



Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS 2024)

SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation Drabkin's Reagent

Product Number 2660

Other Identifying Product Numbers 2660-16, 2660-32

1.2. Recommended Use and Restrictions on Use

General Laboratory Reagent

1.3. Details of the Supplier of the Safety Data Sheet

Company Ricca Chemical Company

Address 412 West Fork Drive

Arlington, TX 76012 USA

Telephone 888-467-4222

1.4. Emergency Telephone Number (24 hours)

CHEMTREC (USA) 800-424-9300

CHEMTREC (International) 1+ 703-527-3887

Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS 2024)

SECTION 2: Hazard(s) Identification

2.1. Classification of the Substance or Mixture

This product is not categorized as hazardous in any GHS hazard class.

2.2. GHS Label Elements

Pictograms: None Required.

Signal Word: None Required.

Hazard Statements: None Required.

Precautionary Statements: None Required.

2.3. Hazards not Otherwise Classified

No other hazards identified.

2.4. Ingredients of Unknown Acute Toxicity

This product does not contain any ingredients of unknown acute toxicity.

SECTION 3: Composition / Information on Ingredients

3.1. Components of Mixture

Chemical Name (IUPAC)	Common Name and Synonyms	CAS Number	Weight%
water	Water	7732-18-5	99.88
sodium hydrogen carbonate	Sodium Bicarbonate	144-55-8	0.10
tripotassium iron(3+) hexacyanide	Potassium Ferricyanide	13746-66-2	< 0.1
potassium cyanide	Potassium Cyanide; Hydrocyanic acid, potassium salt	151-50-8	< 0.1

Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS 2024)

SECTION 4: First-Aid Measures

4.1. Description of Necessary Measures

Eye Contact: May cause irritation, redness, pain, and tearing.

Ingestion: Dilute immediately with water or milk. Induce vomiting. Call a physician.

Inhalation: Not expected to require first aid. If necessary, remove to fresh air.

Skin Contact: Will pass through unbroken skin and enter the bloodstream. Large exposures can be fatal.

4.2. Most Important Symptoms and Effects, Acute and Delayed

CAUTION! Contains Cyanide. Do not mix with acid. Avoid ingestion. If ingested, dilute with water or milk and induce vomiting. Call a physician. Wash areas of contact with plenty of water. For eyes, get medical attention. EYE CONTACT: May cause irritation, redness, pain, and tearing. SKIN CONTACT: Will pass through unbroken skin and enter the bloodstream. Large exposures can be fatal.

4.3. Immediate Medical Attention or Special Treatment Needed

Irrigate immediately with large quantity of water for at least 15 minutes. Call a physician if irritation develops. Remove to fresh air. Give artificial respiration if necessary (Not by mouth). Wash areas of contact with soap and water for at least 15 minutes. Call a physician if irritation develops. Dilute immediately with water or milk. Induce vomiting. Call a physician. Available Cyanide antidotes are Hydroxocobalamin, Sodium Nitrite and Sodium Thiosulfate administered via intravenous (IV) infusion by qualified healthcare professionals.

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing Media

Use any means suitable for extinguishing surrounding fire.

5.2. Specific Hazards Arising from the Substance or Mixture in a Fire

Not considered to be a fire or explosion hazard.

5.3. Special Protective Equipment and Precautions for Firefighters

Use protective clothing and breathing equipment appropriate for the surrounding fire.

SECTION 6: Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Wear appropriate PPE for the size and nature of the spill. As a general rule, wear safety glasses and gloves.

6.2. Cleanup and Containment Methods and Materials

Absorb with suitable material and dispose of in accordance with local regulations.

Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS 2024)

SECTION 7: Handling and Storage

7.1. Precautions for Safe Handling and Storage Conditions

As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage. Store at room temperature. Contact with acid liberates Cyanide fumes.

