

MSDS (Material Safety Data Sheet)

POTASSIUM FERRICYANIDE

1. Product Identification

Synonyms: Potassium ferricyanate; tripotassium hexacyanoferrate; Ferrate (3-), hexacyano, tripotassium

CAS No.: 13746-66-2

Molecular Weight: 329.25

Chemical Formula: $K_3Fe(CN)_6$

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
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Potassium Ferricyanide	13746-66-2	99 - 100%	Yes

3. Hazards Identification

Health Rating: 1 - Slight

Flammability Rating: 0 - None

Reactivity Rating: 1 - Slight

Contact Rating: 1 - Slight

Lab Protective Equip: GOGGLES; LAB COAT

Storage Color Code: Orange (General Storage)

Potential Health Effects

Information on the human health effects from exposure to this substance is limited. Used information for a related compound, potassium ferrocyanide, as a guide. Potassium ferrocyanide is apparently benign and does not decompose to cyanide in the body.

Chronic Exposure:

No information found.

Aggravation of Pre-existing Conditions:

No information found.

4. First Aid Measures

Inhalation:

Remove to fresh air. Get medical attention for any breathing difficulty.

Ingestion:

Give large amounts of water to drink. Never give anything by mouth to an unconscious person.

Get medical attention.

Skin Contact:

Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation develops.

Eye Contact:

Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention if irritation persists.

5. Fire Fighting Measures

Fire:

Not considered to be a fire hazard.

Explosion:

Not considered to be an explosion hazard.

Fire Extinguishing Media:

Use any means suitable for extinguishing surrounding fire.

6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.

7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances. Protect from light.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:

None established.

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

Personal Respirators (NIOSH Approved):

For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. .

9. Physical and Chemical Properties

Appearance:

Bright red, crystalline powder.

Odor:
 Odorless.
 Solubility:
 Slowly soluble in 2.5 parts cold water
 Specific Gravity:
 1.85 @ 17C/4C
 pH:
 No information found.
 % Volatiles by volume @ 21C (70F):
 0
 Boiling Point:
 No information found.
 Melting Point:
 No information found.
 Vapor Density (Air=1):
 No information found.
 Vapor Pressure (mm Hg):
 No information found.
 Evaporation Rate (BuAc=1):
 No information found.

10. Stability and Reactivity

Stability:
 Stable under ordinary conditions of use and storage. The aqueous solution decomposes slowly on standing.
 Incompatibilities:
 Ammonia, chromium trioxide + heat, cupric nitrate, sodium nitrite + heat, acids and acid fumes.
 Conditions to Avoid:
 Light, heat, incompatibles.

11. Toxicological Information

Oral mouse LD50: 2970 mg/kg. Investigated as a mutagen.

-----\Cancer Lists\-----

---NTP Carcinogen---

Ingredient	Known	Anticipated	IARC Category
Potassium Ferricyanide (13746-66-2)	No	No	None

12. Ecological Information

Environmental Fate:
 No information found.
 Environmental Toxicity:
 No information found.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from international disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

Not regulated.

15. Regulatory Information

16. Other Information

NFPA Ratings: Health: 3 Flammability: 0 Reactivity: 0

Keep container closed.