



Centre Anti-Poison pour le Québec: (800) 463-5060  
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## SAFETY DATA SHEET

### SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier BARIUM CHLORIDE (DIHYDRATE)		Product Use Laboratory use	
Chemical formula BaCl <sub>2</sub> •2H <sub>2</sub> O		Product code BR-0102	Molar weight 244,28
Chemical name / Commercial name / Synonymous BARIUM CHLORIDE DIHYDRATE, DICHLORURE DE BARIUM DIHYDRATE			
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 3/21/2023	SDS Prepared by Laboratoire MAT	E-Mail labmat@labmat.com	

### SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Acute toxicity - Inhalation category 4 Acute toxicity - Oral category 3
Signal Word	DANGER
Hazards statements (H)	H332 Harmful if inhaled. H301 Toxic if swallowed.
Precautionary statements (P)	P261 Avoid breathing dust / fume / gas / mist / vapors / spray. 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. P264 Wash the areas of the body that have been in contact with the product after handling. P270 Do not eat, drink or smoke when using this product. P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P321 Specific treatment (see section 4 of the SDS and on this label). P330 Rinse mouth. P405 Store locked up. 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 0 Reactivity 0 Special danger

## SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Chlorure de baryum dihydrate	10326-27-9	<=100

## SECTION 04 - FIRST AID MEASURES

<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. If irritation persists, seek medical attention.
<b>Skin contact</b>	Wash off with soap and plenty of water. Remove soiled clothing. Take victim immediately to hospital.
<b>Inhalation</b>	Move the unwell person to the fresh air. If breathing is difficult, give oxygen. Consult a physician.
<b>Ingestion</b>	If the person is conscious, drink water and induce vomiting. Never give anything by mouth to an unconscious person. Get immediate medical help.
<b>Most important symptoms and effects (acute and delayed)</b>	Main symptoms of high exposure: Cough. Irritation of mouth and stomach if swallowed. Abdominal pain. Vertigo. Tremors. Dermatitis. 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>	No
<b>Ignition conditions</b>	Non flammable. But remains combustible.
<b>Suitable extinguishing media</b>	Use dry chemical powder, dry ice or foam.
<b>Unsuitable extinguishing media</b>	Data not available.
<b>Hazardous combustion products</b>	Hazardous combustion products formed under fire conditions: Hydrogen chloride gas. Baryum oxyde.
<b>Special fire and explosion hazards</b>	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 / Personnel precautions, protective equipment</b>	Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment. Pick up with a shovel or broom, taking care not to scatter dust. Dilute residues with water, clean and rinse. 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. Keep container tightly closed and store away from heat, moisture, and incompatible products.
<b>Methods of handling</b>	Always open containers slowly to allow any excess pressure to vent. Ensure good ventilation. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust or vapor is formed. Avoid ingestion and inhalation. 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

Composants	No.-CAS	Valeur	Paramètres de contrôle	Base
CHLORURE DE BARYUM DIHYDRATE	10326-27-9	TWAEV	0.500000 mg/m3	Canada. Ontario OELs
Remarques				
		TWA	0.500000 mg/m3	Canada. Alberta, Code de santé et de sécurité au travail (tableau 2 : VLE)
		VEMP	0.500000 mg/m3	Québec. Règlement sur la santé et la sécurité du travail, Annexe 1 Partie 1: Valeurs d'exposition admissibles des contaminants de l'air
		TWA	0.500000 mg/m3	Canada. LEP Colombie Britannique
		TWA	0.5 mg/m3	Canada. Alberta, Code de santé et de sécurité au travail (tableau 2 : VLE)
		VEMP	0.5 mg/m3	Québec. Règlement sur la santé et la sécurité du travail, Annexe 1 Partie 1: Valeurs d'exposition admissibles des contaminants de l'air
		TWA	0.5 mg/m3	Canada. LEP Colombie Britannique

<b>Data source</b>	Sigma-Aldrich.
<b>Ventilation</b>	Use fan.
<b>Respiratory</b>	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>	Safety shoes.
<b>Clothing</b>	Labcoat. Complete suit protecting against chemicals, Flame retardant protective clothing, 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

Physical state	Solid.
Appearance	Poudre cristalline de couleur blanche-
Odour	Donnée non disponible.
Odour threshold	Data not available
pH	5.0 - 8.0 à 50 g/l à 25 °C.
Melting point / Freezing point	~120°C (dec)
Initial boiling point	Data not available
Boiling range	Data not available
Flash point	Data not available
Evaporation rate	Data not available
Flammability	No
Lower flammable / Explosive limit	Data not available
Upper flammable / Explosive limit	Data not available
Vapour pressure	Data not available
Vapour density	Data not available
Relative density	3.097g/ml
Solubility	Soluble dans l'eau et le méthanol. Insoluble dans l'éthanol.
Partition coefficient water/n-octanol	Data not available
Auto-ignition temperature	Data not available
Decomposition temperature	Data not available
Viscosity	Data not available

## SECTION 10 - STABILITY AND REACTIVITY

Reactivity	May react violently with incompatible substances.
Chemical stability	Sensitive to heat.
Possibility of hazardous reactions	May react violently with incompatible substances.
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	Avoid contact with incompatible materials. Avoid dust formation.
Incompatible material	Strong oxidizing agents (nitric acid, perchloric acid, peroxides, chlorates and perchlorates) and moisture. Violent reaction with: BrF3 and anhydrous 2-furan percarboxylic acid.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. Toxic vapors of hydrogen chloride. Barium oxide.

## SECTION 11 - TOXICOLOGICAL INFORMATION

### BARIUM CHLORIDE (DIHYDRATE)

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. Nervous disorders, chest pain, cough, dyspnea, headache, dizziness, sweating, salivation, nausea and vomiting.
Acute toxicity (Ingestion)	Irritation of the mucous membranes. Abdominal pain, cramps, diarrhea, headache, dizziness, excessive salivation, nausea and vomiting, stimulation of all muscles followed by flaccid paralysis, cardiac arrhythmias (tachycardia and ventricular fibrillation), hypertension, hypokalemia and death by heart failure or respiratory. Ingestion of 800 mg can be fatal in adults.
Chronic exposure effects / symptoms	Burning sensation, dermatitis, nervous disorders, chest pain, cough, dyspnea, headache, dizziness, confusion, irritability, sweating, salivation, fatigue, weight loss and loss of appetite, nausea and vomiting.
DL50 (specify species and route of entry)	Data based on the anhydrous product: LD50 Oral - Rat - 100 - 676 mg/kg LD50 Dermal - Data not available.
CL50 (specify species and route of entry)	Data based on the anhydrous product: LC50 Inhalation - Rat - 4h - 1.1 mg/L

## SECTION 12 - ECOLOGICAL INFORMATION

Available ecological information	No
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## 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	1564
UN Proper shipping name	COMPOSÉ DU BARYUM N.S.A. à l'exception du sulfate de baryum
Transport hazard class(es)	6.1 Toxic substances
Packing group	III
Limited quantity index	5kg
ERAP Index	-
Special precautions	16 (chlorure de baryum dihydrate)

## SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Acute toxicity - Inhalation category 4 Acute toxicity - Oral 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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