



Centre Anti-Poison pour le Québec: (800) 463-5060  
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## SAFETY DATA SHEET

### SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier SODIUM NITROFERRICYANIDE dihydrate		Product Use Laboratory use	
Chemical formula $\text{Na}_2\text{Fe}(\text{CN})_5\text{NO} \cdot 2\text{H}_2\text{O}$		Product code SR-0141	Molar weight 297,95
Chemical name / Commercial name / Synonyms FERRATE(2-), PENTACYANONITROSYL-, DISODIUM, DIHYDRATE; FERRATE(2-), PENTAKIS(CYANO-C)NITROSYL-, DISODIUM, DIHYDRATE, (OC-6-22)-; NITROFERRICYANURE DE SODIUM DIHYDRATE; Nitroprussiate de sodium dihydraté; SODIUM NITROFERRICYANIDE			
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 9/16/2022	SDS Prepared by Laboratoire MAT	E-Mail labmat@labmat.com	

### SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Acute toxicity - Oral category 3
Signal Word	DANGER
Hazards statements (H)	H301 Toxic if swallowed.
Precautionary statements (P)	<p>P264 Wash the areas of the body that have been in contact with the product after handling.</p> <p>P270 Do not eat, drink or smoke when using this product.</p> <p>P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.</p> <p>P321 Specific treatment (see section 4 of the SDS and on this label).</p> <p>P330 Rinse mouth.</p> <p>P405 Store locked up.</p> <p>P501 Dispose of contents/container in accordance with local / regional / national / international regulations or contact a specialist waste disposal company.</p>
PICTOGRAMS	
Other dangers	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Significant; 4=Extreme)
	<p>Health 2</p> <p>Fire 1</p> <p>Reactivity 1</p> <p>Special danger</p>

### SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Nitroferricyanure(III) de sodium dihydrate	13755-38-9	≤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. Never give anything by mouth to an unconscious person. Consult a physician.
<b>Most important symptoms and effects (acute and delayed)</b>	Main symptoms of high exposure: Nausea and vomiting. Eyes irritation. Skin irritation. Convulsions. Headaches. Anxiety. Cyanosis (blue to black coloring of the skin and nails). 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 chemical powder, dry sand, alcohol resistant foam.
<b>Unsuitable extinguishing media</b>	Do not use water or carbon dioxide as this releases hydrogen cyanide (very toxic and flammable).
<b>Hazardous combustion products</b>	Hazardous combustion products formed under fire conditions: Hydrogen cyanide (cyanhydric acid). - Nitrogen oxides (NO <sub>x</sub> ), Sodium oxides Carbon oxides. - Iron oxides.
<b>Special fire and explosion hazards</b>	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).
<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 / Personnel precautions, protective equipment</b>	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.
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## SECTION 07 - HANDLING AND STORAGE

<b>Conditions for safe storage</b>	Hygroscopic. 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. Keep container tightly closed and store away from heat, water, moisture, and incompatible products.
<b>Methods of handling</b>	Avoid contact with the skin, eyes and clothes. Avoid ingestion and inhalation. Provide appropriate exhaust ventilation at places where dust or vapor is formed. 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

Component	No.-CAS	Control parameters	Value	Basis
Sodium Nitroferricyanide(III) dihydrate	13755-38-9	TWA	1mg/m3	Alberta
		C	10ppm 11mg/m3 (skin)	Quebec
		TWA	1mg/m3	Quebec.
		TWA	1mg/m3	British Columbia
		STEL	2mg/m3	British Columbia
		TWA	1mg/m3	Ontario

Data source	Fisher Scientific
Ventilation	Fan.
Respiratory	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. 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	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	Solide cristallin rouge.
Odour	Donnée non disponible.
Odour threshold	Data not available
pH	Donnée non-disponible.
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
Vapour density	Data not available
Relative density	1.72g/cm <sup>3</sup>
Solubility	Donnée non disponible..
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

<b>Reactivity</b>	May react violently with incompatible substances.
<b>Chemical stability</b>	Stable under recommended storage conditions. Hygroscopic.
<b>Possibility of hazardous reactions</b>	Contact with water or acid liberates hydrogen cyanide gas, very toxic.
<b>Conditions of instability (Including sensitivity to shock / static discharge / vibration)</b>	Sensitive to moisture.
<b>Incompatible material</b>	Water. Acids. Oxydants.
<b>Hazardous decomposition products</b>	Hydrogen cyanide (hydrocyanic acid). - Carbon oxides, Nitrogen oxides (NOx). - Iron oxides. - Sodium oxides.

## SECTION 11 - TOXICOLOGICAL INFORMATION

### SODIUM NITROFERRICYANIDE DIHYDRATE

<b>Routes of exposure</b>	Ingestion, inhalation, skin contact.
<b>Acute exposition effects / symptoms:</b>	By exposure route below.
<b>- Eyes</b>	Irritation.
<b>- Skin</b>	Irritation.
<b>- Inhalation</b>	May produce methemoglobinemia leading to the development of cyanosis and death from asphyxiation. Headache, dizziness, nausea and vomiting. Anxiety. Convulsions. Coma, death. To our knowledge, the product has not been fully studied.
<b>Acute toxicity (Ingestion)</b>	Cyanose: formation de méthémoglobine. Cramps, diarrhea, nausea and vomiting. Weakness. Headache. Anxiety. Convulsions. Coma, death. To our knowledge, the product has not been fully studied.
<b>Chronic exposure effects / symptoms</b>	Risk of causing cyanosis characterized by bluish tinted skin: Any exposure may result in death. To our knowledge, the chemical, physical and toxicological properties have not been fully investigated.
<b>DL50 (specify species and route of entry)</b>	LD50 Oral - Rat - 99 mg/kg. LD50 Dermal: Data not available.
<b>CL50 (specify species and route of entry)</b>	LC50 - Inhalation - Data not available.

## SECTION 12 - ECOLOGICAL INFORMATION

<b>Available ecological information</b>	No
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## 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>	1588
<b>UN Proper shipping name</b>	CYANURES INORGANIQUE SOLIDES, N.S.A. (nitroferricyanure de sodium)
<b>Transport hazard class(es)</b>	6.1 Toxic substances
<b>Packing group</b>	III
<b>Limited quantity index</b>	5kg
<b>ERAP Index</b>	-
<b>Special precautions</b>	16

## SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Acute toxicity - Oral category 3
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## 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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