours of organic compounds (boiling point >65 °C, e. g. EN 14387 Type A)

Hand protection:
Chemical resistant protective gloves (EN ISO 374-1)
Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN ISO 374-1):
butyl rubber (butyl) - 0.7 mm coating thickness
Suitable materials for short-term contact (recommended: At least protective index 2, corresponding > 30 minutes of permeation time according to EN ISO 374-1)
chloroprene rubber (CR) - 0.5 mm coating thickness
nitrile rubber (NBR) - 0.4 mm coating thickness
Manufacturer's directions for use should be observed because of great diversity of types.
Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.

Eye protection:
Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:
Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures
Avoid contact with eyes. Wearing of closed work clothing is required additionally to the stated personal protection equipment.

## 9. Physical and Chemical Properties

### 9.1. Information on basic physical and chemical properties

| | |
|---|---|
| State of matter: | liquid |
| Form: | liquid |

| | | |
|---|---|---|
| Colour: | colourless | |
| Odour: | ether-like | |
| Odour threshold: | | |
| | not determined | |
| Melting point: | -66 °C | (measured) |
| | (1.013,25 hPa) | |
| | Literature data. | |
| Boiling point: | 145,8 °C | (OECD Guideline 103) |
| | (1.013,25 hPa) | |
| | Extrapolated value | |
| Flammability: | Flammable. | (derived from flash point) |
| Lower explosion limit: | | |
| | For liquids not relevant for classification and labelling., The lower explosion point may be 5 - 15 °C below the flash point. | |
| Upper explosion limit: | | |
| | For liquids not relevant for classification and labelling. | |
| Flash point: | 45,5 °C | (ASTM D3278, closed cup) |
| Auto-ignition temperature: | 333 °C | (DIN 51794) |
| Thermal decomposition: | No decomposition if stored and handled as prescribed/indicated. | |
| pH value: | | |
| | not applicable | |
| Viscosity, kinematic: | 1,23 mm2/s | (DIN 51562) |
| | (20 °C) | |
| Thixotropy: | not thixotropic | |
| Solubility in water: | | (Directive 92/69/EEC, A.6) |
| | 198 g/l | |
| | (20 °C, pH 6,8) | |
| Solubility (qualitative) solvent(s): | organic solvents | |
| | soluble | |
| Partitioning coefficient n-octanol/water (log Kow): | 1,2 | (OECD Guideline 117) |
| | (20 °C; pH value: 6,8) | |
| Vapour pressure: | 3,5997 hPa | (OECD Guideline 104) |
| | (20 °C) | |
| | dynamic | |
| Relative density: | 0,967 | (DIN 51757) |
| | (20 °C, 1.013 hPa) | |
| Density: | 0,9677 g/cm3 | |
| | (20 °C, 1.013 hPa) | |
| | Literature data. | |
| | 0,9286 g/cm3 | (calculated) |
| | (55 °C) | |
| Relative vapour density (air): | 4,55 | (calculated) |
| | (20 °C) | |
| | Heavier than air. | |

## 9.2. Other information

**Information with regard to physical hazard classes**

Explosives

| | |
|---|---|
| Explosion hazard: | Based on the chemical structure there is no indication of explosive properties. |
| Impact sensitivity: | not shock-sensitive |

Based on the chemical structure there is no shock-sensitivity.

Oxidizing properties

Fire promoting properties: Based on its structural properties the product is not classified as oxidizing.

Flammable liquids

Sustained combustibility:
not determined

Pyrophoric properties

Self-ignition temperature: Test type: Spontaneous self-ignition at room-temperature.

Based on its structural properties the product is not classified as self-igniting.

Self-heating substances and mixtures

Self heating ability: It is not a substance capable of spontaneous heating.

Substances and mixtures, which emit flammable gases in contact with water

Formation of flammable gases:
Forms no flammable gases in the presence of water.

Corrosion to metals

No corrosive effect on metal.

**Other safety characteristics**

pKA:
The substance does not dissociate.

Adsorption/water - soil: KOC: 3,998; log KOC: 0,6 (calculated)
The data refer to the uncharged form of the substance.

Surface tension:
Based on chemical structure, surface activity is not to be expected.

Molar mass: 132,16 g/mol

SAPT-Temperature:
Study scientifically not justified.

Evaporation rate:
Value can be approximated from Henry's Law Constant or vapor pressure.

