



## Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS 2024)

### SECTION 1: Identification

#### 1.1. Product Identifier

**Trade Name or Designation** Nitrite Nitrogen Standard, 1000 ppm N (3285 ppm NO<sub>2</sub><sup>-</sup>)

**Product Number** 5461

**Other Identifying Product Numbers** 5461-16, 5461-4

#### 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            |
|----------------------------------------------------------|------------|-------------------|-------------------------------------|
| Carcinogenicity                                          | Category 2 | H351              | P201,P202,P280,P308+P313,P405, P501 |
| Reproductive Toxicity                                    | Category 2 | H361              | P201,P202,P280,P308+P313,P405, P501 |
| Hazardous to the Aquatic Environment, Short-term (Acute) | Acute 3    | H402              | P273,P501                           |

#### 2.2. GHS Label Elements

Pictograms:



Signal Word: **Warning**

Hazard Statements:

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

| Hazard Number | Hazard Statement                                    |
|---------------|-----------------------------------------------------|
| H351          | Suspected of causing cancer                         |
| H361          | Suspected of damaging fertility or the unborn child |
| H402          | Harmful to aquatic life                             |

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                                                   |
|----------------------|---------------------------------------------------------------------------|
| P201                 | Obtain special instructions before use.                                   |
| P202                 | Do not handle until all safety precautions have been read and understood. |
| P273                 | Avoid release to the environment.                                         |
| P280                 | Wear protective gloves and eye protection.                                |

### Response

| Precautionary Number | Precautionary Statement                                   |
|----------------------|-----------------------------------------------------------|
| P308+P313            | If exposed or concerned: Get medical advice or attention. |

### 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

This product does not contain any ingredients of unknown acute toxicity.

## SECTION 3: Composition / Information on Ingredients

### 3.1. Components of Mixture

| Chemical Name (IUPAC) | Common Name and Synonyms                              | CAS Number | Weight% |
|-----------------------|-------------------------------------------------------|------------|---------|
| water                 | Water                                                 | 7732-18-5  | 99.21   |
| potassium nitrite     | Potassium Nitrite; Nitrous acid, potassium salt (1:1) | 7758-09-0  | 0.64    |
| chloroform            | Chloroform; Trichloromethane                          | 67-66-3    | 0.15    |

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## SECTION 4: First-Aid Measures

### 4.1. Description of Necessary Measures

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

**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:** May cause slight irritation.

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

Suspected of damaging fertility or the unborn child May cause irritation to the skin and eyes. Wash areas of contact with soap and water.

Contains a minute amount of chloroform as a preservative. Chloroform is a possible carcinogen EYE CONTACT: May cause irritation, redness, pain, and tearing. SKIN CONTACT: May cause slight irritation.

### 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. Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen. Flush with plenty of 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

Absorb with suitable material and dispose of in accordance with local regulations.

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## 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 freezing and physical damage.

## SECTION 8: Exposure Controls / Personal Protection

### 8.1. Exposure Limits

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

No limits found.

#### U.S. OSHA - Permissible Exposure Limits (PEL) - Ceiling Limits

| Chemical Name | CAS Number | Exposure Limit                    |
|---------------|------------|-----------------------------------|
| Chloroform    | 67-66-3    | 50 ppm Ceiling; 240 mg/m3 Ceiling |

#### 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)

No limits found.

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

| Chemical Name | CAS Number | Exposure Limit |
|---------------|------------|----------------|
| Chloroform    | 67-66-3    | 10 ppm TWA     |

