

## Safety Data Sheet

### SECTION 1: Identification

#### 1.1. Product Identifier

**Trade Name or Designation:** Sulfuric Acid, 0.250 N

**Product Number:** C7305530

**Other Identifying Product Numbers:** 7-30553, 7-30553-1, 7-30553-3, 7-30553-5

#### 1.2. Recommended Use and Restrictions on Use

General Laboratory Reagent

#### 1.3. Details of the Supplier of the Safety Data Sheet

**Company:** Reagents Inc.

**Address:** 4746 Sweden Road  
Charlotte, NC 28224 USA

**Telephone:** 800-732-8484

#### 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 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        |

#### 2.2. GHS Label Elements

**Pictograms:**



**Signal Word:** **Warning**

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### Hazard Statements:

| Hazard Number | Hazard Statement               |
|---------------|--------------------------------|
| H315          | Causes skin irritation.        |
| H319          | Causes serious eye irritation. |

### Precautionary Statements:

| Precautionary Number | Precautionary Statement  |
|----------------------|--|
| P264                 | Wash arms, hands and face thoroughly after handling.   |
| P280                 | Wear protective gloves and eye protection.   |
| 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 do. Continue rinsing.         |
| P321                 | Specific treatment (Wash areas of contact with water. If possible, wipe off areas of contact with dry cloth before flushing with water). |
| 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.   |

### 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% |
|---------------|--------------------------------|------------------|------------|---------|
| Water         | H <sub>2</sub> O               | 18.01 g/mol      | 7732-18-5  | 98.77%  |
| Sulfuric Acid | H <sub>2</sub> SO <sub>4</sub> | 98.07 g/mol      | 7664-93-9  | 1.23%   |

## 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 slight irritation.

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



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

**Ingestion:** Dilute with water or milk. Do not induce vomiting. Call a physician if necessary.

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

Does not present any significant health hazards. May irritate eyes and skin. Wash areas of contact with water. EYE CONTACT: May cause slight irritation. SKIN CONTACT: May cause irritation, redness, and pain.

### 4.3. Medical Attention or Special Treatment Needed

Specific treatment (Wash areas of contact with water. If possible, wipe off areas of contact with dry cloth before flushing with water).

## SECTION 5: Fire-Fighting Measures

### 5.1. Extinguishing Media

Dry chemical, foam, or carbon dioxide. Water is acceptable to use on these solutions due to the weak concentrations of acid involved.

### 5.2. Specific Hazards Arising from the Substance or Mixture

Contact with most metals causes formation of flammable and explosive hydrogen gas. However, the risk is reduced due to the weaker concentration of Sulfuric Acid present.

### 5.3. Special Protective Equipment for Firefighters

Use protective clothing and NIOSH-approved 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

Cover the spill with Sodium Carbonate or a soda ash-slaked lime mixture (50:50). Mix and add water to form slurry. Decant the liquid to the drain with excess water. Treat the solid residue as normal refuse. Wash site with soda ash solution. Always dispose of in accordance with local regulations.

## SECTION 7: Handling and Storage

### 7.1. Precautions for Safe Handling and Storage Conditions

As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage. Do not mix with bases.



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### SECTION 8: Exposure Controls / Personal Protection

#### 8.1. Control Parameters

| Chemical Name             | Limit Type | Country | Exposure Limit                                | Information Source  |
|---------------------------|------------|---------|---|---|
| Sulfuric Acid (7664-93-9) | TWA        | USA     | 1 mg/m <sup>3</sup> TWA                       | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)          |
| Sulfuric Acid (7664-93-9) | TLV-TWA    | USA     | 0.2 mg/m <sup>3</sup> TWA (thoracic fraction) | 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:** 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

