## **SECTION 1: Identification**

#### 1.1. Product Identifier

Trade Name or Designation: Hydroxylamine Hydrochloride, 30% (w/v)

**Product Number: 3915** 

Other Identifying Product Numbers: 3915-1, 3915-16, 3915-32, 3915-4, 3915-5

#### 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

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# RICCA CHEMICAL COMPANY®

## **Safety Data Sheet**

## **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    |  |
|---|-------------|-----------|--|
| Hazard Class  | Category    | Statement | Precautionary Statements                     |
| Acute Toxicity - Oral                                       | Category 4  | H302      | P264, P270, P301+P312, P330, P501            |
| Skin Corrosion / Irritation                                 | Category 2  | H315      | P264, P280, P302+P352, P321, P332+P313, P362 |
| Eye Damage / Irritation                                     | Category 2A | H319      | P264, P280, P305+P351+P338, P337+P313        |
| 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 Single   | Category 2  | H371      | P260, P264, P270, P308+P311, P405, P501      |
| Exposure  |             |           |  |
| Specific Target Organs/Systemic Toxicity Following Repeated | Category 1  | H372      | P260, P264, P270, P314, P501                 |
| Exposure  |             |           |  |
| Corrosive to Metals   | Category 1  | H290      | P234, P390, P406                             |
| Hazardous to the Aquatic Environment (Acute)                | Category 1  | H400      | P273, P501                                   |

### 2.2. GHS Label Elements

### Pictograms:









Signal Word: Danger

#### **Hazard Statements:**

| Hazard Number | Hazard Statement  |
|---------------|---|
| H290          | May be corrosive to metals.                                     |
| H302          | Harmful if swallowed.   |
| H315          | Causes skin irritation.   |
| H317          | May cause an allergic skin reaction.                            |
| H319          | Causes serious eye irritation.                                  |
| H351          | Suspected of causing cancer.                                    |
| H371          | May cause damage to organs.                                     |
| H372          | Causes damage to organs through prolonged or repeated exposure. |
| H400          | Very toxic to aquatic life.                                     |

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#### **Precautionary Statements:**

| recautionary Statements: |  |  |
|--------------------------|--|--|
| Precautionary Number     | Precautionary Statement  |  |
| P201                     | Obtain special instructions before use.  |  |
| P202                     | Do not handle until all safety precautions have been read and understood.                                    |  |
| P234                     | Keep only in original container.   |  |
| P260                     | Do not breathe dust, fumes or mist.  |  |
| P261                     | Avoid breathing dust, fumes or mist.   |  |
| P264                     | Wash arms, hands and face thoroughly after handling.   |  |
| P270                     | Do not eat, drink or smoke when using this product.  |  |
| P272                     | Contaminated work clothing must not be allowed out of the workplace.   |  |
| P273                     | Avoid release to the environment.  |  |
| P280                     | Wear protective gloves and eye protection.   |  |
| P301+P312                | IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell.  |  |
| P302+P352                | IF ON SKIN: Wash with plenty of soap and water.  |  |
| P305+P351+P338           | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to d |  |
|                          | Continue rinsing.  |  |
| P308+P311                | IF exposed or concerned: Call a POISON CENTER or physician.  |  |
| 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).   |  |
| P330                     | Rinse mouth.   |  |
| P332+P313                | If skin irritation occurs: Get medical attention.  |  |
| P337+P313                | If eye irritation persists: Get medical attention.   |  |
| P362                     | Take off contaminated clothing and wash it before reuse.   |  |
| P363                     | Wash contaminated clothing before reuse.   |  |
| P390                     | Absorb spillage to prevent material damage.  |  |
| P405                     | Store locked up.   |  |
| P406                     | Store in corrosive resistant container with a resistant inner liner.   |  |
| 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.

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## **SECTION 3: Composition / Information on Ingredients**

## 3.1. Components of Substance or Mixture

| Chemical Name               | Formula   | Molecular Weight | CAS Number | Weight% |
|-----------------------------|-----------|------------------|------------|---------|
| Water                       | $H_2O$    | 18.01 g/mol      | 7732-18-5  | 72.73%  |
| Hydroxylamine Hydrochloride | NH₂OH⋅HCI | 69.49 g/mol      | 5470-11-1  | 27.27%  |

## **SECTION 4: First-Aid Measures**

#### 4.1. General First Aid Information

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.

**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 irritation, redness, and pain.

Ingestion: IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Dilute with water or milk. Do not induce vomiting. Call

a physician if necessary.

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

CAUTION! Mildly corrosive and toxic. Harmful if swallowed. If ingested, dilute with water, do not induce vomiting, and 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: May cause irritation, redness, and pain. CHRONIC EFFECTS / CARCINOGENICITY: Repeated exposure may cause decreased appetite, anemia, weight loss, nervous system effects.

#### 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.

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## 6.2. Cleanup and Containment Methods and Materials

Collect liquid and dilute with water. Release to drain if local regulations allow. For larger spills, absorb with suitable material (vermiculite, clay, etc.). Collect the solid residue and save for disposal.

## **SECTION 7: Handling and Storage**

## 7.1. Precautions for Safe Handling and Storage Conditions

Store in corrosive resistant container with a resistant inner liner. 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. Control Parameters

| Chemical Name       | Limit Type Co | ountry | Exposure Limit | Information Source |
|---------------------|---------------|--------|----------------|--------------------|
| Data not available. |               |        |                |                    |

### 8.2. Exposure Controls

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

Respiratory Protection: Normal room ventilation is adequate.