SECTION 8: Exposure Controls / Personal Protection

8.1. Exposure Limits

U.S. OSHA - Permissible Exposure Limits (PEL) - Time Weighted Averages (TWA)

Chemical Name	CAS Number	Exposure Limit
Potassium Ferricyanide	13746-66-2	"5 mg/m ³ TWA (as CN)" As Cyanides [RR-00812-8]
Potassium Cyanide	151-50-8	"5 mg/m ³ TWA (as CN)" As Cyanides [RR-00812-8]

U.S. OSHA - Permissible Exposure Limits (PEL) - Ceiling Limits

No limits found.

U.S. OSHA - Permissible Exposure Limits (PEL) - Short Term Exposure Limits (STEL)

No limits found.

U.S. OSHA - Specifically Regulated Chemicals

No limits found.

ACGIH - Threshold Limit Values - Ceilings (TLV-C)

Chemical Name	CAS Number	Exposure Limit
Potassium Cyanide	151-50-8	5 mg/m ³ Ceiling (as CN, listed under Hydrogen cyanide and cyanide salts)

ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL)

No limits found.

ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)

Chemical Name	CAS Number	Exposure Limit
Potassium Ferricyanide	13746-66-2	"1 mg/m ³ TWA (as Fe)" As Iron salts, soluble [RR-00521-0]

8.2. Engineering Controls

No specific controls are needed. Normal room ventilation is adequate.

8.3. Individual Protective Measures and Personal Protective Equipment

Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS 2024)

Respiratory Protection: Normal room ventilation is adequate.

Skin Protection: Chemical resistant gloves.

Eye Protection: Safety glasses or goggles.

SECTION 9: Physical and Chemical Properties

9.1. Basic Physical and Chemical Properties

Physical State: liquid

Color: Yellow-green

Odor: Data not available.

Odor Threshold: Data not available.

Melting/Freezing Point: 0.0°C

Boiling Point/Range: 100°C

Flammability: Data not available.

Flammability/Explosive Limits: Data not available.

Flash Point: Not flammable

Auto-Ignition Temperature: Data not available.

Decomposition Temperature: Data not available.

pH: Alkaline

Kinematic Viscosity: Data not available.

Solubility: miscible

Vapor Pressure: Data not available.

Evaporation Rate: Data not available.

Relative Density: 1.01

Relative Vapor Density: Data not available.

Particle Characteristics: Data not available.

Partition Coefficient n-octanol/water, log Data not available.

SECTION 10: Stability and Reactivity

10.1. Reactivity and Chemical Stability

Stable under normal conditions of use and storage.

10.2. Possibility of Hazardous Reactions

Data not available.

10.3. Conditions to Avoid and Incompatible Materials

Strong oxidizers, acids, acid salts, Peroxides. Contact with acids generates toxic Cyanide gas.

Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS 2024)

10.4. Hazardous Decomposition Products

Will not occur.

SECTION 11: Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity - Oral Exposure:

Not acutely toxic.

Chemical Name	CAS Number	Toxicity
Potassium Ferricyanide	13746-66-2	Oral LD50 Mouse 2970 mg/kg (Source: NLM_CIP)
Sodium Bicarbonate	144-55-8	Oral LD50 Rat 4220 mg/kg (Source: NLM_CIP)
Potassium Cyanide	151-50-8	Oral LD50 Rat 7.49 mg/kg (Source: JAPAN_GHS)

Acute Toxicity - Dermal Exposure:

Not acutely toxic.

Chemical Name	CAS Number	Toxicity
Potassium Cyanide	151-50-8	Dermal LD50 Rabbit 22.3 mg/kg (Source: JAPAN_GHS)

Acute Toxicity - Inhalation Exposure:

Not acutely toxic.

Chemical Name	CAS Number	Toxicity
Potassium Cyanide	151-50-8	Inhalation LC50 Rat 0.16 mg/L 1 h (Source: NLM_CIP)

11.2 Carcinogenicity:

International Agency for Research on Cancer (IARC)

Chemical Name	CAS Number	Classification
No data found.		

National Toxicology Program (NTP)

Chemical Name	CAS Number	Classification
No data found.		

U.S. OSHA specifically regulated carcinogens

Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS 2024)

Chemical Name	CAS Number	Classification
No data found.		

11.3 Additional Toxicology Information:

Data not available.

