



Material Safety Data Sheet

NFPA 	HMIS <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="background-color: #00FFFF;">Health Hazard</td> <td style="text-align: center; border: 1px solid black;">2</td> </tr> <tr> <td style="background-color: #FFC0CB;">Fire Hazard</td> <td style="text-align: center; border: 1px solid black;">0</td> </tr> <tr> <td style="background-color: #FFFF00;">Reactivity</td> <td style="text-align: center; border: 1px solid black;">0</td> </tr> </table>	Health Hazard	2	Fire Hazard	0	Reactivity	0	Personal Protective Equipment  See Section 15.
Health Hazard	2							
Fire Hazard	0							
Reactivity	0							

Section 1. Chemical Product and Company Identification		<i>Page Number: 1</i>
Common Name/Trade Name	Potassium ferricyanide	
	Catalog Number(s).	P1285, P1286
	CAS#	13746-66-2
Manufacturer	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	
	RTECS	LJ8225000
	TSCA	TSCA 8(b) inventory: Potassium ferricyanide
Commercial Name(s)	Not available.	
	CI#	Not available.
Synonym	Potassium hexacyanoferrate (III)	
Chemical Name	potassium ferricyanide	
Chemical Family	Not available.	
Chemical Formula	K3Fe(CN)6	
Supplier	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	
<u>IN CASE OF EMERGENCY</u> <u>CHEMTREC (24hr) 800-424-9300</u> CALL (310) 516-8000		

Section 2. Composition and Information on Ingredients					
Name	CAS #	<i>Exposure Limits</i>			% by Weight
		TWA (mg/m ³)	STEL (mg/m ³)	CEIL (mg/m ³)	
1) Potassium ferricyanide	13746-66-2				100
Toxicological Data on Ingredients	Potassium ferricyanide: ORAL (LD50): Acute: 2970 mg/kg [Mouse].				

Section 3. Hazards Identification	
Potential Acute Health Effects	Slightly hazardous in case of skin contact (irritant, permeator), of eye contact (irritant), of ingestion, of inhalation.
Potential Chronic Health Effects	CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. Repeated or prolonged exposure is not known to aggravate medical condition.

Section 4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.
Skin Contact	In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
Serious Skin Contact	Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Serious Inhalation	Not available.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.
Serious Ingestion	Not available.

Section 5. Fire and Explosion Data

Flammability of the Product	Non-flammable.
Auto-Ignition Temperature	Not applicable.
Flash Points	Not applicable.
Flammable Limits	Not applicable.
Products of Combustion	Not available.
Fire Hazards in Presence of Various Substances	Not applicable.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
Fire Fighting Media and Instructions	Not applicable.
Special Remarks on Fire Hazards	Not available.
Special Remarks on Explosion Hazards	Not available.

Section 6. Accidental Release Measures

Small Spill	Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
Large Spill	Use a shovel to put the material into a convenient waste disposal container.

Section 7. Handling and Storage

Precautions	Keep locked up.. Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as acids.
Storage	Light sensitive Store in light-resistant containers. Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
Personal Protection	Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
Exposure Limits	TWA: 1 (mg/m ³) from ACGIH (TLV) [United States] (as Fe) TWA: 5 (mg/m ³) from OSHA (PEL) [United States] (as CN) TWA: 1 (mg/m ³) from NIOSH [United States] (as Fe) TWA: 5 (mg/m ³) [Canada] (as CN) TWA: 1 STEL: 2 (mg/m ³) [Canada] (as Fe) Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical state and appearance	Solid. (crystalline powder.)	Odor	Not available.
Molecular Weight	329.25 g/mole	Taste	Not available.
pH (1% soln/water)	Not available.	Color	Red.
Boiling Point	Not available.		
Melting Point	Decomposes.		
Critical Temperature	Not available.		
Specific Gravity	1.85 (Water = 1)		
Vapor Pressure	Not applicable.		
Vapor Density	Not available.		
Volatility	Not available.		
Odor Threshold	Not available.		
Water/Oil Dist. Coeff.	Not available.		
Ionicity (in Water)	Not available.		
Dispersion Properties	See solubility in water.		
Solubility	Soluble in cold water.		

Section 10. Stability and Reactivity Data

Stability	The product is stable.
Instability Temperature	Not available.
Conditions of Instability	Heat, light, incompatible materials.
Incompatibility with various substances	Reactive with acids.
Corrosivity	Non-corrosive in presence of glass.
Special Remarks on Reactivity	Incompatible with ammonia, chromium trioxide + heat, sodium nitrite + heat, acids, and acid fumes. Sensitive to light. When heated to decomposition or comes in contact with acid or acid fumes, it emits toxic fumes of cyanides (hydrogen cyanide). It emits toxic fumes of cyanides (hydrogen cyanide), and oxides of nitrogen when heated to decomposition.

