

# MSDS

CERIC AMMONIUM SULFATE SOLUTIONS in dilute Sulfuric Acid

## Material Safety Data Sheet

### Section 1: Chemical Product and Company Identification

<b>Catalog Number:</b> 1887, 1890, CX-1095, R1890500	
<b>Product Identity:</b> CERIC AMMONIUM SULFATE SOLUTIONS in dilute Sulfuric Acid	
<b>Manufacturer's Name:</b> RICCA CHEMICAL COMPANY LLC	<b>Emergency Contact(24 hr) -- CHEMTREC®</b> Domestic: 800-424-9300 International: 703-527-3887
<b>CAGE Code:</b> 4TCW6, 0V553, 4XZQ2	
<b>Address:</b> 448 West Fork Dr Arlington, TX 76012	<b>Telephone Number For Information:</b> 817-461-5601
<b>Date Prepared:</b> 2/13/06	<b>Revision: 3</b>  Last Revised: 09/02/2008 Date Printed: 05/20/2010 4:38:11 pm

### Section 2. Composition/Information on Ingredients

Component	CAS Registry #	Concentration	ACGIH TLV	OSHA PEL
Ceric Ammonium Sulfate, Dihydrate	10378-47-9	1 - 10%	Not Available	Not Available
			Not Available	Not Available
Sulfuric Acid	7664-93-9	2 - 3	Not Available	Not Available
			1 mg/m3	1 mg/m3
Water, Deionized	7732-18-5	Balance	Not Available	Not Available
			Not Available	Not Available

### Section 3: Hazard Identification

**Emergency Overview:** This item is mildly corrosive and should be handled with care. May irritate eyes and skin. Wash areas of contact with plenty of water.

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

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

**Inhalation:** May cause irritation.

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

**Ingestion:** May cause throat irritation, vomiting and diarrhea.

**Chronic Effects/Carcinogenicity:** None

**IARC** - No.

**NTP** - No.

**OSHA** - No.

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**Reproductive Information:** Reproductive effects cited in 'Registry of Toxic Effects of Chemical Substances' for Sulfuric Acid. 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. 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. Call a physician if irritation develops.

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

**Skin Contact:** Flush with plenty of water for at least 15 minutes. Call a physician if irritation develops.

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

### Section 5: Fire Fighting Measures

**Flash Point:** N/A

**Method Used:** N/A

**LFL:** N/A

**UFL:** N/A

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

**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.

**Safety Storage Code:** General

### 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, orange liquid

**Odor:** Odorless

**Solubility in Water:** Infinite

**Specific Gravity:** Approximately 1

**pH:** < 3

**Boiling Point(°C):** Approximately 100

**Melting Point(°C):** Approximately 0

**Vapor Pressure:** N/A

### 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.

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

**Hazardous Polymerization:** Will not occur.

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**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. No LD50 information found on Ceric Ammonium Sulfate under normal routes of exposure.

**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**

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:

This product is not regulated.

**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: Yes      Chronic, Fire, Pressure, Reactivity: No

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

**California:** None Reported.

**Pennsylvania:** Sulfuric Acid is listed as an Environmental Hazard on the state's Hazardous Substances List. 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. Sulfuric Acid - 1,000 pounds.

**WHMIS:** E: Corrosive Material.

**Section 16. Other Information**

NFPA Ratings:

Health: 1

Flammability: 0

Reactivity: 0

Special Notice Key: None

HMIS Ratings:

Health: 1

Flammability: 0

Reactivity: 0

Protective Equipment: B (Protective Eyewear, Gloves)

Rev 1, 05-25-2006: (Section 1) added catalog number 1887; (Section 2) revised concentration of Ceric Ammonium Sulfate from 6 - 7%.

Rev 2, 01-15-2007: (Section 1) added catalog number R1890500; (Section 2) revised concentration of Ceric Ammonium Sulfate from 1 - 7%.

Rev 3, 09-02-2008: (Section 1) added Red Bird catalog number CX-1095.



## MSDS

For RICCA, SpectroPure, Red Bird, and Solutions Plus Brands  
Emergency Contact(24 hr) -- CHEMTREC®  
Domestic: 800-424-9300  
International: 703-527-3887

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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.