

SAFETY DATA SHEET

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

1.1 Product identifiers

Product name	Potassium Ferricyanide
CAS number	13746-66-2
Synonyms	Potassium prussiate; Everitt's salt; Prussiate of potash

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Laboratory chemicals.
-----------------	-----------------------

1.3 Details of the supplier of the safety data sheet

Company	Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A.
Telephone	512-668-9918
Fax	512-886-4008

1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

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

2.2 GHS Label elements, including precautionary statements

None required.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Contact with acids liberates very toxic gas.

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Potassium ferricyanide	Potassium prussiate; Everitt's salt; Prussiate of potash	13746-66-2	>95%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

If inhaled	Remove to fresh air. Get medical attention. If not breathing, give artificial respiration.
In case of skin contact	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.
In case of eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
If swallowed	Do NOT induce vomiting. Get medical attention.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media No information available.

Unsuitable extinguishing media No information available.

5.2 Specific hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors.
Hazardous Combustion Products: Potassium oxides. Metal oxides. Hydrogen cyanide (hydrocyanic acid).

5.3 Special 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.

5.4 Further information

Flash Point 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.

NFPA

Health	Flammability	Instability	Physical hazards
1	0	0	N/A

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

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

6.2 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 groundwater system. Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up

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

6.4 Reference to other sections

See Section 2 for full list of hazard and precaution statements.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions on safe handling

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

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep containers tightly closed in a dry, cool, and well-ventilated place. Protect from direct sunlight.

Incompatibilities

Strong oxidizing agents. Strong acids.

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Component	Type	Value
Potassium ferricyanide	(Vacated) TWA	1 mg/m ³
	(Vacated) TWA	5 mg/m ³

US. ACGIH Threshold Limit Values

Component	Type	Value
Potassium ferricyanide	TWA	1 mg/m ³

US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value
Potassium ferricyanide	IDLH	25 mg/m ³
	TWA	1 mg/m ³

Biological occupational exposure limits

No information available.

8.2 Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash 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 protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Body Protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory protection

No protective equipment is needed under normal use conditions.

Control of environmental exposure

No information available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Solid
Appearance	Orange-red
Odor	Odorless
Odor Threshold	No information available
pH	~ 6, 5% aq. sol
Melting Point/Range	No data available
Boiling Point/Range	No information available
Evaporation Rate	Not applicable
Flammability (solid)	No information available
Flammability or explosive limit	No data available
Upper	No data available
Lower	No data available
Vapor Pressure	Negligible
Vapor Density	Not applicable
Density	1.86 g/cm ³
Solubility	Partially soluble
Partition coefficient; n-octanol/water	No data available
Autoignition Temp	No information available
Decomposition Temp	> 200°C
Viscosity	Not applicable
Molecular Formula	C ₆ Fe K ₃ N ₆
Molecular Weight	329.26 g/mol
VOC Content(%)	No information available
Oxidizing properties	No information available

9.2 Other safety information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No information available.

10.2 Chemical stability

Stable under normal conditions. Sensitivity to light.

10.3 Possibility of hazardous reactions

Contact with acids liberates very toxic gas. Heating can release hazardous gases.

10.4 Conditions to avoid

Avoid dust formation. Incompatible products. Excess heat. Exposure to light.

10.5 Incompatible materials

Strong oxidizing agents, Strong acids.

10.6 Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Potassium ferricyanide	2,970 mg/kg (Mouse)	-	-

Skin corrosion/irritation

No information available.

Serious eye damage/eye irritation

No information available.

Respiratory or skin sensitization

No information available.

Germ cell mutagenicity

No information available.

Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Potassium ferricyanide	13746-66-2	Not listed	Not listed	Not listed	Not listed	Not listed

Specific target organ toxicity - single exposure

None known.

Specific target organ toxicity - repeated exposure

None known.

Reproductive toxicity

No information available.

Chronic effects

No information available.

11.2 Additional Information

If ingested: the ferricyanide complex does not decompose to cyanide. The toxicological properties have not been fully investigated.

SECTION 12: Ecological information

12.1 Toxicity

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

Product		Species	Test Results
Potassium ferricyanide	LC50	Onchorchynchus mykiss	869 mg/L/96h
	LC50	Pimephales promelas	>100 mg/L/96h
	EC50	Daphnia magna	549 mg/L/48h

12.2 Persistence and degradability

Persistence is unlikely.

12.3 Bio accumulative potential

No information available.

12.4 Mobility in soil

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

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 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

DOT (US) Not regulated.

IMDG Not regulated.

IATA Not regulated.

SECTION 15: Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not applicable.

CERCLA Hazardous Substance List (40 CFR 302.4)
Not listed.

SARA 304 Emergency release notification
Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)
Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)
SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous
See Section 2 for more information.

SARA 313 (TRI reporting)

Listed, Potassium ferricyanide (CAS #13746-66-2).

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Listed, Potassium ferricyanide (CAS #13746-66-2).

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Clean Water Act (CWA)

Listed, Potassium ferricyanide (CAS #13746-66-2).

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Not listed.

US state regulations**US. Massachusetts RTK - Substance List**

Not listed.

US. New Jersey Worker and Community Right-to-Know Act

Listed, Potassium ferricyanide (CAS #13746-66-2).

US. Pennsylvania Worker and Community Right-to-Know Law

Listed, Potassium ferricyanide (CAS #13746-66-2).

California Proposition 65

Not listed.

SECTION 16: Other information

Issue date: 12/29/2023

Revision 1: 07/16/2026

SECTION 17: Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.