



## Safety Data Sheet

### SECTION 1: Identification

#### 1.1. Product Identifier

**Trade Name or Designation:** Potassium Ferrocyanide Trihydrate  
(Potassium Hexacyanoferrate)

**Product Number:** C2283500

**Other Identifying Product Numbers:** 2-28350-1, 2-28350-3

#### 1.2. Recommended Use and Restrictions on Use

General Laboratory Reagent

#### 1.3. Details of the Supplier of the Safety Data Sheet

**Company:** Reagents Inc.

**Address:** 4746 Sweden Road  
Charlotte, NC 28224 USA

**Telephone:** 800-732-8484

#### 1.4. Emergency Telephone Number (24 hr)

CHEMTREC (USA) 800-424-9300

CHEMTREC (International) 1+ 703-527-3887

### SECTION 2: Hazard(s) Identification

#### 2.1. Classification of the Substance or Mixture (in accordance with OSHA HCS 29 CFR 1910.1200)

*For the full text of the Hazard and Precautionary Statements listed below, see Section 16.*

This product is not categorized as hazardous in any GHS hazard class.

#### 2.2. GHS Label Elements

**Pictograms:** None required.

**Signal Word:** None required.

**Hazard Statements:** None required.

**Precautionary Statements:** None required.

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### 2.3. WHMIS Classification

WHMIS classification is not included based on the recommended option (Option 4) found in the Canada Gazette Part II, Vol. 149, No.3, page 458

### 2.4. Hazards not Otherwise Classified or Covered by GHS

Data not available.

## SECTION 3: Composition / Information on Ingredients

### 3.1. Components of Substance or Mixture

Chemical Name	Formula	Molecular Weight	CAS Number	Weight%
Potassium Ferrocyanide Trihydrate	$K_4Fe(CN)_6 \cdot 3H_2O$	Data not available.	14459-95-1	100.00%

## SECTION 4: First-Aid Measures

### 4.1. General First Aid Information

**Eye Contact:** May cause slight irritation.

**Inhalation:** Not expected to require first aid. If necessary, remove to fresh air.

**Skin Contact:** May cause slight irritation.

**Ingestion:** Dilute with water or milk. Call a physician if necessary.

### 4.2. Most Important Symptoms and Effects, Acute and Delayed

May cause irritation to the eyes, skin and respiratory tract. Wash areas of contact with water. Call a physician if irritation develops.

EYE CONTACT: May cause slight irritation. SKIN CONTACT: May cause slight irritation. CHRONIC EFFECTS / CARCINOGENICITY: Prolonged or repeated exposure may cause dermatitis.

### 4.3. Medical Attention or Special Treatment Needed

Not expected to require special treatment.

## SECTION 5: Fire-Fighting Measures

### 5.1. Extinguishing Media

Use any means suitable for extinguishing surrounding fire.

### 5.2. Specific Hazards Arising from the Substance or Mixture

Not considered to be a fire or explosion hazard.

### 5.3. Special Protective Equipment for Firefighters

Use protective clothing and breathing equipment appropriate for the surrounding fire.



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### SECTION 6: Accidental Release Measures

#### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Wear appropriate PPE for the size and nature of the spill. As a general rule, wear safety glasses and gloves.

#### 6.2. Cleanup and Containment Methods and Materials

Pick up in a manner that does not generate dust. Powder may be moistened with water to aid in the clean-up.

### SECTION 7: Handling and Storage

#### 7.1. Precautions for Safe Handling and Storage Conditions

As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from physical damage. Keep in tightly closed containers in a cool, dry area.

### SECTION 8: Exposure Controls / Personal Protection

#### 8.2. Exposure Controls

**Engineering Controls:** A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limit.

**Respiratory Protection:** A system of local or general exhaust is recommended. If necessary, wear a dust mask respirator to minimize exposure to dust particles.

**Skin Protection:** Chemical resistant gloves.

**Eye Protection:** Safety glasses or goggles.

#### 8.3. Personal Protective Equipment

A system of local or general exhaust is recommended. If necessary, wear a dust mask respirator to minimize exposure to dust particles. Chemical resistant gloves. Safety glasses or goggles.

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### SECTION 9: Physical and Chemical Properties

#### 9.1. Basic Physical and Chemical Properties

<b>Appearance:</b>	Pale yellow
<b>Physical State:</b>	Solid
<b>Odor:</b>	Odorless
<b>Odor Threshold:</b>	Not applicable
<b>pH:</b>	9.5 (10% aqueous solution)
<b>Melting/Freezing Point:</b>	70°C (loses water)
<b>Initial Boiling Point /Range:</b>	Decomposes -
<b>Flash Point:</b>	Not applicable
<b>Evaporation Rate:</b>	Not applicable
<b>Flammability:</b>	Not flammable
<b>Flammability/Explosive Limits:</b>	Data not available.
<b>Vapor Pressure:</b>	< 1 Pa @ 25°C
<b>Vapor Density:</b>	Data not available
<b>Relative Density:</b>	1.85
<b>Solubility:</b>	270G/L @ 12°C
<b>Partition Coefficient (n-Octanol/Water):</b>	Data not available
<b>Auto-Ignition Temperature:</b>	Not applicable
<b>Decomposition Temperature:</b>	70°C
<b>Viscosity:</b>	Not applicable
<b>Explosive Properties:</b>	Data not available.
<b>Oxidizing Properties:</b>	Data not available.

### SECTION 10: Stability and Reactivity

#### 10.1. Reactivity and Chemical Stability

Stable under normal conditions of use and storage.