### 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:** Normal room ventilation is adequate.

**Skin Protection:** Chemical resistant gloves.

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

## SECTION 9: Physical and Chemical Properties

### 9.1. Basic Physical and Chemical Properties

|                                                   |                     |
|---------------------------------------------------|---------------------|
| <b>Physical State:</b>                            | liquid              |
| <b>Color:</b>                                     | Colorless           |
| <b>Odor:</b>                                      | Data not available. |
| <b>Odor Threshold:</b>                            | Data not available. |
| <b>Melting/Freezing Point:</b>                    | 0.0°C               |
| <b>Boiling Point/Range:</b>                       | 100°C               |
| <b>Flammability:</b>                              | Data not available. |
| <b>Flammability/Explosive Limits:</b>             | Data not available. |
| <b>Flash Point:</b>                               | Not flammable       |
| <b>Auto-Ignition Temperature:</b>                 | Data not available. |
| <b>Decomposition Temperature:</b>                 | Data not available. |
| <b>pH:</b>                                        | approximately 7     |
| <b>Kinematic Viscosity:</b>                       | Data not available. |
| <b>Solubility:</b>                                | miscible            |
| <b>Vapor Pressure:</b>                            | Data not available. |
| <b>Evaporation Rate:</b>                          | Data not available. |
| <b>Relative Density:</b>                          | 1.01                |
| <b>Relative Vapor Density:</b>                    | Data not available. |
| <b>Particle Characteristics:</b>                  | Data not available. |
| <b>Partition Coefficient n-octanol/water, log</b> | 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

Inorganic reducing agents, metals, and Boron, Potassium Amide, Cyanides and Ammonium salts.

### 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                                                                                                |
|-------------------|------------|---------------------------------------------------------------------------------------------------------|
| Chloroform        | 67-66-3    | Oral LD50 Rat 908 mg/kg (males, Source: ECHA_API); Oral LD50 Rat 1117 mg/kg (females, Source: ECHA_API) |
| Potassium Nitrite | 7758-09-0  | Oral LD50 Rat 200 mg/kg (Source: ECHA)                                                                  |

##### Acute Toxicity - Dermal Exposure:

Not acutely toxic.

| Chemical Name     | CAS Number | Toxicity                                                       |
|-------------------|------------|----------------------------------------------------------------|
| Chloroform        | 67-66-3    | Dermal LD50 Rabbit >20 g/kg (Source: NLM_CIP)                  |
| Potassium Nitrite | 7758-09-0  | Dermal LD50 Rat >5000 mg/kg (no deaths occurred, Source: ECHA) |

##### Acute Toxicity - Inhalation Exposure:

Inhalation acute toxicity estimate (ATE, vapor): 7000.0000 mg/L, 4 h(calculated)

| Chemical Name     | CAS Number | Toxicity                                                       |
|-------------------|------------|----------------------------------------------------------------|
| Chloroform        | 67-66-3    | Inhalation LC50 Rat 10.5 mg/L 4 h (vapor, Source: ECHA_API)    |
| Potassium Nitrite | 7758-09-0  | Inhalation LC50 Mouse 85000 mg/m3 2 h (dust, Source: ECHA_API) |

#### 11.2 Carcinogenicity:

##### International Agency for Research on Cancer (IARC)

| Chemical Name | CAS Number | Classification                                                   |
|---------------|------------|------------------------------------------------------------------|
| Chloroform    | 67-66-3    | Group 2B (Possibly Carcinogenic to Humans) - Monograph 73 [1999] |

##### National Toxicology Program (NTP)

| Chemical Name | CAS Number | Classification                                                                                                                                                          |
|---------------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Chloroform    | 67-66-3    | Reasonably Anticipated To Be A Human Carcinogen; Male Rat - Clear Evidence; Female Rat - No Evidence; Male Mice - Clear Evidence; Female Mice - Clear Evidence (TR-000) |

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### U.S. OSHA specifically regulated carcinogens

| Chemical Name  | CAS Number | Classification |
|----------------|------------|----------------|
| No data found. |            |                |

### 11.3 Additional Toxicology Information:

Suspected of causing cancer. Suspected of damaging fertility or the unborn child.

## SECTION 12: Ecological Information

### 12.1. Ecotoxicity

| Chemical Name | CAS Number | Species         | Exposure | Toxicity                                                                                                                                                                                                                                              |
|---------------|------------|-----------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Chloroform    | 67-66-3    | Freshwater Fish | Acute    | LC50 96 h Pimephales promelas 71 mg/L [flow-through] (IUCLID); LC50 96 h Oncorhynchus mykiss 18 mg/L [flow-through] (IUCLID); LC50 96 h Lepomis macrochirus 18 mg/L [flow-through] (IUCLID); LC50 96 h Poecilia reticulata 300 mg/L [static] (IUCLID) |
| Chloroform    | 67-66-3    | Water Flea      | Acute    | EC50 48 h Daphnia magna 29 mg/L (IUCLID)                                                                                                                                                                                                              |

