



SAFETY DATA SHEET

SECTION 01 - IDENTIFICATION

Product Identifier	METHANOL
Other identification (Chemical name, Commercial name, Synonymous)	ALCOOL MÉTHYLIQUE; ALCOOL DE BOIS; HYDRATE DE MÉTHYLE; METHYL ALCOHOL; HYDROXYDE DE MÉTHYLE; MONOHYDROXYMÉTHANE; CARBINOL; METHYLOL; COLUMBIAN SPIRITS; WOOD SPIRIT.
Product code	MR-0166; MP-0120; MH-0100; MD-0100, MA-0166; MR-0549; MA-0317; MO-0166
Chemical formula	CH ₃ OH
Molar weight	32.04
Recommended use and Restrictions on use	For laboratory, school, commercial or industrial use. Not for medical or household use. Do not use for medical, food or household purposes.
Supplier	LABORATOIRE MAT 610, rue Adanac Québec Québec G1C 7B7 418-660-8666 Mon-Fri 8h-16h www.labmat.com labmat@labmat.com
Emergency phone	418-660-8666 Mon-Fri 8h-16h CENTRE ANTI-POISON DU QUÉBEC 800-463-5060
Date SDS	2025-05-14

SECTION 02 - HAZARDS IDENTIFICATION

WHIMS CANADA

- Flammable liquids - category 2
- Acute toxicity - Dermal - category 3
- Acute toxicity - Inhalation - category 3
- Specific Target Organ Toxicity - Single exposure - category 1
- Acute toxicity - Oral - category 3

PICTOGRAMS



Signal Word

DANGER

Hazards statements (H)

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

Precautionary statements (P)

- Keep away from heat, sparks, open flames, hot surfaces. — No smoking.
- Keep container tightly closed.
- Ground and bond container and receiving equipment.
- Use explosion-proof equipment.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.
- Wear protective gloves (Nitrile, butyl, laminated material (PE/EVOH)), protective clothing and eye and face protection.
- IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse with water.
- In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish.
- Store in a well-ventilated place. Keep cool.
- Dispose of contents and container in accordance with local, regional and national regulations, or contact a specialist waste disposal company.
- IF ON SKIN: Wash with plenty of water
- Call a POISON CENTER or a doctor or if you feel unwell.
- Store locked up.
- Use only outdoors or in a well-ventilated area.
- IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
- Call a POISON CENTER or a physician.
- Store in a well ventilated place. Keep container tightly closed.
- Do not breathe mists, gases, vapors and other fumes, or the product itself.
- Do not eat, drink or smoke when using this product.
- If exposed or concerned: Call a POISON CENTER or a physician.
- Rinse mouth.

Other dangers

NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Significant; 4=Extreme)

Health 2
Fire 4
Reactivity 0
Special danger

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Component	No. CAS	% Weight
Methanol	67-56-1	<=100

SECTION 04 - FIRST AID MEASURE

Eye contact	Wash eyes with large amounts of water for at least 15 minutes while holding eyelids apart to rinse eyes. If irritation persists, seek medical attention.
Skin contact	Wash skin with plenty of water for at least 15 minutes. Remove contaminated clothing. If irritation persists, seek medical attention.
Inhalation	Move the unwell person to the fresh air. If breathing is difficult, give oxygen. Consult a physician.
Ingestion	If the person is conscious, give water to drink. Never give anything by mouth to an unconscious person. Consult a physician.
Most important symptoms and effects (acute and delayed)	Main symptoms of high exposure: Vision blurs. Dizziness. Nausea and vomiting. Diarrhea. Fatigue. Headaches. Gastrointestinal disorders. Ref. section 11.
Immediate medical attention and special treatment, if necessary	Treat according to symptoms. Show this sheet to the attending physician. In case of poisoning, the following can be administered as an antidote: Fomepizole. Ethanol. Folinic acid or folic acid as an adjuvant can be given in case of methanol poisoning.

SECTION 05 - FIREFIGHTING MEASURES

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	Do not use a jet of water.
Combustion products	Hazardous combustion products formed under fire conditions: Formaldehyde. Carbon oxides.
Specific hazards of the dangerous product	Highly concentrated vapors in the air can ignite or even explode if exposed to an intense ignition source. Keep the product and empty containers away from heat and ignition sources. May react violently with incompatible products (Ref Section 10).
Special protective equipment and precautions for firefighters	Discard incompatible substances if this can be done without risk. Firefighters should be equipped with standard protective equipment, fireproof clothing, face mask, gloves, protective boots and, where appropriate, self-contained breathing apparatus.

