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## Section I - Product Identification

*Product:* An aqueous solution of potassium ferrocyanide.

*Intended Uses:* Intended to be used as a general laboratory reagent.

*Uses advised against:* Not for drug use. For laboratory use only.

*Country of origin:* United States.

### Manufacturer Identification

Medical Chemical Corp.  
19430 Van Ness Ave.  
Torrance, CA 90501

Customer Service: Phone (310)787-6800  
Email. Customerservice@med-chem.com  
FAX (310)787-4464

### Emergency Telephone Number

CHEMTREC Emergency Response Telephone Number: (800)424-9300. Note: The CHEMTREC phone number is only for emergencies involving spills, leaks, fire, exposure or accident. Please direct all other inquiries to our customer service phone number.



## Section II - Hazard Identification

This item is not considered hazardous by 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). May be harmful if swallowed. May cause skin irritation.

**Serious eye damage/eye irritation:** Category 2A (H319). Causes serious eye irritation.

**Acute toxicity (Oral):** Category 4 (H302). May be harmful if swallowed.

**Acute toxicity (Dermal):** Category 5 (H313). May be harmful in contact with skin.

**Sensitization (Skin):** Category 1 (H317). May cause an allergic skin reaction.

**Signal word:** Warning

### Hazard statements

The toxicology of this compound have not been completely examined. It is Irritating to the eye, skin and respiratory system.

### Precautionary statements

- P102 Keep out of reach of children.
- P220 Keep away from clothing and other combustible materials.
- P260 Do not breathe dust/fume/gas/mist/vapors/spray.
- P264 Wash thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P273 Avoid release to the environment.
- P281 Use personal protective equipment as required.

### Safety Ratings

*Health:* Slightly Hazardous *Flammability:* None *Reactivity:* None *Contact:* Slight  
*Recommended safety equipment:* Eye protection and gloves are recommended.

### NFPA Ratings

Health = 1. Can cause significant irritation.  
Flammability = 0. Will not burn.  
Reactivity = 0. Normally stable even under fire conditions.

### Potential Health Effects

*Inhalation:* May be Irritating to respiratory tract.

*Ingestion:* While the toxicity of this compound is low, large doses may cause nausea, vomiting, diarrhea, etc

*Skin contact:* Causes skin irritation or aggravation of existing dermatitis. Causes skin to turn brown.

*Eye contact:* Causes serious eye irritation.

*Chronic Exposure:* No data.

Aggravation of preexisting conditions: Unknown.

### Section III - Composition/Information on Components

Ingredient	CAS#	EC/List No.	% w/w
Potassium ferrocyanide	14459-95-1	680-418-3	5%

### Section IV - First Aid Measures

*Inhalation:* Remove from source of exposure and get medical attention for any breathing difficulty.

*Ingestion:* Rinse mouth with water but do not induce vomiting. Get medical advise.

*Skin Contact:* Wash affected area with soap and water. Get medical advice if irritation develops.

*Eye Contact:* Rinse thoroughly with running water. Get medical advice if irritation develops.

### Section V - Fire Fighting Measures

*Fire:* Not normally a fire hazard.

*Explosion:* Not normally an explosion hazard.

*Fire Extinguishing Media:* Any means suitable for surrounding fire.

*Special information:* Thermal decomposition may produce cyanide gas.

### Section VI - Accidental Release Measures

Absorb with a suitable absorbent and store in a suitable container for disposal.

### Section VII - Handling and Storage

P403+P233+P102; Store in a well-ventilated place. Keep container tightly closed. Keep out of reach of children.

### Section VIII - Exposure Control/Personal Protection

Component	ACGIH TLV	OSHA PEL	NIOSH	NIOSH IDLH
Potassium ferrocyanide	1 mg/m <sup>3</sup> TWA	1 mg/m <sup>3</sup> TWA	1 mg/m <sup>3</sup> TWA	1 mg/m <sup>3</sup> TWA

#### Legend

**ACGIH:** American Conference of Governmental Industrial Hygienists.

**OSHA:** Occupational Safety and Health Administration.

**NIOSH:** National Institute for Occupational Safety and Health.

**IDLH:** Immediately dangerous to life or health.

*Ventilation System:* Usually not required. When required, Refer to the ACGIH document, "Industrial Ventilation, a Manual of Recommended Practices" for details about ventilation.

