

# SAFETY DATA SHEET

## Methoxy Propanol

### SECTION 1: IDENTIFICATION OF MATERIAL AND SUPPLIER

<b>Product Name:</b>	<b>Methoxy Propanol</b>
<b>Other Names:</b>	Propylene glycol monomethyl ether; Icinol PM; Methyl propoxol; 1-Methoxy 2-propanol; PGME.
<b>Product Codes/Trade Names:</b>	N/A
<b>Recommended Use:</b>	Solvent
<b>Applicable In:</b>	Australia
<b>Supplier:</b>	ACB Group (ABN 79 724 186 134)
<b>Address:</b>	118 Swann Drive, Derrimut Victoria-3030
<b>Telephone:</b>	+ 61 3 93690220
<b>Email Address:</b>	<a href="mailto:info@acbgroup.com.au">info@acbgroup.com.au</a>
<b>Facsimile:</b>	+61 3 93690883
<b>Emergency Phone Number:</b>	000 Fire Brigade and Police (available in Australia only).
<b>Poisons Information Centre:</b>	13 11 26 (available in Australia only).

This Material Safety Data Sheet (MSDS) is issued by the Supplier in accordance with National standards and guidelines from the Australian Safety and Compensation Council (ASCC, formerly National Occupational Health and Safety Commission - NOHSC). The information in it must not be altered, deleted or added to. The Supplier will not accept any responsibility for any changes made to its MSDS by any other person or organization. The Supplier will issue a new MSDS when there is a change in product specifications and/or ASCC standards, codes, guidelines, or Regulations.

### SECTION 2: HAZARD IDENTIFICATION

**STATEMENT OF HAZARDOUS NATURE:** Classified as **Hazardous** according to the criteria of the Australian Safety and Compensation Council ASCC (formerly NOHSC) Approved Criteria For Classifying Hazardous Substances [NOHSC:1008] 3rd Edition.

**Methoxy propanol** is classified as **Dangerous** Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

#### GHS Classification:

Flam. Liq.- Category 3  
Repr. – Category 1B  
Stot. Se. Category 3

#### GHS LABEL ELEMENTS

Symbol (s)



**Signal Word:** Danger

## Hazard Statements:

### PHYSICAL HAZARDS:

H226: Flammable liquid and vapour.

### HEALTH HAZARDS:

H336: May cause dizziness or drowsiness

H360: May damage fertility or the unborn child

## Prevention

P201: Obtain special instructions before use

P202: Do not handle until all safety precautions have been read and understood

P210: Keep away from heat, sparks, open flames, hot surfaces. No Smoking.

P233: Keep container tightly closed.

P240: Ground/bond container and receiving equipment.

P241: Use explosion-proof electrical, ventilating, lighting equipment.

P242: Use non-sparking tools

P243: Take precautionary measures against static discharge

P261: Avoid breathing mist, vapours, spray

P271: use only outdoors or in a well-ventilated area

P280: Wear protective gloves, protective clothing eye protection, face protection.

P281: Use personal protection equipment as required.

## Response

P303+P361+P353: If ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.

P308+313: If exposed or concerned: Get medical advice/attention

P304+P340: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing

P312: Call a Poison Centre or doctor/physician if you feel unwell.

P370 +P378: In case of fire: Use appropriate media for extinction. Carbon dioxide powder, alcohol-resistant foam for extinction

## Storage

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

P403+P235: Store in a well-ventilated place. Keep cool.

P405: Store locked up

## Disposal

P501: Dispose of contents and container to appropriate waste site of reclaimer in accordance with local and national regulations.

## SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

### Classification of components according to GHS

Chemical name	Synonyms	CAS	Hazard Class (Category)	Hazard Statement	Conc.
Propylene, glycol monomethyl ether		107-98-2	Flam. Liq., 2; Repr. 1B; Stot. Se., 3	H226 H336	>99.5 %

## SECTION 4: FIRST AID MEASURES

### Information:

Check the vital functions. Unconscious: Maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with labored breathing: half seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital. Never give alcohol to drink..

