

MATERIAL SAFETY DATA SHEET

July 1, 1986
12330-12340

SECTION I NAME

Product POTASSIUM FERRICYANIDE
Chemical Synonyms Red Prussiate of Potash
Formula K₃Fe (CN)₆
Units(s) Size 100 g., 500 g., 2.5 kg.
C.A.S. No. 13746-66-2

CHEMTRAC
 800-424-9300
 Day 716-226-6177
 Night 716-334-4222

HAZARD RATING
 LEAST SLIGHT MODERATE HIGH EXTREME
 0 1 2 3 4

Health	1
Fire	1
Reactivity	1

SECTION II HAZARDOUS INGREDIENTS OF MIXTURES

Principal Hazardous Component(s)	%	TLV Units
Potassium Ferricyanide	100%	See Section V

WARNING! MAY BE HARMFUL IF SWALLOWED.

SECTION III PHYSICAL DATA

Melting Point (°F)	>300°C (>572°F) decomposes.	Specific Gravity (H₂O = 1)	1.894 @ 17°C.
Boiling Point (°F)	>300°C (>572°F) decomposes.	Percent Volatile Evaporation Rate (n-Butyl Ac. = 1)	Non-volatile (NA)
Vapor Pressure (mm Hg)	Negligible as solid.		Non-volatile (NA)
Vapor Density (Air = 1)	Data not listed.		
Solubility in Water	33 grams per 100 mL water at 4°C.		
Appearance and Odor	Bright red crystals; on odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	Non-flammable (NA)	Flammable Limits in Air % by Volume	Lower NA Upper NA
Extinguisher	Water spray; carbon dioxide (CO ₂); dry chemical (ABC).		

SPECIAL FIREFIGHTING PROCEDURES

In fire conditions, wear a NIOSH-approved, self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Dangerous when heated to decomposition or on contact with acids or acid fumes; it emits highly toxic fumes of cyanides.

D.O.T. NON-REGULATED.

FreY **SCIENTIFIC**

FREY SCIENTIFIC

905 HICKORY LANE MANSFIELD OHIO 44905

MSDS No. Effective Date

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20

SECTION V HEALTH HAZARD DATA

Threshold Limited Value

None established. (ACGIH 1983-84).
 Toxicity data: Oral LD₅₀ (rat) 1600-3200 mg/kg. Classification: Slightly toxic.

Effects of Overexposure

Low toxicity hazard. No adequate toxicity data were located, but apparently this material is comparatively benign. It is not decomposed to cyanide in the body. Rapidly excreted in the urine, apparently without metabolic alteration.

Emergency and First Aid Procedures

SKIN: Flush with water.
EYES: Flush thoroughly with water. If irritation develops or persists, get medical attention.
INGESTION: If swallowed, if conscious, induce vomiting and call physician.

SECTION VI REACTIVITY DATA

Stability	Unstable	Conditions to Avoid	Protect from light, heat, strong mineral acid or acid fumes.
	Stable		

Incompatibility (Materials to avoid)

Strong mineral acids or acid fumes.

Hazardous Decomposition Products

Thermal decomposition will produce cyanide fumes and oxides of nitrogen.

Hazardous Polymerization

Will Not Occur

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled

Sweep up and place in a suitable container. Wash spill area with soap and water.

Waste Disposal Method

Dispose of in an approved incinerator equipped with an afterburner and scrubber or contract with a licensed waste disposal service.

SECTION VIII SPECIAL PROTECTION INFORMATION

Discharge, treatment, or disposal may be subject to federal, state, or local laws.

Respiration Protection: None should be needed in normal laboratory handling. If dusty conditions prevail, work in fume hood, or wear approved dust mask.

Ventilation

Local Exhaust	Special	Other	No.
Mechanical(General)	Not needed.		No.
	Recommended.		No.

SECTION IX SPECIAL PRECAUTIONS

Protective Gloves None should be needed.

Eye Protection Chemical safety glasses.

Other Protective Equipment Smock, apron, eye wash station, ventilation hood, proper gloves if needed.

Precautions to be Taken in Handling and Storing Store in a cool, dry place away from strong mineral acids and fire hazards. Wash thoroughly after handling.

Keep container tightly closed when not in use.

Other Precautions

Read label on container before using.
 Protect from light.

For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Rev. No. *No. 1* Date *1/12/87* Approved *Wendell D. Sewell* Chemical Safety Coordinator

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