

## Methanol

### SECTION 1. IDENTIFICATION

<b>Product Identifier</b>	Methanol
<b>Other Means of Identification</b>	Methyl Alcohol, Methylol, Monohydroxymethane, Methylhydrate, Carbinol
<b>Product Code</b>	ME2010, ME2020, ME2021, ME2030, ME2050
<b>Product Family</b>	Organic
<b>Recommended Use</b>	Laboratory and industrial solvent.
<b>Restrictions on Use</b>	None known.
<b>Supplier Identifier</b>	Alphachem Limited, 2485 Milltower Court, Mississauga, Ontario, L5N 5Z6, (905) 821-2995
<b>Emergency Phone No.</b>	CANUTEC CANADA, 613-996-6666, 24 Hours
<b>SDS No.</b>	0033

### SECTION 2. HAZARD IDENTIFICATION

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015).

#### Classification

Flammable liquid - Category 2; Acute toxicity (Oral) - Category 3; Acute toxicity (Dermal) - Category 3; Acute toxicity (Inhalation) - Category 3; Specific target organ toxicity (single exposure) - Category 1

#### Label Elements



Signal Word:

Danger

#### Hazard Statement(s):

Highly flammable liquid and vapour.  
Toxic if swallowed, in contact with skin or if inhaled.  
Causes damage to organs.

#### Precautionary Statement(s):

Keep away from flames and hot surfaces. – No smoking.  
Do not breathe dust/fume/gas/mist/vapours/spray.  
Wear protective gloves/protective clothing.  
IF SWALLOWED: Immediately call a POISON CENTRE/doctor/  
IF ON SKIN: Wash with plenty of water.  
IF exposed or concerned: Get medical advice/attention.

#### Other Hazards

May be a health and fire hazard in a confined space.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%	Other Identifiers
Methanol	67-56-1	99	Methyl Alcohol, Methylol, Monohydroxymethane

### SECTION 4. FIRST-AID MEASURES

#### First-aid Measures

##### Inhalation

Take precautions to ensure your own safety before attempting rescue (e.g. wear appropriate protective equipment). Remove source of exposure or move to fresh air. Immediately call a Poison Centre or doctor.

##### Skin Contact

Avoid direct contact. Wear chemical protective clothing if necessary. Immediately rinse with lukewarm, gently flowing water for 15-20 minutes. Thoroughly clean clothing, shoes and leather goods before reuse or dispose of safely.

##### Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open.

##### Ingestion

Never give anything by mouth if person is rapidly losing consciousness, or is unconscious or convulsing. Do not induce vomiting. Rinse mouth with water. If vomiting occurs naturally, lie on your side in the recovery position. Rinse mouth with water again. Avoid mouth-to-mouth contact by using a barrier device. Immediately call a Poison Centre or doctor. Specific treatment is required.

##### First-aid Comments

Some of the first-aid procedures recommended here require advanced first-aid training. If exposed or concerned, get medical advice or attention.

#### Most Important Symptoms and Effects, Acute and Delayed

If inhaled: symptoms may include headache, nausea, dizziness, drowsiness and confusion.

#### Immediate Medical Attention and Special Treatment

##### Special Instructions

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

### SECTION 5. FIRE-FIGHTING MEASURES

#### Extinguishing Media

##### Suitable Extinguishing Media

Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog.

##### Unsuitable Extinguishing Media

Water is not effective for extinguishing a fire. It may not cool product below its flash point.

#### Specific Hazards Arising from the Product

May accumulate in hazardous amounts in low-lying areas especially inside confined spaces, resulting in a fire and/or health hazard. Closed containers may rupture violently when heated releasing contents.

Very toxic carbon monoxide, carbon dioxide; toxic, flammable aldehydes.

#### Special Protective Equipment and Precautions for Fire-fighters

Evacuate area. Approach fire from upwind to avoid hazardous vapours or gases. Fight fire from a safe distance or a protected location. For a massive fire, immediately evacuate the area and use unmanned hose holder or monitor nozzles.

Chemical protective clothing (e.g. chemical splash suit) and positive pressure SCBA may be necessary.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment, and Emergency Procedures

Emergency responders: evacuate the area immediately. Isolate the hazard area. Keep out unnecessary and unprotected personnel. Remove or isolate incompatible materials as well as other hazardous materials. Increase ventilation to area or move leaking container to a well-ventilated and secure area.

### Environmental Precautions

If the spill is inside a building, prevent product from entering drains, ventilation systems and confined areas. Do not allow into any sewer, on the ground or into any waterway.

### Methods and Materials for Containment and Cleaning Up

Small spills or leaks: stop or reduce leak if safe to do so. Contain and soak up spill with absorbent that does not react with spilled product. Contaminated absorbent poses the same hazard as the spilled product. Flush spill area.

Large spills or leaks: contact emergency services and manufacturer/supplier for advice.

## SECTION 7. HANDLING AND STORAGE

### Precautions for Safe Handling

Wear personal protective equipment to avoid direct contact with this chemical. Only use where there is adequate ventilation. Immediately report leaks, spills or failures of the safety equipment (e.g. ventilation system). Avoid release to the environment. Eliminate heat and ignition sources such as sparks, open flames, hot surfaces and static discharge. Post "No Smoking" signs.

### Conditions for Safe Storage

Store in an area that is: cool, dry, well-ventilated, separate from incompatible materials (see Section 10: Stability and Reactivity), an approved, fire-resistant area. Have escape-type respiratory protective equipment readily available, in case of leaks or spills. Empty containers may contain hazardous residue. Store separately. Keep closed. Follow all precautions given on this safety data sheet.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Methanol	200 ppm	250 ppm				

### Appropriate Engineering Controls

Use local exhaust ventilation and enclosure, if necessary, to control amount in the air. Provide eyewash and safety shower if contact or splash hazard exists.

