



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

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


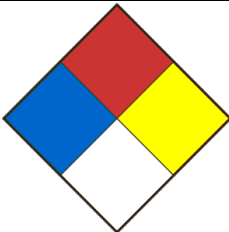
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SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier 2-METHYLBUTANE		Product Use Laboratory use	
Chemical formula $C_2H_5CH(CH_3)_2$		Product code MR-0159	Molar weight 72,15
Chemical name / Commercial name / Synonymous 2-METHYLBUTANE, ISOPENTANE, ETHYLDIMETHYLMETHANE, ISOAMYLHYDRIDE			
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 1/22/2020	SDS Prepared by Laboratoire MAT	E-Mail labmat@labmat.com	

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Flammable liquids category 1 Specific target organ toxicity - Single exposure category 3 Aspiration hazard category 1
Signal Word	DANGER
Hazards statements (H)	H224 Extremely flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H336 May cause drowsiness or dizziness.
Precautionary statements (P)	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 / vapours / spray. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/protective clothing/eye protection/face protection. P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. 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. P312 Call a POISON CENTER or doctor/physician if you feel unwell. P331 Do NOT induce vomiting. 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. P370 + P378 In case of fire: Use water spray or alcohol-resistant foam, or dry powder or carbon dioxide for extinction.
PICTOGRAMS	
Other dangers	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)
	Health 2 Fire 4 Reactivity 0 Special danger

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
2-méthylbutane	78-78-4	>95

SECTION 04 - FIRST AID MEASURES

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 soiled clothing. If irritation persists, seek medical attention.
Inhalation	Move the unwell person to the fresh air. If breathing is difficult, give oxygen. Do not use the mouth-to-mouth method if the victim has ingested or inhaled the substance, apply artificial respiration with a pocket mask equipped with a one-way valve or other suitable medical device. Consult a physician.
Ingestion	If the person is conscious, drink water and do not induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician.
Most important symptoms and effects (acute and delayed)	Ref. section 11.
Immediate medical attention and special treatment, if necessary	In case of medical consultation, keep this sheet available.
General advice	Show this safety data sheet to the doctor in attendance.

SECTION 05 - FIREFIGHTING MEASURES

Flammability	Yes
Ignition conditions	Strong oxidizing agents, heat, sparks and open flame. Flammable in the presence of a source of ignition when the temperature is above the flash point. No smoking.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	Do not use a concentrated stream of water that could spread fire.
Hazardous combustion / decomposition products	Hazardous decomposition products formed under fire conditions. Carbon oxides.
Special fire and explosion hazards	Steam can travel a great distance and ignite on sources of ignition such as heaters, electrical appliances, cigarettes, sparks, etc. Containers exposed to fire may explode. Vapors may form flammable or explosive mixtures with air. Contact with strong oxidizing agents may cause fire. May react violently with incompatible products (Ref Section 10).
Special protective equipment and precautions for firefighters	Wear self contained breathing apparatus for fire fighting if necessary.

SECTION 06 - ACCIDENTAL RELEASE MEASURES

Methods and materials for containment and cleaning up / Personnel precautions, protective equipment	Evacuate personnel to safe areas. Eliminate all sources of inflammation. Avoid the accumulation of charges electrostatic. Use anti-spark tools and anti-explosion equipment. Absorb the product with sand or vermiculite. Dilute residues with water, clean and rinse. Ensure a good ventilation of the premises. Dispose of residues in a container for disposal of hazardous materials. When handling, wear suitable safety equipment. Use breathing apparatus if necessary. Avoid breathing vapours, mist or gas. Do not let product enter drains.
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SECTION 07 - HANDLING AND STORAGE

Conditions for safe storage	Store in a cool, dry place, preferably below 20 ° C. 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). Protect from the sun's rays. Old lots can develop pressure. Keep container tightly closed in a dry and well-ventilated place.
Methods of handling	Bottle in the glass only. Always open containers slowly to allow any excess pressure to vent. Avoid inhalation of vapour or mist. Use explosion-proof equipment. 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	CAS-No.	Value	Control parameters	Basis
Isopentane	78-78-4	TWA	600.000000 ppm 1,770.000000 mg/m ³	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TWA	600.000000 ppm	Canada. British Columbia OEL
		STEL	750.000000 ppm 2,210.000000 mg/m ³	Ontario Table of Occupational Exposure Limits made under the Occupational Health and Safety Act.
		TWA	600.000000 ppm 1,770.000000 mg/m ³	Ontario Table of Occupational Exposure Limits made under the Occupational Health and Safety Act.

