



Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS 2024)

SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation Sodium Cyanide, ACS Reagent Grade

Product Number RDCS0470

Other Identifying Product Numbers RDCS0470-125D2, RDCS0470-500C2, RDCS0470-500G

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

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SECTION 2: Hazard(s) Identification

2.1. Classification of the Substance or Mixture

Hazard Class	Category	Hazard Statements	Precautionary Statements
Acute Toxicity - Oral	Category 2	H300	P264,P270,P301+P310,P321,P330,P405,P501
Acute Toxicity - Dermal	Category 1	H310	P262,P264,P270,P280,P302+P352,P310,P321,P361+P364,P405,P501
Acute Toxicity - Inhalation (Dusts and Mists)	Category 1	H330	P260,P271,P284,P304+P340,P310,P320,P403+P233,P405,P501
Skin Corrosion / Irritation	Category 1	H314	P260,P264,P280,P301+P330+P331,P303+P361+P353,P363,P304+P340,P310,P321,P305+P351+P338,P405,P501
Serious Eye Damage / Eye Irritation	Category 1	H318	P280,P305+P351+P338,P310
Hazardous to the Aquatic Environment, Short-term (Acute)	Acute 1	H400	P273,P391,P501
Hazardous to the Aquatic Environment, Long-term (Chronic)	Chronic 1	H410	P273,P391,P501

2.2. GHS Label Elements

Pictograms:



Signal Word: **Danger**

Hazard Statements:

NOTE: Hazard statements may be combined on labels to improve clarity and readability.

Hazard Number	Hazard Statement
H300+H310+H330	Fatal if swallowed, in contact with skin or if inhaled
H314	Causes severe skin burns and eye damage
H410	Very toxic to aquatic life with long lasting effects

Precautionary Statements:

NOTE: Precautionary statements may be combined or consolidated on labels to improve clarity and readability.

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Prevention

Precautionary Number	Precautionary Statement
P260	Do not breathe dust.
P262	Do not get in eyes, on skin, or on clothing.
P264	Wash hands, arms, and face thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P280	Wear protective gloves and eye protection.
P284	In case of inadequate ventilation wear respiratory protection.

Response

Precautionary Number	Precautionary Statement
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a poison center or doctor.
P330	Rinse mouth.
P361+P364	Take off immediately all contaminated clothing and wash it before reuse.
P391	Collect spillage.

Storage

Precautionary Number	Precautionary Statement
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

Disposal

Precautionary Number	Precautionary Statement
P501	Dispose of contents/container to suitable waste stream in accordance with local, state, federal, and international regulations.

2.3. Hazards not Otherwise Classified

No other hazards identified.

2.4. Ingredients of Unknown Acute Toxicity

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SECTION 3: Composition / Information on Ingredients

3.1. Components of Substance

Chemical Name (IUPAC)	Common Name and Synonyms	CAS Number	Weight%
sodium cyanide	Sodium Cyanide; Hydrocyanic acid, sodium salt	143-33-9	100.00

SECTION 4: First-Aid Measures

4.1. Description of Necessary Measures

Eye Contact: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. May cause irritation, redness, pain, and tearing.

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

Inhalation: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Skin Contact: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Will pass through unbroken skin and enter the bloodstream. Large exposures can be fatal.

4.2. Most Important Symptoms and Effects, Acute and Delayed

Causes severe skin burns and eye damage DANGER! Poisonous. May be fatal if swallowed, inhaled or absorbed through skin. Contact with acids liberates poisonous gas. Do not get in eyes, on skin, or on clothing. If ingested, give large quantity of water and induce vomiting. Call a physician. Wash areas of contact with plenty of water for at least 15 minutes. 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. CHRONIC EFFECTS / CARCINOGENICITY: Repeated exposure may cause skin rash and possible sensitization.