SECTION 06 - ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency measures	Evacuate personnel to safe areas. Cut off all sources of ignition. Use anti-spark tools and anti-explosion equipment. Avoid the accumulation of charges electrostatic. Avoid breathing in vapours, spray mists or gases. When handling, wear appropriate safety equipment (reference Section 8 for protective equipment to be used). Ensure a good ventilation. Use NIOSH cartridge respiratory protection for larger spills. Beware of vapors accumulating to form explosive concentrations. Vapours can accumulate in low-lying areas.
Methods and materials for containment and cleaning up	Absorb the product with sand or vermiculite. Dilute residues with water, clean and rinse. Dispose of residues in a container for disposal of hazardous materials. Discharge into the environment must be avoided.

SECTION 07 - HANDLING AND STORAGE

Conditions for safe storage	Keep container tightly closed in a dry, well-ventilated place. Keep container tightly closed and store away from heat, moisture, and incompatible products (ref. section 10). Keep away from sources of ignition - No smoking. Take measures to prevent the accumulation of electrostatic charges. Protect from the sun's rays. Use venting and electrical equipment that is grounded and does not produce ignition sources (sparks).
Methods of handling	Avoid contact withh eyes, skin and clothing. Avoid ingestion and inhalation. Wear personal protective equipment (ref. section 8) when handling. Always ensure good ventilation. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. Apply the usual standard hygiene rules: Wash your hands after use. Do not eat or drink during use.

SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

WORKPLACE CONTROL PARAMETERS

Components	CAS-No.	Value	Control parameters	Basis
Methanol	67-56-1	TWA	200.000000 ppm 262.000000 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
Remarks	Substance may be readily absorbed through intact skin			
		STEL	250.000000 ppm 328.000000 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
	Substance may be readily absorbed through intact skin			
		TWA	200.000000 ppm	Canada. British Columbia OEL
	Contributes significantly to the overall exposure by the skin route.			
		STEL	250.000000 ppm	Canada. British Columbia OEL
	Contributes significantly to the overall exposure by the skin route.			
		TWAEV	200.000000 ppm 262.000000 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
	Skin (percutaneous)			
		STEV	250.000000 ppm 328.000000 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
	Skin (percutaneous)			
		TWA	200.000000 ppm	USA. ACGIH Threshold Limit Values (TLV)
		STEL	250.000000 ppm	USA. ACGIH Threshold Limit Values (TLV)

Data origin Sigma-Aldrich (Millipore Sigma)

Respiratory If work under the hood is not possible, or if the permissible levels are exceeded, use NIOSH cartridge respiratory protection, or an air-supplied respirator.

Gloves Handle with protective gloves. Suggested material: Nitrile. Butyl. Laminated material (PE/EVOH)
The type, thickness and length of the glove must be chosen according to the use, the concentration of the product, as well as the duration of use. Replace gloves regularly for better protection.

Eyes Safety goggles with safety shutters.

Shoes Use safety shoes.

Clothes Labcoat. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Engineering control Use fan. Have safety showers and eyewash stations in the workplace in case of an emergency and a ventilation system to maintain the level of concentrations in the air below the exposure limit values.

SECTION 09 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid.
Color	Colorless.
Odour	Acre.
Odour threshold	Data not available.
Melting point and freezing point	-97.8°C.
Boiling point	Data not available.
Flammability	Yes.
Lower flammable / Explosive limit	6% v/v.
Upper flammable / Explosive limit	36% v/v.
Flash point	9.7 °C @ 101.3 kPa (Coupelle fermée).
Auto-ignition temperature	455°C à 1.013 hPa (760 mmHg).
Decomposition temperature	Data not available.
pH	Data not applicable.
Kinematic viscosity	0.69mm ² /s.
Solubility	Miscible with water, alcohols, and ether, acetone.
Partition coefficient water/n-octanol	log Pow:-0.77.
Vapour pressure	130.3 hPa (97.7 mmHg) à 20.0 °C / 169.27 hPa (126.96 mmHg) à 25.0°C.
Relative density	0.791g/cm ³ .
Vapour density	1.11 (Air=1).
Particle characteristics	Data not applicable.

