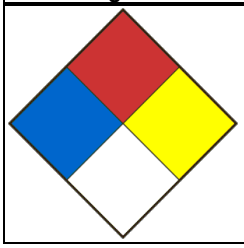
Centre Anti-Poison pour le Québec: (800) 463-5060
Tél. (Qc): (418) 660-8666 / 800-890-8666
Fax. (Qc): (418) 660-8998

SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier ZINC CHLORIDE (d:2.0g/ml)		**Product Use** Laboratory use	
Chemical formula $ZnCl_2$		**Product code** ZS-0200	**Molar weight** 136,28
Chemical name / Commercial name / Synonymous ZINC CHLORIDE ANHYDROUS, DICHLORURE DE ZINC ANHYDRE, BUTTER OF ZINC			
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 1/25/2019	**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 Acute toxicity - Oral category 4 Skin corrosion/irritation - Skin corrosion category 1
Signal Word	DANGER
Hazards statements (H)	H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage.
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. P270 Do no eat, drink or smoke when using this product. P280 Wear protective gloves/protective clothing/eye protection/face protection. P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. 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). P330 Rinse mouth. 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.
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 de zinc Eau	7646-85-7 7732-18-5	75 Balance

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, give water to drink. 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. - Zinc/zinc oxides. Hydrogen chloride gas.
Special fire and explosion hazards	Zinc chloride mixed with metal chlorides and powdered zinc may ignite. Risk of explosion on contact with metallic potassium. 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. Absorb the product with sand or vermiculite. Dilute residues with water, clean and rinse. Ensure a good ventilation of the premises. Dispose of residues in a container for disposal of hazardous materials. When handling, wear suitable safety equipment. Use breathing apparatus if necessary. Avoid breathing vapours, mist or gas.

SECTION 07 - HANDLING AND STORAGE

Conditions for safe storage	Store in a cool, dry place. Keep container tightly closed and store away from heat, moisture, and incompatible products. Hygroscopic.
Methods of handling	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

Composants	No.-CAS	Valeur	Paramètres de contrôle	Base
Zinc chloride	7646-85-7	TWA	1.000000 mg/m3	Canada. LEP Colombie Britannique
		STEL	2.000000 mg/m3	Canada. LEP Colombie Britannique
		TWA	1.000000 mg/m3	Canada. Alberta, Code de santé et de sécurité au travail (tableau 2 : VLE)
Remarques	La limite d'exposition professionnelle est basée sur les effets de l'irritation et son ajustement pour compenser les emplois du temps de travail inhabituels n'est pas nécessaire			
		STEL	2.000000 mg/m3	Canada. Alberta, Code de santé et de sécurité au travail (tableau 2 : VLE)
	La limite d'exposition professionnelle est basée sur les effets de l'irritation et son ajustement pour compenser les emplois du temps de travail inhabituels n'est pas nécessaire			
		TWA	1.000000 mg/m3	Canada. LEP Colombie Britannique
		STEL	2.000000 mg/m3	Canada. LEP Colombie Britannique
		VEMP	1.000000 mg/m3	Québec. Règlement sur la santé et la sécurité du travail, Annexe 1 Partie 1: Valeurs d'exposition admissibles des contaminants de l'air
		TWA	1.000000 mg/m3	Canada. Alberta, Code de santé et de sécurité au travail (tableau 2 : VLE)
	La limite d'exposition professionnelle est basée sur les effets de l'irritation et son ajustement pour compenser les emplois du temps de travail inhabituels n'est pas nécessaire			
		STEL	2.000000 mg/m3	Canada. Alberta, Code de santé et de sécurité au travail (tableau 2 : VLE)
	La limite d'exposition professionnelle est basée sur les effets de l'irritation et son ajustement pour compenser les emplois du temps de travail inhabituels n'est pas nécessaire			
		VEMP	1.000000 mg/m3	Québec. Règlement sur la santé et la sécurité du travail, Annexe 1 Partie 1: Valeurs d'exposition admissibles des contaminants de l'air