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Special Remarks on Corrosivity Not available.

Polymerization Will not occur.

Section 11. Toxicological Information

Routes of Entry Inhalation. Ingestion.

Toxicity to Animals Acute oral toxicity (LD50): 2970 mg/kg [Mouse].

Chronic Effects on Humans **MUTAGENIC EFFECTS:** Mutagenic for bacteria and/or yeast.

Other Toxic Effects on Humans Slightly hazardous in case of skin contact (irritant, permeator), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals Lowest Published Lethal Dose:
LDL [Rat] - route: Oral; Dose: 1600 mg/kg

Special Remarks on Chronic Effects on Humans May affect genetic material.

Special Remarks on other Toxic Effects on Humans Acute Potential Health Effects:
Skin: May cause skin irritation.
Eyes: May cause eye irritation.
Inhalation: May cause respiratory tract irritation with coughing and shortness of breath.
Ingestion: May cause gastrointestinal tract irritation with nausea, vomiting, diarrhea, and possible abdominal cramping.
Chronic Potential Health:
Inhalation: Prolonged or repeated inhalation may affect blood and urinary system.

Section 12. Ecological Information

Ecotoxicity Ecotoxicity in water (LC50): 541-869 mg/l 96 hours [Fish (Oncorhynchus mykiss (rainbow trout, donaldson))]. 1210 mg/l 96 hours [Fish (Oncorhynchus mykiss (rainbow trout, donaldson))]. 570 mg/l 96 hours [Fish (Poecilia reticulata (guppy))]. 32 mg/l 96 hours [Daphnia (daphnia)]. 75 mg/l 96 hours [Daphnia (daphnia)]. 549 ppm 48 hours [Daphnia (daphnia)].

BOD5 and COD Not available.

Products of Biodegradation Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation The product itself and its products of degradation are not toxic.

Special Remarks on the Products of Biodegradation Not available.

Section 13. Disposal Considerations

Waste Disposal Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14. Transport Information

DOT Classification Not a DOT controlled material (United States).

Identification Not applicable.

Special Provisions for Transport Not applicable.

DOT (Pictograms)



Section 15. Other Regulatory Information and Pictograms

Federal and State Regulations

Pennsylvania RTK: Potassium ferricyanide (listed as cyanide compounds)
 Minnesota: Potassium ferricyanide (Listed as Iron soluble salts)
 New Jersey: Potassium ferricyanide (listed as cyanide compounds)
 Louisiana spill reporting: Potassium ferricyanide (Listed as cyanide compounds)
 California Director's List of Hazardous Substances: Potassium ferricyanide (Listed as Iron soluble salts)
 TSCA 8(b) inventory: Potassium ferricyanide

California Proposition 65 Warnings

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found.
 California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.

Other Regulations

EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances (EINECS No. 237-323-3).
 Canada: Listed on Canadian Domestic Substance List (DSL).
 China: Listed on National Inventory.
 Japan: Listed on National Inventory (ENCS).
 Korea: Listed on National Inventory (KECI).
 Philippines: Listed on National Inventory (PICCS).
 Australia: Listed on AICS.

Other Classifications

WHMIS (Canada)	Not controlled under WHMIS (Canada).	
DSCL (EEC)	R31- Contact with acids liberates toxic gas.	Not applicable.

HMIS (U.S.A.)

Health Hazard	2
Fire Hazard	0
Reactivity	0
Personal Protection	E

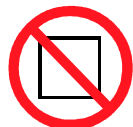
National Fire Protection Association (U.S.A.)



WHMIS (Canada) (Pictograms)



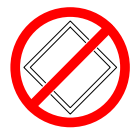
DSCL (Europe) (Pictograms)



TDG (Canada) (Pictograms)



ADR (Europe) (Pictograms)



Protective Equipment



Gloves.



Lab coat.



Dust respirator. Be sure to use an approved/certified respirator or equivalent.



Splash goggles.

Section 16. Other Information**MSDS Code** P4290**References** Not available.**Other Special Considerations** Not available.

Validated by Sonia Owen on 6/24/2013.

Verified by Sonia Owen.

Printed 6/24/2013.

CALL (310) 516-8000

Notice to Reader

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.