### Individual Protection Measures

#### Eye/Face Protection

Wear chemical safety goggles and face shield when contact is possible.

#### Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.

Suitable materials are: butyl rubber, Barrier® (PE/PA/PE), Tychem® Responder, Trellechm® HPS, Trellechm® VPS, Tychem® SL (Saranex™).

The following materials should NOT be used: natural rubber, neoprene rubber, nitrile rubber, polyethylene, polyvinyl alcohol, polyvinyl chloride.

#### Respiratory Protection

Wear a NIOSH approved air-purifying respirator with an organic vapour cartridge.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### Basic Physical and Chemical Properties

**Appearance** Clear colourless liquid.

**Odour** Alcoholic

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<b>Odour Threshold</b>	160 ppm (detection)
<b>pH</b>	Not available
<b>Melting Point/Freezing Point</b>	-97.7 °C (-143.9 °F) (melting)
<b>Initial Boiling Point/Range</b>	64.7 °C (148.5 °F)
<b>Flash Point</b>	11 °C (52 °F) (closed cup)
<b>Evaporation Rate</b>	2.1 (n-butyl acetate = 1)
<b>Flammability (solid, gas)</b>	Not available
<b>Upper/Lower Flammability or Explosive Limit</b>	36% (upper); 5.5% (lower)
<b>Vapour Pressure</b>	12.8 kPa (96.0 mm Hg) at 20 °C
<b>Vapour Density (air = 1)</b>	1.1 (calculated)
<b>Relative Density (water = 1)</b>	0.791 at 20 °C
<b>Solubility</b>	Soluble in water; Soluble in all proportions in alcohols (e.g. ethanol).
<b>Partition Coefficient, n-Octanol/Water (Log Kow)</b>	-0.77
<b>Auto-ignition Temperature</b>	385 °C (725 °F)
<b>Decomposition Temperature</b>	Not available
<b>Viscosity</b>	0.75 mm <sup>2</sup> /s at 20 °C (kinematic); 0.59 mPa.s at 20 °C (dynamic)
<b>Other Information</b>	
<b>Physical State</b>	Liquid

## SECTION 10. STABILITY AND REACTIVITY

### Reactivity

No reactivity test data was located.

### Chemical Stability

Normally stable.

### Possibility of Hazardous Reactions

None expected under normal conditions of storage and use.

### Conditions to Avoid

High temperatures. Open flames, sparks, static discharge, heat and other ignition sources.

### Incompatible Materials

Strong oxidizing agents (e.g. perchloric acid), oxidizing agents (e.g. peroxides), metals (e.g. aluminum), halogenated compounds (e.g. trichloroethylene), organic acids (e.g. acetic acid), acid anhydrides (e.g. acetic anhydride), strong bases (e.g. sodium hydroxide).

### Hazardous Decomposition Products

Very toxic carbon monoxide, carbon dioxide; very toxic, flammable formaldehyde.

## SECTION 11. TOXICOLOGICAL INFORMATION

### Likely Routes of Exposure

Inhalation; skin contact; eye contact; ingestion; skin absorption.

### Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Methanol	64,000 ppm (rat) (4-hour exposure)	5,628 mg/kg (rat)	15,800 mg/kg (rabbit)

### Skin Corrosion/Irritation

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There is limited evidence of skin corrosion.

#### **Serious Eye Damage/Irritation**

Animal tests show mild irritation.

#### **STOT (Specific Target Organ Toxicity) - Single Exposure**

##### **Inhalation**

Depression of the central nervous system.

##### **Skin Absorption**

No information was located.

##### **Ingestion**

Harmful irritation of the mouth, throat and stomach. Symptoms may include nausea, vomiting, stomach cramps and diarrhea. Permanent damage can result.

#### **Aspiration Hazard**

No information was located.

#### **STOT (Specific Target Organ Toxicity) - Repeated Exposure**

No information was located.

#### **Respiratory and/or Skin Sensitization**

Not known to be a respiratory sensitizer. Not known to be a skin sensitizer.

#### **Carcinogenicity**

Chemical Name	IARC	ACGIH®	NTP	OSHA
Methanol	Group 2B	A3		

#### **Key to Abbreviations**

IARC = International Agency for Research on Cancer.

Group 2B = Possibly carcinogenic to humans.

ACGIH® = American Conference of Governmental Industrial Hygienists.

A3 = Animal carcinogen.

#### **Reproductive Toxicity**

##### **Development of Offspring**

Conclusions cannot be drawn from the limited studies available.

##### **Sexual Function and Fertility**

No information was located.

##### **Effects on or via Lactation**

No information was located.

#### **Germ Cell Mutagenicity**

Conclusions cannot be drawn from the limited studies available.

#### **Interactive Effects**

No information was located.

## **SECTION 12. ECOLOGICAL INFORMATION**

This section is not required by WHMIS. This section is not required by OSHA HCS 2012.

## **SECTION 13. DISPOSAL CONSIDERATIONS**

#### **Disposal Methods**

Contact local environmental authorities for approved disposal or recycling methods in your jurisdiction.

## SECTION 14. TRANSPORT INFORMATION

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
Canadian TDG	UN1230	Methanol	3	II
US DOT	UN1230	Methanol	3	II

**Environmental Hazards** Not applicable

**Special Precautions** Not applicable

**Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

## SECTION 15. REGULATORY INFORMATION

**Safety, Health and Environmental Regulations**

**Canada**

**WHMIS 1988 Classification**

B2 - Flammable Liquid; D1B - Toxic; D2A - Very Toxic; D2B - Toxic

## SECTION 16. OTHER INFORMATION

**SDS Prepared By** Alphachem Limited

**Phone No.** (905)-821-2995

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