Material Safety Data Sheet

Potassium ferri(III)cyanide, 98%

ACC# 95764

Section 1 - Chemical Product and Company Identification

MSDS Name: Potassium ferri(III)cyanide, 98%
Catalog Numbers: AC196780000, AC196785000
Synonyms: Red prussiate; Red potassium prussiate; Potassium hexacyanoferrate(III), Potassium ferricyanide; Potassium iron(III) cyanide; Iron potassium cyanide; Potassium ferricyanate; Tripotassium iron hexacyanide; Tripotassium hexacyanoferrate.
Company Identification:

Acros Organics N.V.
One Reagent Lane
Fair Lawn, NJ 07410

For information in North America, call: 800-ACROS-01
For emergencies in the US, call CHEMTREC: 800-424-9300

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
13746-66-2	Potassium ferri(III)cyanide	98%	237-323-3

Hazard Symbols: None listed.
Risk Phrases: 32

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: red solid. Caution! Causes eye and skin irritation. Light sensitive. Causes respiratory tract irritation. Contact with acid liberates a toxic gas, cyanide. Contact with acid liberates hydrogen cyanide, a flammable gas or liquid.
Target Organs: Respiratory system, eyes.

Potential Health Effects

Eye: May cause mild eye irritation. Contact may cause transient eye irritation.
Skin: May cause skin irritation.
Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May be harmful if swallowed.
Inhalation: May cause respiratory tract irritation.
Chronic: Not available. Long term inhalation in rats caused changes in urine composition and r ed blood cell count.

Section 4 - First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Skin: Get medical aid. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.
Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.
Inhalation: Get medical aid immediately. Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Dusts at sufficient concentrations can form explosive mixtures with air. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.
Extinguishing Media: In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam.
Flash Point: Not applicable.
Autoignition Temperature: Not available.
Explosion Limits, Lower:Not available.
Upper: Not available.
NFPA Rating: (estimated) Health: 1; Flammability: 1; Instability: 0

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and wash before reuse. Minimize dust generation and accumulation. Avoid breathing vapors from heated material. Avoid contact with eyes, skin, and clothing. Use only with adequate ventilation. Avoid breathing dust. Avoid temperatures above 210°C (410°F).
Storage: Store in a cool, dry, well-ventilated area away from incompatible substances. Store protected from light. Isolate from oxidizing materials and acids.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.
Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Potassium ferri(III)cyanide	none listed	none listed	none listed

OSHA Vacated PELs: Potassium ferri(III)cyanide: No OSHA Vacated PELs are listed for this chemical.
Personal Protective Equipment
Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin: Wear appropriate protective gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to prevent skin exposure.
Respirators: Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Section 9 - Physical and Chemical Properties

Physical State: Solid
Appearance: red
Odor: odorless
pH: Not available.
Vapor Pressure: Negligible
Vapor Density: Not available.
Evaporation Rate:Not available.
Viscosity: Not available.
Boiling Point: Not available.
Freezing/Melting Point:Decomposes
Decomposition Temperature:> 310 deg C
Solubility: Soluble.
Specific Gravity/Density:1.85 g/cm3
Molecular Formula:C6FeK3N6
Molecular Weight:329.26

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures. Decomposes when heated.
Conditions to Avoid: High temperatures, light, dust generation.

Incompatibilities with Other Materials: Strong oxidizing agents, strong acids.
Hazardous Decomposition Products: Nitrogen oxides, carbon monoxide, carbon dioxide, cyanides, oxides of potassium.
Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#:
CAS# 13746-66-2: LJ8225000
LD50/LC50:
CAS# 13746-66-2:
Oral, mouse: LD50 = 2970 mg/kg;

Carcinogenicity:
CAS# 13746-66-2: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
Epidemiology: No data available.
Teratogenicity: No data available.
Reproductive Effects: No data available.
Neurotoxicity: No information reported
Mutagenicity: See actual entry in RTECS for complete information.
Other Studies: The hazard classification for this product is based on supp lier information.

