

SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

Product	POTASSIUM FERROCYANIDE 0.1 MOLAR AQ. SOLN
Chemical Synonyms	Potassium Ferrocyanide, Water Solution
Formula	Mixture. See Section II.
Unit Size	up to 4 Lt.
C.A.S. No.	Mixture. See Section II.

CHEMTREC
800-424-9300
Day 716-228-8177

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

HMIS*
Health 1
Fire 0
Reactivity 0

SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Potassium Ferrocyanide: (CAS No. 13943-58-3)	3.68%	See Section V.
Water: (CAS No. 7732-18-5)	96.32%	None established.

CAUTION! MAY BE HARMFUL IF SWALLOWED.

MAY CAUSE IRRITATION.

SECTION III PHYSICAL DATA

Melting Point (°F)	Freezes approx. 0°C (32°F)	Specific Gravity (H ₂ O = 1)	Approx. 1.0
Boiling Point (°F)	Approx. 100°C (212°F)	Percent Volatile by Volume (%)	96.32%
Vapor Pressure (mm Hg)	14 (water)	Evaporation Rate (Water = 1)	Slightly less than 1.
Vapor Density (Air=1)	0.7 (water)		
Solubility in Water	Complete.		
Appearance & Odor	Clear, water white, water like liquid; no odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

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

SPECIAL FIREFIGHTING PROCEDURES

In fire conditions, wear a NIOSH/MSHA-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 hydrogen cyanide gas which can form explosive mixture with air.

D.O.T. NON-REGULATED.

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. Slight short term irritation of skin and mucous membranes is possible.

Emergency and First Aid Procedures

SKIN: Flush with water, then wash with mild soap and water. **EYES:** Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention. **INGESTION:** If swallowed, if conscious, give one or two glasses of water to drink, induce vomiting and call physician. Never give anything by mouth to an unconscious person. **INHALATION:** Remove to fresh air. If illness or discomfort develops, get medical attention.

SECTION VI REACTIVITY DATA

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

Incompatibility (Materials to Avoid) Strong mineral acid or acid fumes, strong oxidizing agents.

Hazardous Decomposition Products Thermal decomposition will produce cyanide fumes and oxides of nitrogen.

Hazardous Polymerization	Conditions to Avoid
May Occur	Will Not Occur
	X
	Not applicable.

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled Absorb spill in vermiculite, sand, earth, paper towel and place in a suitable container for disposal. Wash spill area with soap and water.

Waste Disposal Method Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities only.

This material is non-hazardous (as per RCRA). Dispose of waste in a sanitary or industrial landfill.

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type) None should be needed in normal laboratory handling. If misty conditions prevail, work in fume hood, or wear a NIOSH/MSHA-approved respirator.

Ventilation	Local Exhaust	Recommended.	Special	No.
	Mechanical (General)	Recommended.	Other	No.

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.

SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing Store in a cool, dry place away from strong mineral acids and fire hazards. Protect from light. Wash thoroughly after handling. Keep container tightly closed when not in use.

Other Precautions Read label on container before using. Do not wear contact lenses when working with chemicals.

Remove and wash contaminated clothing.

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

Revision No. 1 Date 10/3/85 Approved Michael Raszeja Chemical Safety Coordinator MR

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