### 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           | TPQ            |
|---------------|------------|--------------|----------------|
| Chloroform    | 67-66-3    | 10000 lb TPQ | 10 lb EPCRA RQ |

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

| Chemical Name | CAS Number | Regulatory Information           |
|---------------|------------|----------------------------------|
| Chloroform    | 67-66-3    | 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         |
|---------------|------------|--------------------|--------------------------------|
| Chloroform    | 67-66-3    | Emission Reporting | 0.1 % de minimis concentration |

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

| Chemical Name | CAS Number | Regulatory Information                |
|---------------|------------|---------------------------------------|
| Chloroform    | 67-66-3    | Carcinogen; Extraordinarily hazardous |

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

| Chemical Name | CAS Number | Regulatory Information                            |
|---------------|------------|---------------------------------------------------|
| Chloroform    | 67-66-3    | Environmental hazard; Special hazardous substance |

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

| Chemical Name     | CAS Number | Regulatory Information |
|-------------------|------------|------------------------|
| Chloroform        | 67-66-3    | sn 0388                |
| Potassium Nitrite | 7758-09-0  | sn 1575                |

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### 15.08. California Proposition 65

| Chemical Name | CAS Number | Regulatory Information                             |
|---------------|------------|----------------------------------------------------|
| Chloroform    | 67-66-3    | carcinogen, 10/1/1987                              |
| Chloroform    | 67-66-3    | developmental toxicity, 8/7/2009                   |
| Chloroform    | 67-66-3    | 20 µg/day NSRL (oral); 40 µg/day NSRL (inhalation) |

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

| Chemical Name     | CAS Number | List | Status  |
|-------------------|------------|------|---------|
| Chloroform        | 67-66-3    | DSL  | Present |
| Water             | 7732-18-5  | DSL  | Present |
| Potassium Nitrite | 7758-09-0  | DSL  | Present |

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

| Chemical Name     | CAS Number | Status                |
|-------------------|------------|-----------------------|
| Chloroform        | 67-66-3    | Present (ACTIVE)      |
| Water             | 7732-18-5  | Present [XU] (ACTIVE) |
| Potassium Nitrite | 7758-09-0  | Present [S] (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    |
|-------------------|------------|--------|-----------|
| Chloroform        | 67-66-3    | EINECS | 200-663-8 |
| Water             | 7732-18-5  | EINECS | 231-791-2 |
| Potassium Nitrite | 7758-09-0  | EINECS | 231-832-4 |

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

| Chemical Name     | CAS Number | Status          |
|-------------------|------------|-----------------|
| Chloroform        | 67-66-3    | Present [23977] |
| Water             | 7732-18-5  | Present [32224] |
| Potassium Nitrite | 7758-09-0  | Present [36927] |

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

| Chemical Name     | CAS Number | List    | Status                                                      |
|-------------------|------------|---------|-------------------------------------------------------------|
| Chloroform        | 67-66-3    | Annex 1 | Present [KE-34076]                                          |
| Water             | 7732-18-5  | Annex 1 | Present [KE-35400]                                          |
| Potassium Nitrite | 7758-09-0  | Annex 1 | Present [KE-29165]                                          |
| Potassium Nitrite | 7758-09-0  | Annex 3 | "Present (97-1-167)" As Nitrous acid, salts<br>[RR-04206-8] |

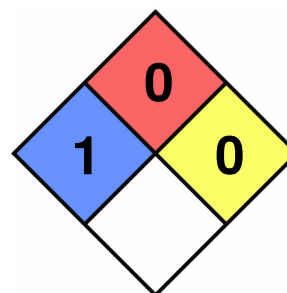
### 15.14. Japan - Existing and New Chemical Substances Inventory (ENCS)

| Chemical Name     | CAS Number | MITI No.                                         |
|-------------------|------------|--------------------------------------------------|
| Chloroform        | 67-66-3    | (2)-37                                           |
| Water             | 7732-18-5  | - (listed on Japanese Pharmacopoeia 8th Edition) |
| Potassium Nitrite | 7758-09-0  | (1)-823                                          |

## 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:**  
 2026-05-25

## 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.