

## 1. Identification

*Identification of the product*

Catalogue No: **PO075 ; 0219/1 ; 0219/12 ; 0219/250 ; PO070**

Product name: **Potassium hexacyanoferrate(III) (potassium ferricyanide)**

Synonyms: Red Prussiate of Potash

*Application of the substance/the preparation:*

Chemicals for synthesis, Laboratory Chemicals

## 2. Hazards identification

***Classification of the substance or mixture***

Not a dangerous substance according to GHS

This substance is not classified as dangerous according to European Directive 67/548/EEC.

***Label elements:***

The product does not need to be labelled in accordance with EC directives or respective national laws.

*Other Hazards:* None

*Classification System*

The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies

## 3. Composition/information on ingredients

Chemical classification: Inorganic salt

CAS number: 13746-66-2    EC number: 237-323-3

## 4. First aid measures

Eye Contact: Irrigate thoroughly with water for at least 10 minutes. If discomfort persists obtain medical attention.

Skin Contact: Wash off skin thoroughly with water. Remove contaminated clothing and wash before re-use. In severe cases, obtain medical attention.

Inhalation: Remove from exposure, rest and keep warm. In severe cases obtain medical attention.

Ingestion: Wash out mouth thoroughly with water and give plenty of water to drink. Obtain medical attention.

## 5. Fire-fighting measures

Fire Risks: Not combustible, May evolve toxic fumes in fire.

Suitable Extinguishing Media: To suit environment.

Fire Action: Do not stay in dangerous zone without chemical protection suit and respiratory protective equipment.

## 6. Accidental release measures

Personal: Wear appropriate protective clothing.

Disposal: Mix with dry sand, transfer carefully to container and arrange removal by disposal company. Wash site of spillage thoroughly with detergent and water.

Spillage: For large spillages liquids should be contained with sand or earth and both liquids and solids transferred to salvage containers. Any residues should be treated as for small spillages.

## 7. Handling and storage

Handling: Avoid generation of dusts. Do not breathe dust. Wash hands and face thoroughly after working with material. Contaminated clothing should be removed and washed before re-use. Use appropriate containment to avoid environmental contamination.

Storage: Store at room temperature (15 to 25°C recommended)  
Keep well closed and protected from direct sunlight and moisture.

## 8. Exposure controls/personal protection

As appropriate to the situation and the quantity handled.

Respirator: Dust respirator.

Ventilation: Extraction hood.

Gloves: Rubber or plastic

Eye Protection: Goggles or face-shield

Other Precautions: Plastic apron, sleeves, boots - if handling large quantities  
See section 15 for UK exposure limits.

## 9. Physical and chemical properties

Physical State: Solid  
Appearance: Red  
Odour: Odourless  
Molecular Formula:  $K_3Fe(CN)_6$   
Molecular Weight: 329.25  
Specific Gravity/Density:  $1.89 \text{ g/cm}^3 @ 20^\circ\text{C}$   
Solubility in water: Very soluble.

## 10. Stability and reactivity

Light-sensitive.

Substances to be avoided: Acids, oxidising agents, fluorine, ammonia, chromium trioxide, nitrides, nitrites, hydrogen halides. Contact with acids liberates very toxic gas. (Hydrogen cyanide).

The possibility of reaction with other substances cannot be excluded.

## 11. Toxicological information

Inhalation: Dust: Dizziness, dyspnoea, vomiting, cyanosis, cardiovascular disorders, coma.

Skin Contact: Slight irritation.

Eye Contact: Severe irritation.

Ingestion: Gastrointestinal complaints.

Further data: Hydrolysis: Highly toxic.

**12. Ecological information**

Ecological: Harmful effect on aquatic organisms cannot be excluded in the event of improper handling or disposal.  
Do not allow to enter drinking water supplies, waste water, or soil!

**13. Disposal considerations**

Chemical residues are generally classified as special waste, and as such are covered by regulations which vary according to location. Contact your local waste disposal authority for advice, or pass to a chemical disposal company. Rinse out empty containers thoroughly before returning for recycling.

**14. Transport information**

*Land Transport ADR:*

UN: NR  
PK:  
Class:  
Proper Shipping Name:  
LQ:

*Maritime Transport IMDG:*

UN: NR  
PK:  
Class:  
Marine Pollutant:  
Proper Shipping Name:

*Air Transport IATA:*

UN: NR  
PK:  
Class:  
Proper Shipping Name:

**15. Regulatory information**

*Labelling according to EC directives*

Symbol:

R-phrases:

S-phrases:

EC-No.: 237-323-3

Local Regulations:

UK Exposure Limits: WEL – potassium hexacyanoferrate (III)  
Long-term: 5 mg/m<sup>3</sup>

## 16. Other information

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### Important Statement

The information above is believed to be accurate and represents the best information currently available from multiple crosschecked sources.

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