### Ingestion:

If swallowed, do not induce vomiting: transport to nearest medical facility for additional

treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Give a glass of water. Seek immediate medical assistance.

- Eyes:** Immediately flush eyes with large amounts of water for at least 15 minutes while holding eyelids open. Transport to the nearest medical facility for additional treatment.
- Skin:** Remove contaminated clothing. Immediately flush skin with large amounts of water for at least 15 minutes, and follow by washing with soap and water if available. If redness, swelling, pain and/or blisters occur, transport to the nearest facility for additional treatment.
- Inhaled:** Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.
- First Aid Facilities:** Eye wash fountains and safety showers should be available for emergency use.
- Advice to Doctor:** Treat Symptomatically.

## SECTION 5: FIRE FIGHTING MEASURES

- Suitable extinguishing media:** Alcohol resistant foam is the preferred firefighting medium but, if it is not available, fine water spray or water fog can be used.
- Unsuitable extinguishing media** Container may slop over if solid jet (water/foam) is applied
- Special protective precautions and equipment for fire fighters:** On burning will emit toxic fumes, including those of oxides of carbon. Heating can cause expansion or decomposition of the material, which can lead to the containers exploding. If safe to do so, remove containers from the path of fire. Keep containers cool with water spray. Fire fighters to wear self contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion.
- Other advice** Flammable liquid. May form flammable vapour mixtures with air. Vapour may travel a considerable distance to source of ignition and flash back. Burning liquid may float on water. Keep adjacent containers cool by spraying with water.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

Avoid contact with spilled or released material. For guidance on selection of personal protective equipment see chapter 8 of this Material Safety Data Sheet.

### Emergency procedures/Environmental precautions:

Shut off all possible sources of ignition. Clear area of all unprotected personnel. If contamination of sewers or waterways has occurred advise local emergency services.

### Personal precautions/Protective equipment/Methods and materials for containment and cleaning up:

Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contact and breathing in vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal. Use non-sparking tools.

## SECTION 7: HANDLING AND STORAGE

### Precautions for safe handling:

Avoid skin and eye contact and breathing in vapour. Flameproof equipment is necessary in all areas where this chemical is being used. Nearby equipment must be earthed. Vapour may travel a considerable distance to source of ignition and flash back. When transferring propylene glycol ethers with flash points at or below 60°C into fixed site vessels, the vessel should be purged and inerted prior to transfer. Propylene glycol ethers may be transferred into air atmospheres if the temperature of the product and the ambient temperature within the shipping container are both at least 16.7°C less than the product's flash point. After loading, nitrogen blanketing is required if the contents of the transportation container could exceed a temperature of 16.7°C less than the product flash point during any subsequent transportation activities. If the product flash point is less than 16.7°C above either the ambient temperature of the transportation container or the storage temperature of the product, the container should be purged and inerted with nitrogen prior to loading and nitrogen blanketed after loading. The purging of all empty shipping containers, regardless of flashpoint, is recommended when received with air atmospheres. Isolate, vent, drain, wash and purge systems or equipment before maintenance or repair. Take precautionary measures against static discharges.

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

Store in a cool, dry, well ventilated place. Storage under nitrogen atmosphere is recommended to minimize possible formation of highly reactive peroxides. Store away from sources of heat or ignition. Store away from incompatible materials described in Section 10. Protect from moisture. Keep containers closed when not in use - check regularly for leaks.

## SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure limits

Material	Type	ppm	mg/m3
Propylene glycol monomethyl ether	TWA	100	369
Propylene glycol monomethyl ether	STEL	150	553

### Biological Exposure Index (BEI):

No biological limit allocated.