Data source	Sigma-Aldrich.
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	Liquid.
Appearance	Liquide incolore-
Odour	Donnée non disponible.
Odour threshold	Data not available
pH	Solution aqueuse = pH ~4-5.
Melting point / Freezing point	Data not available
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
Solubility	Très soluble dans l'eau (851 g/L). Soluble dans l'alcool, l'acétone et la glycérine.
Vapour density	Data not available
Relative density	2.0g/ml
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)	This product becomes deliquescent if exposed to moisture
Incompatible material	Strong oxidizing agents (nitric acid, perchloric acid, peroxides, chlorates and perchlorates), metallic potassium and moisture.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. Toxic vapors of hydrogen chloride. - Zinc/zinc oxides.

SECTION 11 - TOXICOLOGICAL INFORMATION

ZINC CHLORIDE

Routes of exposure	Inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Severe irritation and burns that may cause permanent eye damage.
- Skin	May be harmful if absorbed through skin. Severe irritation and dermatitis. Intense dust exposure can lead to boils (furunculosis).
- Inhalation	May be harmful if inhaled. The product is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. Nervous disorders, chest pain, cough, dyspnea, headache, dizziness, fever, seizures, respiratory acidosis, bronchopneumonia, and pulmonary edema that may result in death.
Acute toxicity (Ingestion)	Toxic if swallowed. Irritation of the mucous membranes. Burns in the mouth and throat, dysphagia, abdominal pain and leg cramps, diarrhea, headache, dizziness, cold sweat, hematuria, convulsions, hypotension, nausea and vomiting.
Chronic exposure effects / symptoms	Burning sensation, dermatitis, furunculosis, conjunctivitis, nervous disorders, lung damage, chest pain, cough, dyspnoea, laryngitis, headache, dizziness, confusion, irritability, tachyphemia, sweating, salivation, fatigue, fever, nausea and vomiting.
DL50 (specify species and route of entry)	LD50 Oral - Rat - 350 mg/kg. DL50 Oral - Mouse - 1260 mg/kg. LD50 Dermal - Rat - 2000 mg/kg.
CL50 (specify species and route of entry)	LC50 - Inhalation - Rat - 1.975 mg/L air - 10 min.

SUMMARY

Acute exposure effects / Symptoms:	By exposure routes below.
Ingestion	To our knowledge, the product has not been fully evaluated
Inhalation	To our knowledge, the product has not been fully evaluated
Skin	To our knowledge, the product has not been fully evaluated
Eyes	To our knowledge, the product has not been fully evaluated
Chronic exposure effects / Symptoms:	To our knowledge, the product has not been fully evaluated
ETA Mix (Estimated Acute Toxicity)	LD50 Oral : 469 mg/kg - Rat LD50 Dermal: 2680 mg/kg - Rat LC50 Inhalation: 2646 mg/L- 10min - Rat

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	Toxicity to fish: LC50: Cyprinus carpio (Carpe) - 0.4 - 2.2 mg/l - 96.0 h. Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia magna (Water flea) - 0.2 mg/l - 48 h Toxicity to algae: Inhibition of growth LOEC - Pseudokirchneriella subcapitata - 12.5 mg/l - 96 h
Persistence and degradability	Data not available.
Bioaccumulative potential	Bioaccumulation Pimephales promelas (fathead minnow) - 63 d Bioconcentration factor (BCF): 21,000.
Mobility in soil	Data not available.
Other adverse effects	Very toxic to aquatic life. Causes long-term adverse effects. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

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	1840
UN Proper shipping name	CHLORURE DE ZINC EN SOLUTION
Transport hazard class(es)	8 Corrosive substances
Packing group	III
Limited quantity index	5L
ERAP Index	-
Special precautions	-

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Serious eye damage/eye irritation - Serious eye damage category 1 Acute toxicity - Oral category 4 Skin corrosion/irritation - Skin corrosion 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: 1/25/2019