Data source	Sigma-Aldrich.
Ventilation	Fan.
Respiratory	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.
Gloves	Handle with gloves.
Eyes	Safety goggles with safety shutters. Face shield (20 cm minimum).
Shoes	Safety shoes.
Clothing	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	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.
Appearance	Liquide incolore.
Odour	Odeur d'essence.
Odour threshold	Data not available
pH	Non applicable.
Melting point / Freezing point	-160°C
Initial boiling point	30°C
Boiling range	Data not available
Flash point	-51°C
Evaporation rate	1%
Flammability	Yes
Lower flammable / Explosive limit	1.4%
Upper flammable / Explosive limit	8.3%
Vapour pressure	1055 mm @ 37.7°CmmHg
Vapour density	2.48 (Air=1)-
Relative density	0.62g/cm ³
Solubility	Très peu soluble dans l'eau (50 mg/L), soluble dans alcool, ether, huiles..
Partition coefficient water/n-octanol	-
Auto-ignition temperature	°C
Decomposition temperature	Data not available
Viscosity	Data not available

SECTION 10 - STABILITY AND REACTIVITY

Reactivity	Non-reactive under normal conditions.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Vapours may form explosive mixture with air.
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	Heat, flames and sparks. Avoid the accumulation of static electricity.
Incompatible material	Strong oxidizing agents (nitric acid, perchloric acid, peroxides, chlorates and perchlorates), heat and moisture.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. Toxic vapors of carbon monoxide and dioxide.

SECTION 11 - TOXICOLOGICAL INFORMATION

2-METHYLBUTANE

Routes of exposure	Ingestion, inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Irritation and tearing.
- Skin	Irritation and dermatitis.
- Inhalation	Irritation of the mucous membranes and respiratory tract. Narcotic effects, cough, dyspnea, headache, dizziness, drowsiness, confusion, nausea and vomiting, hypotension, suffocation and may cause loss of consciousness.
Acute toxicity (Ingestion)	Irritation of the mucous membranes. Liver and kidney damage, gastrointestinal disorders, cramps, diarrhea, headache, dizziness, drowsiness, nausea and vomiting, seizures and may cause air embolism.
Chronic exposure effects / symptoms	Burning sensation, dermatitis, narcotic effects, chest pain, cough, dyspnea, laryngitis, headache, dizziness, drowsiness, confusion, tremors, asthenia, weight loss and loss of appetite, nausea and vomiting.
DL50 (specify species and route of entry)	LD50 Oral - Rat - 2000-5000 mg/kg LD50 Dermal: Data not available
CL50 (specify species and route of entry)	LC50 Inhalation - Mouse - 4h - Rat 25.3 mg/L.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	Toxicity to fish: LC50 - Pimephales promelas (fathead minnow) - 12.8 mg/l - 96 h. Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia magna (Water flea) - 2.3 mg/l - 48 h
Persistence and degradability	Readily biodegradable. Biodegradability Result: 71.
Bioaccumulative potential	Does not significantly accumulate in organisms.
Mobility in soil	Data not available.
Other adverse effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life.

SECTION 13 - DISPOSAL CONSIDERATIONS

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

SECTION 14 - TRANSPORT INFORMATION

UN Number	1265
UN Proper shipping name	PENTANES, liquides
Transport hazard class(es)	3 Flammable liquids
Packing group	I
Limited quantity index	OL
ERAP Index	-
Special precautions	-

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Flammable liquids category 1 Specific target organ toxicity - Single exposure category 3 Aspiration hazard category 1
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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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