

## SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version 6.0 Revision Date 31.03.2016

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GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

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

Product name : Propylene glycol monomethyl ether acetate

Product Number : 484431

Brand : Sigma-Aldrich

Index-No. : 607-195-00-7

REACH No. : A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

CAS-No. : 108-65-6

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

Identified uses : Laboratory chemicals, Manufacture of substances

**1.3 Details of the supplier of the safety data sheet**

Company : Sigma-Aldrich Chemical Pvt Limited  
Industrial Area, Anekal Taluka  
Plot No 12,  
12 Bommasandra - Jigani Link Road  
560100 BANGALORE  
INDIA

**1.4 Emergency telephone number**

Emergency Phone # : +91 98802 05043

**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

Flammable liquids (Category 3), H226

For the full text of the H-Statements mentioned in this Section, see Section 16.

**2.2 Label elements****Labelling according Regulation (EC) No 1272/2008**

Pictogram



Signal word

Warning

Hazard statement(s)

H226

Flammable liquid and vapour.

Precautionary statement(s)

P210

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P403 + P235

Store in a well-ventilated place. Keep cool.

Supplemental Hazard Statements none

## 2.3 Other hazards - none

### SECTION 3: Composition/information on ingredients

#### 3.1 Substances

Synonyms : DOWANOL® PMA  
MPA  
1-Methoxy-2-propyl acetate  
1,2-Propanediol monomethyl ether acetate  
Propylene glycol methyl ether acetate  
PGMEA

Formula : C<sub>6</sub>H<sub>12</sub>O<sub>3</sub>  
Molecular weight : 132.16 g/mol  
CAS-No. : 108-65-6  
EC-No. : 203-603-9  
Index-No. : 607-195-00-7

#### Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	Classification	Concentration
<b>2-Methoxypropanol</b>		
CAS-No. 1589-47-5 EC-No. 216-455-5 Index-No. 603-106-00-0	Flam. Liq. 3; Skin Irrit. 2; Eye Dam. 1; Repr. 1B; STOT SE 3; H226, H315, H318, H360D, H335	< 0.3 %
<b>2-Methoxy-1-methylethyl acetate***</b>		
CAS-No. 108-65-6 EC-No. 203-603-9 Index-No. 607-195-00-7	Flam. Liq. 3; H226	<= 100 %

\* PBT substance, \*\* vPvB substance, \*\*\* WEL substance

For the full text of the H-Statements mentioned in this Section, see Section 16.

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

##### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

##### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

##### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

##### In case of eye contact

Flush eyes with water as a precaution.

##### If swallowed

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

No data available

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## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

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

### 5.2 Special hazards arising from the substance or mixture

Carbon oxides

### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further 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 vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### 6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

### 6.4 Reference to other sections

For disposal see section 13.

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Avoid exposure - obtain special instructions before use. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. 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. Storage class (TRGS 510): Flammable liquids

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

### 8.2 Exposure controls

#### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protective equipment

##### Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

### **Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact

Material: butyl-rubber

Minimum layer thickness: 0.3 mm

Break through time: > 480 min

Material tested: Butoject® (KCL 897 / Aldrich Z677647, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.4 mm

Break through time: 79 min

Material tested: Camatril® (KCL 730 / Aldrich Z677442, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industria situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

### **Body Protection**

Impervious clothing, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use (US) or type ABEK (EN 14387) respirator cartridges as a backup to enginee protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### **Control of environmental exposure**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

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## **SECTION 9: Physical and chemical properties**

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

- |  |   |
|--|---|
| a) Appearance                              | Form: clear, liquid<br>Colour: colourless                           |
| b) Odour                                   | No data available   |
| c) Odour Threshold                         | No data available   |
| d) pH                                      | No data available   |
| e) Melting point/freezing point            | Melting point/range: < -65.99 °C at 1,013 hPa                       |
| f) Initial boiling point and boiling range | 145 - 146 °C - lit.   |
| g) Flash point                             | 45.5 °C - closed cup  |
| h) Evaporation rate                        | No data available   |
| i) Flammability (solid, gas)               | No data available   |
| j) Upper/lower flammability or             | Upper explosion limit: 13.1 %(V)<br>Lower explosion limit: 1.3 %(V) |

explosive limits

- |    |  |   |
|----|--|---|
| k) | Vapour pressure                        | 3.59 hPa at 20 °C - OECD Test Guideline 104     |
| l) | Vapour density                         | No data available                               |
| m) | Relative density                       | 0.97 g/cm <sup>3</sup> at 25 °C - lit.          |
| n) | Water solubility                       | 198 g/l at 20 °C                                |
| o) | Partition coefficient: n-octanol/water | log Pow: 1.2 at 20 °C - OECD Test Guideline 117 |
| p) | Auto-ignition temperature              | 333 °C at 1,013 hPa                             |
| q) | Decomposition temperature              | No data available                               |
| r) | Viscosity                              | 1.13 mm <sup>2</sup> /s at 25 °C -              |
| s) | Explosive properties                   | No data available                               |
| t) | Oxidizing properties                   | No data available                               |

## 9.2 Other safety information

No data available

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

Heat, flames and sparks.