#### 10.2. Possibility of Hazardous Reactions

Data not available.

#### 10.3. Conditions to Avoid and Incompatible Materials

Strong oxidizing agents, strong reducing agents, strong acids, strong bases. Metal chlorates, perchlorates, nitrates, or nitrites may cause violent

#### 10.4. Hazardous Decomposition Products

Will not occur.



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### SECTION 11: Toxicological Information

#### 11.1. Information on Toxicological Effects

**Acute Toxicity - Oral Exposure:**

Not applicable.

**Acute Toxicity - Dermal Exposure:**

Not applicable.

**Acute Toxicity - Inhalation Exposure:**

Not applicable.

**Acute Toxicity - Other Information:**

LD50, Oral, Rat: 6400 mg/kg (Potassium Ferrocyanide, anhydrous), details of toxic effects not reported other than lethal dose value. Investigated as a mutagen and reproductive effector.

**Skin Corrosion and Irritation:**

Not applicable.

**Serious Eye Damage and Irritation:**

Not applicable.

**Respiratory Sensitization:**

Not applicable.

**Skin Sensitization:**

Not applicable.

**Germ Cell Mutagenicity:**

Not applicable.

**Carcinogenicity:**

Not applicable.

**Reproductive Toxicity:**

Not applicable.

**Specific Target Organ Toxicity from Single Exposure:**

Not applicable.

**Specific Target Organ Toxicity from Repeated Exposure:**

Not applicable.

**Aspiration Hazard:**

Not applicable.

**Additional Toxicology Information:**

Data not available.



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### SECTION 12: Ecological Information

#### 12.1. Ecotoxicity

Not applicable.

#### 12.2. Persistence and Degradability

Data not available.

#### 12.3. Bioaccumulative Potential

Data not available.

#### 12.4. Mobility in Soil

Data not available.

#### 12.5. Other Adverse Ecological Effects

Data not available.

### SECTION 13: Disposal Considerations

#### 13.1. Waste Treatment Methods

Data not available.

### SECTION 14: Transportation Information

#### 14.1. Transportation by Land - Department of Transportation (DOT, United States of America)

Not regulated according to DOT Regulations.



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### 14.2. Transportation by Air - International Air Transport Association (IATA)

UN Number: N/A

Proper Shipping Name:

Hazard Class:

Packing Group:

Hazard Placard Labels:

## SECTION 15: Regulatory Information

### 15.1. Occupational Safety and Health Administration (OSHA) Hazards

Not listed.

### 15.2. Superfund Amendments and Reauthorization Act (SARA) 302 Extremely Hazardous Substances

Not listed.

### 15.3. Superfund Amendments and Reauthorization Act (SARA) 311/312 Hazardous Chemicals

Not listed.

### 15.4. Superfund Amendments and Reauthorization Act (SARA) 313 Toxic Release Inventory (TRI)

Potassium Ferrocyanide Trihydrate (CAS # 14459-95-1): 1.0% de minimis concentration (X+CN<sup>-</sup> where X = H<sup>+</sup> or any other group where a formal dissociation can be made. For example KCN or Ca(CN)<sub>2</sub>. Chemical Category N106)

### 15.5. Massachusetts Right-to-Know Substance List

Not listed.

### 15.6. Pennsylvania Right-to-Know Hazardous Substances

Potassium Ferrocyanide Trihydrate (CAS # 14459-95-1): Environmental hazard

Potassium Ferrocyanide Trihydrate (CAS # 14459-95-1): Present

### 15.7. New Jersey Worker and Community Right-to-Know Components

Potassium Ferrocyanide Trihydrate (CAS # 14459-95-1): SN 2308 TPQ: 500 lb (Category Code N106, listed under Cyanide)

Potassium Ferrocyanide Trihydrate (CAS # 14459-95-1): sn 2308; sn 0553

### 15.8. California Proposition 65

Not listed.

### 15.9. Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)

Potassium Ferrocyanide Trihydrate (CAS # 14459-95-1): Present

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### 15.10. United States of America Toxic Substances Control Act (TSCA) List

Potassium Ferrocyanide Trihydrate (CAS # 14459-95-1): Present

### 15.11. European Inventory of Existing Commercial Chemical Substances (EINECS),

European List of Notified Chemical Substances (ELINCS), and No Longer Polymers (NLP)

Not listed.

## SECTION 16: Other Information

### 16.1. Full Text of Hazard Statements and Precautionary Statements

### 16.2. Miscellaneous Hazard Classes

Canadian Carcinogenicity Hazard Class: Not Applicable.

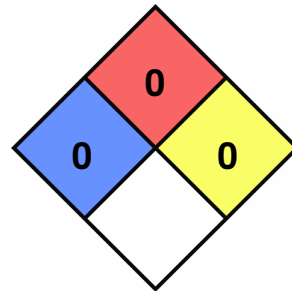
Physical Hazards Not Otherwise Classified (PHNOC): Not Applicable.

Health Hazards Not Otherwise Classified (HHNOC): Not Applicable.

Biohazardous Infectious Materials Hazard Class: Not Applicable.

### 16.3. National Fire Protection Association (NFPA) Rating

Health: 0  
Flammability: 0  
Reactivity: 0  
Special Hazard:



### 16.4. Document Revision

Last Revision Date: 9/13/2018

## DISCLAIMER

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and REAGENTS, INC. assumes no legal responsibility or liability whatsoever resulting from its use.