



Centre Anti-Poison pour le Québec: (800) 463-5060

Tél. (Qc): (418) 660-8666 / 800-890-8666


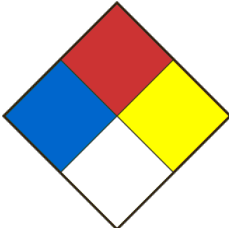
Fax. (Qc): (418) 660-8998

## SAFETY DATA SHEET

### SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier SODIUM CYANIDE		Product Use Laboratory use	
Chemical formula NaCN		Product code SR-0134; SP-0934; ST-0134	Molar weight 49,01
Chemical name / Commercial name / Synonymous SODIUM CYANIDE, CYANIDE OF SODIUM, HYDROCYANIC ACID SODIUM SALT, CYANOGRAN, PRUSSIAE OF SODA			
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 6/16/2020	SDS Prepared by Laboratoire MAT	E-Mail labmat@labmat.com	

## SECTION 02 - HAZARDS IDENTIFICATION

<b>Classification WHIMS / GHS</b>	Corrosive to metals-Category 1 Specific Target Organ Toxicity - Repeated exposure category 1 Acute toxicity - Oral category 1 Acute toxicity - Dermal category 1 Acute toxicity - Inhalation category 1
<b>Signal Word</b>	DANGER
<b>Hazards statements (H)</b>	H290 May be corrosive to metals. H300 Fatal if swallowed. H310 Fatal in contact with skin. H330 Fatal if inhaled. H372 Causes damage to organs through prolonged or repeated exposure.
<b>Precautionary statements (P)</b>	P234 Keep only in original container. 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 not 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. 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. P361 + P364 Take off immediately all contaminated clothing and wash it before reuse. P390 Absorb spillage to prevent material damage. P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up. 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.
<b>PICTOGRAMS</b>	
<b>Other dangers</b>	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)
	<b>Health</b> 4 <b>Fire</b> 0 <b>Reactivity</b> 1 <b>Special danger</b>

## SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Cyanure de sodium	143-33-9	<=100

## SECTION 04 - FIRST AID MEASURES

<b>Eye contact</b>	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.
<b>Skin contact</b>	Wash skin with plenty of water for at least 15 minutes. Remove soiled clothing. If irritation persists, seek medical attention.
<b>Inhalation</b>	Move the unwell person to the fresh air. If breathing is difficult, give oxygen. Consult a physician.
<b>Ingestion</b>	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.
<b>Most important symptoms and effects (acute and delayed)</b>	Ref. section 11.
<b>Immediate medical attention and special treatment, if necessary</b>	In case of medical consultation, keep this sheet available.
<b>General advice</b>	Show this safety data sheet to the doctor in attendance.

## SECTION 05 - FIREFIGHTING MEASURES

<b>Flammability</b>	No
<b>Ignition conditions</b>	Not flammable or combustible.
<b>Suitable extinguishing media</b>	Dry powder or dry sand.
<b>Unsuitable extinguishing media</b>	Do not use water or carbon dioxide as this releases hydrogen cyanide (very toxic and flammable).
<b>Hazardous combustion / decomposition products</b>	Hazardous decomposition products formed under fire conditions. Carbon oxides, Nitrogen oxides (NOx). - Sodium oxides. Hydrogen cyanide gas.
<b>Special fire and explosion hazards</b>	May react violently with incompatible products (Ref Section 10). Sodium 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. Violent reactions with fluoride, magnesium and nitrites. Do not allow run-off from fire fighting to enter drains or water courses.
<b>Special protective equipment and precautions for firefighters</b>	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

<b>Methods and materials for containment and cleaning up / Personal precautions, protective equipment</b>	Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment. Use a respirator as needed. 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

<b>Conditions for safe storage</b>	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.
<b>Methods of handling</b>	Avoid contact with the skin, eyes and clothes. Avoid formation of dust and aerosols. Use a hood preferably. Do not breathe dust. 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	No.-CAS	Control parameters	Value	Basis
SODIUM CYANIDE	143-33-9	(c)	5.000000 mg/m <sup>3</sup>	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
Remarks: The substance can be easily absorbed through the intact skin.				
		CEV	5.000000 mg/m <sup>3</sup>	Canada. Ontario OELs
Skin				
		TWA	10.000000 ppm 11.000000mg/m <sup>3</sup>	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
A substance whose recirculation is prohibited in accordance with section 108. Skin (percutaneous)				
		C	5.000000 mg/m <sup>3</sup>	Canada. British Columbia OEL
Contributes significantly to overall dermal exposure.				
		C	5.000000 mg/m <sup>3</sup>	Canada. British Columbia OEL
Contributes significantly to overall dermal exposure.				
		C	5.000000 mg/m <sup>3</sup>	Canada. British Columbia OEL
Contributes significantly to overall dermal exposure.				
		(c)	5 mg/m <sup>3</sup>	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
The substance can be easily absorbed through the intact skin.				
		P	10 ppm 11 mg/m <sup>3</sup>	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
A substance whose recirculation is prohibited in accordance with section 108. Skin (percutaneous)				
		C	5 mg/m <sup>3</sup>	Canada. British Columbia OEL
Contributes significantly to overall dermal exposure				

<b>Data source</b>	Sigma-Aldrich.
<b>Ventilation</b>	Use fan.
<b>Respiratory</b>	If work under the hood is not possible, or if the permissible levels are exceeded, use a mechanical filter / cartridge against NIOSH vapors or a respirator with air supply. Keep an emergency bag-valve mask in the workplace in the event of suffocation.
<b>Gloves</b>	Handle with gloves.
<b>Eyes</b>	Safety goggles with safety shutters.
<b>Shoes</b>	Use safety shoes.
<b>Clothing</b>	Labcoat. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
<b>Engineering control</b>	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

