

**1-METHOXY-2-PROPANOL ACETATE
CAS NO 108-65-6**

**MATERIAL SAFETY DATA SHEET
SDS/MSDS**

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

1.1 Product identifiers

Product name : 1-Methoxy-2-Propanol Acetate

CAS-No. : 108-65-6

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

Identified uses : Laboratory chemicals, Industrial & for professional use only.

1.3 Details of the supplier of the safety data sheet

Company : Central Drug House (P) Ltd
7/28 Vardaan House
New Delhi -110002
INDIA

Telephone : +91 11 49404040

Email : care@cdhfinechemical.com

1.4 Emergency telephone number

Emergency Phone # : +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

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



GHS02

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 ₆ H ₁₂ O ₃
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
2-Methoxypropanol			
CAS-No.	1589-47-5	Flam. Liq. 3; Skin Irrit. 2; Eye	< 0.3 %
EC-No.	216-455-5	Dam. 1; Repr. 1B; STOT SE 3;	
Index-No.	603-106-00-0	H226, H315, H318, H360D, H335	
2-Methoxy-1-methylethyl acetate***			
CAS-No.	108-65-6	Flam. Liq. 3; H226	<= 100 %
EC-No.	203-603-9		
Index-No.	607-195-00-7		

* 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

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.

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.

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

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.

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.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance	Form: clear, liquid 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 explosive limits	Upper explosion limit: 13.1 %(V) Lower explosion limit: 1.3 %(V)
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 ³ 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 ² /s at 25 °C -
s) Explosive properties	No data available
t) Oxidizing properties	No data available

9.2 Other safety information

No data available

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

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: AI8925000

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

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

No data available

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.

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			

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

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

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.cdhfinechemical.com for additional terms and conditions of sale.