

## MATERIAL SAFETY DATA SHEET

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Version 1.5

## Section 1 - Product and Company Information

Product Name 1-METHOXY-2-PROPANOL ACETATE,  
99.5+%(DOWANOL PMA)  
Product Number 484431  
Brand ALDRICH

Company Sigma-Aldrich  
Street Address 3050 Spruce Street  
City, State, Zip, Country SAINT LOUIS MO 63103 US  
Technical Phone: 314 771 5765  
Emergency Phone: 414 273 3850 Ext. 5996  
Fax: 800 325 5052

## Section 2 - Composition/Information on Ingredient

Substance Name	CAS #	SARA 313
1,2-PROPANEDIOL MONOMETHYL ETHER ACETATE	108-65-6	No

Formula C6H12O3  
Synonyms Dowanol (R) PMA glycol ether acetate \*  
1-Methoxy-2-acetoxypropane \* PGMEA \* 2-Propanol,  
1-methoxy-, acetate (9CI) \* Propyleneglycol  
monomethyl ether acetate  
RTECS Number: AI8925000

## Section 3 - Hazards Identification

## EMERGENCY OVERVIEW

Combustible (USA) Flammable (EU). Irritant.  
May form explosive peroxides. Irritating to eyes.  
Target organ(s): Liver. Kidneys.

## HMIS RATING

HEALTH: 2\*  
FLAMMABILITY: 2  
REACTIVITY: 0

## NFPA RATING

HEALTH: 2  
FLAMMABILITY: 2  
REACTIVITY: 0

\*additional chronic hazards present.

For additional information on toxicity, please refer to Section 11.

## Section 4 - First Aid Measures

## ORAL EXPOSURE

If swallowed, wash out mouth with water provided person is  
conscious. Call a physician.

#### INHALATION EXPOSURE

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

#### DERMAL EXPOSURE

In case of contact, immediately wash skin with soap and copious amounts of water.

#### EYE EXPOSURE

In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

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### Section 5 - Fire Fighting Measures

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#### FLAMMABLE HAZARDS

Flammable Hazards: Yes  
Peroxide Former: Yes

#### EXPLOSION HAZARDS

Vapor may travel considerable distance to source of ignition and flash back. Container explosion may occur under fire conditions. May form peroxides of unknown stability.

#### FLASH POINT

109.4 °F    43 °C    Method: closed cup

#### EXPLOSION LIMITS

Lower: 1.3 %    Upper: 13.1 %

#### AUTOIGNITION TEMP

354 °C

#### FLAMMABILITY

N/A

#### EXTINGUISHING MEDIA

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

#### FIREFIGHTING

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.  
Specific Hazard(s): Flammable liquid. Emits toxic fumes under fire conditions.

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### Section 6 - Accidental Release Measures

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#### PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL

Evacuate area. Shut off all sources of ignition.

#### PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

#### METHODS FOR CLEANING UP

Cover with dry-lime, sand, or soda ash. Place in covered containers using non-sparking tools and transport outdoors. Ventilate area and wash spill site after material pickup is complete.

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### Section 7 - Handling and Storage



Flash Point	109.4 °F 43 °C	Method: closed cup
Explosion Limits	Lower: 1.3 % Upper: 13.1 %	
Flammability	N/A	
Autoignition Temp	354 °C	
Refractive Index	1.402	
Optical Rotation	N/A	
Miscellaneous Data	N/A	
Solubility	N/A	

N/A = not available

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## Section 10 - Stability and Reactivity

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### STABILITY

Conditions of Instability: Upon exposure to air, product may slowly degrade, forming peroxides, which can be unstable  
Materials to Avoid: Strong oxidizing agents, Strong acids, Strong bases.

### HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.

### HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

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## Section 11 - Toxicological Information

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### ROUTE OF EXPOSURE

Skin Contact: May cause skin irritation.  
Skin Absorption: May be harmful if absorbed through the skin.  
Eye Contact: Causes eye irritation.  
Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.  
Ingestion: May be harmful if swallowed.

### TARGET ORGAN(S) OR SYSTEM(S)

Liver. Kidneys.

### SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

### TOXICITY DATA

Oral  
Rat  
8532 mg/kg  
LD50

Intraperitoneal  
Mouse  
750 MG/KG  
LD50

Skin  
Rabbit  
> 5000 mg/kg  
LD50

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## Section 12 - Ecological Information

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No data available.

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## Section 13 - Disposal Considerations

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### APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION

Contact a licensed professional waste disposal service to dispose of this material. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Observe all federal, state, and local environmental regulations.

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## Section 14 - Transport Information

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### DOT

Proper Shipping Name: Ethers, n.o.s.  
UN#: 3271  
Class: 3  
Packing Group: Packing Group III  
Hazard Label: Flammable liquid  
PIH: Not PIH

### IATA

Proper Shipping Name: Ethers, n.o.s.  
IATA UN Number: 3271  
Hazard Class: 3  
Packing Group: III

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## Section 15 - Regulatory Information

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### EU DIRECTIVES CLASSIFICATION

Symbol of Danger: Xi  
Indication of Danger: Irritant.  
R: 10 36  
Risk Statements: Flammable. Irritating to eyes.  
S: 25  
Safety Statements: Avoid contact with eyes.

### US CLASSIFICATION AND LABEL TEXT

Indication of Danger: Combustible (USA) Flammable (EU). Irritant.  
Risk Statements: May form explosive peroxides. Irritating to eyes.  
Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.  
US Statements: Target organ(s): Liver. Kidneys.

### UNITED STATES REGULATORY INFORMATION

SARA LISTED: No  
TSCA INVENTORY ITEM: Yes

### CANADA REGULATORY INFORMATION

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.  
DSL: Yes  
NDSL: No

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## Section 16 - Other Information

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### DISCLAIMER

For R&D use only. Not for drug, household or other uses.

WARRANTY

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. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2004 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.