<b>Physical state</b>	Solid.
<b>Appearance</b>	Cristalline blanche.
<b>Odour</b>	Amande amère..
<b>Odour threshold</b>	Data not available
<b>pH</b>	Solution aqueuse saturée = pH 11-12.
<b>Melting point / Freezing point</b>	563.7°C
<b>Initial boiling point</b>	1496°C
<b>Boiling range</b>	Data not available
<b>Flash point</b>	Data not available
<b>Evaporation rate</b>	Data not available
<b>Flammability</b>	No
<b>Lower flammable / Explosive limit</b>	Data not available
<b>Upper flammable / Explosive limit</b>	Data not available
<b>Vapour pressure</b>	1.0 mmHg @ 817°C.
<b>Vapour density</b>	Data not available
<b>Relative density</b>	1.59 kg/m <sup>3</sup> à 20 °C.
<b>Solubility</b>	Très soluble dans l'eau. Peu soluble dans l'alcool.
<b>Partition coefficient water/n-octanol</b>	log Pow : -0.25 à 20°C-
<b>Auto-ignition temperature</b>	Data not available
<b>Decomposition temperature</b>	Data not available
<b>Viscosity</b>	4 cP @ 30 deg C (26% aqueous soln).

## SECTION 10 - STABILITY AND REACTIVITY

<b>Reactivity</b>	Non-reactive under normal conditions.
<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Possibility of hazardous reactions</b>	Stable under normal conditions.
<b>Conditions of instability (Including sensitivity to shock / static discharge / vibration)</b>	Deliquescent, this product decomposes slowly if exposed to moisture. Exposure to moist air or water. Avoid contact with incompatible materials. Carbon dioxide.
<b>Incompatible material</b>	Strong oxidizing agents (nitric acid, perchloric acid, peroxides, chlorates and perchlorates), acids and certain acid salts, alkaloids, carbon dioxide, fluorine, chloral hydrate, iodine , magnesium, metal salts, nitrates, nitrites, permanganates, water, heat and moisture.
<b>Hazardous decomposition products</b>	Hazardous decomposition products formed under fire conditions. Carbon oxides, Nitrogen oxides (NOx). - Sodium oxides. Hydrogen cyanide (hydrocyanic acid).

## SECTION 11 - TOXICOLOGICAL INFORMATION

## SODIUM CYANIDE

<b>Routes of exposure</b>	Ingestion, inhalation, skin and eyes.
<b>Acute exposition effects / symptoms:</b>	By exposure route below.
<b>- Eyes</b>	Severe irritation and may result in inflammation of the conjunctiva.
<b>- Skin</b>	Irritation and dermatitis. The intense absorption of this product through the skin can lead to chemical asphyxia (cessation of aerobic oxygen use) and death.
<b>- Inhalation</b>	Irritation of the mucous membranes and respiratory tract. Sensation of oppression, erythema, cough, dyspnea, headache, dizziness, confusion, weakness, nausea and vomiting, palpitations, rapid breathing, convulsions, paralysis, unconsciousness, respiratory arrest and death. May be fatal if inhaled.
<b>Acute toxicity (Ingestion)</b>	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. May be fatal if swallowed and enters airways.
<b>Chronic exposure effects / symptoms</b>	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. May cause reproductive system problems. May harm fertility Risk of causing cyanosis characterized by bluish tinted skin: Any exposure may result in death.
<b>DL50 (specify species and route of entry)</b>	LD50 Oral - Rat - 4.7 mg/kg. LD50 Dermal - Rabbit - 10.4 mg/kg.
<b>CL50 (specify species and route of entry)</b>	CL50 inhalation - Rat 0.16 mg/L - 1 h.

## SECTION 12 - ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	LC50 - Daphnia magna (Water flea) - 0.09 mg/L - 96 h. CL50 - Tilapia mossambica - Static test: 0.04 mg/L - 96 h. LC50 - Pimephales promelas (fathead minnow) - Flow-through test - 0.0712-0.0936 mg/L - 96 h. LC50 - Oncorhynchus mykiss (rainbow trout) - Flow-through test - 0.0558 - 0.0586 mg/L. Static test: 0.0391 - 0.0548 mg/L - 96 h. CE50 - Nitzshia closterium (algae) - 0.051 mg/L - 72 h. CE50 - Gammarus pseudolimnaeus - 0.17 mg/L - 96 h.
<b>Persistence and degradability</b>	Soluble in water. Persistence is unlikely based on the information provided.
<b>Bioaccumulative potential</b>	Data not available.
<b>Mobility in soil</b>	Probable mobility in the environment due to its solubility in water.
<b>Other adverse effects</b>	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.

## SECTION 13 - DISPOSAL CONSIDERATIONS

<b>Waste Disposal Method</b>	Dispose of contents / container in accordance with local / regional / national / international regulations / or contact a specialist waste disposal company.
<b>Contaminated Packaging</b>	Dispose of as unused product.

## SECTION 14 - TRANSPORT INFORMATION

<b>UN Number</b>	1689
<b>UN Proper shipping name</b>	CYANURE DE SODIUM
<b>Transport hazard class(es)</b>	6.1 Toxic substances
<b>Packing group</b>	I
<b>Limited quantity index</b>	0kg
<b>ERAP Index</b>	1000
<b>Special precautions</b>	-

## SECTION 15 - REGULATORY INFORMATION

<b>WHIMS CANADA</b>	Corrosive to metals-Category 1 Specific Target Organ Toxicity - Repeated exposure category 1 Acute toxicity - Oral category 1 Acute toxicity - Dermal category 1 Acute toxicity - Inhalation 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: 6/16/2020