



# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Product identifier** YSI 2363 Potassium Ferrocyanide  
**Version #** 01  
**Issue date** 03-June-2014  
**Revision date** -  
**Supersedes date** -  
**Product code** 2363  
**Product use** Analysis Standard/Reagent  
**Manufacturer information** YSI, Inc  
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(Collect calls accepted)

## 2. Hazards Identification

**Emergency overview** Exposure to powder or dusts may be irritating to eyes, nose and throat.  
**Potential health effects**  
**Routes of exposure** Inhalation.  
**Eyes** Dust in the eyes will cause irritation.  
**Skin** Dust or powder may irritate the skin.  
**Inhalation** Dust may irritate respiratory system.  
**Ingestion** May cause irritation.  
**Signs and symptoms** Dust may irritate the eyes and the respiratory system.  
**Potential environmental effects** May cause long-term adverse effects in the environment.

## 3. Composition / Information on Ingredients

Components	CAS #	Percent
POTASSIUM FERROCYANIDE TRIHYDRATE	14459-95-1	60 - 100

## 4. First Aid Measures

**First aid procedures**  
**Eye contact** Rinse with water. Get medical attention if irritation develops and persists.  
**Skin contact** Rinse skin with water/shower. Get medical attention if irritation develops and persists.  
**Inhalation** If dust from the material is inhaled, remove the affected person immediately to fresh air.  
**Ingestion** Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately.  
**General advice** If you feel unwell, seek medical advice (show the label where possible). Show this safety data sheet to the doctor in attendance.

## 5. Fire Fighting Measures

**Flammable properties** Not flammable by WHMIS criteria.  
**Extinguishing media**  
**Suitable extinguishing media** Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).  
**Unsuitable extinguishing media** Do not use water jet as an extinguisher, as this will spread the fire.

<b>Protection of firefighters</b>	
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Protective equipment for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Use water spray to cool unopened containers.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>Explosion data</b>	
<b>Sensitivity to static discharge</b>	Not available.
<b>Sensitivity to mechanical impact</b>	Not available.

## 6. Accidental Release Measures

<b>Personal precautions</b>	Keep unnecessary personnel away. Avoid inhalation of dust from the spilled material. Wear a dust mask if dust is generated above exposure limits. For personal protection, see section 8 of the MSDS.
<b>Environmental precautions</b>	Do not contaminate water.
<b>Methods for containment</b>	If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product.
<b>Methods for cleaning up</b>	Minimize dust generation and accumulation. Should not be released into the environment. This product is miscible in water. Collect dust using a vacuum cleaner equipped with HEPA filter. Following product recovery, flush area with water. For waste disposal, see section 13 of the MSDS.

## 7. Handling and Storage

<b>Handling</b>	Avoid release to the environment. 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.
<b>Storage</b>	Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the MSDS).

## 8. Exposure Controls / Personal Protection

<b>Occupational exposure limits</b>	No exposure limits noted for ingredient(s).
<b>Engineering controls</b>	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. Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing.
<b>Personal protective equipment</b>	
<b>Eye / face protection</b>	Use tight fitting goggles if dust is generated.
<b>Skin protection</b>	Wear suitable protective clothing.
<b>Respiratory protection</b>	Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.

## 9. Physical & Chemical Properties

<b>Appearance</b>	Not available.
<b>Physical state</b>	Solid.
<b>Form</b>	Powder.
<b>Color</b>	White
<b>Odor</b>	None.
<b>Odor threshold</b>	No data available.
<b>pH</b>	6.5 - 7.5
<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Boiling point</b>	No data available.

<b>Melting point/Freezing point</b>	158 °F (70 °C)
<b>Solubility (water)</b>	Infinitely soluble
<b>Specific gravity</b>	1.85
<b>Flash point</b>	Not applicable.
<b>Flammability limits in air, upper, % by volume</b>	No data available.
<b>Flammability limits in air, lower, % by volume</b>	No data available.
<b>Auto-ignition temperature</b>	No data available.
<b>Evaporation rate</b>	No data available.
<b>Viscosity</b>	Not applicable.
<b>Partition coefficient (n-octanol/water)</b>	No data available.
<b>Molecular formula</b>	C6FeN6.3H2O.4K
<b>Other data</b>	
<b>Decomposition temperature</b>	No data available.
<b>Density</b>	No data available.
<b>Explosive limit - lower (%)</b>	No data available.
<b>Explosive limit - upper (%)</b>	No data available.
<b>Explosive properties</b>	No data available.
<b>Flammability (solid, gas)</b>	No data available.
<b>Oxidizing properties</b>	No data available.

## 10. Chemical Stability & Reactivity Information

<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Conditions to avoid</b>	Contact with incompatible materials. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).
<b>Incompatible materials</b>	Strong acids.
<b>Hazardous decomposition products</b>	Nitrogen oxides (NOx). Hydrogen cyanide.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.

## 11. Toxicological Information

<b>Acute effects</b>	Not classified.
<b>Local effects</b>	Inhalation of dusts may cause respiratory irritation.
<b>Chronic effects</b>	Not expected to be hazardous by WHMIS criteria.

## 12. Ecological Information

<b>Ecotoxicity</b>	Contains a substance which causes risk of hazardous effects to the environment.
<b>Environmental effects</b>	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
<b>Persistence and degradability</b>	Not available.
<b>Mobility in environmental media</b>	This product is miscible in water.

## 13. Disposal Considerations

<b>Disposal instructions</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Dispose in accordance with all applicable regulations.
<b>Waste from residues / unused products</b>	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****TDG**

Not regulated as dangerous goods.

**IATA**

Not regulated as dangerous goods.

**IMDG**

Not regulated as dangerous goods.

**15. Regulatory Information****Canadian regulations**

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

**WHMIS status**

Non-controlled

**Inventory status**

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

\*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****NFPA ratings**

Health: 1  
Flammability: 0  
Instability: 0

**Disclaimer**

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