Potassium Ferrocyanide Trihydrate, Saturated Solution



SAFETY DATA SHEET

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

1.1 Product identifiers

Product name Potassium Ferrocyanide Trihydrate Solution

CAS number See section 3

Synonyms Potassium Hexacyanoferrate(II), Tetrapotassium Ferrocyanide

Trihydrate, Yellow Prussiate

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

Harmful to aquatic life with long lasting effects.

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Potassium ferrocyanide trihydrate	Potassim hexacyanoferrate (II) trihydrate	14459-95-1	25-30%
Water	H20	7732-18-5	70-75%

SECTION 4: First aid measures

4.1 **Description of first-aid measures**

General advice Show this sheet to a doctor if medical advice is needed.

If inhaled Remove to fresh air. Get medical attention immediately if symptoms occur.

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

None reasonably foreseeable.

4.3 Indication of any immediate medical attention and special treatment needed

Note to Physician: Treat symptomatically.

SECTION 5: Firefighting measures

5.1 **Extinguishing media**

Suitable extinguishing media Substance is nonflammable; use agent most appropriate to extinguish surrounding fire.

Unsuitable extinguishing mediaNone identified.

5.2 Specific hazards arising from the substance or mixture

Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes. Keep product and empty container away from heat and sources of ignition.

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	1	N/A

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

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

6.2 Environmental precautions

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

6.3 Methods and materials for containment and cleaning up

Cover drains. Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Refer to protective measures listed in Sections 7 and 8. See section 13 for proper disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. 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 Ferrocyanide Trihydrate	TWA	5 mg/m3	

US. ACGIH Threshold Limit Values

Component	Туре	Value
Potassium Ferrocyanide Trihydrate	TWA	1 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value
Potassium Ferrocyanide Trihydrate	TWA	1 mg/m3
	IDLH	25 mg/m3

Biological occupational exposure limits

No information available.

8.2 Exposure controls

Appropriate engineering controls

None under normal use conditions.

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.

Body Protection

Wear appropriate protective clothing to prevent skin exposure.

Respiratory protection

No protective equipment is needed under normal use conditions.

Control of environmental exposure

Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State Liquid

Appearance Light yellow Odor Odorless

Odor Threshold No information available pH No information available Melting Point/Range No information available Boiling Point/Range No information available Evaporation Rate No information available Flammability (solid) No information available

Flammability or explosive limit

Upper No information available
Lower No information available
Vapor Pressure No information available
Vapor Density No information available
Density No information available

Solubility Soluble in water

Partition coefficient; No information available

n-octanol/water

Autoignition Temp

Decomposition Temp

No information available

Viscosity

No information available

Molecular Formula Mixture
Molecular Weight Mixture

VOC Content(%)

Oxidizing properties

No information available

9.2 Other safety information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

None known, based on information available.

10.2 Chemical stability

Stable under normal conditions. Light sensitive.

10.3 Possibility of hazardous reactions

Contact with acids liberates very toxic gas.

10.4 Conditions to avoid

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

10.5 Incompatible materials

Strong oxidizing agent. Strong acids.

10.6 Hazardous decomposition products

Carbon monoxide (CO), Carbon dioxide (CO2), Nitrogen oxides (NOx), Hydrogen cyanide (hydrocyanic acid), Heavy metal oxides.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

No acute toxicity information is available for this product.

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 Ferrocyanide Trihydrate	14459- 95-1	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

The toxicological properties have not been fully investigated.

SECTION 12: Ecological information

12.1 Toxicity

No information available.

12.2 Persistence and degradability

May persist.

12.3 Bio accumulative potential

No information available.

12.4 Mobility in soil

No information available.

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)

UN Number Not regulated Proper Shipping name Not regulated

Hazard Class None

Packaging Group Not regulated

Technical name Potassium Ferrocyanide Trihydrate Solution

IMDG

UN Number Not regulated Proper Shipping name Not regulated

Hazard Class None

Packaging Group Not regulated

Technical name Potassium Ferrocyanide Trihydrate Solution

IATA

UN Number Not regulated Proper Shipping name Not regulated

Hazard Class None

Packaging Group Not regulated

Technical name Potassium Ferrocyanide Trihydrate Solution

SECTION 15: Regulatory information

US federal regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not listed/applicable.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed/applicable.

SARA 304 Emergency release notification

Not listed/applicable.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed/applicable.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed/applicable.

SARA 311/312 Hazardous

Not listed/applicable.

SARA 313 (TRI reporting)

Not listed/applicable.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not listed/applicable.

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

Not listed/applicable.

Safe Drinking Water Act

Not listed/applicable.

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

Not listed/applicable.

US state regulations

US. Massachusetts RTK - Substance List

Not listed.

US. New Jersey Worker and Community Right-to-Know Act Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law Not listed.

California Proposition 65

Not listed.

SECTION 16: Other information

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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.