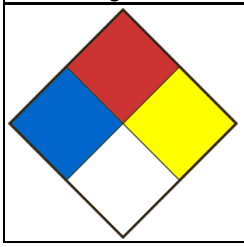
Centre Anti-Poison pour le Québec: (800) 463-5060
Tél. (Qc): (418) 660-8666 / 800-890-8666
Fax. (Qc): (418) 660-8998

SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier FERROXYL® (SOLUTION "B")		**Product Use** Laboratory use	
Chemical formula -		**Product code** FS-0602	**Molar weight**
Chemical name / Commercial name / Synonymous POTASSIUM FERRICYANIDE (III), ROUGE PRUSSIATE DE POTASSIUM; EVERITT'S SALT; PRUSSIATE OF POTASH			
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 11/26/2018	**SDS Prepared by** Laboratoire MAT	**E-Mail** labmat@labmat.com	

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Not a hazardous substance according to WHMIS 2015
Other dangers	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)
	**Health** 1 **Fire** 0 **Reactivity** 0 **Special danger**

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Ferricyanure de potassium	13746-66-2	6

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. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. 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 powder.
Unsuitable extinguishing media	Not applicable.
Hazardous combustion / decomposition products	Hazardous decomposition products formed under fire conditions. - nitrogen oxides (NOx). Hydrogen cyanide gas. Carbon monoxide, carbon dioxide. - Potassium oxides. - Iron oxides.
Special fire and explosion hazards	Contact with acids liberates very toxic gas. May react violently with incompatible products (Ref Section 10). Potassium ferricyanide may explode if heated in the presence of the following products: ammonia, silver powder, chromium trioxide, cupric nitrate and sodium nitrite.
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	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. Do not let product enter drains.

SECTION 07 - HANDLING AND STORAGE

Conditions for safe storage	Store in a cool, dry place. Do not store near acids. Never allow product to get in contact with water during storage. Keep container tightly closed and store away from heat, moisture, and incompatible products. Protect from sunlight and light. Keep container tightly closed in a dry and well-ventilated place.
Methods of handling	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
Tripotassium hexacyanoferrate	13746-66-2	C	5.000000 mg/m3	Canada. British Columbia OEL
Remarks	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.			
				Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TWA	1 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
	Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required			
		C	10 ppm 11 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)			
		TWAEV	1 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		C	5 mg/m3	Canada. British Columbia OEL
	Contributes significantly to the overall exposure by the skin route.			
		TWA	1 mg/m3	Canada. British Columbia OEL
		STEL	2 mg/m3	Canada. British Columbia OEL
		C	5.000000 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
		C	5.000000 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
		TWA	1.000000 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
		C	5 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
		TWA	1 mg/m3	USA. ACGIH Threshold Limit Values (TLV)

Data source	Sigma-Aldrich.
Ventilation	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	Use 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 orange-
Odour	inodore.
Odour threshold	Data not available
pH	~ 6.0 à 5%aq.sol.
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	Soluble dans l'eau. (329 g/l à 20°C(68°F) -Complètement soluble) Peu soluble dans l'alcool (K3Fe(CN)6).
Vapour density	Data not available
Relative density	~1.06g/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. Contact with acids liberates very toxic gas.
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	Exposure to moisture. Incompatible with strong oxidizing agents and strong acids. This product may discolor if exposed to light.
Incompatible material	When pure, the product reacts with the following products: Strong oxidizing agents, strong acids, ammonia, silver powder, chromium trioxide, cupric nitrate, sodium nitrite and light. Cyanides.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. Toxic vapors of hydrogen cyanide. - Carbon oxides, Nitrogen oxides (NOx), Potassium oxides, Iron oxides

SECTION 11 - TOXICOLOGICAL INFORMATION

POTASSIUM FERRICYANIDE (III)

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, dizziness, cough, dyspnea, headache, convulsions, nausea and vomiting.
Acute toxicity (Ingestion)	Irritation of the mucous membranes. Gastrointestinal disorders, enteritis, cramps, dizziness, headache, convulsions, nausea and vomiting. If ingested: the ferricyanide complex does not decompose to cyanide.
Chronic exposure effects / symptoms	Burning sensation, dermatitis, conjunctivitis, nervous disorders, dizziness, headache, cough, dyspnoea, laryngitis, fatigue, loss of appetite, convulsions, nausea and vomiting
DL50 (specify species and route of entry)	LD50 Oral - Mouse - 2,970 mg/kg LD50 Dermal - Data not available.
CL50 (specify species and route of entry)	LC50 - Inhalation - Data not available.
ETA (Estimated Acute Toxicity)	

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: >5000 mg/kg - Mouse LD50 Dermal: Data not available LC50 Inhalation : Data not available

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	Potassium ferricyanide: Toxicity to fish: LC50 Oncorhynchus mykiss (rain trout) -869 mg / l -96h Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia magna (Great Daphnia) - 549 mg / l -48 h
Persistence and degradability	Data not available.
Bioaccumulative potential	Data not available.
Mobility in soil	Probable mobility in the environment due to its solubility in water.
Other adverse effects	Data not available.

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	N/R
UN Proper shipping name	
Transport hazard class(es)	
Packing group	
Limited quantity index	
ERAP Index	
Special precautions	

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Not a hazardous substance according to WHMIS 2015

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: 11/26/2018