

MATERIAL SAFETY DATA SHEET**Product Name:** Potassium ferrocyanide trihydrate**CAS No.:** 14459-95-1**Version:** 0**1. Identification**

Product Code : 90212, 90504
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2. Composition/Information on Ingredients

Ingredient	CAS No	Percent
POTASSIUM FERROCYANIDE TRIHYDRATE	14459-95-1	98-100 %

3. Hazards Identification

Hazard classification : Not classified
Labels elements
Hazard symbol : No symbol
Signal word : No signal word.
Hazard statement : Not Applicable.
Precautionary statement : Not Applicable.
Other hazards which do not result in GHS classification : None.

4. First Aid Measures

General information : Get medical advice/attention if you feel unwell. If medical advice is needed, have product container or label at hand. Show this safety data sheet to the doctor in attendance.

Ingestion : Rinse mouth thoroughly. Drink a few glasses of water or milk. Call a POISON CENTER or doctor/physician if you feel unwell.

Inhalation : Move to fresh air. Get medical attention if symptoms persist.

Skin contact : Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing. Wash contaminated clothing before reuse.

Eye contact : Flush thoroughly with water. If irritation occurs, get medical assistance.

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Most important symptoms/effects, acute and delayed : May cause irritation to skin, eyes, and respiratory tract.

Indication of immediate medical attention and special treatment needed : Treat symptomatically. Symptoms may be delayed.

5. Fire fighting measures

General fire hazards : In case of fire and/or explosion do not breathe fumes.
Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Special fire fighting procedures : Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures : Keep unauthorized personnel away. Ventilate closed spaces before entering them. Use personal protective equipment.

Methods and material for containment and cleaning up : Sweep up and place in a clearly labeled container for chemical waste. Clean surface thoroughly to remove residual contamination.

Notification Procedures : Prevent entry into waterways, sewer, basements or confined areas. Inform authorities if large amounts are involved.

Environmental precautions : Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

MATERIAL SAFETY DATA SHEET**Product Name:** Potassium ferrocyanide trihydrate**CAS No.:** 14459-95-1**Version:** 0**7. Handling and Storage**

- Precautions for safe handling** : Use personal protective equipment as required. Avoid contact with eyes, skin, and clothing. Avoid inhalation of dust. Wash thoroughly after handling.
- Conditions for safe storage, including any incompatibilities** : Keep container tightly closed. Store in a well-ventilated place. Store in a dry place.

8. Exposure Controls Personal Protection**Control parameters**

Occupational exposure limits : None of the components have assigned exposure limits

Appropriate engineering controls : No data available.

Individual protection measures, such as personal protective equipment

General information : Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Eye/face protection : Use tight fitting goggles if dust is generated.

Hand protection : Wear protective gloves.

Other : Wear suitable protective clothing.

Respiratory protection : In case of inadequate ventilation use suitable respirator.

Hygiene measures : Provide eyewash station and safety shower. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Avoid contact with eyes, skin, and clothing.

9. Physical and Chemical Properties

Appearance : Yellow Solid Granules.

Odor : Odorless

pH : No data available.

Melting point/freezing point : 60 °C

Initial boiling point and boiling range : No data available

Flash Point : No data available

Vapor pressure : No data available

Vapor density : No data available

Relative density : 1.85 (20 °C)

Solubility in water : Soluble.

Solubility (other) : No data available.

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Formula : $K_4Fe(CN)_4 \cdot 3H_2O$
Molecular Weight : 422.39 g/mol.

10. Stability and Reactivity

Reactivity : No dangerous reaction known under conditions of normal use.
Chemical stability : Material is stable under normal conditions.
Possibility of hazardous reactions : Hazardous polymerization does not occur.
Conditions to avoid : Contact with incompatible materials.
Incompatible materials : Strong oxidizing agents. Strong acids.
Hazardous decomposition products : Thermal decomposition may produce oxides of nitrogen. Cyanides.

11. Toxicological Information**Information on likely routes of exposure**

Ingestion : Large amount may cause gastrointestinal upset.
Inhalation : Dust may irritate respiratory system.
Skin contact : May cause irritation.
Eye contact : May cause temporary eye irritation.

Information on toxicological effects**Acute toxicity (list all possible routes of exposure)**

Oral Product : LD 50 (Rat): 6,400 mg/kg .
Dermal Product : No data available
Inhalation Product : No data available
Repeated dose toxicity Product : No data available.
Skin corrosion/irritation Product : May cause skin irritation.
Serious eye damage/eye irritation Product : May irritate eyes.
Respiratory or skin sensitization Product : Not a skin sensitizer.
Carcinogenicity Product : This substance has no evidence of carcinogenic properties .
IARC Monographs on the Evaluation of Carcinogenic Risks to Humans DIOXANE : No carcinogenic components identified.
US. National Toxicology Program (NTP) Report on Carcinogens DIOXANE : No carcinogenic components identified.
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050 : No carcinogenic components identified.

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- In vitro Product** : No mutagenic components identified.
In vivo Product : No mutagenic components identified.
Reproductive toxicity Product : No components toxic to reproduction.
Specific target organ toxicity - single exposure Product : No data available.
Specific target organ toxicity - repeated exposure Product : No data available.
Aspiration hazard Product : Not classified.
Other effects : None known.

12. Ecological Information**Ecotoxicity****Acute hazards to the aquatic environment :**

- Fish Product** : No data available.
Aquatic invertebrates Product : No data available.

Chronic hazards to the aquatic environment :

- Fish Product** : No data available.
Aquatic invertebrates Product : No data available.
Toxicity to Aquatic Plants Product: : No data available.

Persistence and degradability

- Biodegradation Product** : There are no data on the degradability of this product.
BOD/COD ratio Product : No data available.

Bioaccumulative potential

- Bioconcentration factor (BCF) Product** : No data available on bioaccumulation.

- Partition coefficient n-octanol / water (log Kow) Product** : No data available.

- Mobility in soil** : The product is water soluble and may spread in water systems.

- Other adverse effects** : The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

13. Disposal consideration

- Disposal instructions** : Discharge, treatment, or disposal may be subject to national, state, or local laws. Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal .

- Contaminated packaging** : Since emptied containers retain product residue, follow label warnings even after container is emptied.

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14. Transport Information

	UN No.	UN proper shipping name	Hazard Class(es)	Packaging group	Marine Pollutant
DOT			Not regulated.		
IMDG			Not regulated.		
IATA			Not regulated.		

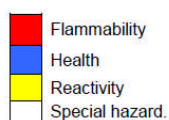
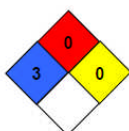
15. Regulatory Information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Safety, health and environmental regulations/legislation specific for the substance or mixture
No Data Available.

16. Other Information

NFPA Hazard ID



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

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