### ENGINEERING CONTROLS

- Ventilation:** Provide sufficient ventilation to keep airborne levels below the exposure limits. Where vapours or mists are generated, particularly in enclosed areas, and natural ventilation is inadequate, a flameproof exhaust ventilation system is required. Refer to AS 1940 - The storage and handling of flammable and combustible liquids and AS/NZS 2430.3.1:1997 : Classification of hazardous areas - Examples of area classification - General, for further information concerning ventilation requirements.
- Appropriate Engineering Controls:** The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include: Adequate explosion-proof ventilation to control airborne concentrations below the exposure guidelines/limits. Use sealed systems as far as possible. Firewater monitors and deluge systems are recommended. Eye washes and showers for emergency use.

### PERSONAL PROTECTION

- Hand Protection** Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739, AS/NZS:2161) made from the following materials may provide suitable chemical protection: Longer term protection: Viton. Incidental contact/Splash protection: Nitrile rubber. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a

non-perfumed moisturizer is recommended.

- Skin Protection:** Wear gloves of impervious material. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.
- Eye Protection:** Safety glasses with side shields, goggles or full-face shield as appropriate recommended. Final choice of appropriate eye/face protection will vary according to individual circumstances i.e. methods of handling or engineering controls and according to risk assessments undertaken. Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications..
- Respiratory Protection:** If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for organic gases and vapors [Type A boiling point > 65°C (149°F)] meeting EN14387. Where respiratory protective equipment is required, use a full-face mask. Where air-filtering respirators are unsuitable (e.g., airborne concentrations are high, risk of oxygen deficiency, confined space) use appropriate positive pressure breathing apparatus.
- Body protection:** Chemical resistant gloves/gauntlets, boots, and apron. Where risk of splashing or in spillage clean up, use chemical resistant one-piece overall with integral hood. Wear antistatic and flame retardant clothing.
- Smoking & Other Dusts** Smoking must be prohibited in all areas where this product is used - see safety information on flammability.  
  
Not Applicable
- Thermal Hazards** Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate. Examples of sources of recommended exposure measurement methods are given below or contact the supplier.  
  
Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapor.
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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**Physical state:** Clear Liquid  
**Colour:** Colourless  
**Odour:** Ether - like  
**Solubility:** Miscible with water.  
**Specific Gravity:** 0.920- 0.927  
**Relative Vapour Density (air=1):** 3.11 (at 15.5-32.2°C)  
**Vapour Pressure (20 °C):** 14.5 hPa @25°C  
**Flash Point (°C):** 34  
**Flammability Limits (%):** No data available  
**Auto ignition Temperature (°C):** 270  
**Boiling Point/Range (°C):** 118-119

## SECTION 10: STABILITY AND REACTIVITY

<b>Chemical Stability:</b>	Stable under normal conditions.
<b>Incompatible Materials:</b>	Strong oxidizing agents, air, oxygen and moisture
<b>Conditions to avoid:</b>	Heat, sparks, flame and build-up of static electricity.
<b>Hazardous Decomposition Products:</b>	Thermal decomposition may result in the release of toxic and/or irritating fumes including carbon monoxide and carbon dioxide.
<b>Hazardous Reactions:</b>	Hazardous polymerisation will not occur.

## SECTION 11: TOXICOLOGICAL INFORMATION

<b>Basis for assessment:</b>	Information given is based on product testing, and/or similar products, and/or components.
<b>Likely Routes of exposure:</b>	Inhalation is the primary route of exposure although absorption may occur through skin contact or following accidental ingestion.
<b>Acute Toxicity</b>	
<b>Acute Oral Toxicity:</b>	May be harmful if swallowed LD50 4016 mg/kg
<b>Acute Dermal Toxicity</b>	Harmful in contact with skin. LD50 2000 mg/kg
<b>Acute Inhalation Toxicity</b>	Harmful if inhaled. LC50 > 25.8 mg/l /6hr
<b>Skin corrosion/irritation</b>	Causes skin irritation.
<b>Serious eye damage/Irritation</b>	Causes serious eye irritation.
<b>Respiratory or skin sensitisation</b>	Not expected to be a skin sensitiser.
<b>Aspiration Hazard</b>	Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.
<b>Germ cell mutagenicity</b>	Not mutagenic.
<b>Carcinogenity</b>	Not expected to be carcinogenic.
<b>Reproductive and environmental toxicity</b>	Suspected of damaging fertility or the unborn child
<b>Specific target organ toxicity</b>	May cause damage to organs through prolonged or repeated exposure.
<b>Toxicity single exposure</b>	Respiratory system

