

Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS 2024)

SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation Nitrification Inhibitor

Product Number R5443990

Other Identifying Product Numbers R5443990-125D2, R5443990-500C2, R5443990-50B1

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 - Dermal	Category 3	H311	P280,P302+P352,P312,P321, P361+P364,P405,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
H311	Toxic in contact with skin

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
P280	Wear protective gloves and eye protection.

Response

Precautionary Number	Precautionary Statement
P302+P352	IF ON SKIN: Wash with plenty of water.
P312	Call a poison center or doctor if you feel unwell.
P361+P364	Take off immediately all contaminated clothing and wash it before reuse.

Storage

Precautionary Number	Precautionary Statement
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

98.1 percent of this mixture consists of ingredient(s) of unknown acute dermal toxicity. 1.9 percent of this mixture consists of ingredient(s) of unknown acute inhalation toxicity.

SECTION 3: Composition / Information on Ingredients

3.1. Components of Mixture

Chemical Name (IUPAC)	Common Name and Synonyms	CAS Number	Weight%
disodium sulfate	Sodium Sulfate Anhydrous	7757-82-6	98.13
2-chloro-6-(trichloromethyl)pyridine	2-Chloro-6-(trichloromethyl)pyridine; Nitrapyrin	1929-82-4	1.87

SECTION 4: First-Aid Measures

4.1. Description of Necessary Measures

Eye Contact: May cause slight irritation.

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Ingestion: Dilute with water or milk. Call a physician if necessary.

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

Skin Contact: IF ON SKIN: Wash with plenty of water. May cause slight irritation.

4.2. Most Important Symptoms and Effects, Acute and Delayed

Toxic in contact with skin. May cause irritation to the eyes, skin and respiratory tract. Wash areas of contact with water. Call a physician if irritation develops. Contains an ingredient known to the state of California to cause cancer and developmental toxicity. **EYE CONTACT:** May cause slight irritation. **SKIN CONTACT:** May cause slight irritation. **CHRONIC EFFECTS / CARCINOGENICITY:** Chronic exposure may affect kidneys and liver.

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. Not expected to require first aid measures. Wash areas of contact with soap and water for at least 15 minutes. Call a physician if irritation develops. Dilute with water or milk. Call a physician if necessary.

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 protective gloves and eye protection.

6.2. Cleanup and Containment Methods and Materials

Small amounts may be flushed to the drain with excess water.

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. Exposure Limits

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

Chemical Name	CAS Number	Exposure Limit
2-Chloro-6-(trichloromethyl)pyridine	1929-82-4	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)

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)

No limits found.

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

Chemical Name	CAS Number	Exposure Limit
2-Chloro-6-(trichloromethyl)pyridine	1929-82-4	20 mg/m ³ STEL (inhalable fraction and vapor)

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

Chemical Name	CAS Number	Exposure Limit
2-Chloro-6-(trichloromethyl)pyridine	1929-82-4	10 mg/m ³ TWA (inhalable fraction and vapor)

8.2. Engineering Controls

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

8.3. Individual Protective Measures and Personal Protective Equipment

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.



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SECTION 9: Physical and Chemical Properties

9.1. Basic Physical and Chemical Properties

Physical State:	Solid
Color:	Off-white
Odor:	Data not available.
Odor Threshold:	Data not available.
Melting/Freezing Point:	884 - 888°C
Boiling Point/Range:	>890°C (with decomposition)
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:	Data not available.
Kinematic Viscosity:	Data not available.
Solubility:	160 - 200 g/L at 20°C
Vapor Pressure:	Data not available.
Evaporation Rate:	Data not available.
Relative Density:	2.7
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

In combination with sodium sulfate, aluminum and magnesium will explode @ 800C (1472F); strong mineral acids and bases.

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 acutely toxic.

Chemical Name	CAS Number	Toxicity
2-Chloro-6-(trichloromethyl)pyridine	1929-82-4	Oral LD50 Acute Toxicity Estimate 500 mg/kg (EU)
Sodium Sulfate Anhydrous	7757-82-6	Oral LD50 Rat >10000 mg/kg (no deaths occurred, Source: OECD_SIDS)

Acute Toxicity - Dermal Exposure:

Dermal acute toxicity estimate (ATE): 850 mg/kg(calculated)

Chemical Name	CAS Number	Toxicity
2-Chloro-6-(trichloromethyl)pyridine	1929-82-4	Dermal LD50 Rabbit 850 mg/kg (Source: JAPAN_GHS)

Acute Toxicity - Inhalation Exposure:

No information found.

