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

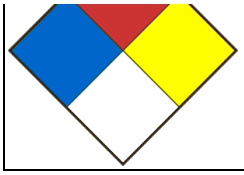
SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier TIN(II) CHLORIDE (DIHYDRATE)		**Product Use** Laboratory use	
Chemical formula $SnCl_2.2H_2O$		**Product code** ER-0149	**Molar weight** 225,63
Chemical name / Commercial name / Synonymous TIN (II) CHLORIDE DIHYDRATE, CHLORURE STANNEUX DIHYDRATE, DICHLORURE D'ÉTAIN DIHYDRATE, PROTOCHLORURE D'ÉTAIN 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 9/1/2020	**SDS Prepared by** Laboratoire MAT	**E-Mail** labmat@labmat.com	

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Skin corrosion/irritation - Skin corrosion category 1B Serious eye damage/eye irritation - Serious eye damage category 1 Reproductive toxicity category 2 Acute toxicity - Inhalation category 4 Respiratory or skin sensitization - Skin sensitize category 1 Germ cell mutagenicity category 2 Specific Target Organ Toxicity - Repeated exposure category 2 Specific target organ toxicity - Single exposure category 3
Signal Word	DANGER
Hazards statements (H)	H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H317 May cause an allergic skin reaction. H332 Harmful if inhaled. H341 Suspected of causing genetic defects . H361 Suspected of damaging fertility or the unborn child. H335 May cause respiratory irritation. H373 May cause damage to organs through prolonged or repeated exposure.
Precautionary statements (P)	P260 Do not breathe dust / fume / gas / mist / vapours / spray. P264 Wash the areas of the body that have been in contact with the product after handling. P280 Wear protective gloves/protective clothing/eye protection/face protection. P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. 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. P310 Immediately call a POISON CENTER or doctor/physician. P321 Specific treatment (see section 4 of the SDS and on this label). P363 Wash contaminated clothing before reuse. P405 Store locked up. P501 Dispose of contents/container in accordance with local / regional / national / international regulations or contact a specialist waste disposal company. P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P261 Avoid breathing dust / fume / gas / mist / vapours / spray. P271 Use only outdoors or in a well-ventilated area. P308 + P313 IF exposed or concerned: Get medical advice/attention. P312 Call a POISON CENTER or doctor/physician if you feel unwell. P362 + P364 Take off contaminated clothing and wash it before reuse. P314 Get medical advice/attention if you feel unwell. P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P272 Contaminated work clothing should not be allowed out of the workplace. P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
PICTOGRAMS	
Other dangers	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Significant; 4=Extreme)
	**Health** 3 **Fire** 0

	**Reactivity** 1 **Special danger**

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Chlorure d'étain (II) dihydrate	10025-69-1	<=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, drink water and 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	Do not use a concentrated stream of water that could spread fire.
Hazardous combustion / decomposition products	Hazardous decomposition products formed under fire conditions. - Hydrogen chloride gas, Tin/tin oxides
Special fire and explosion hazards	Tin (II) chloride dihydrate reacts violently in the presence of the following products: alkalis, bromine trifluoride, calcium carbide, ethylene oxide, hydrazine hydrate, hydrogen peroxide, nitrates metallic and organic, potassium and metallic sodium. Violent reaction with calcium acetylide if initiated by a flame. 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. Air and moisture sensitive. Do not store in metal containers. It is strongly recommended to store the product under an inert gas. Keep container tightly closed and store away from heat, air, moisture and incompatible products. Location for corrosive material.
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 or vapor is formed. Use only under a fume hood. Avoid ingestion and inhalation. Wear personal protective equipment when handling. Always ensure good ventilation. Transport according to TDG (ref Section 14)

SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace control parameters

Components	CAS-No.	Value	Control parameters	Basis
Stannous chloride	10025-69-1	TWA	2.000000	Canada. Alberta, Occupational Health and Safety
Remarks				
		TWA	2.000000 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		TWAEV	2.000000 mg/m3	Canada. Ontario OELs
		TWA	2.000000 mg/m3	Canada. British Columbia OEL
		TWA	2.000000 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
	TWA 2.000000 mg/m3 Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)			
		TWAEV	2 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		TWAEV	2.000000 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		TWAEV	2.000000 mg/m3	Canada. Ontario OELs
		TWA	2.000000 mg/m3	Canada. British Columbia OEL
		TWA	2.000000 mg/m3	Ontario Table of Occupational Exposure Limits made under the Occupational Health and Safety Act.
		TWA	2 mg/m3	Ontario Table of Occupational Exposure Limits made under the Occupational Health and Safety Act.
	TWA 2 mg/m3 Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)			
		TWA	2 mg/m3	Canada. British Columbia OEL
		TWA	2 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
		TWA	2.000000 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
		TWA	2 mg/m3	USA. ACGIH Threshold Limit Values (TLV)

Data source	Sigma-Aldrich.
Ventilation	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. 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	Poudre cristalline de couleur blanche.-
Odour	inodore.
Odour threshold	Data not available
pH	Donnée non disponible..
Melting point / Freezing point	37-38°C (dec)
Initial boiling point	652 °C @ 1,010.8 hPa-
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	2.71g/cm³
Solubility	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.
Possibility of hazardous reactions	Stable under normal conditions.
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	Avoid dust formation. This product absorbs oxygen from the air to form the oxychloride which is insoluble. Exposure to air or humidity may affect the quality of the product. Avoid contact with incompatible materials. Strong reducing agent-contact with other substances can cause fire. Avoid excessive heat.
Incompatible material	Strong oxidizing agents (nitric acid, perchloric acid, peroxides, chlorates and perchlorates), alkalis, strong bases, bromine trifluoride, calcium carbide, ethylene oxide, hydrazine hydrate, metals, metallic and organic nitrates, potassium and metallic sodium, air and moisture. Violent reaction with calcium acetylide if initiated by a flame.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. - Hydrogen chloride gas, Tin/tin oxides

SECTION 11 - TOXICOLOGICAL INFORMATION

TIN(II) CHLORIDE (DIHYDRATE)

Routes of exposure	Ingestion, inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Severe irritation and may result in inflammation of the conjunctiva.
- Skin	Irritation and dermatitis.
- Inhalation	Irritation of the mucous membranes and respiratory tract. Nervous disorders, chest pain, cough, dyspnea, headache, dizziness, nausea and vomiting. Prolonged inhalation may cause chemical pneumonitis associated with pulmonary edema that may cause death.
Acute toxicity (Ingestion)	Irritation and burning of the mucous membranes. Dysphagia, abdominal pain, cramps, diarrhea, headache, dizziness, sweating, salivation, convulsions, nausea and vomiting.
Chronic exposure effects / symptoms	Burning sensation, dermatitis, conjunctivitis, nervous disorders, chest pain, cough, dyspnoea, laryngitis, 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 - 700 mg/kg. LD50 Dermal - Data not available.
CL50 (specify species and route of entry)	LC50 Inhalation - Rat - male and female - 4 h - 2 mg / l

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	Toxicity to daphnia and other aquatic invertebrates: EC50 = 19.5 mg/L/48h Toxicity to algae: EC50r - Skeletonema costatum (marine algae) - 0.21 mg / l - 72 h
Persistence and degradability	Soluble in water. Persistence is unlikely based on information provided.
Bioaccumulative potential	Data not available.
Mobility in soil	Probable mobility in the environment due to its solubility in water.
Other adverse effects	The product contains the following substances which are dangerous for the environment. Harmful to aquatic life with long lasting effects. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful effect by pH change. All littering must be avoided in 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	3260
UN Proper shipping name	SOLIDE INORGANIQUE CORROSIF, ACIDE, N.S.A. (Chlorure d'étain (II))
Transport hazard class(es)	8 Corrosive substances
Packing group	II
Limited quantity index	1kg
ERAP Index	-
Special precautions	16

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Skin corrosion/irritation - Skin corrosion category 1B Serious eye damage/eye irritation - Serious eye damage category 1 Reproductive toxicity category 2 Acute toxicity - Inhalation category 4 Respiratory or skin sensitization - Skin sensitize category 1 Germ cell mutagenicity category 2 Specific Target Organ Toxicity - Repeated exposure category 2 Specific target organ toxicity - Single exposure category 3

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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