|   |                       |
|---|-----------------------|
| <b>Appearance:</b>                              | Colorless liquid      |
| <b>Physical State:</b>                          | Liquid                |
| <b>Odor:</b>                                    | Odorless              |
| <b>Odor Threshold:</b>                          | Not applicable.       |
| <b>pH:</b>                                      | < 1                   |
| <b>Melting/Freezing Point:</b>                  | Approximately 0°C     |
| <b>Initial Boiling Point /Range:</b>            | Approximately 100°C - |
| <b>Flash Point:</b>                             | Not applicable.       |
| <b>Evaporation Rate:</b>                        | Data not available.   |
| <b>Flammability:</b>                            | Data not available.   |
| <b>Flammability/Explosive Limits:</b>           | Data not available.   |
| <b>Vapor Pressure:</b>                          | Data not available.   |
| <b>Vapor Density:</b>                           | Data not available.   |
| <b>Relative Density:</b>                        | 1.01                  |
| <b>Solubility:</b>                              | Miscible              |
| <b>Partition Coefficient (n-Octanol/Water):</b> | Data not available.   |
| <b>Auto-Ignition Temperature:</b>               | Not applicable.       |
| <b>Decomposition Temperature:</b>               | Data not available.   |
| <b>Viscosity:</b>                               | Data not available.   |
| <b>Explosive Properties:</b>                    | Data not available.   |
| <b>Oxidizing Properties:</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

Organics, chlorates, carbides, fulminates, picrates, alkalines, reducing agents, nitrates, Acetic Acid, oxidizing agents, metals.

#### 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, Rat: 2140 mg/kg (Sulfuric Acid), details of toxic effects not reported other than lethal dose value. LC50, Inhalation, Rat: (Sulfuric Acid) 510 mg/m<sup>3</sup>/2H, No toxic effect noted.

**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 possible, wipe off areas of contact with dry cloth before flushing 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:**

Not applicable.

**Germ Cell Mutagenicity:**

Not applicable.

**Carcinogenicity:**

Not applicable.

**Reproductive Toxicity:**

Not applicable.

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

Not applicable.

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

Not applicable.

**Aspiration Hazard:**

Not applicable.



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

UN Number: N/A

Proper Shipping Name:

Hazard Class:

Packing Group:

Hazard Placard Labels:

## 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

Sulfuric Acid (CAS # 7664-93-9): 1000 lb EPCRA RQ

Sulfuric Acid (CAS # 7664-93-9): 1000 lb TPQ

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

Sulfuric Acid (CAS # 7664-93-9): 1000 lb final RQ; 454 kg final RQ

### 15.4. Superfund Amendments and Reauthorization Act (SARA) 313 Toxic Release Inventory (TRI)

Sulfuric Acid (CAS # 7664-93-9): 1.0 % de minimis concentration (acid aerosols including mists, vapors, gas, fog, and other airborne forms of any particle size)

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

Sulfuric Acid (CAS # 7664-93-9): Extraordinarily hazardous

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

Sulfuric Acid (CAS # 7664-93-9): Environmental hazard

Sulfuric Acid (CAS # 7664-93-9): Present

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

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

Sulfuric Acid (CAS # 7664-93-9): carcinogen; corrosive; reactive - second degree

Sulfuric Acid (CAS # 7664-93-9): sn 1761

Sulfuric Acid (CAS # 7664-93-9): SN 1761 TPQ: 500 lb

### 15.8. California Proposition 65

Sulfuric Acid (CAS # 7664-93-9): carcinogen, initial date 3/14/03

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

Sulfuric Acid (CAS # 7664-93-9): Present

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

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

Sulfuric Acid (CAS # 7664-93-9): 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.

## SECTION 16: Other Information

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

Causes skin irritation. Causes serious eye 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. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Specific treatment (Wash areas of contact with water. If possible, wipe off areas of contact with dry cloth before flushing with water). If skin irritation occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off contaminated clothing and wash it before reuse.

### 16.2. Miscellaneous Hazard Classes

Canadian Carcinogenicity Hazard Class: Not Applicable.

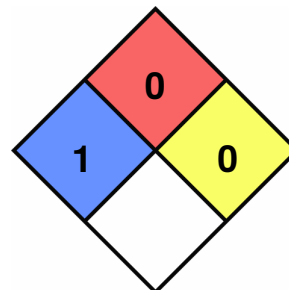
Physical Hazards Not Otherwise Classified (PHNOC): Not Applicable.

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

Biohazardous Infectious Materials Hazard Class: Not Applicable.

### 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: 5/8/2018

#### 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 REAGENTS, INC. assumes no legal responsibility or liability whatsoever resulting from its use.