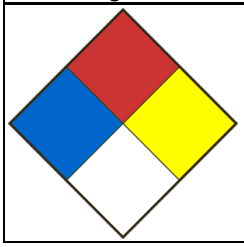
Centre Anti-Poison pour le Québec: (800) 463-5060
Tél. (Qc): (418) 660-8666 / 800-890-8666
Fax. (Qc): (418) 660-8998

SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier COPPER (II) CHLORIDE DIHYDRATE		**Product Use** Laboratory use	
Chemical formula $CuCl_2.2H_2O$		**Product code** CP-0157	**Molar weight** 170,48
Chemical name / Commercial name / Synonymous COPPER (II) CHLORIDE DIHYDRATE, CUPRIC CHLORIDE 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 7/23/2019	**SDS Prepared by** Laboratoire MAT	**E-Mail** labmat@labmat.com	

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Acute toxicity - Oral category 4 Acute toxicity - Dermal category 4 Skin corrosion/irritation - Skin irritation category 2 Serious eye damage/eye irritation - Serious eye damage category 1 Corrosive to metals-Category 1
Signal Word	DANGER
Hazards statements (H)	H290 May be corrosive to metals. H302 Harmful if swallowed. H312 Harmful in contact with skin. H315 Causes skin irritation. H318 Causes serious eye damage.
Precautionary statements (P)	P234 Keep only in original container. 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. P302 + P352 IF ON SKIN: Wash with plenty of soap and water. 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 doctor/physician. P312 Call a POISON CENTER or doctor/physician if you feel unwell. P321 Specific treatment (see section 4 of the SDS and on this label). P330 Rinse mouth. P332 + P313 If skin irritation occurs: Get medical advice/attention. P362 + P364 Take off contaminated clothing and wash it before reuse. P390 Absorb spillage to prevent material damage. P406 Store in a corrosion resistant container / or a container with corrosion resistant liner. 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** 2 **Fire** 0 **Reactivity** 0 **Special danger**

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Chlorure cuivrique (Dihydraté)	10125-13-0	<=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. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician.
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	Not flammable or combustible.
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. - Hydrogen chloride gas, copper oxides.
Special fire and explosion hazards	Cupric chloride reacts violently with potassium and metallic sodium. Contact with acetylene may result in the formation of copper acetylide, an explosive, unstable, shock-sensitive compound. 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. Discharge into the environment must be avoided.

SECTION 07 - HANDLING AND STORAGE

Conditions for safe storage	Hygroscopic. Store in a well-ventilated area. Store in a cool, dry place. Keep container tightly closed and store away from heat, moisture, and incompatible products.
Methods of handling	In the presence of moisture, this product can corrode metals. Also, only use plastic utensils to handle this product. Bottle in glass or plastic containers. 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.

SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace control parameters

Components	CAS-No.	Value	Control Citric acid	
Cupric chloride (Dihydrate)	10125-13-0	No data available	TLV, TWA, STEL	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		No data available	TLV, TWA, STEL	Canada. British Columbia OEL
		No data available	TLV, TWA, STEL	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants

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 bleu-vert..
Odour	inodore.
Odour threshold	Data not available
pH	Solution aqueuse 5% = pH 3.0 - 3.8.
Melting point / Freezing point	
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	2.51g/cm³
Solubility	Très soluble dans l'eau et 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. Hygroscopic.
Possibility of hazardous reactions	Stable under normal conditions.
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	Avoid excessive heat. Avoid moisture. This product quickly absorbs moisture from the air.
Incompatible material	Acetylene, potassium and sodium metal, alkali metals and moisture.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. - Hydrogen chloride gas, Copper oxides

SECTION 11 - TOXICOLOGICAL INFORMATION

COPPER (II) CHLORIDE DIHYDRATE

Routes of exposure	Inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Severe irritation may result in copper deposition and opacification of ocular tissue (Wilson's disease).
- Skin	Irritation and dermatitis. Intense and prolonged exposure may cause severe irritation and burns to exposed surfaces.
- Inhalation	Irritation of the mucous membranes and respiratory tract. Nervous disorders, chest pain, cough, dyspnea, headache, dizziness, tearing, sweating, salivation, nausea and vomiting.
Acute toxicity (Ingestion)	Irritation of the mucous membranes. Abdominal pain, liver (cirrhosis) and kidney damage, cramps, diarrhea, headache, dizziness, sweating, salivation, convulsions, tachycardia, hypotension, coma and can lead to death.
Chronic exposure effects / symptoms	Burning sensation, dermatitis, conjunctivitis, eye and lung damage, nerve disorders, chest pain, cough, dyspnoea, laryngitis, headache, dizziness, confusion, irritability, metallic taste in the mouth, sweating, salivation, anemia hemolytic, fever, weight loss and loss of appetite, nausea and vomiting.
DL50 (specify species and route of entry)	LD50 Oral - Rat - 336 mg/kg LD50 Dermal - Rat - male -> 2,000 mg / kg LD50 Dermal - Rat - female - 1,224 mg / kg
CL50 (specify species and route of entry)	LC50 - Inhalation - Data not available.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	Toxicity to fish: LC50 - Cyprinus carpio (Carp) - 0.12 - 0.23 mg / l - 96.0 h LC50 - Lepomis macrochirus - 0.9 mg / l - 96.0 h NOEC - Ictalurus punctatus - 0.013 mg / l - 60 d
Persistence and degradability	May persist based on information provided. The methods for determining the biological degradability are not applicable to inorganic substances.
Bioaccumulative potential	Data not available.
Mobility in soil	Probable mobility in the environment due to its solubility in water.
Other adverse effects	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Avoid release to the environment.

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	2802
UN Proper shipping name	CHLORURE DE CUIVRE
Transport hazard class(es)	8 Corrosive substances
Packing group	III
Limited quantity index	5kg
ERAP Index	-
Special precautions	-

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Acute toxicity - Oral category 4 Acute toxicity - Dermal category 4 Skin corrosion/irritation - Skin irritation category 2 Serious eye damage/eye irritation - Serious eye damage category 1 Corrosive to metals-Category 1

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.

Last Update: 7/23/2019