



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

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


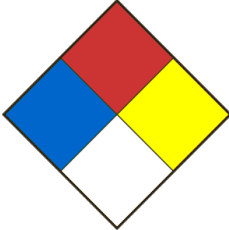
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SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier 1-BROMOBUTANE		Product Use Laboratory use	
Chemical formula CH ₃ (CH ₂) ₃ Br		Product code BR-0131	Molar weight 137,03
Chemical name / Commercial name / Synonymous N-BUTYL BROMIDE, BUTYL BROMIDE, BROMO-1 BUTANE, BROMURE DE BUTYLE, BROMURE DE N-BUTYLE			
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 3/1/2021	SDS Prepared by Laboratoire MAT	E-Mail labmat@labmat.com	

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Flammable liquids category 2 Skin corrosion/irritation - Skin irritation category 2 Serious eye damage/eye irritation - Eye irritation category 2
Signal Word	DANGER
Hazards statements (H)	H225 Highly flammable liquid and vapor. H315 Causes skin irritation. H319 Causes serious eye irritation.
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. P264 Wash the areas of the body that have been in contact with the product after handling. P280 Wear protective gloves/protective clothing/eye protection/face protection. P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P321 Specific treatment (see section 4 of the SDS and on this label). P332 + P313 If skin irritation occurs: Get medical advice/attention. P337 + P313 If eye irritation persists: Get medical advice/attention. P362 + P364 Take off contaminated clothing and wash it before reuse. P370 + P378 In case of fire: Use water spray or alcohol-resistant foam, or dry powder or carbon dioxide for extinction. P403 + P235 Store in a well-ventilated place. Keep cool. P501 Dispose of contents/container in accordance with local / regional / national / international regulations or contact a specialist waste disposal company.
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 (%)
1-bromobutane	109-65-9	<=100

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. Consult a physician.
Ingestion	Do NOT induce vomiting. If the person is conscious, rinse the mouth with water. 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: Irritation of mouth and stomach if swallowed. Skin irritation. Eyes irritation. Irritation of the respiratory system. Cough. Headaches. Nausea and vomiting. 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.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	Do not use a heavy water stream.
Hazardous combustion products	Hazardous combustion products formed under fire conditions: Carbon oxides. Gaseous hydrogen bromide and/or bromine.
Special fire and explosion hazards	May react violently with incompatible products (Ref Section 10). 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. Contact with strong oxidizing agents may cause fire. 1-Bromobutane can react violently in the presence of bromobenzene and metallic sodium, especially above 30 ° C.
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

Methods and materials for containment and cleaning up / Personal precautions, protective equipment	Evacuate personnel to safe areas. 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 vapors, mist or gas. Remove all sources of ignition. Avoid the accumulation of charges electrostatic. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. Do not let product enter drains. Discharge into the environment must be avoided.
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SECTION 07 - HANDLING AND STORAGE

Conditions for safe storage	Keep container tightly closed in a dry and well-ventilated place. Close all opened containers carefully and store vertically to avoid any flow. Use venting and electrical equipment that is grounded and does not produce ignition sources (sparks).
Methods of handling	Bottle in glass containers only. Avoid contact with the skin, eyes and clothes. Avoid inhalation of vapor or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace control parameters

Components	CAS-No.	Control	Value	Basis
1-BROMOBUTANE	109-65-9	TLV, TWA, STEL	No data available	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TLV, TWA, STEL	No data available	Canada. British Columbia OEL
		TLV, TWA, STEL	No data available	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants

Ventilation	Use fan.
Respiratory	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.
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	Brun/jaune clair.
Odour	Forte.
Odour threshold	Data not available
pH	Donnée non disponible..
Melting point / Freezing point	-112°C
Initial boiling point	100-104°C
Boiling range	Data not available
Flash point	10°C
Evaporation rate	Data not available
Flammability	Yes
Lower flammable / Explosive limit	2.8%
Upper flammable / Explosive limit	6.6%
Vapour pressure	40 mmHg à 25 °C.
Vapour density	4.73 (air=1.0).
Relative density	1.276g/cm ³
Solubility	Insoluble dans l'eau. Soluble dans l'alcool et l'éther.
Partition coefficient water/n-octanol	log Pow: 2.75-
Auto-ignition temperature	265°C
Decomposition temperature	Data not available
Viscosity	0.606 mPa à 25 °C.

SECTION 10 - STABILITY AND REACTIVITY

Reactivity	Flammable product, may ignite with source of ignition, if temperature above flash point. May ignite on contact with oxidants.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Stable under normal conditions. May react violently with incompatible substances.
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	Heat, flames, sparks.
Incompatible material	Strong oxidizers, Strong bases, Metallic powders. Magnesium. Aluminum. Sodium, Sodium Oxides, Potassium.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. Carbon oxides. Gaseous hydrogen bromide and/or bromine.

SECTION 11 - TOXICOLOGICAL INFORMATION

1-BROMOBUTANE

Routes of exposure	Ingestion, inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Irritation and may cause inflammation of the conjunctiva.
- Skin	Irritation.
- Inhalation	Irritation of the mucous membranes and respiratory tract. Nervous disorders, chest pain, cough, dyspnea, headache, dizziness, nausea and vomiting, drowsiness, convulsions and loss of consciousness.
Acute toxicity (Ingestion)	Irritation of the mucous membranes. Nervous disorders, gastrointestinal disorders, cramps, headache, diarrhea, dizziness, nausea and vomiting, convulsions and loss of consciousness.
Chronic exposure effects / symptoms	Burning sensation, conjunctivitis, nervous disorders, chest pain, cough, dyspnea, laryngitis, headache, dizziness, drowsiness, fatigue, loss of appetite, nausea and vomiting.
DL50 (specify species and route of entry)	LD50 Oral - Rat - 2761 mg/kg. LD50 Dermal - Data not available.
CL50 (specify species and route of entry)	CL50 inhalation - Rat 47000 mg/m ³ - 2 h.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	LC50 - Pimephales promelas (fathead minnow) - 36.7 mg/L - 96 h.
Persistence and degradability	Biodegradability Result: 1% - Not readily biodegradable.
Bioaccumulative potential	Data not available.
Mobility in soil	Probable mobility in the environment due to its solubility in water.
Other adverse effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.

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	1126
UN Proper shipping name	1-BROMOBUTANE
Transport hazard class(es)	3 Flammable liquids
Packing group	II
Limited quantity index	1L
ERAP Index	-
Special precautions	-

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Flammable liquids category 2 Skin corrosion/irritation - Skin irritation category 2 Serious eye damage/eye irritation - Eye irritation category 2
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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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