## 10. Stability and Reactivity

### Reactivity

When heated can give off ignitable vapours.

| | | |
|---|---|---|
| Corrosion to metals: | No corrosive effect on metal. | |
| Formation of flammable gases: | Remarks: | Forms no flammable gases in the presence of water. |

### Chemical stability

The product is stable if stored and handled as prescribed/indicated.

### Possibility of hazardous reactions

Reacts with strong oxidizing agents.

### Conditions to avoid

No special precautions other than good housekeeping of chemicals.

### Incompatible materials

Substances to avoid:
strong oxidizing agents

### Hazardous decomposition products

Hazardous decomposition products:
No hazardous decomposition products if stored and handled as prescribed/indicated.

## 11. Toxicological Information

### Information on toxicological effects

Acute toxicity

Assessment of acute toxicity:
Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact.

Experimental/calculated data:
LD50 rat (oral): > 5.000 mg/kg (similar to OECD guideline 401)

LC50 rat (by inhalation): > 23,5 mg/l > 4345 ppm 6 h (similar to OECD guideline 403)
No mortality was observed. The vapour was tested.

LD50 rat (dermal): > 2.000 mg/kg (similar to OECD guideline 402)
No mortality was observed.

LD50 rabbit (dermal): > 5.000 mg/kg (similar to OECD guideline 402)
No mortality was observed.

Irritation

Assessment of irritating effects:
Not irritating to the skin. Not irritating to the eyes.

Experimental/calculated data:

Skin corrosion/irritation rabbit: non-irritant (similar to OECD guideline 404)

Serious eye damage/irritation rabbit: non-irritant (similar to OECD guideline 405)

Respiratory/Skin sensitization

Assessment of sensitization:
Skin sensitizing effects were not observed in animal studies.

Experimental/calculated data:
Guinea pig maximization test guinea pig: Non-sensitizing. (OECD Guideline 406)

Germ cell mutagenicity

Assessment of mutagenicity:
The substance was not mutagenic in bacteria. The substance was not mutagenic in mammalian cell culture. The substance was not genotoxic in mammalian cell culture.

Carcinogenicity

Assessment of carcinogenicity:
In long-term studies in rats and mice in which the substance was given by inhalation, a carcinogenic effect was not observed. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Reproductive toxicity

Assessment of reproduction toxicity:
The results of animal studies gave no indication of a fertility impairing effect. The product has not been fully tested. The statements have been derived in parts from products of a similar structure or composition.

Developmental toxicity

Assessment of teratogenicity:
No indications of a developmental toxic / teratogenic effect were seen in animal studies.

Specific target organ toxicity (single exposure)

Assessment of STOT single:
Possible narcotic effects (drowsiness or dizziness).

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:
Repeated dermal uptake of the substance did not cause substance-related effects. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. The substance may cause damage to the olfactory epithelium after repeated inhalation. Repeated oral uptake of the substance did not cause substance-related effects.

Aspiration hazard

No aspiration hazard expected.

## 12. Ecological Information

### Toxicity

Assessment of aquatic toxicity:
There is a high probability that the product is not acutely harmful to aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Toxicity to fish:
LC50 (96 h) 134 mg/l, Oncorhynchus mykiss (OECD Guideline 203, static)
The details of the toxic effect relate to the nominal concentration.

Aquatic invertebrates:
EC50 (48 h) > 500 mg/l, Daphnia magna (Daphnia test acute, semistatic)
The details of the toxic effect relate to the nominal concentration.

Aquatic plants:
EC50 (72 h) > 1.000 mg/l (growth rate), Selenastrum capricornutum (OECD Guideline 201, static)
The details of the toxic effect relate to the nominal concentration.

Microorganisms/Effect on activated sludge:
EC10 (30 min) > 1.000 mg/l, activated sludge, industrial (DIN EN ISO 8192-OECD 209-88/302/EEC,P. C, aerobic)
The details of the toxic effect relate to the nominal concentration.

Chronic toxicity to fish:
No observed effect concentration (14 d) 47,5 mg/l, Oryzias latipes (OECD Guideline 204, Flow through.)
The details of the toxic effect relate to the nominal concentration.

Chronic toxicity to aquatic invertebrates:
No observed effect concentration (21 d) >= 100 mg/l, Daphnia magna (OECD Guideline 202, part 2, semistatic)

Assessment of terrestrial toxicity:
No data available concerning terrestrial toxicity.

### Persistence and degradability

Assessment biodegradation and elimination (H2O):
Readily biodegradable (according to OECD criteria).

