



## Safety Data Sheet

### 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:** 448 West Fork Drive  
Arlington, TX 76012 USA

**Telephone:** 888-467-4222

#### 1.4. Emergency Telephone Number (24 hr)

CHEMTREC (USA) 800-424-9300  
CHEMTREC (International) 1+ 703-527-3887

### SECTION 2: Hazard(s) Identification

#### 2.1. Classification of the Substance or Mixture (in accordance with OSHA HCS 29 CFR 1910.1200)

*For the full text of the Hazard and Precautionary Statements listed below, see Section 16.*

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.

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### 2.3. WHMIS Classification

WHMIS classification is not included based on the recommended option (Option 4) found in the Canada Gazette Part II, Vol. 149, No.3, page 458

### 2.4. Hazards not Otherwise Classified or Covered by GHS

Data not available.

## SECTION 3: Composition / Information on Ingredients

### 3.1. Components of Substance or Mixture

Chemical Name	Formula	Molecular Weight	CAS Number	Weight%
Water	H <sub>2</sub> O	18.01 g/mol	7732-18-5	99.88%
Sodium Bicarbonate	NaHCO <sub>3</sub>	84.00 g/mol	144-55-8	0.10%
Potassium Ferricyanide	K <sub>3</sub> Fe(CN) <sub>6</sub>	329.24 g/mol	13746-66-2	0.02%
Potassium Cyanide	KCN	65.11 g/mol	151-50-8	0.00%

## SECTION 4: First-Aid Measures

### 4.1. General First Aid Information

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

**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.

**Ingestion:** Dilute immediately with water or milk. Break Amyl Nitrite ampule in cloth and hold tightly under nose for 15 seconds, repeat 2 to 6 times at 15 second intervals. Induce vomiting. Call a physician.

### 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. Medical Attention or Special Treatment Needed

Not expected to require special treatment.

## SECTION 5: Fire-Fighting Measures

### 5.1. Extinguishing Media

Use any means suitable for extinguishing surrounding fire.



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### 5.2. Specific Hazards Arising from the Substance or Mixture

Not considered to be a fire or explosion hazard.

### 5.3. Special Protective Equipment 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.

## 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

### 8.2. Exposure Controls

**Engineering Controls:** No specific controls are needed. Normal room ventilation is adequate.

**Respiratory Protection:** Normal room ventilation is adequate.

**Skin Protection:** Chemical resistant gloves.

**Eye Protection:** Safety glasses or goggles.

### 8.3. Personal Protective Equipment

Normal room ventilation is adequate. Chemical resistant gloves. Safety glasses or goggles.



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### SECTION 9: Physical and Chemical Properties

#### 9.1. Basic Physical and Chemical Properties

**Appearance:** Yellow-green liquid

**Physical State:** Liquid

**Odor:** Data not available.

**Odor Threshold:** Data not available.

**pH:** Alkaline

**Melting/Freezing Point:** 0.0°C

**Initial Boiling Point /Range:** 100°C - 100°C

**Flash Point:** Data not available.

**Evaporation Rate:** Data not available.

**Flammability:** Data not available.

**Flammability/Explosive Limits:** Data not available.

**Vapor Pressure:** Data not available.

**Vapor Density:** Data not available.

**Relative Density:** 1.01

**Solubility:** Miscible

**Partition Coefficient (n-Octanol/Water):** Data not available.

**Auto-Ignition Temperature:** Data not available.

**Decomposition Temperature:** Data not available.

**Viscosity:** Data not available.

**Explosive Properties:** Data not available.

**Oxidizing Properties:** 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.

#### 10.4. Hazardous Decomposition Products

Will not occur.



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### SECTION 11: Toxicological Information

#### 11.1. Information on Toxicological Effects

**Acute Toxicity - Oral Exposure:**

Not applicable.

**Acute Toxicity - Dermal Exposure:**

Not applicable.

**Acute Toxicity - Inhalation Exposure:**

Not applicable.

**Acute Toxicity - Other Information:**

LD50, Oral, Rat: 5 mg/kg (Potassium Cyanide), 4220 mg/kg (Sodium Bicarbonate), details of toxic effects not reported other than lethal dose value. LD50, Oral, Mouse: (Potassium Ferricyanide) 2970 mg/kg, details of toxic effects not reported other than lethal dose value.

**Skin Corrosion and Irritation:**

Not applicable.

**Serious Eye Damage and Irritation:**

Not applicable.

**Respiratory Sensitization:**

Not applicable.

**Skin Sensitization:**

Not applicable.

**Germ Cell Mutagenicity:**

Not applicable.

**Carcinogenicity:**

Not applicable.

**Reproductive Toxicity:**

Not applicable.

**Specific Target Organ Toxicity from Single Exposure:**

Not applicable.

