Multichem Specialities Pvt. Ltd.
1215, Dalamal Tower,
Nariman Point, Mumbai 400021, India
T: +91 2243432121
E: multichem@multichemindia.com
www.multichemindia.com

ESTD.1976 MULTI CHEM YOUR CHEMICAL PARTNER

SAFETY DATA SHEET

POTASSIUM FERROCYANIDE

SECTION 1: Identification of the substance/mixture and of the company/undertaking Trade name:

1.1 Product identifier:	
CAS Number:	14459-95-1
EC number:	237-722-2
1.2 SYNONYMS:	• Yellow prussiate of potash • Potassium hexacyanoferrate(II) trihydrate • Tetrapotassium ferrocyanide trihydrate • Ferrate hexacyano tetrapotassium trihydrate • KALI FERROCYANATUM

SECTION 2: Hazards identification:

2.1 Classification of the substance or mixture:	Classification according to Regulation (EC) No 1272/2008 The substance is not classified according to the CLP regulation.
2.2 Label elements:	Labelling according to Regulation (EC) No 1272/2008 No data available
Hazard Pictograms:	None
Signal Word:	No data available
Hazard statements:	No data available
Precautionary Statements:	**P261:** Avoid breathing dust/fume/gas/mist/vapors/spray **P264:** Wash thoroughly after handling **P280:** Wear protective gloves/protective clothing/eye protection/face protection **P302+P352:** IF ON SKIN: Wash with plenty of soap and water **P405:** Store locked up.

	P501: Dispose of contents/ container to an approved waste disposal plant.
2.3 Other hazards:	
Inhalation:	may cause respiratory irritation or discomfort, and prolonged exposure could lead to more serious respiratory issues.
Ingestion:	may cause nausea, vomiting, and abdominal discomfort; in large quantities, it could lead to more severe effects due to the potential release of cyanide ions.
Skin Contact:	may cause mild irritation, redness, or discomfort; prolonged or repeated exposure could lead to more significant skin irritation.
Eye contact:	may cause irritation, redness, tearing, and discomfort; prolonged exposure could result in more severe eye damage.
Chronic Exposure:	Chronic exposure may lead to prolonged skin irritation, respiratory issues, or more serious health effects due to the potential release of cyanide ions, especially in an acidic environment.
Aggravation of pre-existing conditions:	Aggravation of pre-existing conditions, such as respiratory or skin disorders, may occur with exposure to potassium ferrocyanide, particularly in individuals with sensitivities to cyanide or those with asthma or dermatitis.

SECTION 3: Composition/information on ingredients

3.1 Chemical characterisation:	Substances
CAS No:	Description: 14459-95-1 POTASSIUM FERROCYANIDE
Identification number(s):	EC number: 237-722-2

Multichem Specialities Pvt. Ltd.
1215, Dalamal Tower,
Nariman Point, Mumbai 400021, India
T: +91 2243432121
E: multichem@multichemindia.com
www.multichemindia.com

SECTION 4: First aid measures

4.1 Description of first aid measures	
General information:	
After inhalation:	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
After skin contact:	Remove contaminated clothing immediately .Wash with plenty of water. Consult a physician.
After eye contact:	Immediately flush eyes with plenty of water for at least 15 minutes. consult a physician.
After swallowing:	Rinse mouth with water. Immediately after ingestion Never give anything by mouth to an unconscious person. Do not induce vomiting. Consult a physician.
4.2 Most important symptoms and effects, both acute and delayed:	The most important symptoms and effects include acute respiratory irritation, skin and eye irritation, and nausea, while delayed effects may involve more severe respiratory or skin issues, especially with prolonged exposure or ingestion.
4.3 Indication of any immediate medical attention and special treatment needed:	Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media:	Water, Carbon dioxide dry powder
5.2 Special hazards arising from the substance or mixture:	Carbon oxides, nitrogen oxides, hydrogen cyanide.
5.3 Advice for firefighters:	Wear fully protective suit, safety glasses and respiratory device. Cool

	tanks/drums with water spray/remove them into safety.
5.4 further information:	no data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:	Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Avoid dust accumulation. Seek medical attention.
6.2 Environmental precautions:	Do not enter this chemical into drains.
6.3 Methods and material for containment and cleaning up:	Take up spill into absorbent material, e.g.: sand, earth, vermiculite, powdered limestone. Scoop absorbed substance into closing containers. Spill must not return in its original container. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling

SECTION 7: Handling and storage

7.1 Precautions for safe handling:	For use in are with adequate ventilation. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not use in confined spaces. Electrostatic discharge protection. Minimize dust generation and

	accumulation. Avoid ingestion and inhalation.
7.2 Conditions for safe storage, including any incompatibilities:	Store in original containers. Keep containers securely sealed Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks. Store in a dry and dark area. Keep away from moisture.
Requirements to be met by storerooms and receptacles:	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
7.3 Specific end uses:	no data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters	
Additional information about design of technical facilities:	A system of local and general exhaust is recommended.
8.2 Exposure controls	
Appropriate engineering controls	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Personal protective equipment:	Dust respirator, protective masks, wearing anti chemical gloves, rubber gloves, etc.
General protective and hygienic measures:	Eyes, body and hand protection, maintain indoor air unobstructed. Wear protective equipment.
	Respiratory protection: Required.
Protection of hands:	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this