Elimination information:
83 % BOD of the ThOD (28 d) (OECD 301F; ISO 9408; 92/69/EWG, C.4-D) (aerobic, activated sludge, domestic, non-adapted)

Assessment of stability in water:
In contact with water the substance will hydrolyse slowly.
Information on Stability in Water (Hydrolysis):
$t_{1/2}$ > 1 a (25 °C, pH value 7), (OECD Guideline 111, pH 7)

### Bioaccumulative potential

Assessment bioaccumulation potential:
Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

Bioaccumulation potential:
No data available.

### Mobility in soil

Assessment transport between environmental compartments:
Volatility: The substance will slowly evaporate into the atmosphere from the water surface.
Adsorption in soil: Adsorption to solid soil phase is not expected.

### Results of PBT and vPvB assessment

According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not fulfill the criteria for PBT (Persistent/bioaccumulative/toxic) and vPvB (very persistent/very bioaccumulative). Self classification

### Other adverse effects

The substance is not listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

### Additional information

Adsorbable organically-bound halogen (AOX):
This product contains no organically-bound halogen.

## 13. Disposal Considerations

### Waste treatment methods

Must be disposed of or incinerated in accordance with local regulations.

Contaminated packaging:
Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.

## 14. Transport Information

**Land transport**

ADR

| | |
|---|---|
| UN number or ID number: | UN1993 |
| UN proper shipping name: | FLAMMABLE LIQUID, N.O.S. (2-METHOXY-1-METHYLETHYL ACETATE) |
| Transport hazard class(es): | 3 |
| Packing group: | III |
| Environmental hazards: | no |
| Special precautions for user: | Tunnel code: D/E |

RID

| | |
|---|---|
| UN number or ID number: | UN1993 |
| UN proper shipping name: | FLAMMABLE LIQUID, N.O.S. (2-METHOXY-1-METHYLETHYL ACETATE) |
| Transport hazard class(es): | 3 |
| Packing group: | III |
| Environmental hazards: | no |
| Special precautions for user: | None known |

**Inland waterway transport**

ADN

| | |
|---|---|
| UN number or ID number: | UN1993 |
| UN proper shipping name: | FLAMMABLE LIQUID, N.O.S. (2-METHOXY-1-METHYLETHYL ACETATE) |
| Transport hazard class(es): | 3 |
| Packing group: | III |
| Environmental hazards: | no |
| Special precautions for user: | None known |

Transport in inland waterway vessel

| | |
|---|---|
| UN number or ID number: | UN1993 |
| UN proper shipping name: | FLAMMABLE LIQUID, N.O.S. (2-METHOXY-1-METHYLETHYL ACETATE) |
| Transport hazard class(es): | 3 |
| Packing group: | III |
| Environmental hazards: | no |
| Type of inland waterway vessel: | N |
| Cargo tank design: | 3 |
| Cargo tank type: | 2 |

**Sea transport**

IMDG

| | |
|---|---|
| UN number or ID number: | UN 1993 |
| UN proper shipping name: | FLAMMABLE LIQUID, N.O.S. (2-METHOXY-1-METHYLETHYL ACETATE) |
| Transport hazard class(es): | 3 |
| Packing group: | III |
| Environmental hazards: | no<br>Marine pollutant: NO |
| Special precautions for user: | EmS: F-E; S-E |

**Air transport**

IATA/ICAO

| | |
|---|---|
| UN number or ID number: | UN 1993 |
| UN proper shipping name: | FLAMMABLE LIQUID, N.O.S. (2-METHOXY-1-METHYLETHYL ACETATE) |
| Transport hazard class(es): | 3 |
| Packing group: | III |
| Environmental hazards: | No Mark as dangerous for the environment is needed |
| Special precautions for user: | None known |

### Maritime transport in bulk according to IMO instruments

| | |
|---|---|
| Regulation: | IBC-Code |
| Product name: | Propylene glycol methyl ether acetate |
| Pollution category: | Z |
| Ship Type: | 3 |

## 15. Regulatory Information

### Safety, health and environmental regulations/legislation specific for the substance or mixture

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

## 16. Other Information

Full text of classifications, hazard symbols and hazard statements, if mentioned in section 2 or 3:

| | |
|---|---|
| Flam. Liq. | Flammable liquids |
| STOT SE | Specific target organ toxicity — single exposure |
| Repr. | Reproductive toxicity |
| H226 | Flammable liquid and vapour. |
| H336 | May cause drowsiness or dizziness. |
| H335 | May cause respiratory irritation. |
| H360 | May damage the unborn child. |

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.