## SECTION 12: ECOLOGICAL INFORMATION

**Eco-toxicity:** Avoid contaminating waterways.

**Persistence and Degradability:** The material is readily biodegradable

**Mobility:** Floats on water.

## SECTION 13: DIPOSAL CONSIDERATIONS

Dispose of waste according to federal, EPA, state and local regulations. Labels should not be removed from containers until they have been cleaned. Do not cut, puncture or weld on or near containers. Empty containers may contain hazardous residues. Contaminated containers must not be treated as household waste. Containers should be cleaned by appropriate methods and then re-used or disposed of by landfill or incineration as appropriate. Do not incinerate closed containers.

## SECTION 14: TRANSPORT INFORMATION

**Proper Shipping Name:** 1-Methoxy 2-Propanol  
**UN number:** 3092  
**DG Class:** 3  
**Subsidiary Risk 1:** None Allocated  
**Packaging Group:** III  
**HAZCHEM code:** ·2Y  
**Marine Pollutant:** No  
**Special Precautions for User:** Refer to incompatibilities in section 7 and stability and reactivity information in section 10.

**ADDITIONAL TRANSPORT REQUIREMENTS:** Nil

## SECTION 15: REGULATORY INFORMATION

### Classification:

This material is hazardous according to Safe Work Australia; HAZARDOUS SUBSTANCE.

### Classification of the substance or mixture:

Flammable liquids - Category 3  
Specific target organ toxicity (single exposure) - Category 3  
Toxic to Reproduction - Category 1B

### Hazard Statement(s):

H226 Flammable liquid and vapour.  
H336 May cause drowsiness and dizziness.  
H360 May damage fertility or the unborn child.

**Poisons Schedule (SUSMP):** None allocated.

All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

## SECTION 16: OTHER INFORMATION

### For further information on this product, please contact:

ACB Group (ABN 79 724 186 134)  
118 Swann Drive, Derrimut Victoria-3030  
**Phone:** +61 3 93690220  
**Fax:** + 61 3 93690883

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## ADDITIONAL INFORMATION

### Australian Standards References:

AS 1020	The Control of undesirable static electricity.
AS 1076	Code of Practice for selection, installation and maintenance of electrical apparatus and associated equipment for use in explosive atmospheres (other than mining applications) – Parts 1 to 13.
AS/NZS 1336	Recommended Practices for Occupational Eye Protection
AS/NZS 1715	Selection, Use and Maintenance of Respiratory Protective Devices
AS/NZS 1716	Respiratory Protective Devices
AS 1940	The Storage and Handling of Flammable and Combustible Liquids.
AS 2161	Industrial Safety Gloves and Mittens (excluding electrical and medical gloves)
AS 2380	Electrical equipment for explosive atmospheres – Explosion Protection Techniques (Parts 1 to 9).
AS 3000	Electrical installations (known as the Australian/New Zealand Wiring Rules).

### Other References:

NOHSC:2011(2003)	National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition, April 2003, National Occupational Health and Safety Commission.
NOHSC; 2012 (1994)	National Code of Practice for the Labeling of Workplace Substances, March 1994, Australian Government Publishing Service, Canberra.
NES	National Occupational Exposure Standards for workplace Atmospheric Contaminants (NES) Australian Safety and Compensation Council, ASCC (Formerly NOHSC) 1995 as amended.
ADG Code 6 <sup>th</sup> Edition	Australian Dangerous Goods Code 6 <sup>th</sup> Edition

## AUTHORISATION

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END OF MSDS