



Centre Anti-Poison pour le Québec: (800) 463-5060

Tél. (Qc): (418) 660-8666 / 800-890-8666


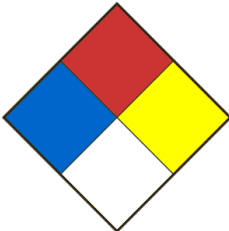
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## SAFETY DATA SHEET

### SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier 4-METHYL-2-PENTANOL		Product Use Laboratory use	
Chemical formula C <sub>6</sub> H <sub>14</sub> O		Product code MP-0421; MR-0221	Molar weight 102,18
Chemical name / Commercial name / Synonymous Alcool méthyl amylique; 4-méthylpentan-2-ol; 2-pentanol, 4-méthyl-; Isobutylméthylcarbinol; Methyl Isobutyl Carbinol; MIBC; MAOH			
Supplier's name Laboratoire MAT		Address-Street 610, Adanac Street	
City Québec		Province Québec	
Postal code G1C 7B7	Internet www.labmat.com	Phone number 418-660-8666 / 800-890-8666	
Emergency phone	CANUTEC: 613-996-6666		CENTRE ANTI-POISON DU QUÉBEC 800-463-5060
Date SDS 12/15/2020	SDS Prepared by Laboratoire MAT	E-Mail labmat@labmat.com	

## SECTION 02 - HAZARDS IDENTIFICATION

<b>Classification WHIMS / GHS</b>	Flammable liquids category 3 Serious eye damage/ Eye irritation category 2A Specific target organ toxicity - Single exposure category 3
<b>Signal Word</b>	WARNING
<b>Hazards statements (H)</b>	H226 Flammable liquid and vapor. H319 Causes serious eye irritation. H335 May cause respiratory irritation.
<b>Precautionary statements (P)</b>	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 only non-sparking tools. P243 Take precautionary measures against static discharge. P261 Avoid breathing dust / fume / gas / mist / vapors / spray. P264 Wash the areas of the body that have been in contact with the product after handling. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/protective clothing/eye protection/face protection. P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P312 Call a POISON CENTER or doctor/physician if you feel unwell. P337 + P313 If eye irritation persists: Get medical advice/attention. P370 + P378 In case of fire: Use water spray or alcohol-resistant foam, or dry powder or carbon dioxide for extinction. 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. P501 Dispose of contents/container in accordance with local / regional / national / international regulations or contact a specialist waste disposal company.
<b>PICTOGRAMS</b>	
<b>Other dangers</b>	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)
	<b>Health</b> 2 <b>Fire</b> 2 <b>Reactivity</b> 0 <b>Special danger</b>

## SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
4-MÉTHYL-2-PENTANOL	108-11-2	<=100

## SECTION 04 - FIRST AID MEASURES

<b>Eye contact</b>	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.
<b>Skin contact</b>	Wash skin with plenty of water for at least 15 minutes. Remove soiled clothing. If irritation persists, seek medical attention.
<b>Inhalation</b>	If breathed in, move person into fresh air. If breathing is difficult, give oxygen. Consult a physician.
<b>Ingestion</b>	If the person is conscious, give water to drink. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician.
<b>Most important symptoms and effects (acute and delayed)</b>	Main symptoms of high exposure: Eyes irritation. Irritation of the nose and throat. Skin irritation. Redness. Headaches. Drowsiness. Anesthesia. Cough. Ref. section 11.
<b>Immediate medical attention and special treatment, if necessary</b>	In case of medical consultation, keep this sheet available.
<b>General advice</b>	Show this safety data sheet to the doctor in attendance.

