

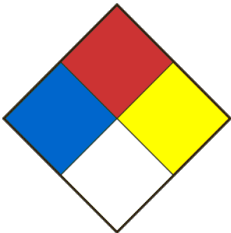


SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier MERCURY CHLORIDE		Product Use Laboratory use	
Chemical formula HgCl ₂		Product code MR-0131	Molar weight 271,5
Chemical name / Commercial name / Synonymous MERCURY CHLORIDE, DICHLOROMERCURY, BICHLORURE DE MERCURE, MERCURIC BICHLORIDE, MERCURY PERCHLORIDE, SULEM			
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 12/17/2025	SDS Prepared by Laboratoire MAT	E-Mail labmat@labmat.com	

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Acute toxicity - Dermal category 1 Acute toxicity - Oral category 2 Skin corrosion/irritation - Skin corrosion category 1B Serious eye damage/eye irritation - Serious eye damage category 1 Reproductive toxicity category 2 Specific Target Organ Toxicity - Repeated exposure category 1 Germ cell mutagenicity category 2	
Signal Word	DANGER	
Hazards statements (H)	H300 Fatal if swallowed. H310 Fatal in contact with skin. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H361 Suspected of damaging fertility or the unborn child. H372 Causes damage to organs through prolonged or repeated exposure. H341 Suspected of causing genetic defects.	
Precautionary statements (P)	P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. 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 thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P280 Wear protective gloves, protective clothing and eye and face protection. P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. 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. P308 + P313 IF exposed or concerned: Get medical advice/attention. P310 Immediately call a POISON CENTER or a doctor. P314 Get medical advice/attention if you feel unwell. 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. P363 Wash contaminated clothing before reuse. 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. P330 Rinse mouth.	
PICTOGRAMS		
Other dangers	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Significant; 4=Extreme)	
	Health 4 Fire 0 Reactivity 0 Special danger	

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%P/P)
Chlorure mercurique	7487-94-7	<=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)	In case of high exposure, the main symptoms would be: Diarrhea. Nausea and vomiting. Necrosis. Kidney damage. Tremors. Anxiety. Sleep disorder. Anuria (suppression of urine formation). Oliguria (rare urination). Skin sensitizer. Ref. section 11.
Immediate medical attention and special treatment, if necessary	Treat according to symptoms. Show this sheet to the attending physician.

SECTION 05 - FIREFIGHTING MEASURES

Flammability	No
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	Data not available.
Hazardous combustion products	Hazardous combustion products formed under fire conditions: Hydrogen chloride gas. Mercury oxide.
Specific hazards of the dangerous product	May react violently with incompatible products (Ref Section 10). Very toxic. Do not allow run-off from fire fighting to enter drains or water courses. Mercuric chloride reacts violently with metallic potassium and sodium.
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. Avoid breathing dust. 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. Discharge into the environment must be avoided. Avoid breathing vapors, mist or gas.
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SECTION 07 - HANDLING AND STORAGE

Conditions for safe storage	Keep container tightly closed in a dry and well-ventilated place. Light sensitive. Moisture sensitive.
Methods of handling	Use only under a fume hood. Always open containers slowly to allow any excess pressure to vent. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust or vapor is formed. Avoid contact with the skin, eyes and clothes. 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.	Value	Control parameters	Basis
Mercuric chloride	7487-94-7	TWAEV	0.025000 mg/m3	Canada. Occupational Health and Safety Act - Part 11: Exposure Values for Acrylonitrile, Benzene and Mercury
Remarks	Skin The values listed in this part apply to workplaces to which the designated substance regulation does not apply			
	TWA 0.025000 mg/m3 Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)			
	Substance may be readily absorbed through intact skin			
		TWAEV	0.025000 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
	Skin (percutaneous)			
		TWA	0.025000 mg/m3	Canada. British Columbia OEL
	Adverse reproductive effect Contributes significantly to the overall exposure by the skin route.			
		TWA	0.025000 mg/m3	Ontario Table of Occupational Exposure Limits made under the Occupational Health and Safety Act.
	Skin Denotes a chemical agent listed in Table 1 of Ontario Regulation 490/09 (Designated Substances) made under the Act. See clause 2 (2) (a) of this Regulation.			
		TWA	0.025 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
	Substance may be readily absorbed through intact skin			
		TWAEV	0.025 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
	Skin (percutaneous)			
		TWA	0.025 mg/m3	Canada. British Columbia OEL
	Adverse reproductive effect Contributes significantly to the overall exposure by the skin route.			
		TWA	0.025 mg/m3	Ontario Table of Occupational Exposure Limits made under the Occupational Health and Safety Act.
	Skin Denotes a chemical agent listed in Table 1 of Ontario Regulation 490/09 (Designated Substances) made under the Act. See clause 2 (2) (a) of this Regulation.			