Chemical Name	CAS Number	Toxicity
Sodium Sulfate Anhydrous	7757-82-6	Inhalation LC50 Rat >2.4 mg/L 4 h (no deaths occurred, dust, Source: ECHA_API)

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:

Toxic in contact with skin.

SECTION 12: Ecological Information

12.1. Ecotoxicity

Chemical Name	CAS Number	Species	Exposure	Toxicity
Sodium Sulfate Anhydrous	7757-82-6	Freshwater Fish	Acute	LC50 96 h Pimephales promelas 13500 - 14500 mg/L (IUCLID); LC50 96 h Pimephales promelas >6800 mg/L [static] (EPA); LC50 96 h Lepomis macrochirus 3040 - 4380 mg/L [static] (IUCLID); LC50 96 h Lepomis macrochirus 13500 mg/L (IUCLID)
Sodium Sulfate Anhydrous	7757-82-6	Water Flea	Acute	EC50 48 h Daphnia magna 2564 mg/L (IUCLID)
2-Chloro-6-(trichloromethyl)pyridine	1929-82-4	Water Flea	Chronic	NOEC 21 d Daphnia magna 0.744 mg/L [semi-static] (mortality, ECHA_API); NOEC 21 d Daphnia magna 0.103 mg/L [semi-static] (reproduction, ECHA_API); NOEC 21 d Daphnia magna 0.217 mg/L [semi-static] (length, ECHA_API)

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)

Not regulated according to DOT regulations.

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

Not regulated according to IATA Dangerous Goods Regulations.

14.3 Transportation of Dangerous Goods (TDG, Canada)

Not regulated according to TDG regulations.

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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
No data found.		

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

Chemical Name	CAS Number	Regulatory Information
No data found.		

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

Chemical Name	CAS Number	List	Regulatory Information
2-Chloro-6-(trichloromethyl)pyridine	1929-82-4	Emission Reporting	1.0 % de minimis concentration

15.05. Massachusetts Right-to-Know Substance List

Chemical Name	CAS Number	Regulatory Information
2-Chloro-6-(trichloromethyl)pyridine	1929-82-4	Present
Sodium Sulfate Anhydrous	7757-82-6	Present (solution)

15.06. Pennsylvania Right-to-Know Hazardous Substances

Chemical Name	CAS Number	Regulatory Information
2-Chloro-6-(trichloromethyl)pyridine	1929-82-4	Present
Sodium Sulfate Anhydrous	7757-82-6	Environmental hazard (solution)

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

Chemical Name	CAS Number	Regulatory Information
2-Chloro-6-(trichloromethyl)pyridine	1929-82-4	sn 1355

15.08. California Proposition 65

Chemical Name	CAS Number	Regulatory Information
2-Chloro-6-(trichloromethyl)pyridine	1929-82-4	carcinogen, 10/5/2005
2-Chloro-6-(trichloromethyl)pyridine	1929-82-4	developmental toxicity, 3/30/1999

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

Chemical Name	CAS Number	List	Status
2-Chloro-6-(trichloromethyl)pyridine	1929-82-4	DSL	Present
Sodium Sulfate Anhydrous	7757-82-6	DSL	Present

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

Chemical Name	CAS Number	Status
2-Chloro-6-(trichloromethyl)pyridine	1929-82-4	Present (ACTIVE)
Sodium Sulfate Anhydrous	7757-82-6	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
2-Chloro-6-(trichloromethyl)pyridine	1929-82-4	EINECS	217-682-2
Sodium Sulfate Anhydrous	7757-82-6	EINECS	231-820-9

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

Chemical Name	CAS Number	Status
2-Chloro-6-(trichloromethyl)pyridine	1929-82-4	Present [24554]
Sodium Sulfate Anhydrous	7757-82-6	Present [23172]

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

Chemical Name	CAS Number	List	Status
2-Chloro-6-(trichloromethyl)pyridine	1929-82-4	Annex 1	Present [KE-05-0915]
Sodium Sulfate Anhydrous	7757-82-6	Annex 1	Present [KE-31609]

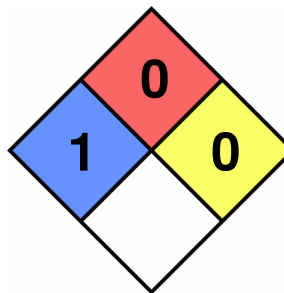
15.14. Japan - Existing and New Chemical Substances Inventory (ENCS)

Chemical Name	CAS Number	MITI No.
Sodium Sulfate Anhydrous	7757-82-6	(1)-501

SECTION 16: Other Information

16.1 National Fire Protection Associate (NFPA) Rating

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



16.2 Document Revision

Last Revision Date:
 2026-05-05

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.