SECTION 10 - STABILITY AND REACTIVITY

Reactivity	Flammable product, may ignite with source of ignition, if temperature above flash point. May react violently with incompatible substances.
Chemical stability	Stable under recommended storage conditions. Sensitive to heat.
Possibility of hazardous reactions	Flammable liquid and vapours. Vapours can form explosive mixtures with air when heated. May react violently with incompatible substances.
Conditions to avoid	Heat, flames and sparks. Avoid the build-up of static electricity. Avoid contact with incompatible materials and extreme temperatures. Avoid contact with incompatible materials.
Incompatible materials	Strong acids. Oxydants. Acid anhydrides. Alkali metals. Reducing agents. Acid chlorides.
Hazardous decomposition products	Formaldehyde. Carbon monoxide.

SECTION 11 - TOXICOLOGICAL INFORMATION

METHANOL

Routes of exposure	Ingestion, inhalation, skin and eye contact.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Irritation.
- Skin	Irritation Dermatitis.
- Inhalation	Irritation of the mucous membranes and respiratory tract. Narcotic effects. Chest pain. Cough. Dyspnoea. Headaches. Dizziness. Watery eyes. Paresthesia. Nystagmus. Drowsiness. Confusion. Nausea and vomiting.
Acute toxicity (Ingestion)	Mucous membrane irritation. Narcotic effects. Liver and kidney damage. Injury to the eyes. Abdominal pain. Cramps. Diarrhea. Headaches. Dizziness. Paresthesia. Nystagmus. Drowsiness. Incoordination. Acidosis. Nausea and vomiting. Convulsions. Hypotension. Respiratory collapse. Loss of consciousness. Coma. Possible death. Acute absorption can lead to: Blindness. Damage to the liver. Damage to the kidneys. Damage to the eyes. Damage to the heart. Damage to the central nervous system.
Chronic exposure effects / symptoms	Dizziness. Headache. Nausea. Visual troubles. Decrease in visual acuity. Liver damage. Kidney damage.
DL50 (specify species and route of entry)	LD50 Oral - Rat - 1187 mg/kg. LD50 Dermal - Rabbit - 15840 mg/kg.
CL50 (specify species and route of entry)	LC50 Inhalation - Rat - 4 h - 64000 ppm. LC50 Inhalation - Rat - 4 h - 115.9-130.7mg/L air.

SECTION 12 - ECOLOGICAL INFORMATION

METHANOL

Ecotoxicity	Toxicity to fish: LC50 - Lepomis macrochirus - 15,400.0 mg/l - 96 h.
Persistence and degradability	Biodegradability aerobic - Readily biodegradable Result: 72%.
Bioaccumulative potential	Bioaccumulation Cyprinus carpio (Carp) - 72 d à 20 °C. Bioconcentration factor (BCF): 1.
Mobility in soil	Do not get absorbed by the ground.
Other adverse effects	Avoid release to the environment.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal Method	Dispose of contents and container in accordance with local, regional and national regulations, or contact a specialist waste disposal company.
Contaminated Packaging	Dispose of as unused product.

SECTION 14 - TRANSPORT INFORMATION

UN Number	1230
UN Proper shipping name	MÉTHANOL
Transport hazard class(es)	Liquides inflammables 3 Matières toxiques 6.1
Packing group	II
Limited quantity index	1 L
ERAP Index	-
Special precautions	43

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	- Flammable liquids - category 2 - Acute toxicity - Dermal - category 3 - Acute toxicity - Inhalation - category 3 - Specific Target Organ Toxicity - Single exposure - category 1 - Acute toxicity - Oral - category 3
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SECTION 16 - OTHER INFORMATION

CNESST: Commission des normes, de l'équité et de la santé et sécurité au travail
NIH: National institute of health (U.S. National Library of Medicine)
ECHA: Agence Européenne de Chimie
ACGIH : American Conference of Governmental Industrial Hygienists
AIHA : American Industrial Hygiene Association
VECD: Valeur d'exposition courte durée
VEMP: Valeur d'exposition moyenne pondérée
CMRG : Chemical Manufacturer's Recommended Guidelines
OSHA : United States Department of Labor - Occupational Safety and Health Administration
TLV : Threshold limit value
TWA: Time-Weighted-Average
STEL: Short Term Exposure Limit
CEIL: Ceiling
RSST: Règlement sur la santé et sécurité au travail (Québec)
INRS: l'Institut national de recherche et de sécurité pour la prévention des accidents du travail et des maladies professionnelles (France)

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. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. It does not represent any guarantee of the properties of the product. Laboratoire MAT Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.

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