## SECTION 05 - FIREFIGHTING MEASURES

<b>Flammability</b>	Yes
<b>Ignition conditions</b>	Strong oxidizing agents, heat, sparks and open flame.
<b>Suitable extinguishing media</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Unsuitable extinguishing media</b>	Do not use a heavy water stream.
<b>Hazardous combustion products</b>	Hazardous combustion products formed under fire conditions: Carbon oxides.
<b>Special fire and explosion hazards</b>	Vapors may form flammable and explosive mixtures with air. Vapors may rise to the source of ignition and flash back. May react violently with incompatible products (Ref Section 10).
<b>Special protective equipment and precautions for firefighters</b>	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

<b>Methods and materials for containment and cleaning up / Personal precautions, protective equipment</b>	Evacuate personnel to safe areas. Cut off all sources of ignition. Avoid the accumulation of charges electrostatic. Ensure adequate ventilation. Use personal protective equipment. Use a respirator as needed. Absorb residues with sand or vermiculite. Do not use cellulose-based absorbent. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. Dispose of residues in a container provided for the disposal of hazardous materials. Do not let product enter drains.
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## SECTION 07 - HANDLING AND STORAGE

<b>Conditions for safe storage</b>	Store in a cool, dry place. Zone containing flammable substances. Keep container tightly closed and store away from strong oxidants, heat, sparks and open flame. Use venting and electrical equipment that is grounded and does not produce ignition sources (sparks).
<b>Methods of handling</b>	Always open containers slowly to allow any excess pressure to vent. Avoid inhalation of vapor or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. Wear personal protective equipment when handling. Always ensure good ventilation. Transport according to TDG (ref Section 14)

## SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

### Workplace control parameters

Components	No.-CAS	Control parameters	Value	Basis
4-Methyl-2-pentanol	108-11-2	TWA	25ppm 104mg/m <sup>3</sup>	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
Remarks:	Substance may be readily absorbed through intact skin			
		STEL	40ppm 167mg/m <sup>3</sup>	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
Remarks:	Substance may be readily absorbed through intact skin			
		TWAEV	25ppm 104mg/m <sup>3</sup>	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
Remarks:	Skin (percutaneous)			
		STEV	40ppm 167mg/m <sup>3</sup>	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
Remarks:	Skin (percutaneous)			
		TWA	25ppm	Canada. British Columbia OEL
Remarks:	Contributes significantly to the overall exposure by the skin route.			
		STEL	40ppm	Canada. British Columbia OEL
Remarks:	Contributes significantly to the overall exposure by the skin route.			

<b>Data source</b>	Sigma-Aldrich.
<b>Ventilation</b>	Use fan.
<b>Respiratory</b>	If work under the hood is not possible, or if the permissible levels are exceeded, use a mechanical filter / cartridge against NIOSH vapors or a respirator with air supply.
<b>Gloves</b>	Handle with gloves.

<b>Eyes</b>	Safety goggles with safety shutters.
<b>Shoes</b>	Use safety shoes.
<b>Clothing</b>	Labcoat. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
<b>Engineering control</b>	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

<b>Physical state</b>	Liquid.
<b>Appearance</b>	Liquide incolore.
<b>Odour</b>	Douce.
<b>Odour threshold</b>	0,07ppm
<b>pH</b>	Donnée non-disponible.
<b>Melting point / Freezing point</b>	-90°C
<b>Initial boiling point</b>	132°C
<b>Boiling range</b>	Data not available
<b>Flash point</b>	41°C
<b>Evaporation rate</b>	Data not available
<b>Flammability</b>	Yes
<b>Lower flammable / Explosive limit</b>	1.0%
<b>Upper flammable / Explosive limit</b>	5.5%
<b>Vapour pressure</b>	3.7 mmHg @ 20°C.
<b>Vapour density</b>	3.5 (air=1)-
<b>Relative density</b>	0.8075g/ml à 20°C
<b>Solubility</b>	Soluble dans l'eau: 20g/L à 20°C.
<b>Partition coefficient water/n-octanol</b>	Data not available
<b>Auto-ignition temperature</b>	305°C
<b>Decomposition temperature</b>	Data not available
<b>Viscosity</b>	4.074mPa.s