*Personal Respirator:* Usually not required. In case of emergency, or when exposure levels are unknown, use a positive pressure, full face piece, air supplied respirator.

*Skin protection:* Protective gloves are recommended as part of good laboratory practice.

*Eye Protection:* Laboratory safety goggles or similar products are recommended.

### Section IX - Physical and Chemical Properties

*Appearance and Odor:* A clear, colorless solution..

*Flash point:* Not applicable.

*Auto ignition temperature:* Not applicable

*Boiling point range:* 99 - 101 °C

*Decomposition temperature:* No data

*Melting point:* 0.0 °C

*pH:* No data

*Vapor pressure (mm Hg):* 18 @ 20 °C

*Viscosity:* ~ 0.01 poise

*Flammable Limits:* Not applicable.

*Boiling Point:* 100 °C (212 °F)

*Density:* 1.03 g/ml @ 25 °C

*Evaporation Rate (Water = 1):* 1

*Partition coefficient (n-Octanol/Water):* No data

*Solubility:* Infinitely miscible with water

*Vapor density (air = 1):* 0.6

*Volatile organic carbon (VOC):* Not applicable

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## Section X - Stability and Reactivity

*Stability:* Stable under normal conditions.

*Hazardous Decomposition Products:* Pyrolysis will release toxic gases such as hydrogen cyanide.

*Hazardous polymerization:* Will not occur.

*Incompatibilities:* Nothing unusual.

*Conditions to avoid:* Excessive cold and heat.

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## Section XI - Toxicological Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Potassium ferrocyanide	3,613 mg/kg (Rat)	> 2,000 mg/kg (rat)	No data

### Cancer lists

<i>Ingredient</i>	<i>Known Carcinogenicity?</i>	<i>NTP?</i>	<i>Anticipated?</i>	<i>IARC Category</i>
Potassium ferrocyanide	No	No	No	No

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## Section XII - Ecological Information

This product is expected to bioaccumulate. The product does not contain endocrine disrupters, persistent organic pollutants or ozone depleters.

**Soil Mobility:** Unknown

**Environmental Fate:** Biodegradable

**Hazardous to the aquatic environment, long term hazard:** Category 3 (H412). Harmful to aquatic life with long lasting effects.

For potassium ferrocyanide

Toxicity to freshwater fish (carp): LC50 > 100 mg/l, 96 h

Toxicity to invertebrates (water flea): EC50 > 100 mg/l, 48 h

Toxicity to freshwater algae (pseudokirchneriella subcapitata): EC50 = 3 mg/l, 72 h

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## Section XIII - Disposal Considerations

Usually not restricted but local ordinances vary. Insure compliance with all local, state and federal government regulations.

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## Section XIV - Transportation Information

Not regulated by DOT or IATA.

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## Section XV - Regulatory Information

### Chemical Inventory Status

<i>Ingredient</i>	<i>TSCA</i>	<i>EC</i>
Potassium ferrocyanide	Yes	Yes

### Federal and State Regulations

<i>Ingredient</i>	<i>SARA 302 RQ</i>	<i>SARA 302 TPQ</i>	<i>SARA 313 List</i>	<i>SARA 313 Category</i>	<i>RCRA 261.33</i>	<i>TSCA 8(D)</i>	<i>Ca. Prop 65</i>
Potassium ferrocyanide	No	No	No	No	No	No	No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No

### SARA 311/312

<i>Acute:</i>	No
<i>Chronic:</i>	No
<i>Fire:</i>	No
<i>Pressure:</i>	No

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## Section XVI - Other Information

This information is believed to be correct at the time of publication but is not guaranteed as such, nor does it purport to be all inclusive. Medical Chemical Corp. assumes no liability for the accuracy or completeness of the information. The user assumes all responsibility for compliance with federal, state and local laws.

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