SECTION 12: Ecological Information

12.1. Ecotoxicity

Chemical Name	CAS Number	Species	Exposure	Toxicity
Sodium Bicarbonate	144-55-8	Freshwater Fish	Acute	LC50 96 h <i>Lepomis macrochirus</i> 8250 - 9000 mg/L [static] (IUCLID)
Potassium Cyanide	151-50-8	Freshwater Fish	Acute	LC50 96 h <i>Oncorhynchus mykiss</i> 0.04 - 0.046 mg/L [flow-through] (EPA); LC50 96 h <i>Oncorhynchus mykiss</i> 0.044 - 0.084 mg/L [static] (EPA); LC50 96 h <i>Lepomis macrochirus</i> 0.01 - 0.08 mg/L [static] (EPA); LC50 96 h <i>Lepomis macrochirus</i> 0.45 mg/L (EPA); LC50 96 h <i>Lepomis macrochirus</i> 0.45 - 0.57 mg/L [flow-through] (IUCLID); LC50 96 h <i>Pimephales promelas</i> 0.31 - 0.37 mg/L [static] (EPA); LC50 96 h <i>Poecilia reticulata</i> 0.0588 mg/L [flow-through] (EPA)
Sodium Bicarbonate	144-55-8	Water Flea	Acute	EC50 48 h <i>Daphnia magna</i> 2350 mg/L (IUCLID)

12.2. Persistence and Degradability

Data not available.

12.3. Bioaccumulative Potential

Data not available.

12.4. Mobility in soil

Data not available.

12.5. Other Adverse Ecological Effects

Data not available.

Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS 2024)

SECTION 13: Disposal Considerations

13.1. Waste Treatment Methods

Data not available.

SECTION 14: Transportation Information

14.1 Transportation by Land - Department of Transportation (DOT, United States of America)

Not regulated according to DOT regulations.

14.2 Transportation by Air - International Air Transport Association (IATA)

Not regulated according to IATA Dangerous Goods Regulations.

Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS 2024)

14.3 Transportation of Dangerous Goods (TDG, Canada)

Not regulated according to TDG regulations.

SECTION 15: Regulatory Information

Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS 2024)

15.01. Occupational Safety and Health Administration (OSHA) Hazards

Chemical Name	CAS Number	Regulatory Information
		No data found.

15.02. Superfund Amendments and Reauthorization Act (SARA) 302 Extremely Hazardous Substances

Chemical Name	CAS Number	RQ	TPQ
Potassium Cyanide	151-50-8	100 lb TPQ (this material is a reactive solid, the TPQ does not default to 10000 pounds for non-powder, non-molten, non-solution form)	10 lb EPCRA RQ

15.03. Superfund Amendments and Reauthorization Act (SARA) 311/312 Hazardous Chemicals

Chemical Name	CAS Number	Regulatory Information
Potassium Cyanide	151-50-8	10 lb final RQ; 4.54 kg final RQ

15.04. Superfund Amendments and Reauthorization Act (SARA) 313 Toxics Release Inventory (TRI)

Chemical Name	CAS Number	List	Regulatory Information
Potassium Ferricyanide	13746-66-2	Emission Reporting	"1.0 % de minimis concentration (X+CN- where X=H+ or any other group where a formal dissociation can be made, for example, KCN or Ca(CN) ₂ , listed under Chemical Category N106)" As Cyanide compounds [RR-00812-8]
Potassium Cyanide	151-50-8	Emission Reporting	"1.0 % de minimis concentration (X+CN- where X=H+ or any other group where a formal dissociation can be made, for example, KCN or Ca(CN) ₂ , listed under Chemical Category N106)" As Cyanide compounds [RR-00812-8]

15.05. Massachusetts Right-to-Know Substance List

Chemical Name	CAS Number	Regulatory Information
Potassium Cyanide	151-50-8	Extraordinarily hazardous

Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS 2024)

