

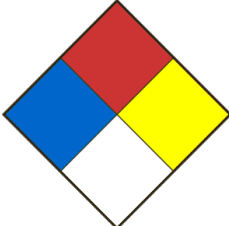


SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier MANGANESE (II) CHLORIDE (ANHYDROUS)		Product Use Laboratory use	
Chemical formula MnCl ₂		Product code MP-0216	Molar weight 125,84
Chemical name / Commercial name / Synonymous MANGANESE DICHLORIDE, MANGANESE CHLOR, CHLORURE MANGANEUX, DICHLORURE DE MANGANESE			
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 4/23/2025	SDS Prepared by Laboratoire MAT	E-Mail labmat@labmat.com	

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Serious eye damage/eye irritation - Serious eye damage category 1 Specific Target Organ Toxicity - Repeated exposure category 2 Acute toxicity - Oral category 3
Signal Word	DANGER
Hazards statements (H)	H301 Toxic if swallowed. H318 Causes serious eye damage. H373 May cause damage to organs through prolonged or repeated exposure.
Precautionary statements (P)	P260 Do not breathe mists, gases, vapors and other fumes, or the product itself. 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. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. 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). P330 Rinse mouth. 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.
PICTOGRAMS	
Other dangers	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Significant; 4=Extreme)
	Health 2 Fire 0 Reactivity 1 Special danger

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%P/P)
Chlorure de manganèse (II)	7773-01-5	<=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. Never give anything by mouth to an unconscious person. Consult a physician.
Most important symptoms and effects (acute and delayed)	Main symptoms of high exposure: Headaches. Sleep disorder. Sensation of euphoria. Eyes irritation. 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. - Manganese/manganese 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 / Personal precautions, protective equipment	Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment. When handling, wear appropriate safety equipment. Use NIOSH cartridge respiratory protection for larger spills. (Reference Section 8 for protective equipment to be used.) 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.
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SECTION 07 - HANDLING AND STORAGE

Conditions for safe storage	Keep container tightly closed in a dry and well-ventilated place. Keep container tightly closed and store away from moisture and incompatible products (ref. section 10). Hygroscopic.
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. 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	Value	Basis
MANGANESE (II) CHLORIDE ANHYDROUS	7773-01-5	TWA	0.2 mg/m ³	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
Remarks				
		VEMP	0.2 mg/m ³	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		TWA	0.02 mg/m ³	Canada. British Columbia OEL
				Adverse effect on reproduction
		TWA	0.2 mg/m ³	Canada. British Columbia OEL
				Adverse effect on reproduction

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.
Appearance	Billes rose/rouge clair.
Odour	inodore.
Odour threshold	Data not available
pH	5.5 à 25 g/l à 20 °C.
Melting point / Freezing point	652°C
Initial boiling point	1190°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	Data not available
Vapour density	Data not available
Relative density	2.98g/ml
Solubility	Soluble dans l'eau et l'éthanol. Insoluble dans l'éther..
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	Stable under recommended storage conditions.
Possibility of hazardous reactions	Avoid dust formation. May react violently with incompatible substances.
Conditions to avoid, including static discharge, shock or vibration	This product quickly absorbs moisture from the air. Avoid excessive heat.
Incompatible materials	Strong reducing agents (potassium, sodium, zinc, metal hydrides), strong acids, heat and humidity.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. - Hydrogen chloride gas, Manganese/manganese oxides.

SECTION 11 - TOXICOLOGICAL INFORMATION

MANGANESE (II) CHLORIDE (ANHYDROUS)

Routes of exposure	Ingestion and inhalation.
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, drowsiness, nausea and vomiting.
Acute toxicity (Ingestion)	Irritation of the mucous membranes. Gastrointestinal disorders, cramps, diarrhea, headache, dizziness, tremors, convulsions, nausea and vomiting.
Chronic exposure effects / symptoms	Manganism. Burning sensation, dermatitis, nervous disorders, chest pain, cough, dyspnea, laryngitis, headache, dizziness, drowsiness, confusion, irritability, fatigue, tremors, akinesia, muscle weakness, weight loss and loss of appetite, nausea and vomiting. Target organs: Brain. Men who have been exposed to manganese dust show decreased fertility. Chronic manganese poisoning acts primarily on the central nervous system. The first symptoms are including languor, somnolence and weakness of the legs. In more advanced cases, the face remains impassive and seems to wear a mask, and there is predominance of emotional disorders including laughing uncontrollable and gait jerky accompanied by falls. A high percentage of pneumonia is found among workers exposed to dust and vapors of certain manganese compounds. Any prolonged or repeated inhalation at high levels concentrations may result in: Pneumonia.
DL50 (specify species and route of entry)	LD50 Oral - Rat - 250 mg/kg. LD50 Dermal: Data not available.
CL50 (specify species and route of entry)	CL50 inhalation - Rat 4.45 mg/L - 4 h.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	LC50 - <i>Oryzias latipes</i> : >1000 mg/l - 48 h EC50 - <i>Daphnia magna</i> (Water flea) - 9.8 mg/L - 48 h. EC50 - <i>Pseudokirchneriella subcapitata</i> (green algae) - Inhibition of growth - 3.83 mg/L - 72 h.
Persistence and degradability	Persistence is unlikely based on information available.
Bioaccumulative potential	Data not available.
Mobility in soil	Probable mobility in the environment due to its solubility in water.
Other adverse effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects. 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	3288
UN Proper shipping name	SOLIDE INORGANIQUE TOXIQUE, N.S.A (chlorure de manganèse II)
Transport hazard class(es)	6.1 Toxic substances
Packing group	III
Limited quantity index	5kg
ERAP Index	-
Special precautions	16

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Serious eye damage/eye irritation - Serious eye damage category 1 Specific Target Organ Toxicity - Repeated exposure category 2 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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