4.3. Immediate Medical Attention or Special Treatment Needed

Immediately call a poison center or doctor. 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). Flush with plenty of 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

Does not burn. Therefore, use extinguishing media that are not incompatible with cyanides and are appropriate for the surrounding fire. Sodium cyanide does not burn. Therefore, use extinguishing media that are not incompatible with cyanides and are appropriate for the surrounding fire. Specifically, do not use carbon dioxide or acidic dry chemical extinguishers since very toxic and flammable HCN will be released.

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

Not combustible, but if involved in a fire decomposes to produce hydrogen cyanide and oxides of nitrogen.

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5.3. Special Protective Equipment and Precautions for Firefighters

Wear special protective clothing and positive pressure self-contained breathing apparatus.

SECTION 6: Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Wear protective gloves and eye protection.

6.2. Cleanup and Containment Methods and Materials

Keep water away from release. Avoid contact with dust, mist, or solution. Do not create dust. Prompt cleanup and removal are necessary. Shovel into suitable dry container. Control runoff and isolate discharged material for proper disposal.

SECTION 7: Handling and Storage

7.1. Precautions for Safe Handling and Storage Conditions

Store in a well-ventilated place. Keep container tightly closed. Store locked up. 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

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

Chemical Name	CAS Number	Exposure Limit
Sodium Cyanide	143-33-9	"5 mg/m3 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
Sodium Cyanide	143-33-9	5 mg/m3 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)

No limits found.

8.2. Engineering Controls

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limit.

8.3. Individual Protective Measures and Personal Protective Equipment

Respiratory Protection: If engineering controls do not maintain airborne concentrations below recommended exposure limits, an approved respirator must be worn.

Skin Protection: Chemical resistant gloves.

Eye Protection: Safety glasses or goggles.

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SECTION 9: Physical and Chemical Properties

9.1. Basic Physical and Chemical Properties

Physical State:	Solid
Color:	Colorless/white
Odor:	Almond-like
Odor Threshold:	Data not available.
Melting/Freezing Point:	Approximately 564°C
Boiling Point/Range:	Approximately 1496°C
Flammability:	Data not available.
Flammability/Explosive Limits:	Data not available.
Flash Point:	Data not available.
Auto-Ignition Temperature:	Data not available.
Decomposition Temperature:	Data not available.
pH:	Alkaline (aqueous solution)
Kinematic Viscosity:	Data not available.
Solubility:	48 g/100 mL at 10°C
Vapor Pressure:	1 mmHg at 817°C
Evaporation Rate:	Data not available.
Relative Density:	1.6
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

Very stable when dry. Moisture will cause slow decomposition, releasing poisonous hydrogen cyanide gas.

10.2. Possibility of Hazardous Reactions

Data not available.

10.3. Conditions to Avoid and Incompatible Materials

Acid, nitrates, nitrites, chlorates, fluorine, magnesium, and strong oxidizers. Reacts with acids to liberate toxic and flammable hydrogen cyanide gas. Water or weak alkaline solutions can produce dangerous amounts of hydrogen cyanide in confined areas. Reacts with carbon dioxide in air to form hydrogen 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:

Oral acute toxicity estimate (ATE): 15 mg/kg(calculated)

Chemical Name	CAS Number	Toxicity
Sodium Cyanide	143-33-9	Oral LD50 Rat 15 mg/kg (Source: Canada_WHMIS)

Acute Toxicity - Dermal Exposure:

Dermal acute toxicity estimate (ATE): 10 mg/kg(calculated)

Chemical Name	CAS Number	Toxicity
Sodium Cyanide	143-33-9	Dermal LD50 Rabbit 10.4 mg/kg (Source: Canada_WHMIS)

Acute Toxicity - Inhalation Exposure:

Inhalation acute toxicity estimate (ATE, dust or mist): 0.0400 mg/L, 4 h(calculated)

Chemical Name	CAS Number	Toxicity
Sodium Cyanide	143-33-9	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

Chemical Name	CAS Number	Classification
		No data found.

