1. Identification

Product identifier: YSI 2363 Potassium Ferrocyanide
Other means of identification:
- Product code: 2363
- Recommended use: Analysis Standard/Reagent
- Recommended restrictions: None known.

Manufacturer/Importer/Supplier/Distributor information:
- Company name: YSI, Inc
- Address: 1700/1725 Brannum Lane
- Telephone: (937) 767-7241
- E-mail: MSDSinfo@ysi.com
- Emergency phone number:
  - CHEMTREC (US/Canada) (800) 424-9300
  - CHEMTREC (International) 011 703-527-3887
    (Collect calls accepted)

2. Hazard(s) identification

Physical hazards: Not classified.
Health hazards: Not classified.
OSHA defined hazards: Not classified.

Label elements:
- Hazard symbol: None.
- Signal word: None.
- Hazard statement: The substance does not meet the criteria for classification.
- Precautionary statement:
  - Prevention: Observe good industrial hygiene practices.
  - Response: Wash hands after handling.
  - Storage: Store away from incompatible materials.
  - Disposal: Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC): None known.

Supplemental information:
Not applicable.

3. Composition/information on ingredients

Substances

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>POTASSIUM FERROCYANIDE TRIHYDRATE</td>
<td></td>
<td>14459-95-1</td>
<td>100</td>
</tr>
</tbody>
</table>

4. First-aid measures

Inhalation: If dust from the material is inhaled, remove the affected person immediately to fresh air.
Skin contact: Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact: Rinse with water. Get medical attention if irritation develops and persists.
Ingestion: Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed
Indication of immediate medical attention and special treatment needed
General information

Direct contact with eyes may cause temporary irritation.

Treat symptomatically.

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media
Unsuitable extinguishing media
Specific hazards arising from the chemical
Special protective equipment and precautions for firefighters
Fire-fighting equipment/instructions
Specific methods
General fire hazards

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Do not use water jet as an extinguisher, as this will spread the fire.

During fire, gases hazardous to health may be formed.

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Use water spray to cool unopened containers.

Use standard firefighting procedures and consider the hazards of other involved materials.

No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Methods and materials for containment and cleaning up
Environmental precautions

Keep unnecessary personnel away. Avoid inhalation of dust from the spilled material. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. For personal protection, see section 8 of the SDS.

This product is miscible in water. If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product. Collect dust using a vacuum cleaner equipped with HEPA filter. Minimize dust generation and accumulation. Following product recovery, flush area with water. Sweep up or vacuum up spillage and collect in suitable container for disposal. For waste disposal, see section 13 of the SDS.

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling
Conditions for safe storage, including any incompatibilities

Minimize dust generation and accumulation. Provide appropriate exhaust ventilation at places where dust is formed. Avoid breathing dust. Avoid contact with skin and eyes. In case of insufficient ventilation, wear suitable respiratory equipment. Practice good housekeeping.

Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits
Biological limit values
Appropriate engineering controls

No exposure limits noted for ingredient(s).

No biological exposure limits noted for the ingredient(s).

Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing.

Individual protection measures, such as personal protective equipment

Eye/face protection
Skin protection
Hand protection
Other
Respiratory protection
Thermal hazards

Use tight fitting goggles if dust is generated.

For prolonged or repeated skin contact use suitable protective gloves.

Wear suitable protective clothing.

Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

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.

9. Physical and chemical properties

Appearance
Physical state: Solid.
Form: Powder.
Color: White
Odor: None.
Odor threshold: No data available.
pH: 6.5 - 7.5
Melting point/freezing point: 158 °F (70 °C)
Initial boiling point and boiling range: No data available.
Flash point: Not applicable.
Evaporation rate: No data available.
Flammability (solid, gas): No data available.
Upper/lower flammability or explosive limits:
Flammability limit - lower (%): No data available.
Flammability limit - upper (%): No data available.
Explosive limit - lower (%): No data available.
Explosive limit - upper (%): No data available.
Vapor pressure: Not applicable.
Vapor density: Not applicable.
Relative density: 1.85
Solubility(ies):
Solubility (water): Infinitely soluble
Partition coefficient (n-octanol/water): No data available.
Auto-ignition temperature: No data available.
Decomposition temperature: No data available.
Viscosity: Not applicable.
Other information:
Density: No data available.
Explosive properties: No data available.
Molecular formula: C6FeN6.3H2O.4K
Oxidizing properties: No data available.

