
Hazardous according to criteria of Worksafe

1. IDENTIFICATION

General

Product Name : POTASSIUM FERRICYANIDE

Other Names : POTASSIUM FERRICYANIDE TRIPOTASSIUM HEXACYANOFERRATE

UN No. : N/A

Dangerous Goods Class : None Allocated

Subsidiary Risk : None Allocated

Hazchem Code : N/A

Pack Group : 0

EPG : N/A

Poisons Schedule : N/A

Uses :

Tempering steel, etching liquid, production of pigments, electroplating, sensitive coatings on blueprint paper, fertilizer compositions, laboratory reagent.

1.1 Physical Description / Properties

Appearance : Bright red lustrous crystals or powder.

Formula : $K_3Fe(CN)_6$

Boiling Point : Dec deg C

Melting Point : N/A deg C

Vapour Pressure : N/A

Specific Gravity : 1.85 (water = 1)

Flash Point : N/A

pH : N/A ()

Solubility in water : SOL g/l (25 deg C)

Flammability Limits (as percentage volume in air)

Lower Explosion Limit : N/A

Upper Explosion Limit : N/A

1.2 Other Properties

Soluble in water, slightly soluble in alcohol.

1.3 Ingredients

Chemical Entity	CAS No.	Proportions (%)
POTASSIUM FERRICYANIDE	[13746-66-2]	> 99

2. HEALTH HAZARD INFORMATION

2.1 Health Effects - Acute

Swallowed

May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Eye

May cause mild eye irritation.

Skin

May cause skin irritation.

Inhaled

May cause respiratory tract irritation. May cause anoxia, characterised by weakness, headache, dizziness, confusion, cyanosis, weak and irregular heart beat, collapse, unconsciousness, convulsions, coma and death.

2.2 Health Effects - Chronic

No significant health effects should be found.

2.3 First Aid

Swallowed

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 attention immediately. Induce vomiting by giving one teaspoon of Ipecac syrup.

Eye

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Seek medical attention.

Skin

Seek medical aid. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes.

Inhaled

Get medical aid immediately. Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

First Aid Facilities

Ensure an eye bath and safety shower are available and ready for use. Always have a cyanide antidote kit on hand when working with cyanide compounds. Seek medical advice on how to use.

2.5 Advice to Doctor

Treat symptomatically based on judgement of doctor and individual reactions of patient.

2.6 Toxicity Data

Oral LD50 = 2970 mg/kg (Mouse) Dermal LD50 = not available Inhalation LC50 = not available Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP or OSHA.

3. PRECAUTIONS FOR USE

3.1 Exposure Standards

No exposure limit has been established for this material.

3.2 Engineering Controls

Ensure adequate ventilation to maintain exposure levels at a minimum.

3.3 Personal Protection

Wear appropriate protective eyewear or chemical safety goggles, impervious gloves, and protective clothing to minimise skin exposure. Wash hands and face thoroughly after handling and before work breaks, eating, drinking, smoking or using toilet facilities.

3.4 Flammability

Keep away from heat and ignition sources - NO SMOKING.

SAFE HANDLING INFORMATION

4.1 Storage / Transport

Store in a cool, dry, well-ventilated area away from incompatible substances.

4.2 Packaging / Labelling

UN No. N/A

Class None Allocated

Sub Risk None Allocated

Hazchem Code N/A

Pack Group 0

EPG No. N/A

Shipping Name POTASSIUM FERRICYANIDE

Hazard HARMFUL

Risk Phrases

R21/22 Harmful in contact with skin and if swallowed.

Safety Phrases

4.3 Spills and Disposal

Spills

Avoid raising dust. Eliminate flammables. Eliminate all ignition sources. Prevent material from entering drains, sewers and other watercourses.

Sweep or shovel up spilled material and place into suitable containers for reuse or disposal.

Disposal

Dispose of waste in accordance with all Local, State and Federal regulations at an approved waste disposal facility.

4.4 FIRE AND EXPLOSION HAZARD

Fire / Explosion

Stable under normal temperatures and pressures. Hazardous polymerisation has not been reported. Evolves toxic gases on decomposition.

Extinguishing Media

Fire-fighters should wear full protective clothing including self-contained breathing apparatus. Use water, dry chemical, chemical foam or alcohol- resistant foam type extinguishers. Use equipment/media appropriate to surrounding fire conditions.