

Classified According to OSHA Hazard Communication Standard (HCS)

SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation: Sodium Nitroferricyanide Dihydrate, ACS Reagent Grade

(Sodium Nitroprusside)

Product Number: RDCS0700

Other Identifying Product Numbers: RDCS0700-100B1, RDCS0700-250B1

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 hours)

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

SECTION 2: Hazard(s) Identification

2.1. Classification of the Substance or Mixture

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

Hazard Class	Category	Hazard Statements	Precautionary Statements:
Acute Toxicity - Oral	Category 3	H301	P264, P270, P301+P310, P321, P330, P405,
			P501

2.2. GHS Label Elements

Pictograms:



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Signal Word: Danger

Hazard Statements:

Hazard Numbe	er Hazard Statement	
H301	Toxic if swallowed.	

Precautionary Statements:

Precautionary Number	Precautionary Statement
P264	Wash arms, hands and face thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or physician.
P321	Specific treatment (Wash areas of contact with water).
P330	Rinse mouth.
P405	Store locked up.
P501	Dispose of contents in accordance with local, state, federal and international regulations.

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%
Sodium Nitroprusside	Na ₂ Fe(CN) ₅ NO·2H ₂ O	297.95 g/mol	13755-38-9	100.00

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: May cause irritation, redness and pain. May be absorbed through skin on prolonged exposure.

Ingestion: IF SWALLOWED: Immediately call a POISON CENTER or physician. Dilute immediately with water or milk. Induce

vomiting. Call a physician.

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4.2. Most Important Symptoms and Effects, Acute and Delayed

Toxic if swallowed. CAUTION! Toxic. Harmful if ingested. May cause irritation to areas of contact. Wash areas of contact with plenty of water. If ingested, dilute with water, induce vomiting then call a physician. EYE CONTACT: May cause irritation, redness, pain, and tearing. SKIN CONTACT: May cause irritation, redness and pain. May be absorbed through skin on prolonged exposure. CHRONIC EFFECTS / CARCINOGENICITY: Iron poisoning may develop indicated by pink urine discoloration. Repeated ingestion may affect the liver.

4.3. Medical Attention or Special Treatment Needed

Specific treatment (Wash areas of contact with water). 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. If breathing is difficult, give oxygen. 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.

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

Not considered to be a fire or explosion hazard.

5.3. Special Protective Equipment for Firefighters

Use protective clothing and NIOSH-approved 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

Pick up in a manner that does not generate dust. Powder may be moistened with water to aid in the clean-up.

SECTION 7: Handling and Storage

7.1. Precautions for Safe Handling and Storage Conditions

Store locked up. As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from physical damage. Keep in tightly closed containers in a cool, dry area.

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SECTION 8: Exposure Controls / Personal Protection

8.1 Control Parameters

Chemical Name	Limit Type	Country	Exposure Limit	Information Source
Sodium Nitroprusside (13755-38-9)	TLV-TWA	USA	"1 mg/m³ TWA (as Fe)" As Iron salts, soluble	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
			[RR-00521-0]	J /
Sodium Nitroprusside (13755-38-9)	TWA	USA	"5 mg/m3 TWA (as CN)" As	U.S OSHA - Final PELs - Time
			Cyanides [RR-00812-8]	Weighted Averages (TWAs)
Sodium Nitroprusside (13755-38-9)	TWA	USA	"5 mg/m3 TWA (as CN)" As	U.S OSHA - Final PELs - Time
			Cyanides [RR-00812-8]	Weighted Averages (TWAs)
Sodium Nitroprusside (13755-38-9)	TLV-TWA	USA	"1 mg/m³ TWA (as Fe)" As	ACGIH - Threshold Limit Values - Time
			Iron salts, soluble	Weighted Averages (TLV-TWA)
			[RR-00521-0]	
Sodium Nitroprusside (13755-38-9)	TLV-TWA	USA	1 mg/m³ TWA (as Fe)	ACGIH - Threshold Limit Values - Time
				Weighted Averages (TLV-TWA)
Sodium Nitroprusside (13755-38-9)	TWA	USA	5 mg/m³ TWA (as CN)	U.S OSHA - Final PELs - Time
				Weighted Averages (TWAs)

8.2. Exposure Controls

Engineering Controls: A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne

Exposure Limit.

Respiratory Protection: A system of local or general exhaust is recommended. If necessary, wear a dust mask respirator to minimize

exposure to dust particles.

Skin Protection: Chemical resistant gloves. **Eye Protection:** Safety glasses or goggles.

