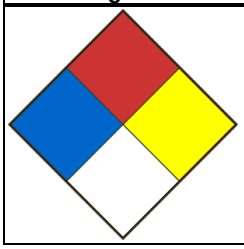
Centre Anti-Poison pour le Québec: (800) 463-5060
Tél. (Qc): (418) 660-8666 / 800-890-8666
Fax. (Qc): (418) 660-8998

SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier POTASSIUM CHLORATE		**Product Use** Laboratory use	
Chemical formula $KClO_3$		**Product code** PP-0199 ; PR-0175	**Molar weight** 122,55
Chemical name / Commercial name / Synonymous POTASSIUM CHLORATE, OXYMURIATE DE POTASSIUM, CHLORATE DE POTASH, POTCRATE, SEL DE TARTARE			
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 8/19/2019	**SDS Prepared by** Laboratoire MAT	**E-Mail** labmat@labmat.com	

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Oxidizing solids category 1 Acute toxicity - Oral category 4 Acute toxicity - Inhalation category 4
Signal Word	DANGER
Hazards statements (H)	H271 May cause fire or explosion; strong oxidiser. H302 Harmful if swallowed. H332 Harmful if inhaled.
Precautionary statements (P)	P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking. P220 Keep/Store away from clothing and combustible materials. P261 Avoid breathing 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. P283 Wear fire/flame resistant/retardant clothing. P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P306 + P360 IF ON CLOTHING: rinse immediately contaminated clothing and skin with plenty of water before removing clothes. P312 Call a POISON CENTER or doctor/physician if you feel unwell. P330 Rinse mouth. P370 + P378 In case of fire: Use water spray or alcohol-resistant foam, or dry powder or carbon dioxide for extinction. P371 + P380 + P375 In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion. P420 Store away from other materials. 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** 3 **Special danger** OX

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Chlorate de potassium	3811-04-9	<=100

SECTION 04 - FIRST AID MEASURES

Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. If irritation persists, seek medical attention.
Skin contact	Wash off with soap and plenty of water. Remove soiled clothing. Take victim immediately to hospital.
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 induce vomiting. Never give anything by mouth to an unconscious person. Get immediate medical help.
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	Non flammable. Risk of fire or explosion if heated or crushed in presence of combustible products.
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 - Potassium oxides. Chlorine gas. Oxygen.
Special fire and explosion hazards	Powerful oxidizer Contact with combustible products may cause fire. Potassium chlorate mixed with arsenic, carbon, hydrocarbons, phosphorus, metal phosphides (aluminum, silver, copper, magnesium, mercury, zinc, etc.), fine metal powders (aluminum, copper, magnesium, zinc), sulfur, metal sulfides and thiocyanates can explode if initiated by friction, shock or heat. Risk of ignition or explosion on contact with the following products: gallic acid, nitric acid, sulfuric acid, tannic acid, ammonium chloride, ammonium hydroxide, sodium sulphate ammonium, aqua regia, boron, sawdust, charcoal, chromium, cyanides, flour, fluorine, hydrogen iodide, metal hydrides, lactose, bioxide of manganese, potassium hydroxide, sodium amide, sulfur dioxide, sugars, fabrics, titanium, peat and zirconium. May react violently with incompatible products (Ref Section 10).
Special protective equipment and precautions for firefighters	Wear self contained breathing apparatus for fire fighting if necessary.

SECTION 06 - ACCIDENTAL RELEASE MEASURES

Methods and materials for containment and cleaning up / Personnal precautions, protective equipment	Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

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, combustible and organic products. Keep container tightly closed in a dry and well-ventilated place.
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. Keep away from sources of ignition - No smoking. 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.	Control	Value	Basis
Potassium chlorate	3811-04-9	TLV, TWA, STEL	No data available	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TLV, TWA, STEL	No data available	Canada. British Columbia OEL
		TLV, TWA, STEL	No data available	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. 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	saline.
Odour threshold	Data not available
pH	5.0 -6.5 à 61.3 g/l à 25°C.
Melting point / Freezing point	356°C-
Initial boiling point	400°C (dec)
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	2.320g/cm³
Solubility	Soluble dans l'eau bouillante (8.61% @25°C,). Insoluble dans l'alcool.
Partition coefficient water/n-octanol	Data not available
Auto-ignition temperature	Donnée non disponible-
Decomposition temperature	400°C
Viscosity	Data not available

SECTION 10 - STABILITY AND REACTIVITY

Reactivity	Oxidizer: risk of fire in case of contact with combustible / organic substance.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Oxidizer.
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	Avoid contact with incompatible materials and extreme temperatures. Heat, flames and sparks.
Incompatible material	Strong reducing agents (potassium, sodium, metal hydrides), strong acids, alcohols, ammonium hydroxide, cyanides, hydrocarbons, hypophosphites, iodides, organic and combustible materials, phosphinates, phosphides, potassium hydroxide, fine metal powders, sulfur, sugars, sulphites, sulphides, thiocyanates, heat and moisture.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. - Hydrogen chloride gas Gaseous chlorine. - Potassium oxides. Oxygen

SECTION 11 - TOXICOLOGICAL INFORMATION

POTASSIUM CHLORATE

Routes of exposure	Ingestion, inhalation, skin and eyes.
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, cough, dyspnea, headache, dizziness, nausea and vomiting.
Acute toxicity (Ingestion)	Irritation of the mucous membranes. Abdominal pain, liver and kidney damage, cramps, diarrhea, headache, dizziness, convulsions, methemoglobinemia, nausea and vomiting. Complications can occur a few days after ingestion, including blood disorders (hemolysis and hemoglobinuria).
Chronic exposure effects / symptoms	Burning sensation, dermatitis, nervous disorders, kidney damage, chest pain, coughing, dyspnea, laryngitis, headache, dizziness, confusion, irritability, fatigue, anemia, hemoglobinemia, nausea and vomiting.
DL50 (specify species and route of entry)	LD50 Oral - rat - 1,870 mg/kg. LD50 Dermal: Data not available
CL50 (specify species and route of entry)	LC50 Inhalation - Rat - 4h - 5.1 mg/L.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	Toxicity to algae: Static test EC50 - Nitzschia closterium - 2.8 mg/l - 72 h
Persistence and degradability	Data not available.
Bioaccumulative potential	Data not available.
Mobility in soil	Data not available.
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.

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	1485
UN Proper shipping name	CHLORATE DE POTASSIUM
Transport hazard class(es)	5.1 Oxidizing substances
Packing group	II
Limited quantity index	1kg
ERAP Index	-
Special precautions	-

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Oxidizing solids category 1 Acute toxicity - Oral category 4 Acute toxicity - Inhalation category 4

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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