10. Stability and reactivity
Reactivity: The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability: Material is stable under normal conditions.
Possibility of hazardous reactions: Hazardous polymerization does not occur.
Conditions to avoid: Contact with incompatible materials. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).
Incompatible materials: Strong oxidizing agents. Strong acids.
Hazardous decomposition products: Nitrogen oxides (NOx). Hydrogen cyanide.

11. Toxicological information
Information on likely routes of exposure:
Ingestion: Expected to be a low ingestion hazard.
Inhalation: Inhalation of dusts may cause respiratory irritation.
Skin contact: No adverse effects due to skin contact are expected.
Eye contact: Dust in the eyes will cause irritation.
Symptoms related to the physical, chemical and toxicological characteristics

Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity
Not classified.

Skin corrosion/irritation
Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation
Dust in the eyes will cause irritation.

Respiratory or skin sensitization

Respiratory sensitization
Not available.

Skin sensitization
This product is not expected to cause skin sensitization.

Germ cell mutagenicity
No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity
This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

Reproductive toxicity
This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure
Not classified.

Specific target organ toxicity - repeated exposure
Not classified.

Aspiration hazard
Not relevant, due to the form of the product.

12. Ecological information

Ecotoxicity
The product is 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.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>POTASSIUM FERROCYANIDE TRIHYDRATE (CAS 14459-95-1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Rainbow trout,donaldson trout (Oncorhynchus mykiss)</td>
</tr>
</tbody>
</table>

Persistence and degradability
No data is available on the degradability of this product.

Bioaccumulative potential
No data available.

Mobility in soil
No data available.

Other adverse effects
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions
Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

Local disposal regulations
Dispose in accordance with all applicable regulations.

Hazardous waste code
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products
Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging
Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT
Not regulated as dangerous goods.

IATA
Not regulated as dangerous goods.

IMDG
Not regulated as dangerous goods.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information

US federal regulations

All components are on the U.S. EPA TSCA Inventory List.

- TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
  Not regulated.
- US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
  Not listed.
- CERCLA Hazardous Substance List (40 CFR 302.4)
  Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

- Hazard categories
  Immediate Hazard - No
  Delayed Hazard - No
  Fire Hazard - No
  Pressure Hazard - No
  Reactivity Hazard - No

  SARA 302 Extremely hazardous substance
  Not listed.

  SARA 311/312 Hazardous chemical
  Not listed.

  SARA 313 (TRI reporting)
  Not regulated.

Other federal regulations

- Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
  Not regulated.
- Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
  Not regulated.
- Safe Drinking Water Act (SDWA)
  Not regulated.

US state regulations

- US. Massachusetts RTK - Substance List
  Not regulated.
- US. New Jersey Worker and Community Right-to-Know Act
  Not listed.
- US. Pennsylvania Worker and Community Right-to-Know Law
  Not listed.
- US. Rhode Island RTK
  Not regulated.
- US. California Proposition 65
  California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.
  Not listed.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance
  Not listed.

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Country(s) or region</td>
<td>Inventory name</td>
<td>On inventory (yes/no)*</td>
</tr>
<tr>
<td>----------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
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<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s). A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

<table>
<thead>
<tr>
<th>Issue date</th>
<th>03-June-2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revision date</td>
<td>-</td>
</tr>
<tr>
<td>Version #</td>
<td>01</td>
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</tbody>
</table>

NFPA Ratings

![NFPA Ratings Diagram](image)

Disclaimer

The information in the sheet was written based on the best knowledge and experience currently available.