Data source	Sigma-Aldrich.
Ventilation	Use fan.
Respiratory	If permitted levels are exceeded, use NIOSH cartridge respiratory protection, or an air-supplied respirator.
Gloves	Handle with gloves. Suggested material: Nitrile. Butyle. 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.

SECTION 09 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Solid.
Particle characteristics	Poudre blanche.
Odour	inodore.
Odour threshold	Data not available
pH	3.2 (0.2M).
Melting point / Freezing point	277°C
Initial boiling point	302°C
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	1.3 mmHg à 236°C.
Vapour density	Data not available
Relative density	5.44g/cm ³
Solubility	Soluble dans l'alcool..
Partition coefficient water/n-octanol	log Pow : 0.22-
Auto-ignition temperature	Data not available
Decomposition temperature	Data not available
Kinematic Viscosity	Data not available

SECTION 10 - STABILITY AND REACTIVITY

Reactivity	May react violently with incompatible substances.
Chemical stability	Stable under recommended storage conditions. Sensitive to light.
Possibility of hazardous reactions	Stable under normal conditions. May react violently with incompatible substances.
Conditions to avoid, including static discharge, shock or vibration	Avoid moisture. Exposure to light. Avoid excessive heat.
Incompatible materials	Strong oxidizing agents. Strong reducing agents. Strong bases. Organic materials. Ammonia, Sulfures, Lead, Metals, Copper.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. Hydrogen chloride gas, Mercury/mercury oxides.

SECTION 11 - TOXICOLOGICAL INFORMATION

MERCURY CHLORIDE

Routes of exposure	Ingestion, inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Irritation and burns that may cause permanent eye damage.
- Skin	Severe irritation and tissue burns. May be harmful if absorbed through skin.
- Inhalation	May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. Irritation of the mucous membranes and respiratory tract. Edema of the larynx and bronchi.
Acute toxicity (Ingestion)	Irritation and burning of the mouth, throat, esophagus and abdominal wall. dysphagia, kidney damage, abdominal pain, gastric bleeding, cramps, bloody diarrhea, hematemesis, nausea and vomiting, prostration, convulsions, stupor, circulatory collapse, loss of consciousness, coma and can lead to death. Ingesting 1 to 2 g can be fatal in humans.
Chronic exposure effects / symptoms	Suspected toxic for reproduction for humans. The product is extremely destructive of the tissues of the mucous membranes, upper respiratory tract, eyes and skin., Cough, Respiratory insufficiency, Migraine, Nausea. The use of a gastric wash or emesis is contraindicated. Possible perforation of the stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to delicate tissues and the danger of perforation. 504/5000 Burning sensation, mercurialentis (brown-yellow coloring of the lens), kidney damage (proteinuria and hypoproteinuria), chest pain, cough, dyspnea, laryngitis, stomatitis, headache, vertigo, confusion, irritability, insomnia, memory problems, prostration, tremors, fatigue, weight loss and loss of appetite, convulsions, nausea and vomiting. Prolonged exposure to this product is likely to cause abnormalities of the reproductive system in humans.
DL50 (specify species and route of entry)	LD50 Oral - Rat - 1 mg/kg LD50 Dermal - Rabbit - 41 mg/kg
CL50 (specify species and route of entry)	LC50 - Inhalation - Data not available.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	LC50 - Oncorhynchus mykiss (rainbow trout) - 0.016 mg/L - 96 h LC50 - Pimephales promelas (fathead minnow) - 0.155 mg/L - 96 h EC50 - Daphnia magna (Water flea) - 0.002 mg/L - 48 h
Persistence and degradability	Soluble in water. Persistence is unlikely based on the information provided.
Bioaccumulative potential	Bioaccumulation Pimephales promelas (fathead minnow) -. Bioconcentration factor (BCF): 5,680.
Mobility in soil	Probable mobility due to its solubility in water.
Other adverse effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic 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	1624
UN Proper shipping name	CHLORURE DE MERCURE II
Transport hazard class(es)	6.1 Toxic substances
Packing group	II
Limited quantity index	0,5kg
ERAP Index	-
Special precautions	-

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Acute toxicity - Dermal category 1 Acute toxicity - Oral category 2 Skin corrosion/irritation - Skin corrosion category 1B Serious eye damage/eye irritation - Serious eye damage category 1 Reproductive toxicity category 2 Specific Target Organ Toxicity - Repeated exposure category 1 Germ cell mutagenicity 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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