



Emergency Contact (24 hr) -- CHEMTREC®  
Domestic: 800-424-9300  
International: 703-527-3887

SULFURIC ACID, 2.01 - 14.6 Normal, 5.6 - 40% (v/v), 9.3 - 50.9% (w/w) Aqueous Solutions

## Material Safety Data Sheet

### Section 1: Chemical Product and Company Identification

#### Catalog Number:

BDH0014, BDH0016, BDH0022, BDH0024, BDH0038, BDH0040, BDH0042, BDH0044

#### Product Identity:

SULFURIC ACID, 2.01 - 14.6 Normal, 5.6 - 40% (v/v), 9.3 - 50.9% (w/w) Aqueous Solutions

#### Manufacturer's Name:

RICCA CHEMICAL COMPANY LLC

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#### CAGE Code: 0V553

#### Address:

448 West Fork Dr  
Arlington, TX 76012

#### Telephone Number For Information:

817-461-5601

#### Date Prepared:

11/01/2006

#### Revision: 0

Last Revised: 11/01/2006

### Section 2. Composition/Information on Ingredients

Component	CAS Registry #	Concentration	ACGIH TLV	OSHA PEL
Sulfuric Acid	7664-93-9	9.3 - 50.9% (w/w)	Not Available 1 mg/m <sup>3</sup>	Not Available 1 mg/m <sup>3</sup>
Water, Deionized	7732-18-5	Balance	Not Available Not Available	Not Available Not Available

### Section 3: Hazard Identification

**Emergency Overview:** Corrosive liquid. Causes severe burns. Eye contact causes tissue damage and blindness. Ingestion causes corrosion of the mucosa of the mouth, throat and esophagus with stomach discomfort and pain. If ingested, dilute with large quantity of water. Do not induce vomiting. Call a physician. Wash areas of contact with plenty of water for at least 15 minutes. If possible, wipe off areas of contact with dry cloth before flushing with water, as water contact will generate heat.

**Target Organs:** eyes, skin, respiratory system, teeth.

**Eye Contact:** Eye contact causes tissue damage and blindness.

**Inhalation:** May cause irritation.

**Skin Contact:** Skin contact causes burns, blistering, local necrosis, and membrane ulceration. Burns may be 2nd or 3rd degree.

**Ingestion:** Causes corrosion of the mucosa of the mouth, throat and esophagus with stomach discomfort and pain, nausea, intense thirst, vomiting, circulatory collapse, clammy skin, weak and rapid pulse, shallow respiration, scanty urine, circulatory shock and subsequent death.



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**Chronic Effects/Carcinogenicity:** May affect the skin, liver, kidneys and blood.

**IARC** - No.

**NTP** - No.

**OSHA** - No.

**Reproductive Information:** Reproductive effects cited in 'Registry of Toxic Effects of Chemical Substances' for Sulfuric Acid.

**Teratology (Birth Defect) Information:** Mutation data cited in 'Registry of Toxic Effects of Chemical Substances' for Sulfuric Acid.

#### Section 4: First Aid Measures - In all cases, seek qualified evaluation.

**Eye Contact:** Irrigate immediately with large quantity of water for at least 15 minutes. Get medical attention immediately.

**Inhalation:** Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen.

**Skin Contact:** If possible, wipe off areas of contact with dry cloth before flushing contact areas with water for at least 15 minutes. Flushing immediately with water will generate a large amount of heat upon contact with sulfuric acid. Call a physician. Dispose of cloth by soaking in water. Neutralize the soaking solution with dilute sodium hydroxide solution, then flush the neutralized rinse water down the drain with excess water and treat the cloth as solid refuse.

**Ingestion:** Do not induce vomiting. Give large quantity of water. Call a physician immediately.

#### Section 5: Fire Fighting Measures

**Flash Point:** Not Available.

**Method Used:** Not Available.

**LFL:** Not Available.

**UFL:** Not Available.

**Extinguishing Media:** Dry chemical, foam, or carbon dioxide. Reacts with water producing heat and toxic fumes.

**Fire & Explosion Hazards:** 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.

**Fire Fighting Instructions:** Use normal procedures/instructions.

**Fire Fighting Equipment:** Use protective clothing and NIOSH-approved breathing equipment appropriate for the surrounding fire.

#### Section 6: Accidental Release Measures

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

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. Contact with water will generate heat.

**Safety Storage Code:** Corrosive

#### Section 8: Exposure Control/Personal Protection

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

**Respiratory Protection:** Normal room ventilation is adequate.

**Skin Protection:** Chemical resistant gloves.

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

#### Section 9: Physical and Chemical Properties

**Appearance:** Clear, colorless liquid

**Odor:** Odorless

**Solubility in Water:** Infinite

**Specific Gravity:** Approximately 1.06 - 1.4

**pH:** <3

**Boiling Point(°C):** Not Available.

**Melting Point(°C):** Below 0

**Vapor Pressure:** Not Applicable.

#### Section 10: Stability and Reactivity

**Chemical Stability:** Stable under normal conditions of use and storage.

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



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**Hazardous Decomposition Products:** When heated to decomposition, Sulfuric Acid can emit highly toxic/poisonous gases and fumes, including toxic oxides of Sulfur.

**Hazardous Polymerization:** Will not occur.

### Section 11. Toxicological 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.

### Section 12. Ecological Information

**Ecotoxicological Information:** Concentrated Sulfuric Acid has moderate acute and chronic toxicity to aquatic life. Insufficient data are available on the long-term effects of Sulfuric Acid to aquatic life, plants, birds, or land animals.

**Chemical Fate Information:** Small quantities of acids will be neutralized by the alkalinity in aquatic ecosystems.

### Section 13. Disposal Considerations

Dilute the solution with water. Neutralize with soda ash or Calcium Carbonate. Wash the resulting solution down the drain with excess water. Treat the solid residue as normal refuse. Always dispose of in accordance with local, state and federal regulations.

### Section 14. Transport Information

Part Numbers: BDH0014-55GL, BDH0016-20L, BDH0022-55GL, BDH0024-20L, BDH0038-55GL, BDH0040-20L, BDH0042-55GL, BDH0044-20L

D.O.T. Shipping Name: Sulphuric Acid Solution

D.O.T. Hazard Class: 8

U.N. / N.A. Number: UN2796

Packing Group: II

D.O.T. Label: 8



### Section 15. Regulatory Information (Not meant to be all inclusive - selected regulation represented)

**OSHA Status:** These items meet the OSHA Hazard Communication Standard (29 CFR 1910.1200) definition of a hazardous material.

**TSCA Status:** All components of this solution are listed on the TSCA Inventory or are mixtures (hydrates) of items listed on the TSCA Inventory.

Sara Title III:

**Section 302 Extremely Hazardous Substances:** Not Applicable.

**Section 311/312 Hazardous Categories:** Acute, Chronic, Reactivity: Yes      Fire, Pressure: No

**Section 313 Toxic Chemicals:** Not Applicable.



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**California:** None Reported.

**Pennsylvania:** Sulfuric Acid is listed as an Environmental Hazard on the state's Hazardous Substances List.

**RCRA Status:** Not Applicable.

**CERCLA Reportable Quantity:** Sulfuric Acid - 1,000 pounds.

**WHMIS:** E: Corrosive Material.



## Section 16. Other Information

NFPA Ratings:

Health: 3

Flammability: 0

Reactivity: 1

Special Notice Key:None

HMIS Ratings:

Health: 3

Flammability: 0

Reactivity: 1

Protective Equipment:B (Protective Eyewear, Gloves)

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.