Multichem Specialities Pvt. Ltd.
1215, Dalamal Tower,
Nariman Point, Mumbai 400021, India
T: +91 2243432121
E: multichem@multichemindia.com
www.multichemindia.com

	product. Dispose of contaminated gloves after use in accordance with applicable laws. Wash and dry hands.
	Eye protection: Required
Protection of Body:	Complete suit protecting against chemicals, Flame retardant antistatic protective clothing.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties General Information	
Appearance: Form:	Crystalline Powder
Colour:	Yellow
Odour:	Odourless
pH-value:	7
Melting point/Melting range:	400°C
Boiling point/Boiling range:	Not determined
Flammability (solid, gaseous):	Non- Flammable
Ignition temperature:	Non- Flammable
Decomposition temperature:	400°C
Self-igniting:	None
Flash point:	Not applicable
Danger of explosion:	None
Explosion limits: Lower:	Not applicable
Explosion limits: Upper:	Not applicable
Vapour pressure:	Not determined
Density at 20 °C:	1.86 g/cm^3
Relative density:	1.86
Vapour density:	Not applicable
Evaporation rate:	Not determined
Solubility in / Miscibility with- ·water at 20 °C:	InSoluble
Partition coefficient:(n-octanol/water)	Not applicable
Viscosity:	Not applicable

Multichem Specialities Pvt. Ltd.
1215, Dalamal Tower,
Nariman Point, Mumbai 400021, India
T: +91 2243432121
E: multichem@multichemindia.com
www.multichemindia.com

SECTION 10: Stability and reactivity

10.1 Reactivity	Contact with acids releases toxic gas.
10.2 Chemical stability	This chemical is stable under storage conditions.
10.3 Possibility of hazardous reactions	It may react with strong oxidizing agents or acids to produce toxic gas.
10.4 Conditions to avoid	High temperatures (above 60°C), open flames, direct sunlight.
10.5 Incompatible materials	Strong oxidizing agents, strong acids or strong bases.
10.6 Hazardous decomposition products	Carbon dioxide, carbon monoxide, hydrogen cyanide.

SECTION 11: Toxicological information

11.1 Information on toxicological effects	
Acute Toxicity:	**LD50** (Oral, Rat): 5.110 mg/kg **LD50** (Dermal, Rabbit): 2000 mg/kg **LC50** (Inhalation Rat): no data available
Skin corrosion/Irritation:	No data available
Serious eye damage/irritation:	No data available
Respiratory damage/irritation:	No data available
Ingestion:	No data available
Germ cell mutagenicity:	No data available
Carcinogenicity:	No data available
Reproductive toxicity:	No data available
Specific target organ toxicity - single exposure:	No data available
Specific target organ toxicity - repeated exposure:	No data available
Aspiration hazard:	No data available
Signs and Symptoms of Exposure:	Refer section 2.3
11.2 Additional toxicological information	
Biodegradability:	Not Biodegradable

Multichem Specialities Pvt. Ltd.
1215, Dalamal Tower,
Nariman Point, Mumbai 400021, India
T: +91 2243432121
E: multichem@multichemindia.com
www.multichemindia.com

SECTION 12: Ecological information

12.1 Toxicity **Aquatic toxicity:**	LC50(fish): 100 mg/l (96hr) EC50(daphnia): 100 mg/l (48 hr) ErC50(algae): 3.1 mg/l (72 hr)
12.2 Persistence and degradability:	Not Biodegradable
12.3 Bioaccumulative potential:	Not bioaccumulative
12.4 Mobility in soil:	low mobility
12.5 Other adverse effects:	No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods	
Uncleaned packaging **Recommendation:**	dispose of in accordance with local hazardous waste regulations
Recommended cleansing agents:	Water, diluted sodium hydroxide, sand.

SECTION 14: Transport information

14.1 UN-Number · ADR, ADN, IMDG, IATA:	2811
14.2 UN proper shipping name · ADR, ADN, IMDG, IATA:	POTASSIUM FERROCYANIDE
14.3 Transport hazard class(es) · ADR, ADN, IMDG, IATA :	6.1
14.4 Packing group · ADR, IMDG, IATA:	3
14.5 Environmental hazards:	None
14.6 Special precautions for user:	Handle responsibly.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture **Directive 2012/18/EU**	Directive 2012/18/EU, under that this substance is not classified in listed substances

Multichem Specialities Pvt. Ltd.
1215, Dalamal Tower,
Nariman Point, Mumbai 400021, India
T: +91 2243432121
E: multichem@multichemindia.com
www.multichemindia.com

Named dangerous substances:	This substance is not listed in the annex 1 to the directive.
15.2 Chemical safety assessment:	Chemical assessment has not been carried out.

SECTION 16: Other information

The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and limitations of our knowledge, this document is only for reference. Users should make their independent judgment suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.