8.3. Personal Protective Equipment

A system of local or general exhaust is recommended. If necessary, wear a dust mask respirator to minimize exposure to dust particles. 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: Ruby red solid

Physical State: Solid

Odor: Data not available.

Odor Threshold: Data not available.

pH: approx 5 (5% aqueous)

Melting/Freezing Point: Data not available.

Initial Boiling Point/Range: Data not available.

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: 1.72

Solubility: Data not available.

Partition Coefficient: 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 oxidizing agents, strong acids

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:

Toxic if swallowed. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. IF SWALLOWED: Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water). Rinse mouth. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

Acute Toxicity - Dermal Exposure:

Not applicable.

Acute Toxicity - Inhalation Exposure:

Not applicable.

Acute Toxicity - Other Information:

LD50, Oral Rat: 99 mg/kg, details of toxic effects not reported other than lethal dose value. Investigated as a reproductive effector.

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)

Sizes: 100 g, 250 g, 500 g, 1000 g

UN Number: UN3288

Proper Shipping Name: Toxic solid, inorganic, n.o.s. (Sodium Nitroferricyanide)

Hazard Class: 6.1

Packing Group: ||

Hazard Label(s):



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

Sizes: 100 g, 250 g, 500 g, 1000 g

UN Number: UN3288

Proper Shipping Name: Toxic solid, inorganic, n.o.s. (Sodium Nitroferricyanide)

Hazard Class: 6.1

Packing Group: ||

Hazard Label(s):



14.3 Transportation of Dangerous Goods (TDG, Canada)

Sizes: 100 g, 250 g, 500 g, 1000 g

UN Number: UN3288

Proper Shipping Name: TOXIC SOLID, INORGANIC, N.O.S. (sodium nitroferricyanide)

Hazard Class: 6.1

Packing Group: ||

Hazard Label(s):



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 Not listed.
- 15.3. Superfund Amendments and Reauthorization Act (SARA) 311/312 Hazardous Chemicals Not listed.
- 15.4. Superfund Amendments and Reauthorization Act (SARA) 313 Toxic Release Inventory (TRI)

Sodium Nitroprusside (CAS # 13755-38-9): "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] Sodium Nitroprusside (CAS # 13755-38-9): 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)

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15.5. Massachusetts Right-to-Know Substance List

Not listed.

15.6. Pennsylvania Right-to-Know Hazardous Substances

Sodium Nitroprusside (CAS # 13755-38-9): "Environmental hazard" As Cyanide compounds [RR-00812-8];

"Environmental hazard" As Iron salts [RR-04647-9]

Sodium Nitroprusside (CAS # 13755-38-9): "Environmental hazard" As Iron salts [RR-04647-9]

Sodium Nitroprusside (CAS # 13755-38-9): "Present" As Cyanide compounds [RR-00812-8];

"Present" As Iron salts [RR-04647-9]

Sodium Nitroprusside (CAS # 13755-38-9): "Present" As Iron salts [RR-04647-9]

Sodium Nitroprusside (CAS # 13755-38-9): Environmental hazard

Sodium Nitroprusside (CAS # 13755-38-9): Present

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

Sodium Nitroprusside (CAS # 13755-38-9): "SN 2308 500 lb TPQ (Category Code N106. Includes any unique chemical substance that contains the named metal as part of that chemical structure)" As Cyanide compounds [RR-00812-8]

Sodium Nitroprusside (CAS # 13755-38-9): "sn 2308" As Cyanide compounds [RR-00812-8]

Sodium Nitroprusside (CAS # 13755-38-9): sn 2308

Sodium Nitroprusside (CAS # 13755-38-9): SN 2308 500 lb TPQ (Category Code N106. Includes any unique chemical substance that contains the named metal as part of that chemical structure)

15.8. California Proposition 65

Not listed.

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

Sodium Nitroprusside (CAS # 13755-38-9): Present (DSL)

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

All components of this solution are listed as active on the TSCA Inventory or are mixtures (hydrates) of active items listed on the TSCA Inventory.

Sodium Nitroprusside (CAS # 13755-38-9): Present (ACTIVE)

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

Sodium Nitroprusside (CAS # 13755-38-9): 238-373-9

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SECTION 16: Other Information

16.1. Full Text of Hazard Statements and Precautionary Statements

Toxic if swallowed

Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product.

IF SWALLOWED: Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water). Rinse mouth.

Store locked up.

Dispose of contents in accordance with local, state, federal and international regulations.

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.

Biohazardous Infectious Materials Hazard Class: Not Applicable.

16.3. National Fire Protection Association (NFPA) Rating

Health: 2
Flammability: 0
Reactivity: 0
Special Hazard:



16.4. Document Revision

Last Revision Date: 2024-04-16

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.

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