



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 6%W/V		Product Use Laboratory use	
Chemical formula $\text{BaCl}_2 \cdot 2\text{H}_2\text{O}$		Product code BS-0356	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 - Oral category 4
Signal Word	WARNING
Hazards statements (H)	H302 Harmful if swallowed.
Precautionary statements (P)	<p>P264 Wash the areas of the body that have been in contact with the product after handling.</p> <p>P270 Do no eat, drink or smoke when using this product.</p> <p>P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.</p> <p>P330 Rinse mouth.</p> <p>P501 Dispose of contents/container in accordance with local / regional / national / international regulations or contact a specialist waste disposal company.</p>
PICTOGRAMS	
Other dangers	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)
	<p>Health 2</p> <p>Fire 0</p> <p>Reactivity 0</p> <p>Special danger</p>

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Chlorure de baryum (dihydrate)	10326-27-9	6,6

SECTION 04 - FIRST AID MEASURES

Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. If irritation persists, seek medical attention.
Skin contact	Wash off with soap and plenty of water. Remove soiled clothing. Take victim immediately to hospital.
Inhalation	Move the unwell person to the fresh air. If breathing is difficult, give oxygen. Consult a physician.
Ingestion	If the person is conscious, drink water and induce vomiting. Never give anything by mouth to an unconscious person. Get immediate medical help.
Most important symptoms and effects (acute and delayed)	Main symptoms of high exposure: Cough. Irritation of mouth and stomach if swallowed. Abdominal pain. Vertigo. Tremors. Dermatitis. 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	No
Ignition conditions	Non flammable. But remains combustible.
Suitable extinguishing media	Use dry chemical powder, dry ice or foam.
Unsuitable extinguishing media	Data not available.
Hazardous combustion products	Hazardous combustion products formed under fire conditions: Hydrogen chloride gas. Baryum oxyde.
Special fire and explosion hazards	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

Methods and materials for containment and cleaning up / Personnel 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. 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. Keep container tightly closed and store away from heat, moisture, and incompatible products.
Methods of handling	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

Data source	Sigma-Aldrich.
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. 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.
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	Donnée non disponible.
Odour threshold	Data not available
pH	5.3.
Melting point / Freezing point	Data not available
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
Solubility	Soluble dans l'eau et le méthanol. Insoluble dans l'éthanol.
Vapour density	Data not available
Relative density	1.05g/ml
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.
Incompatible material	When pure, the product reacts with the following products: 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 oxyde.

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

SUMMARY

Acute exposure effects / Symptoms:	By exposure routes below.
Ingestion	To our knowledge, the product has not been fully evaluated
Inhalation	To our knowledge, the product has not been fully evaluated
Skin	To our knowledge, the product has not been fully evaluated
Eyes	To our knowledge, the product has not been fully evaluated
Chronic exposure effects / Symptoms:	To our knowledge, the product has not been fully evaluated
ETA Mix (Estimated Acute Toxicity)	LD50 Oral: 1788 mg/kg - Rat LD50 Dermal: Data not available LC50 Inhalation: 19.4mg/L- 4h- Rat

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	N/R
UN Proper shipping name	
Transport hazard class(es)	
Packing group	
Limited quantity index	
ERAP Index	
Special precautions	

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Acute toxicity - Oral category 4
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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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