## SECTION 10 - STABILITY AND REACTIVITY

<b>Reactivity</b>	Flammable product, may ignite with source of ignition, if temperature above flash point.
<b>Chemical stability</b>	Forms peroxides over time. Test for peroxide formation or discard after 1 year.
<b>Possibility of hazardous reactions</b>	Stable under normal conditions. Vapors may form explosive mixture with air.
<b>Conditions of instability (Including sensitivity to shock / static discharge / vibration)</b>	Heat, flames and sparks.
<b>Conditions of instability (Including sensitivity to shock / static discharge / vibration)</b>	Avoid contact with incompatible materials and extreme temperatures. Heat, flames, sparks.
<b>Incompatible material</b>	Strong acids, strong oxidants. Alkalis. Metals. Acid chloride.
<b>Hazardous decomposition products</b>	Hazardous decomposition products formed under fire conditions. Carbon oxides.

## SECTION 11 - TOXICOLOGICAL INFORMATION

## 4-METHYL-2-PENTANOL

<b>Routes of exposure</b>	Ingestion, inhalation, skin contact.
<b>Acute exposition effects / symptoms:</b>	By exposure route below.
<b>- Eyes</b>	Irritation.
<b>- Skin</b>	Severe irritation and dermatitis. Redness.
<b>- Inhalation</b>	Irritation of the throat. Cough. Drowsiness.
<b>Acute toxicity (Ingestion)</b>	May cause irritation. To our knowledge, the product has not been fully studied.
<b>Chronic exposure effects / symptoms</b>	Prolonged or repeated exposure to this product can cause damage to the following organs: Kidney. May cause: Anesthesia. Narcotic effects. Dermatitis. Central nervous system depression, depression, narcosis, lowering of blood pressure due to cardiac depression, relaxing of smooth muscle in all regions and depressed skeletal muscle without influencing nerves.
<b>DL50 (specify species and route of entry)</b>	LD50 Oral - Rat - 2590mg/kg. LD50 Dermal - Rabbit - 2900 mg/kg.
<b>CL50 (specify species and route of entry)</b>	LC50 Inhalation - Rat - 4h - 16mg/L.

## SECTION 12 - ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	Toxicity to fish: Semi-static test LC50 - Pimephales promelas (fathead minnow) - 359 mg/l - 96h. Toxicity to daphnia and other aquatic invertebrates: Semi-static test: EC50 - Daphnia magna (Water flea) - 337 mg/l - 48 h. Toxicity to algae: Static test EC50 - Pseudokirchneriella subcapitata - 264 mg/l - 72 h.
<b>Persistence and degradability</b>	Biodegradability aerobic - Exposure time 28 d Result: 85 % - Readily biodegradable. (OECD Test Guideline 301F) Ration BOD / ThBOD: 85%.
<b>Bioaccumulative potential</b>	Data not available.
<b>Mobility in soil</b>	Probable mobility in the environment due to its solubility in water.
<b>Other adverse effects</b>	Data not available.

## SECTION 13 - DISPOSAL CONSIDERATIONS

<b>Waste Disposal Method</b>	Dispose of contents / container in accordance with local / regional / national / international regulations / or contact a specialist waste disposal company.
<b>Contaminated Packaging</b>	Dispose of as unused product.

## SECTION 14 - TRANSPORT INFORMATION

<b>UN Number</b>	2053
<b>UN Proper shipping name</b>	ALCOOL MÉTHYLAMYLIQUE
<b>Transport hazard class(es)</b>	3 Flammable liquids
<b>Packing group</b>	III
<b>Limited quantity index</b>	5L
<b>ERAP Index</b>	-
<b>Special precautions</b>	-

## SECTION 15 - REGULATORY INFORMATION

<b>WHIMS CANADA</b>	Flammable liquids category 3 Serious eye damage/ Eye irritation category 2A Specific target organ toxicity - Single exposure category 3
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## SECTION 16 - OTHER INFORMATION

### Further information

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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