

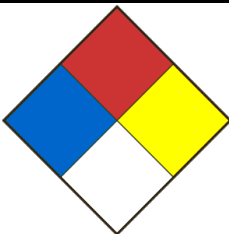


SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier MERCUROUS (I) NITRATE DIHYDRATE		Product Use Laboratory use	
Chemical formula Hg ₂ (NO ₃) ₂ ·2H ₂ O		Product code MR-0133	Molar weight 561,22
Chemical name / Commercial name / Synonymous MERCURY (I) NITRATE MONOHYDRATE, MERCUROUS NITRATE, NITRIC ACID MERCURY (I) SALT, MERCURY PROTONITRATE			
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 Lun-Ven 8h-16h	
Emergency phone	418-660-8666 Lun-Ven 8h-16h CENTRE ANTI-POISON DU QUÉBEC 800-463-5060		
Date SDS 7/26/2024	SDS Prepared by Laboratoire MAT	E-Mail labmat@labmat.com	

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Specific Target Organ Toxicity - Repeated exposure category 2 Acute toxicity - Dermal category 1 Acute toxicity - Inhalation category 2 Acute toxicity - Oral category 2	
Signal Word	DANGER	
Hazards statements (H)	H310 Fatal in contact with skin. H330 Fatal if inhaled. H373 May cause damage to organs through prolonged or repeated exposure. H300 Fatal if swallowed.	
Precautionary statements (P)	P260 Do not breathe mists, gases, vapors and other fumes, or the product itself. P262 Do not get in eyes, on skin, or on clothing. 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. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves, protective clothing and eye and face protection. P284 Wear respiratory protection. P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P310 Immediately call a POISON CENTER or a doctor. P314 Get medical advice/attention if you feel unwell. P320 Specific treatment is urgent (see section 4 on this SDS on this label). P321 Specific treatment (see section 4 of the SDS and on this label). P361 + P364 Take off immediately all contaminated clothing and wash it before reuse. P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up. P501 Dispose of contents and container in accordance with local, regional and national regulations, or contact a specialist waste disposal company. P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P330 Rinse mouth.	
PICTOGRAMS		
Other dangers	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)	
	Health 3 Fire 0 Reactivity 2 Special danger OX	

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%P/P)
Nitrate mercureux	14836-60-3	<=100

SECTION 04 - FIRST AID MEASURES

Eye contact	Remove contact lenses. Rinse with water for at least 15 minutes and consult a physician. Seek immediate medical attention.
Skin contact	Wash skin with plenty of water for at least 15 minutes. Remove soiled clothing. Seek immediate medical attention.
Inhalation	Move the unwell person to the fresh air. If breathing is difficult, give oxygen. Seek immediate medical attention.
Ingestion	Induce vomiting. If the person is conscious, give water to drink. Never give anything by mouth to an unconscious person. Immediate medical consultation is required.
Most important symptoms and effects (acute and delayed)	Main symptoms of high exposure: Neurological damage. Chest pain. Breathing difficulties. Necrosis. Vomiting. Eye damage. Dermatitis. Coma. Effects may be delayed. Ref. section 11.
Immediate medical attention and special treatment, if necessary	Treat according to symptoms. Show this sheet to the attending physician. In case of poisoning, the following can be administered as an antidote: Activated charcoal. Milk. Beaten egg whites.

SECTION 05 - FIREFIGHTING MEASURES

Flammability	No
Suitable extinguishing media	Use water to extinguish the fire
Unsuitable extinguishing media	CO2 or halon can provide limited control. Do not use dry chemicals or foam.
Hazardous combustion products	Hazardous combustion products formed under fire conditions: Nitrogen oxides (NOx). Mercury/mercury oxides.
Specific hazards of the dangerous product	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. Recommended distance: at least 50 meters (150 feet) for liquids and at least 25 meters (75 feet) for solids. Use personal protective equipment. Ensure adequate ventilation. Use a respirator as needed. 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.
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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, water, moisture, and incompatible products. Protect from light and sunlight.
Methods of handling	Avoid contact with the skin, eyes and clothes. Avoid ingestion and inhalation. Wear personal protective equipment when handling. Always ensure good ventilation. Apply the usual standard hygiene rules: Wash your hands after use. Do not eat or drink during use.

SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace control parameters

Components	CAS-No.	Control parameters	Value	Basis
MERCUROUS (I) NITRATE DIHYDRATE	14836-60-3	TWA	0.025 mg/m ³	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
Remarks	Substance may be readily absorbed through intact skin			
		TWAEV	0.025mg/m ³	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
	Skin (percutaneous)			
		TWA	0.025mg/m ³	Canada. British Columbia OEL
	Adverse reproductive effect Contributes significantly to the overall exposure by the skin route.			
		TWA	0.025mg/m ³	Ontario Table of Occupational Exposure Limits made under the Occupational Health and Safety Act.
	Skin			

Data source	Sigma-Aldrich (Millipore Sigma)
Ventilation	Fan.
Respiratory	If work under the hood is not possible, or if the permissible levels are exceeded, use NIOSH cartridge respiratory protection, or an air-supplied respirator.
Gloves	Handle with gloves. Suggested material: Nitrile. Rubber or neoprene. The type, thickness and length of the glove must be chosen according to the use, the concentration of the product, as well as the duration of use. Replace gloves regularly for better protection.
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. Recirculation is prohibited.

SECTION 09 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Solid.
Appearance	solide cristallin blanc.
Odour	Donnée non disponible.
Odour threshold	Data not available
pH	Donnée non disponible.
Melting point / Freezing point	~70°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	4.781g/cm ³
Solubility	Soluble dans l'eau 20 g/L à 20°C.
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	Oxidizer: risk of fire in case of contact with combustible / organic substance. May react violently with incompatible substances.
Chemical stability	Sensitive to light.
Possibility of hazardous reactions	Mixtures of metal/nonmetal nitrates with alkyl esters may explode, owing to the formation of alkyl nitrates; mixtures with phosphorus, tin (II) chloride or other reducing agents may react explosively.
Conditions to avoid, including static discharge, shock or vibration	This product may decompose if exposed to light. Avoid excessive heat and contaminations of all kinds. Avoid dust formation.
Incompatible materials	Strong reducing agents, metal nitrates, phosphorus, aluminum, alkyl ester, tin(II) chloride, phosphinates, nitrites, cyanides, thiocyanates, isothiocyanates, hypophosphites and light.
Hazardous decomposition products	- nitrogen oxides (NOx). Mercury/mercury oxides.

SECTION 11 - TOXICOLOGICAL INFORMATION

MERCUROUS (I) NITRATE DIHYDRATE

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 and dermatitis.
- Inhalation	Irritation of the mucous membranes and respiratory tract. Breathing difficulties. Cough and dyspnea. Nervous disorders, liver and kidney damage, dizziness, headache, cough, convulsions, nausea and vomiting, loss of consciousness, coma and death.
Acute toxicity (Ingestion)	Irritation of the mucous membranes. Nervous disorders, liver and kidney damage, gastrointestinal disorders, drowsiness, dizziness, nausea and vomiting, convulsions, coma and death. Chest pain.
Chronic exposure effects / symptoms	Burning sensation, dermatitis, nervous disorders, liver and kidney damage, dyspnea, cough, laryngitis, headache, loss of appetite, convulsions, nausea and vomiting.
DL50 (specify species and route of entry)	LD50 Oral - Data not available. LD50 Dermal - 5 mg/kg Undefined species.
CL50 (specify species and route of entry)	LC50 Inhalation - Rat - 4h - 0.05mg/L. Undefined species.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	Toxicity to fish: LC50 - Oncorhynchus mykiss (rainbow trout) - 0.032 mg/L - 96 h. Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia magna (Water flea) - 0.005mg/L - 48h.
Persistence and degradability	Data not available.
Bioaccumulative potential	Data not available.
Mobility in soil	Data not available.
Other adverse effects	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Avoid release to the environment.

SECTION 13 - DISPOSAL CONSIDERATIONS

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

SECTION 14 - TRANSPORT INFORMATION

UN Number	1627
UN Proper shipping name	NITRATE DE MERCURE I
Transport hazard class(es)	6.1 Toxic substances
Packing group	II
Limited quantity index	0,5kg
ERAP Index	1000
Special precautions	-

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Specific Target Organ Toxicity - Repeated exposure category 2 Acute toxicity - Dermal category 1 Acute toxicity - Inhalation category 2 Acute toxicity - Oral 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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