15.06. Pennsylvania Right-to-Know Hazardous Substances

Chemical Name	CAS Number	Regulatory Information
Potassium Ferricyanide	13746-66-2	"Environmental hazard" As Cyanide compounds [RR-00812-8]; "Environmental hazard" As Iron salts [RR-04647-9]
Potassium Cyanide	151-50-8	Environmental hazard

15.07. New Jersey Worker and Community Right-to-Know Components

Chemical Name	CAS Number	Regulatory Information
Potassium Ferricyanide	13746-66-2	"sn 2308" As Cyanide compounds [RR-00812-8]
Potassium Cyanide	151-50-8	sn 1562

15.08. California Proposition 65

Chemical Name	CAS Number	Regulatory Information
Potassium Cyanide	151-50-8	"male reproductive toxicity, 7/5/13" As Hydrogen cyanide salts [RR-04817-9]

15.09. Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)

Chemical Name	CAS Number	List	Status
Potassium Ferricyanide	13746-66-2	DSL	Present
Sodium Bicarbonate	144-55-8	DSL	Present
Potassium Cyanide	151-50-8	DSL	Present
Water	7732-18-5	DSL	Present

15.10. United States of America Toxic Substances Control Act (TSCA) List

Chemical Name	CAS Number	Status
Potassium Ferricyanide	13746-66-2	Present (ACTIVE)
Sodium Bicarbonate	144-55-8	Present (ACTIVE)
Potassium Cyanide	151-50-8	Present (ACTIVE)
Water	7732-18-5	Present [XU] (ACTIVE)

Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS 2024)

15.11. European Inventory of Existing Commercial Chemical Substances (EINECS), European List of Notified Chemical Substances (ELINCS), and No Longer Polymers (NLP)

Chemical Name	CAS Number	List	Number
Potassium Ferricyanide	13746-66-2	EINECS	237-323-3
Sodium Bicarbonate	144-55-8	EINECS	205-633-8
Potassium Cyanide	151-50-8	EINECS	205-792-3
Water	7732-18-5	EINECS	231-791-2

15.12. China - Inventory of Existing chemical Substances (IECSC)

Chemical Name	CAS Number	Status
Potassium Ferricyanide	13746-66-2	Present [34366]
Sodium Bicarbonate	144-55-8	Present [34140]
Potassium Cyanide	151-50-8	Present [27730]
Water	7732-18-5	Present [32224]

15.13. Korea - Existing Chemicals Inventory (KECI/KECL)

Chemical Name	CAS Number	List	Status
Potassium Ferricyanide	13746-66-2	Annex 1	Present [KE-34764]
Potassium Ferricyanide	13746-66-2	Annex 3	"Present (97-1-90)" As Inorganic cyanide compounds [RR-00573-2]
Sodium Bicarbonate	144-55-8	Annex 1	Present [KE-31360]
Potassium Cyanide	151-50-8	Annex 1	Present [KE-29092]
Potassium Cyanide	151-50-8	Annex 3	"Present (97-1-90)" As Inorganic cyanide compounds [RR-00573-2]
Water	7732-18-5	Annex 1	Present [KE-35400]

15.14. Japan - Existing and New Chemical Substances Inventory (ENCS)

Chemical Name	CAS Number	MITI No.
Potassium Ferricyanide	13746-66-2	(1)-134
Sodium Bicarbonate	144-55-8	(1)-164
Potassium Cyanide	151-50-8	(1)-1086
Water	7732-18-5	- (listed on Japanese Pharmacopoeia 8th Edition)

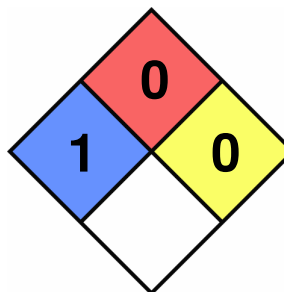
SECTION 16: Other Information

Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS 2024)

16.1 National Fire Protection Associate (NFPA) Rating

Health: 1
Flammability: 0
Reactivity 0
Special Hazard:



16.2 Document Revision

Last Revision Date:
2026-05-07

DISCLAIMER

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and RICCA CHEMICAL COMPANY assumes no legal responsibility or liability whatsoever resulting from its use.