### 10.5 Incompatible materials

Strong oxidizing agents

### 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - No data available

In the event of fire: see section 5

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## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

LD50 Oral - Rat - female - 8,532 mg/kg(2-Methoxy-1-methylethyl acetate)

LD50 Dermal - Rat - male and female - > 2,000 mg/kg(2-Methoxy-1-methylethyl acetate)

(OECD Test Guideline 402)

#### Skin corrosion/irritation

Skin - Rabbit(2-Methoxy-1-methylethyl acetate)

Result: No skin irritation

(OECD Test Guideline 404)

#### Serious eye damage/eye irritation

Eyes - Rabbit(2-Methoxy-1-methylethyl acetate)

Result: No eye irritation

#### Respiratory or skin sensitisation

Maximisation Test - Guinea pig(2-Methoxy-1-methylethyl acetate)

Did not cause sensitisation on laboratory animals.  
(OECD Test Guideline 406)

### **Germ cell mutagenicity**

reverse mutation assay(2-Methoxy-1-methylethyl acetate)  
S. typhimurium  
Result: negative

### **Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

### **Reproductive toxicity**

No data available(2-Methoxy-1-methylethyl acetate)

### **Specific target organ toxicity - single exposure**

No data available(2-Methoxy-1-methylethyl acetate)

### **Specific target organ toxicity - repeated exposure**

No data available

### **Aspiration hazard**

No data available(2-Methoxy-1-methylethyl acetate)

### **Additional Information**

Repeated dose toxicity - Rat - male and female - Oral(2-Methoxy-1-methylethyl acetate)  
RTECS: A18925000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.(2-Methoxy-1-methylethyl acetate)

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## **SECTION 12: Ecological information**

### **12.1 Toxicity**

Toxicity to fish                      mortality LC50 - Salmo gairdneri - 100 - 180 mg/l - 96 h(2-Methoxy-1-methylethyl acetate)  
(OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates                      static test EC50 - Daphnia magna (Water flea) - > 500 mg/l - 48 h(2-Methoxy-1-methylethyl acetate)

### **12.2 Persistence and degradability**

Biodegradability                      Biotic/Aerobic - Exposure time 28 d(2-Methoxy-1-methylethyl acetate)  
Result: 83 % - Readily biodegradable  
(OECD Test Guideline 301F)

Biochemical Oxygen Demand (BOD)                      0.36 mg/l(2-Methoxy-1-methylethyl acetate)

Chemical Oxygen Demand (COD)                      1.74 mg/g(2-Methoxy-1-methylethyl acetate)

### **12.3 Bioaccumulative potential**

No data available

### **12.4 Mobility in soil**

No data available(2-Methoxy-1-methylethyl acetate)

### **12.5 Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

## 12.6 Other adverse effects

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### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

##### Product

Burn in a chemical incinerator equipped with an afterburner and scrubber b highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

##### Contaminated packaging

Dispose of as unused product.

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### SECTION 14: Transport information

#### 14.1 UN number

ADR/RID: 3271

IMDG: 3271

IATA: 3271

#### 14.2 UN proper shipping name

ADR/RID: ETHERS, N.O.S. (2-Methoxy-1-methylethyl acetate)

IMDG: ETHERS, N.O.S. (2-Methoxy-1-methylethyl acetate)

IATA: Ethers, n.o.s. (2-Methoxy-1-methylethyl acetate)

#### 14.3 Transport hazard class(es)

ADR/RID: 3

IMDG: 3

IATA: 3

#### 14.4 Packaging group

ADR/RID: III

IMDG: III

IATA: III

#### 14.5 Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

#### 14.6 Special precautions for user

No data available

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### SECTION 15: Regulatory information

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

#### 15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

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### SECTION 16: Other information

#### Full text of H-Statements referred to under sections 2 and 3.

H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H360D	May damage the unborn child.

#### Further information

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