

## Safety Data Sheet

### 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:** 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.*

Hazard Class	Category	Hazard Statement	Precautionary Statements
Skin Sensitizer	Category 1	H317	P261, P272, P280, P302+P352, P332+P313, P321, P363, P501
Carcinogenicity	Category 2	H351	P201, P202, P280, P308+P313, P405, P501
Specific Target Organs/Systemic Toxicity Following Repeated Exposure	Category 2	H373	P260, P314, P501

#### 2.2. GHS Label Elements

**Pictograms:**



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Signal Word: **Warning**

**Hazard Statements:**

Hazard Number	Hazard Statement
H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.

**Precautionary Statements:**

Precautionary Number	Precautionary Statement
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust/fumes.
P261	Avoid breathing dust/fumes.
P272	Contaminated work clothing must not be allowed out of the workplace.
P280	Wear protective gloves and eye protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P308+P313	IF exposed or concerned: Get medical attention.
P314	Get medical attention if you feel unwell.
P321	Specific treatment (Wash areas of contact with water).
P332+P313	If skin irritation occurs: Get medical attention.
P363	Wash contaminated clothing before reuse.
P405	Store locked up.
P501	Dispose of contents in accordance with local, state, federal and international regulations.

## 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%
Sodium Sulfate Anhydrous	Na <sub>2</sub> SO <sub>4</sub>	142.04 g/mol	7757-82-6	98.13%
2-Chloro-6-(trichloromethyl)pyridine	C <sub>6</sub> H <sub>3</sub> Cl <sub>4</sub> N	230.90 g/mol	1929-82-4	1.87%

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### SECTION 4: First-Aid Measures

#### 4.1. General First Aid Information

**Eye Contact:** May cause slight irritation.

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

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

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

#### 4.2. Most Important Symptoms and Effects, Acute and Delayed

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. Medical Attention or Special Treatment Needed

Specific treatment (Wash areas of contact with water).

### 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 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. Control Parameters

Chemical Name	Limit Type	Country	Exposure Limit	Information Source
2-Chloro-6-(trichloromethyl)pyridine (1929-82-4)	TWA	USA	15 mg/m <sup>3</sup> TWA (total dust) 5 mg/m <sup>3</sup> TWA (respirable fraction)	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
2-Chloro-6-(trichloromethyl)pyridine (1929-82-4)	TLV-STEL	USA	20 mg/m <sup>3</sup> STEL	ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL)
2-Chloro-6-(trichloromethyl)pyridine (1929-82-4)	TLV-TWA	USA	10 mg/m <sup>3</sup> TWA	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)

#### 8.2. Exposure Controls

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

**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:** Wear protective gloves and eye protection. Chemical resistant gloves.

**Eye Protection:** Wear protective gloves and eye protection. Safety glasses or goggles.

#### 8.3. Personal Protective Equipment

Wear protective gloves and eye protection. 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:** Off-white solid

**Physical State:** Solid

**Odor:** Data not available.

**Odor Threshold:** Data not available.

**pH:** Data not available.

**Melting/Freezing Point:** 884 - 888°C

**Initial Boiling Point /Range:** >890°C (with decomposition) - >890°C (with decomposition)

**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:** 2.7

**Solubility:** 160 - 200 G/L at 20°C

**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

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 applicable.

**Acute Toxicity - Dermal Exposure:**

Not applicable.

**Acute Toxicity - Inhalation Exposure:**

Not applicable.

**Acute Toxicity - Other Information:**

LD50, Oral, Mouse: (Sodium Sulfate) 5989 mg/kg, (2-Chloro-(6-Trichloromethyl)-Pyridine) 940 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:**

May cause an allergic skin reaction. Avoid breathing dust/fumes. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves and eye protection. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical attention. Specific treatment (Wash areas of contact with water). Wash contaminated clothing before reuse. Dispose of contents in accordance with local, state, federal and international regulations.

**Germ Cell Mutagenicity:**

Not applicable.

**Carcinogenicity:**

Suspected of causing cancer. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves and eye protection. IF exposed or concerned: Get medical attention. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

**Reproductive Toxicity:**

Not applicable.

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

Not applicable.

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

May cause damage to organs through prolonged or repeated exposure. Do not breathe dust/fumes. Get medical attention if you feel unwell. Dispose of contents in accordance with local, state, federal and international regulations.



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**Aspiration Hazard:**

Not applicable.

**Additional Toxicology Information:**

Data not available.

### 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.

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Not regulated according to IATA 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

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)

2-Chloro-6-(trichloromethyl)pyridine (CAS # 1929-82-4): 1.0 % de minimis concentration

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

2-Chloro-6-(trichloromethyl)pyridine (CAS # 1929-82-4): Present

Sodium Sulfate Anhydrous (CAS # 7757-82-6): Present (solution)

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

2-Chloro-6-(trichloromethyl)pyridine (CAS # 1929-82-4): Present

Sodium Sulfate Anhydrous (CAS # 7757-82-6): Environmental hazard (solution)

Sodium Sulfate Anhydrous (CAS # 7757-82-6): Present (solution)

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

2-Chloro-6-(trichloromethyl)pyridine (CAS # 1929-82-4): sn 1355

2-Chloro-6-(trichloromethyl)pyridine (CAS # 1929-82-4): SN 1355 500 lb TPQ

#### 15.8. California Proposition 65

2-Chloro-6-(trichloromethyl)pyridine (CAS # 1929-82-4): carcinogen, 10/5/2005

2-Chloro-6-(trichloromethyl)pyridine (CAS # 1929-82-4): developmental toxicity, 3/30/1999





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

2-Chloro-6-(trichloromethyl)pyridine (CAS # 1929-82-4): Present (DSL)

Sodium Sulfate Anhydrous (CAS # 7757-82-6): Present (DSL)

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

2-Chloro-6-(trichloromethyl)pyridine (CAS # 1929-82-4): Present

Sodium Sulfate Anhydrous (CAS # 7757-82-6): 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

May cause an allergic skin reaction. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure.

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fumes. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves and eye protection.

IF ON SKIN: Wash with plenty of soap and water. IF exposed or concerned: Get medical attention. Get medical attention if you feel unwell. Specific treatment (Wash areas of contact with water). If skin irritation occurs: Get medical attention. Wash contaminated clothing before reuse.

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.

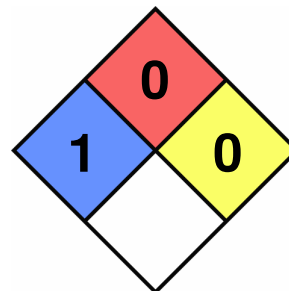
**Health Hazards Not Otherwise Classified (HHNOC):** Not Applicable.

Not Applicable.

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

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



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### 16.4. Document Revision

**Last Revision Date:** 12/1/2015

### 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.