

## MATERIAL SAFETY DATA SHEET

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Issue Date:

### 1- Chemical Product Information and Company Identification.

**Product Name:** : Potassium ferricyanide reference standard, AnStan®.  
**Synonym:** : Potassium Hexacyanoferrate(III).  
**Product code:** : BS14390.  
**CAS Number:** : 13746-66-2.  
**Company Name:** : Briti Scientific.  
**Company Address:** : Plot No:78/B/13, SY-79,Phase-VI, Jeedimetla,Hyderabad-500 055.  
Telangana, India.

### Section 2- Composition / Information on Ingredients.

CAS No.	Chemical Name	Mol. Formula
13746-66-2.	Potassium Hexacyanoferrate(III).	C <sub>6</sub> FeK <sub>3</sub> N <sub>6</sub> .

### Section 3- Hazards Identification.

#### Classification

Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

#### Label Elements

##### Hazard Statements

##### Precautionary Statements

Hazards not otherwise classified (HNOC)

Contact with acids liberates very toxic gas

### Section 4- First Aid Measures.

**Eye Contact:** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.

**Skin Contact:** Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.

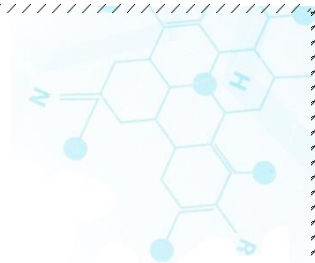
**Inhalation:** Remove to fresh air. Get medical attention. If not breathing, give artificial respiration

**Ingestion:** Do NOT induce vomiting. Get medical attention.

#### Most important symptoms and effects

No information available.





**Notes to Physician** Treat symptomatically

### Section 5- Fire Fighting Measures.

**Unsuitable Extinguishing Media:** No information available

**Flash Point** No information available

**Method** - No information available

**Autoignition Temperature** No information available

**Explosion Limits**

**Upper** No data available

**Lower** No data available

**Sensitivity to Mechanical Impact** No information available

**Sensitivity to Static Discharge** No information available

**Specific Hazards Arising from the Chemical**

Thermal decomposition can lead to release of irritating gases and vapors.

**Hazardous Combustion Products**

Potassium oxides. Metal oxides. Hydrogen cyanide (hydrocyanic acid)

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**NFPA**

Health	Flammability	Instability	Physical hazards
1	0	0	NA

### Section 6- Accidental Release Measures.

**Personal Precautions:** Use personal protective equipment as required. Ensure adequate ventilation. Avoid dust formation. Avoid contact with skin, eyes or clothing.

**Environmental Precautions:** Avoid release to the environment. See Section 12 for additional Ecological Information. Should not be released into the environment. Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system.

**Methods for Containment and Clean Up:**

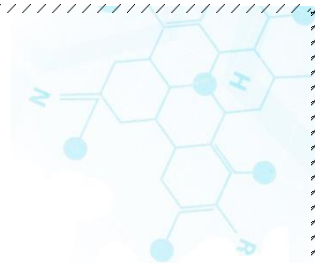
Sweep up and shovel into suitable containers for disposal. Avoid dust formation

### Section 7- Handling and Storage.

**Handling:** Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid dust formation. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation

**Storage:** Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from direct sunlight. Incompatible Materials. Strong oxidizing agents. Strong acids.





## Section 8- Exposure Control/Personal Protection.

**Exposure Guidelines:** This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Engineering Measures:** Ensure adequate ventilation, especially in confined areas. Ensure that eye wash stations and safety showers are close to the workstation location.

### **Personal Protective Equipment**

**Eye/face Protection:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin and body protection:** Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection:** No protective equipment is needed under normal use conditions.

