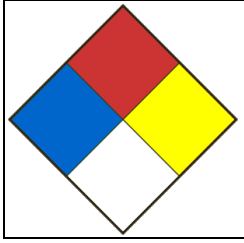
Centre Anti-Poison pour le Québec: (800) 463-5060
Tél. (Qc): (418) 660-8666 / 800-890-8666
Fax. (Qc): (418) 660-8998

SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier POTASSIUM CYANIDE		**Product Use** Laboratory use	
Chemical formula KCN		**Product code** PR-0178 ; PP-0166	**Molar weight** 65,12
Chemical name / Commercial name / Synonymous POTASSIUM CYANIDE, CYANIDE OF POTASSIUM, CYANURE, HYDROCYANIC ACID POTASSIUM SALT, KCN, POTASSIUM IMINOMETHANIDE			
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 10/17/2019	**SDS Prepared by** Laboratoire MAT	**E-Mail** labmat@labmat.com	

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Specific Target Organ Toxicity - Single exposure category 1 Specific Target Organ Toxicity - Repeated exposure category 1 Aspiration hazard category 1 Acute toxicity - Oral category 1 Acute toxicity - Dermal category 1 Acute toxicity - Inhalation category 1 Corrosive to metals-Category 1
Signal Word	DANGER
Hazards statements (H)	H300 Fatal if swallowed. H304 May be fatal if swallowed and enters airways. H310 Fatal in contact with skin. H330 Fatal if inhaled. H370 Causes damage to Heart, Testicle, Brain. H372 Causes damage to organs through prolonged or repeated exposure. H290 May be corrosive to metals.
Precautionary statements (P)	P260 Do not breathe dust / fume / gas / mist / vapours / spray. P262 Do not get in eyes, on skin, or on clothing. 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. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/protective clothing/eye protection/face protection. P284 Wear respiratory protection. P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P308 + P311 IF exposed or concerned: Call a POISON CENTER or a doctor. P310 Immediately call a POISON CENTER or doctor/physician. P314 Get medical advice/attention if you feel unwell. P320 Specific treatment is urgent (see section 4 on this SDS on this label). P321 Specific treatment (see section 4 of the SDS and on this label). P330 Rinse mouth. P331 Do NOT induce vomiting. P361 + P364 Take off immediately all contaminated clothing and wash it before reuse. P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up. P501 Dispose of contents/container in accordance with local / regional / national / international regulations or contact a specialist waste disposal company. P234 Keep only in original container. P390 Absorb spillage to prevent material damage. P406 Store in a corrosion resistant container / or a container with corrosion resistant liner.
PICTOGRAMS	
Other dangers	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)
	**Health** 4 **Fire** 0 **Reactivity** 1 **Special danger**

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Cyanure de potassium	151-50-8	<=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	Do NOT induce vomiting. 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)	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	Dry chemical powder, dry sand, acohol resistant foam.
Unsuitable extinguishing media	Do not use water. Do not use carbon dioxide.
Hazardous combustion / decomposition products	Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx), Potassium oxides, Hydrogen cyanide (hydrocyanic acid).
Special fire and explosion hazards	Potassium cyanide can form explosive compounds of a spontaneous nature with chlorates, nitrates and the mixture of nitrogen trichloride and ammonia. Direct contact of water with this product may cause decomposition to hydrogen cyanide, a very toxic gas with flammable vapors. Releases a deadly gas (hydrogen cyanide) in contact with acids as well as certain acid salts. 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. Do NOT rinse with water. 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	Keep container tightly closed in a dry and well-ventilated place. Never allow product to get in contact with water during storage. Do not store near acids. Do not store in aluminum containers.
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.

SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace control parameters

Components	CAS-No.	Value	Control parameters	Basis
Potassium cyanide	151-50-8	(c)	5.000000 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
Remarks	Substance may be readily absorbed through intact skin			
		C	10.000000 ppm 11.000000 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
	A substance which may not be recirculated in accordance with section 108 Skin (percutaneous)			
		C	5.000000 mg/m3	Canada. British Columbia OEL
	Contributes significantly to the overall exposure by the skin route.			
		C	5.000000 mg/m3	Canada. British Columbia OEL
	Contributes significantly to the overall exposure by the skin route.			
		C	5.000000 mg/m3	Canada. British Columbia OEL
	Contributes significantly to the overall exposure by the skin route.			
		C	5.000000 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
		C	5.000000 mg/m3	USA. ACGIH Threshold Limit Values (TLV)

Data source	Sigma-Aldrich.
Ventilation	Fan.
Respiratory	Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. f the mask is the only means of protection use a self-contained full face respirator.
Gloves	Handle with gloves.
Eyes	Safety goggles with safety shutters.
Shoes	Use safety shoes.
Clothing	Complete suit protecting against chemicals, 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. Use mechanical exhaust or laboratory fumehood to avoid exposure.

