

MATERIAL SAFETY DATA SHEET
 Potassium ferricyanide

Section 1 - Chemical Product and Company Identification

MSDS Name:	Potassium ferricyanide
Catalog Numbers:	19678-0000, 19678-1000, 19678-5000, 22311-0000, 22311-1000, 22311-5000, 42412-0000, 42412-5000
Synonyms:	Red prussiate; Potassium hexacyanoferrate (III); Potassium iron(III)cyanide
Company Identification:	Acros Organics BVBA Janssen Pharmaceuticaaan 3a 2440 Geel, Belgium
Company Identification: (USA)	Acros Organics One Reagent Lane Fair Lawn, NJ 07410
For information in the US, call:	800-ACROS-01
For information in Europe, call:	+32 14 57 52 11
Emergency Number, Europe:	+32 14 57 52 99
Emergency Number US:	201-796-7100
CHEMTREC Phone Number, US:	800-424-9300
CHEMTREC Phone Number, Europe:	703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	%	EINECS#
13746-66-2	Potassium ferricyanide	99+%	237-323-3

Hazard Symbols: None listed

Risk Phrases: 32

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Contact with acids liberates very toxic gas.

Potential Health Effects

Eye: May cause eye irritation.

Skin: May cause skin irritation. May be harmful if absorbed through the skin.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May be harmful if swallowed. May cause effects similar to those of acute inhalation.

Inhalation: May cause respiratory tract irritation. May cause anoxia, characterized by weakness, headache, dizziness, confusion, cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood), weak and irregular heart beat, collapse, unconsciousness, convulsions, coma and death. May be harmful if inhaled.

Chronic: Prolonged or repeated skin contact may cause dermatitis.

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 water for at least 15 minutes while removing contaminated clothing and shoes.
Ingestion:	Get medical aid. Wash mouth out with water.
Inhalation:	Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.
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. Use water spray to keep fire-exposed containers cool. Substance is noncombustible.
Extinguishing Media:	In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam. Do NOT use carbon dioxide.

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. Avoid runoff into storm sewers and ditches which lead to waterways. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage

Handling:	Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes.
Storage:	Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Store protected from light.

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 ventilation to keep airborne concentrations low.

Exposure Limits

CAS# 13746-66-2:

- United States OSHA: 5 mg/m³ TWA (Cyanide anion).
- Belgium - TWA: (iron salts (soluble)): 1 mg/m³ VLE (as Fe)
- Germany: (cyanide anion): skin notation
- Malaysia: (iron salts (soluble)): 1 mg/m³ TWA (as Fe)
- Netherlands: (cyanide anion): 5 mg/m³ MAC (as CN)
- Spain: (iron salts (soluble)): 1 mg/m³ VLA-ED (as Fe)

Personal Protective Equipment

Eyes:	Wear chemical splash goggles.
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 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: powder and chunks
Color: orange to red
Odor: odorless
pH: ~6 (5% aq. sol.)
Vapor Pressure: Not available
Viscosity: Not available
Boiling Point: Not available
Freezing/Melting Point: Not available
Autoignition Temperature: Not available
Flash Point: Not available
Explosion Limits: Lower: Not available
Explosion Limits: Upper: Not available
Decomposition Temperature:
Solubility in water: 464 g/l water (20°C)
Specific Gravity/Density: 1.850
Molecular Formula: C₆FeK₃N₆
Molecular Weight: 329.26

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures. Light sensitive.
Conditions to Avoid: Incompatible materials, light, moisture, excess heat.
Incompatibilities with Other Materials Excess heat, acids, ammonia, fluorine, nitrides (e.g. potassium nitride, sodium nitride), chromium trioxide, sodium nitrite.
Hazardous Decomposition Products Hydrogen cyanide, nitrogen oxides, carbon monoxide, carbon dioxide.
Hazardous Polymerization Will not occur.

Section 11 - Toxicological Information

RTECS#: CAS# 13746-66-2: LJ8225000
LD50/LC50: RTECS:
CAS# 13746-66-2: Oral, mouse: LD50 = 2970 mg/kg;
Other: Oral, rat: LD50 = 3503 mg/kg
Carcinogenicity: Potassium ferricyanide - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Other: See actual entry in RTECS for complete information. The toxicological properties have not been fully investigated.

Section 12 - Ecological Information

Ecotoxicity: Fish: Fathead Minnow: LC50: 100 mg/l; 96H; .
Water flea LC50: 80 mg/l; 96H; .
Other: This chemical is not likely to bioconcentrate. Avoid entering into waters or underground water.

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

IATA

IMO

RID/ADR

Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.*	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
Hazard Class:	9	9	9
UN Number:	3077	3077	3077
Packing Group:	III	III	III

Section 15 - Regulatory Information

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:

S 50A Do not mix with acids.

WGK (Water Danger/Protection)

CAS# 13746-66-2: 2

Canada

CAS# 13746-66-2 is listed on Canada's DSL List

US Federal

TSCA

CAS# 13746-66-2 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 1/22/1996

Revision #3 Date 3/10/2008

Revisions were made in Sections: 14

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