**Specific Target Organ Toxicity from Repeated Exposure:**

Not applicable.

**Aspiration Hazard:**

Not applicable.

**Additional Toxicology Information:**

Data not available.

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### SECTION 12: Ecological Information

#### 12.1. Ecotoxicity

Not applicable.

#### 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.

### 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.

### SECTION 15: Regulatory Information

#### 15.1. Occupational Safety and Health Administration (OSHA) Hazards

Not listed.

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

Potassium Cyanide (CAS # 151-50-8): 10 lb EPCRA RQ

Potassium Cyanide (CAS # 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)



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

Potassium Cyanide (CAS # 151-50-8): 10 lb final RQ; 4.54 kg final RQ

### 15.4. Superfund Amendments and Reauthorization Act (SARA) 313 Toxic Release Inventory (TRI)

Potassium Ferricyanide (CAS # 13746-66-2): 1.0 % de minimis concentration (X+CN<sup>-</sup> where X = H<sup>+</sup> or any other group where a formal dissociation can be made. For example KCN or Ca(CN)<sub>2</sub>. Chemical Category N106)

Potassium Cyanide (CAS # 151-50-8): 1.0 % de minimis concentration (X+CN<sup>-</sup> where X = H<sup>+</sup> or any other group where a formal dissociation can be made. For example KCN or Ca(CN)<sub>2</sub>. Chemical Category N106)

### 15.5. Massachusetts Right-to-Know Substance List

Potassium Cyanide (CAS # 151-50-8): Extraordinarily hazardous

Potassium Cyanide (CAS # 151-50-8): Present

### 15.6. Pennsylvania Right-to-Know Hazardous Substances

Potassium Ferricyanide (CAS # 13746-66-2): Environmental hazard

Potassium Ferricyanide (CAS # 13746-66-2): Present

Potassium Cyanide (CAS # 151-50-8): Environmental hazard

Potassium Cyanide (CAS # 151-50-8): Environmental hazard (listed under Cyanide)

Potassium Cyanide (CAS # 151-50-8): Present

Potassium Cyanide (CAS # 151-50-8): Present (listed under Cyanide)

Water (CAS # 7732-18-5): Present

### 15.7. New Jersey Worker and Community Right-to-Know Components

Potassium Ferricyanide (CAS # 13746-66-2): SN 2308 TPQ: 500 lb (Category Code N106, listed under Cyanide)

Potassium Ferricyanide (CAS # 13746-66-2): sn 2308; sn 0553

Potassium Cyanide (CAS # 151-50-8): sn 0553

Potassium Cyanide (CAS # 151-50-8): SN 0553 TPQ: 500 lb

Potassium Cyanide (CAS # 151-50-8): sn 1562

Potassium Cyanide (CAS # 151-50-8): SN 1562 TPQ: 100 lb

Potassium Cyanide (CAS # 151-50-8): SN 2308 TPQ: 500 lb (Category Code N106, listed under Cyanide)

Potassium Cyanide (CAS # 151-50-8): sn 2308; sn 0553

### 15.8. California Proposition 65

Potassium Cyanide (CAS # 151-50-8): carcinogen, initial date 7/5/13

Potassium Cyanide (CAS # 151-50-8): male reproductive toxicity, initial date 7/5/13

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

Potassium Ferricyanide (CAS # 13746-66-2): Present

Sodium Bicarbonate (CAS # 144-55-8): Present

Potassium Cyanide (CAS # 151-50-8): Present

Water (CAS # 7732-18-5): Present

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

Potassium Ferricyanide (CAS # 13746-66-2): Present

Sodium Bicarbonate (CAS # 144-55-8): Present

Potassium Cyanide (CAS # 151-50-8): Present

Water (CAS # 7732-18-5): Present

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

Not listed.

## SECTION 16: Other Information

### 16.1. Full Text of Hazard Statements and Precautionary Statements

### 16.2. Miscellaneous Hazard Classes

**Canadian Carcinogenicity Hazard Class:** Not Applicable.

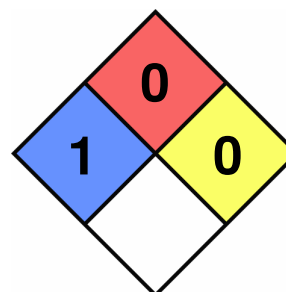
**Physical Hazards Not Otherwise Classified (PHNOC):** Not Applicable.

**Health Hazards Not Otherwise Classified (HHNOC):** Not Applicable.

Not Applicable.

### 16.3. National Fire Protection Association (NFPA) Rating

**Health:** 1  
**Flammability:** 0  
**Reactivity:** 0  
**Special Hazard:**





## Safety Data Sheet

### 16.4. Document Revision

**Last Revision Date:** 5/1/2015

### 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.