SECTION 09 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Solid.
Appearance	Poudre cristalline blanche.
Odour	Amande amère.
Odour threshold	Data not available
pH	Solution aqueuse 0.1N = pH 11.0.
Melting point / Freezing point	634.5°C
Initial boiling point	1625°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	1.8 hPa à 634.5°C.
Vapour density	Data not available
Relative density	1.52g/cm³
Solubility	Soluble dans l'eau et la glycérine. Peu soluble dans l'alcool.
Partition coefficient water/n-octanol	log Pow : 0.44-
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. Moisture sensitive.
Possibility of hazardous reactions	Stable under normal conditions.
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	Deliquescent, this product decomposes slowly if exposed to moisture. Avoid extreme temperature variations. Exposure to light. Exposure to moisture. Exposure to the air.
Incompatible material	Strong oxidizing agents (nitric acid, perchloric acid, peroxides, chlorates and perchlorates), acids and certain acid salts, alkaloids, carbon dioxide, chloral hydrate, iodine, salts metal, nitrates, permanganates, water, heat and moisture.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx), Potassium oxides, Hydrogen cyanide (hydrocyanic acid).

SECTION 11 - TOXICOLOGICAL INFORMATION

POTASSIUM CYANIDE

Routes of exposure	Ingestion, inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Irritation and may cause inflammation of the conjunctiva.
- Skin	Irritation and dermatitis. The intense absorption of this product through the skin can lead to chemical asphyxia (cessation of aerobic oxygen use) and death.
- Inhalation	Irritation of the mucous membranes and respiratory tract. Sensation of oppression, erythema, cough, dyspnea, headache, dizziness, confusion, weakness, nausea and vomiting, tremors, palpitations, rapid breathing, convulsions, paralysis, unconsciousness, respiratory arrest and death.
Acute toxicity (Ingestion)	Irritation and burning of the mucous membranes. Constriction of the pharynx and respiratory tract, low blood pressure, convulsions, paralysis, loss of consciousness, respiratory arrest and rapid death. Ingestion of 200 mg may be fatal in an adult.
Chronic exposure effects / symptoms	Burning sensation, dermatitis, conjunctivitis, nervous disorders, cough, dyspnea, headache, dizziness, confusion, irritability, tearing, erythema, sweating, salivation, change in taste and smell, weakness, cyanosis, tachycardia, hyperthyroidism, loss of weight and loss of appetite, seizures, nausea and vomiting.
DL50 (specify species and route of entry)	LD50 Oral - Rat - Female >=7.49 mg/kg LD50 Dermal - Rabbit - Female - 14.29 mg/kg
CL50 (specify species and route of entry)	CL50 inhalation - Rat 0.16 mg/L - 1 h

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	EC50 - Daphnia (water flea) - Static test: 0.11 mg/l - 48 h CI50 - Scenedesmus quadricauda (green algae) - 0.03 mg/L - 192 h Respiration inhibition EC50 - Sludge Treatment - 2.3 mg/L - 30 min LC50 - Pimephales promelas (fathead minnow) - 0.31-0.37 mg/L - 96 h - Static. LC50 - Lepomis macrochirus - 0.45-0.57 mg/L - 96 h - flow-through. 0.01-0.08 mg/L - 96 h - static test.
Persistence and degradability	Soluble in water. Persistence is unlikely based on information available.
Bioaccumulative potential	Bioaccumulation Oncorhynchus mykiss (rainbow trout) - 16 Weeks Bioconcentration factor (BCF): 170.
Mobility in soil	Probable mobility due to its solubility in water.
Other adverse effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic 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	1680
UN Proper shipping name	CYANURE DE POTASSIUM, SOLIDE
Transport hazard class(es)	6.1 Toxic substances
Packing group	I
Limited quantity index	0kg
ERAP Index	1000
Special precautions	-

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Specific Target Organ Toxicity - Single exposure category 1 Specific Target Organ Toxicity - Repeated exposure category 1 Aspiration hazard category 1 Acute toxicity - Oral category 1 Acute toxicity - Dermal category 1 Acute toxicity - Inhalation 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.

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