### **Hygiene Measures:**

Handle in accordance with good industrial hygiene and safety practice

## Section 9- Physical and Chemical Properties.

**Appearance** Orange to Brown to Dark red powder to crystal.

**Odor** Odorless

**Odor Threshold** No information available

**pH** No information available

**Melting Point/Range** 300°C.

**Boiling Point/Range** 2735°C.

**Flash Point** No information available

**Evaporation Rate** No information available

**Flammability (solid,gas)** Not applicable

### **Flammability or explosive limits**

Upper No data available

Lower No data available

**Vapor Pressure** negligible

**Density** 1.85 g/cm<sup>3</sup>.

**Solubility** Soluble in water.

**Partition coefficient; n-octanol/water** No data available

**Autoignition Temperature** No information available

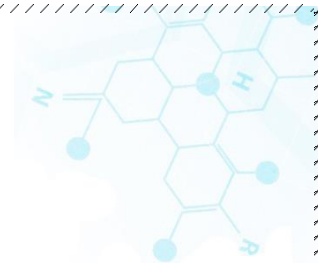
**Decomposition Temperature** > 200°C

**Viscosity** No information available

**Molecular Formula** C<sub>6</sub>FeK<sub>3</sub>N<sub>6</sub>.

**Molecular Weight** 329.25 g/mol.





## Section 10- Stability and Reactivity.

**Reactive Hazard:** None known, based on information available

**Stability:** Stable under normal conditions. Sensitivity to light.

**Conditions to Avoid:** Avoid dust formation. Incompatible products. Excess heat. Exposure to light

**Incompatible Materials:** Strong oxidizing agents, Strong acids

**Hazardous Decomposition Products:** Potassium oxides, Metal oxides, Hydrogen cyanide (hydrocyanic acid)

**Hazardous Polymerization:** Hazardous polymerization does not occur

**Hazardous Reactions:** Contact with acids liberates very toxic gas. Heating can release hazardous gases.

## Section 11- Toxicological Information.

### Acute Toxicity

**Product Information** If ingested: the ferricyanide complex does not decompose to cyanide.

### Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Potassium ferricyanide	LD50 = 2,970 mg/kg (Mouse)	Not listed	Not listed

### Toxicologically Synergistic Products

No information available

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Irritation** No information available

**Sensitization** No information available

**Mutagenic Effects** No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Potassium ferricyanide	13746-66-2	Not listed	Not listed	Not listed	Not listed	Not listed

**Reproductive Effects** No information available.

**Developmental Effects** No information available. Teratogenicity No information available. STOT - single exposure None known

STOT - repeated exposure None known

**Aspiration hazard** No information available

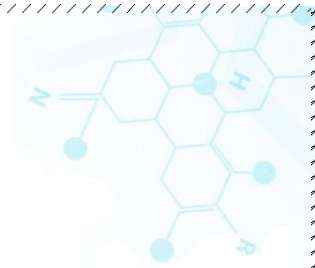
### Symptoms / effects, both acute and delayed

Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated.





## Section 12- Ecological Information.

**Ecotoxicity** May cause long-term adverse effects in the environment. Do not empty into drains. Do not allow material to contaminate ground water system.  
available.

**Persistence and Degradability** Persistence is unlikely

**Bioaccumulation/ Accumulation** No information available

**Mobility** Will likely be mobile in the environment due to its water solubility.

## Section 13- Disposal Considerations.

**Waste Disposal Methods:** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## Section 14- Transport Information.

<b>DOT</b>	Not regulated
<b>TDG</b>	Not regulated
<b>IATA</b>	Not regulated
<b>IMDG/IMO</b>	Not regulated

## Section 15- Regulatory Information.

### **Legend:**

TSCA - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

**TSCA 12(b)** - Notices of Export Not applicable

### **U.S. Federal Regulations**

SARA 313 Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable

**Clean Air Act** Not applicable

**OSHA** - Occupational Safety and

Health Administration

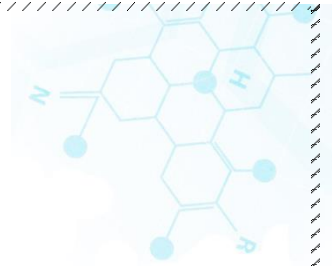
Not applicable

**CERCLA** Not applicable

**California Proposition 65** This product does not contain any Proposition 65 chemicals







### Section 16- Other Information.

Briti Scientific provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