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11.3 Additional Toxicology Information:

Fatal if swallowed, in contact with skin or if inhaled. Causes severe skin burns and eye damage.

SECTION 12: Ecological Information

12.1. Ecotoxicity

Chemical Name	CAS Number	Species	Exposure	Toxicity
Sodium Cyanide	143-33-9	Freshwater Fish	Acute	LC50 96 h <i>Lepomis macrochirus</i> 0.066 - 0.0852 mg/L [flow-through] (EPA); LC50 96 h <i>Lepomis macrochirus</i> 0.15 mg/L [static] (EPA); LC50 96 h <i>Oncorhynchus mykiss</i> 0.0391 - 0.0548 mg/L [static] (EPA); LC50 96 h <i>Oncorhynchus mykiss</i> 0.0558 - 0.0586 mg/L [flow-through] (EPA); LC50 96 h <i>Pimephales promelas</i> 0.0712 - 0.0936 mg/L [flow-through] (EPA); LC50 96 h <i>Pimephales promelas</i> 0.17 mg/L [static] (EPA)

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.

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SECTION 14: Transportation Information

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

Sizes: 125 g, 500 g

UN Number: UN1689

Proper Shipping Name: Sodium Cyanide, solid

Hazard Class: 6.1

Packing Group: I

Hazard Label(s):



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

Sizes: 125 g, 500 g

UN Number: UN1689

Proper Shipping Name: Sodium Cyanide, solid

Hazard Class: 6.1

Packing Group: I

Hazard Label(s):



14.3 Transportation of Dangerous Goods (TDG, Canada)

Sizes: 125 g, 500 g

UN Number: UN1689

Proper Shipping Name: SODIUM CYANIDE, SOLID

Hazard Class: 6.1

Packing Group: I

Hazard Label(s):



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SECTION 15: Regulatory Information

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
Sodium Cyanide	143-33-9	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
Sodium Cyanide	143-33-9	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
Sodium Cyanide	143-33-9	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
Sodium Cyanide	143-33-9	Extraordinarily hazardous

15.06. Pennsylvania Right-to-Know Hazardous Substances

Chemical Name	CAS Number	Regulatory Information
Sodium Cyanide	143-33-9	Environmental hazard

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

Chemical Name	CAS Number	Regulatory Information
Sodium Cyanide	143-33-9	sn 1693

15.08. California Proposition 65

Chemical Name	CAS Number	Regulatory Information
Sodium Cyanide	143-33-9	"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
Sodium Cyanide	143-33-9	DSL	Present

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

Chemical Name	CAS Number	Status
Sodium Cyanide	143-33-9	Present (ACTIVE)

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

Chemical Name	CAS Number	List	Number
Sodium Cyanide	143-33-9	EINECS	205-599-4

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

Chemical Name	CAS Number	Status
Sodium Cyanide	143-33-9	Present [27731]

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

Chemical Name	CAS Number	List	Status
Sodium Cyanide	143-33-9	Annex 1	Present [KE-31401]
Sodium Cyanide	143-33-9	Annex 3	"Present (97-1-90)" As Inorganic cyanide compounds [RR-00573-2]

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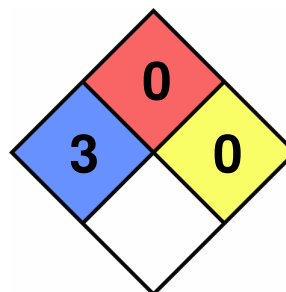
15.14. Japan - Existing and New Chemical Substances Inventory (ENCS)

Chemical Name	CAS Number	MITI No.
Sodium Cyanide	143-33-9	(1)-158

SECTION 16: Other Information

16.1 National Fire Protection Associate (NFPA) Rating

Health: 3
Flammability: 0
Reactivity: 0
Special Hazard:



16.2 Document Revision

Last Revision Date:
 2026-05-25

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.