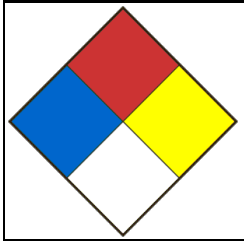
Centre Anti-Poison pour le Québec: (800) 463-5060
Tél. (Qc): (418) 660-8666 / 800-890-8666
Fax. (Qc): (418) 660-8998

SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier BARYUM NITRATE		**Product Use** Laboratory use	
Chemical formula $Ba(NO_3)_2$		**Product code** BR-0104	**Molar weight** 261,35
Chemical name / Commercial name / Synonymous BARIUM NITRATE, DINITRATE DE BARYUM, NITRIC ACID BARIUM SALT			
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 4/12/2019	**SDS Prepared by** Laboratoire MAT	**E-Mail** labmat@labmat.com	

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Oxidizing solids category 2 Acute toxicity - Oral category 4 Acute toxicity - Inhalation category 4 Serious eye damage/ Eye irritation category 2A
Signal Word	DANGER
Hazards statements (H)	H272 May intensify fire; oxidiser. H302 Harmful if swallowed. H319 Causes serious eye irritation. H332 Harmful if inhaled.
Precautionary statements (P)	P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking. P220 Keep/Store away from clothing and combustible materials. P261 Avoid breathing dust / fume / gas / mist / vapours / spray. P264 Wash the areas of the body that have been in contact with the product after handling. P270 Do no eat, drink or smoke when using this product. P280 Wear protective gloves/protective clothing/eye protection/face protection. 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. P330 Rinse mouth. 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. P501 Dispose of contents/container in accordance with local / regional / national / international regulations or contact a specialist waste disposal company. P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
PICTOGRAMS	
Other dangers	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)
	**Health** 1 **Fire** 0 **Reactivity** 1 **Special danger** OX

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Nitrate de baryum	10022-31-8	<=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	If the person is conscious, rinse the mouth with water. Sodium sulphate solution (60 to 100 ml) may also be used. Never give anything by mouth to an unconscious person. Get immediate medical help.
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	No
Ignition conditions	Risk of fire or explosion if heated or crushed in presence of combustible products.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	Data not available.
Hazardous combustion / decomposition products	Hazardous decomposition products formed under fire conditions. Nitrogen oxides (NOx), oxide of barium.
Special fire and explosion hazards	Powerful oxidizer Contact with combustible, organic or other easily oxidizable materials may cause fire. Barium nitrate mixed with finely divided aluminum-magnesium alloys can ignite easily and be extremely sensitive to friction and impact. Closed containers may explode under the effect of heat. 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 / Personnal precautions, protective equipment	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. Dispose of residues in a container provided for the disposal of hazardous materials. Do not let product enter drains.

SECTION 07 - HANDLING AND STORAGE

Conditions for safe storage	Store in a cool, dry place. Store in a well-ventilated area. Keep container tightly closed and store away from heat, moisture, combustible and organic products.
Methods of handling	Avoid contact with the skin, eyes and clothes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking. Keep away from heat and sources of ignition.

SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace control parameters

Components	CAS-No.	Control	Value	Based
Barium Nitrate	10022-31-8	TWA	0.5mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TWA	0.5mg/m3	Canada. British Columbia OEL
		TWA	0.5mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants

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.
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	Solid.
Appearance	Poudre cristalline de couleur blanche.-
Odour	inodore.
Odour threshold	Data not available
pH	Solution aqueuse à 5% = pH 5.0 - 7.0.
Melting point / Freezing point	592°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	3.24g/cm³
Solubility	Soluble dans l'eau; 94 g/L @ 20 °C. Insoluble dans l'alcool..
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	Non-reactive under normal conditions.
Chemical stability	Stable under recommended storage conditions. Risk of fire in case of contact with a combustible / organic substance.
Possibility of hazardous reactions	Stable under normal conditions.
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	Avoid dust formation. Avoid heat and excessive moisture. Incompatible products. Combustible materials.
Incompatible material	Strong reducing agents (potassium, sodium, metal hydrides), acids and acid anhydrides, aluminum-magnesium alloys, bases, easily oxidizable materials, combustible and organic products, heat and moisture . Acid anhydrides, Acids, Bases, Reducing agents.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. Nitrogen oxides (NOx), oxide of barium.

SECTION 11 - TOXICOLOGICAL INFORMATION

BARYUM NITRATE

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, cough, dyspnea, headache, dizziness, nausea and vomiting.
Acute toxicity (Ingestion)	Irritation of the mucous membranes. Gastrointestinal disorders, cramps, diarrhea, headache, dizziness, excessive salivation, nausea and vomiting, stimulation of all muscles followed by flaccid paralysis, disturbances of cardiac rhythm (tachycardia and ventricular fibrillation), hypertension, hypokalemia and death by heart failure or respiratory failure.
Chronic exposure effects / symptoms	Burning sensation, dermatitis, nervous disorders, 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)	LD50 Oral - Rat - 390 mg / kg Remarks: Behavioral effect: Drowsiness (decreased general activity). LD50 Oral - Mammal - 390 mg / kg Remarks: Behavioral effect: Muscle weakness Ingestion may cause irritation of the digestive tract, nausea, vomiting and diarrhea. LD50 Dermal - Data not available.
CL50 (specify species and route of entry)	LC50 - Inhalation - Data not available.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	Do not throw residues in the sewer.
Persistence and degradability	Soluble in water. Persistence is unlikely based on the information provided.
Bioaccumulative potential	Data not available.
Mobility in soil	Probable mobility in the environment due to its solubility in water.
Other adverse effects	Data not available.

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	1446
UN Proper shipping name	NITRATE DE BARYUM
Transport hazard class(es)	5.1 Oxidizing substances 6.1 Toxic substances
Packing group	II
Limited quantity index	1kg
ERAP Index	-
Special precautions	-

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Oxidizing solids category 2 Acute toxicity - Oral category 4 Acute toxicity - Inhalation category 4 Serious eye damage/ Eye irritation category 2A

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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