Section 12 - Ecological Information

Ecotoxicity: No data available. Acute and long-term toxicity to fish and invertebrates: LC50/96hr for fathead minnow: GT 100mg/L; LC50/96hr for water flea: 80mg/L. Toxicity to aquatic and terrestrial plants: No plan germination adverse effects at 10mg/L for ryegrass, radish and lettuce.
Environmental: Bioaccumulation/Bioconcentration: Not likely to bioconcentrate.
Physical: No information available.
Other: No information available.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.
RCRA P-Series: None listed.
RCRA U-Series: None listed.

Section 14 - Transport Information

	US DOT	IATA	RID/ADR	IMO	Canada TDG

Shipping Name:	No information available.	No information available.
Hazard Class:		
UN Number:		
Packing Group:		

Section 15 - Regulatory Information

US FEDERAL

TSCA
CAS# 13746-66-2 is listed on the TSCA inventory.
Health & Safety Reporting List
None of the chemicals are on the Health & Safety Reporting List.
Chemical Test Rules
None of the chemicals in this product are under a Chemical Test Rule.
Section 12b
None of the chemicals are listed under TSCA Section 12b.
TSCA Significant New Use Rule
None of the chemicals in this material have a SNUR under TSCA.
SARA

Section 302 (RQ)
None of the chemicals in this material have an RQ.
Section 302 (TPQ)
None of the chemicals in this product have a TPQ.
Section 313
No chemicals are reportable under Section 313.
Clean Air Act:
This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depletors. This material does not contain any Class 2 Ozone depletors.
Clean Water Act:
None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.
OSHA:
None of the chemicals in this product are considered highly hazardous by OSHA.
STATE
CAS# 13746-66-2 is not present on state lists from CA, PA, MN, MA, FL, or NJ.
California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives
Hazard Symbols:
Not available.
Risk Phrases:
R 32 Contact with acids liberates very toxic gas.

Safety Phrases:

S50A Do not mix with acids.

WGK (Water Danger/Protection)
CAS# 13746-66-2: 2
Canada - DSL/NDSL
CAS# 13746-66-2 is listed on Canada's DSL List.
Canada - WHMIS
This product has a WHMIS classification of D2B.
Canadian Ingredient Disclosure List
CAS# 13746-66-2 (listed as Iron salts (soluble)) is listed on the Canadian Ingredient Disclosure List.
Exposure Limits
CAS# 13746-66-2 (listed as cyanide anion): OEL-ARAB Republic of Egypt:
TWA 5 mg/m3;Skin OEL-AUSTRALIA:TWA 5 mg/m3;Skin OEL-AUSTRIA:TWA 5 mg/m3;Skin OEL-CZECHOSLOVAKIA:TWA 3 mg/m3;STEL 10 mg/m3 JAN9 OEL-DENMARK:TWA 5 mg/m3;Skin OEL-FINLAND:TWA 5 mg/m3;STEL 10 mg/m3 OEL-FRANCE:TWA 5 mg/m3;Skin OEL-GERMANY:TWA 5 mg/m3;Skin OEL-HUNGARY:TWA 0.3 mg/m3;STEL 0.6 mg/m3;Skin OEL-INDIA:TWA 4 mg/m3;Skin OEL-THE NETHERLANDS:TWA 5 mg/m3;Skin OEL-THE PHILIPPINES:TWA 5 mg/m3;Skin OEL-POLAND:TWA 0.3 mg/m3 OEL-SWEDEN:STEL 5 mg/m3;Skin OEL-SWITZERLAND:TWA 5 mg/m3;STEL 10 mg/m3;Skin OEL-THAILAND:TWA 5 mg/m3 OEL-UNITED KINGDOM:TWA 5 mg/m3;Skin

Section 16 - Additional Information

MSDS Creation Date: 6/27/2000
Revision #2 Date: 3/04/2002