**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. Normal room ventilation is adequate. 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: Colorless liquid

Physical State: Liquid

Odor: Data not available.

Odor Threshold: Data not available.

**pH:** 3.2 (1.4% solution)

Melting/Freezing Point: Data not available.

Initial Boiling Point /Range: Approximately 100°C - Approximately 100°C

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: 1.1

Solubility: Miscible

Partition Coefficient (n-Octanol/Water): Data not available.

Auto-Ignition Temperature: Data not available.

**Decomposition Temperature:** Data not available.

Viscosity: Data not available.

**ExplosiveProperties:** 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

Keep only in original container. Strong oxidizing agents, heat plus sodium acetate or ether, carbonyl compounds, copper sulfate, zinc and phosphorus chlorides.

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## 10.4. Hazardous Decomposition Products

Will not occur.

## **SECTION 11: Toxicological Information**

## 11.1. Information on Toxicological Effects

#### **Acute Toxicity - Oral Exposure:**

Harmful if swallowed. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth. 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: (Hydroxylamine Hydrochloride) 141 mg/kg, behavioral effects. Investigated as a mutagen.

#### **Skin Corrosion and Irritation:**

Causes skin irritation. Wash arms, hands and face thoroughly after handling. Wear protective gloves and eye protection. IF ON SKIN: Wash with plenty of soap and water. Specific treatment (Wash areas of contact with water). If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash it before reuse.

## Serious Eye Damage and Irritation:

Causes serious eye irritation. Wash arms, hands and face thoroughly after handling. Wear protective gloves and eye protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

### **Respiratory Sensitization:**

Not applicable.

#### Skin Sensitization:

May cause an allergic skin reaction. Avoid breathing dust, fumes or mist. 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.

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#### **Reproductive Toxicity:**

Not applicable.

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

May cause damage to organs. Do not breathe dust, fumes or mist. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. IF exposed or concerned: Call a POISON CENTER or physician. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

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

Causes damage to organs through prolonged or repeated exposure. Do not breathe dust, fumes or mist. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. Get medical attention if you feel unwell. Dispose of contents in accordance with local, state, federal and international regulations.

#### **Aspiration Hazard:**

Not applicable.

#### **Additional Toxicology Information:**

Data not available.

## **SECTION 12: Ecological Information**

#### 12.1. Ecotoxicity

Very toxic to aquatic life. Avoid release to the environment. Dispose of contents in accordance with local, state, federal and international regulations.

### 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:** 1 L, 120 mL, 500 mL

UN Number: UN2735

**Proper Shipping Name:** Amines, liquid, corrosive, n.o.s. (Hydroxylamine Hydrochloride)

Hazard Class: 8

Packing Group: |||

**Hazard Placard Labels:** 



Sizes:

**UN Number:** 

**Proper Shipping Name:** 

**Hazard Class:** 

**Packing Group:** 

**Hazard Placard Labels:** 

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

**Sizes:** 1 L, 120 mL, 500 mL

UN Number: UN2735

Proper Shipping Name: Amines, liquid, corrosive, n.o.s. (Hydroxylamine Hydrochloride)

Hazard Class: 8

Packing Group: |||

Hazard Placard Labels:



## **SECTION 15: Regulatory Information**

15.1. Occupational Safety and Health Administration (OSHA) Hazards

Not listed.

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- 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)

  Not listed.
- 15.5. Massachusetts Right-to-Know Substance List Not listed.
- 15.6. Pennsylvania Right-to-Know Hazardous Substances Water (CAS # 7732-18-5): Present
- 15.7. New Jersey Worker and Community Right-to-Know Components Not listed.
- 15.8. California Proposition 65

Not listed.

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

Hydroxylamine Hydrochloride (CAS # 5470-11-1): Present (DSL)

Water (CAS # 7732-18-5): Present (DSL)

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

Hydroxylamine Hydrochloride (CAS # 5470-11-1): Present Water (CAS # 7732-18-5): 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.

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## **SECTION 16: Other Information**

## 16.1. Full Text of Hazard Statements and Precautionary Statements

May be corrosive to metals. Harmful if swallowed. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Suspected of causing cancer. May cause damage to organs. Causes damage to organs through prolonged or repeated exposure. Very toxic to aquatic life.

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep only in original container. Do not breathe dust, fumes or mist. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves and eye protection.

IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Call a POISON CENTER or physician. Get medical attention if you feel unwell. Specific treatment (Wash areas of contact with water). Rinse mouth. If skin irritation occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off contaminated clothing and wash it before reuse. Absorb spillage to prevent material damage.

Store locked up. Store in corrosive resistant container with a resistant inner liner.

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

#### 16.2. Miscellaneous Hazard Classes

Canadian Carcinogenicity Hazard Class: Not Applicable.

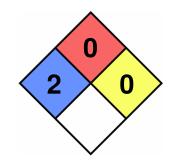
Physical Hazards Not Otherwise Classified (PHNOC): Not Applicable.

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

Not Applicable.

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

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



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#### 16.4. Document Revision

Last Revision Date: 5/1/2015

## **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.

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