MSDS

For RICCA, SpectroPure, Red Bird, and Solutions Plus Brands Emergency Contact (24 hr) -- CHEMTREC®

Domestic: 800-424-9300 International: 703-527-3887

AMMONIUM CHLORIDE, < 1.87 Molar Aqueous Solutions (< 1%)

Material Safety Data Sheet

Section 1: Chemical Product and Company Identification

Catalog Number: 623, 623.1, 623.6, 623.7, 626.01, 626.2, 627, A-355, A002210, M00	010042, SA002160, SA002190, SA002210
Product Identity: AMMONIUM CHLORIDE, < 1.87 Molar Aqueous Solutions (< 1%)	
Manufacturer's Name: RICCA CHEMICAL COMPANY LLC	Emergency Contact(24 hr) CHEMTREC® Domestic: 800-424-9300 International: 703-527-3887
CAGE Code: 0V553	
Address: 448 West Fork Dr Arlington, TX 76012	Telephone Number For Information: 817-461-5601
Date Prepared: 1/18/99	Revision: 8 Last Revised: 11/16/2005 Date Printed: 08/31/2006 1:28:20 pm

Section 2. Composition/Information on Ingredients

Component	CAS Registry #	Concentration	ACGIH TLV	OSHA PEL
Ammonium Chloride	12125-02-9	<1	Not Available	Not Available
			10 mg/m3	Not Available
Water, Deionized	7732-18-5	Balance	Not Available	Not Available
			Not Available	Not Available

Section 3: Hazard Identification

Emergency Overview: Non-flammable, non-toxic, non-corrosive. Does not present any significant health hazards at these low concentrations. Wash areas of

contact with water.

Target Organs: eyes, skin

Eye Contact: May cause slight irritation.

Inhalation: Not likely to be hazardous by inhalation.

 $\textbf{Skin Contact:} \ \text{May cause slight irritation}.$

Ingestion: Large doses may cause stomach upset.

Chronic Effects/Carcinogenicity: None

IARC - No. NTP - No. OSHA - No.

Reproductive Information: Not Applicable.

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



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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: Not Available. Method Used: Not Available.

LFL: Not Available. UFL: Not Available.

 $\textbf{Extinguishing Media:} \ \textbf{Use any means suitable for extinguishing surrounding fire}.$

Fire & Explosion Hazards: Not considered to be a fire or explosion hazard. Fire Fighting Instructions: Use normal procedures/instructions.

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

Section 6: Accidental Release Measures

Absorb with suitable material (paper towels, etc.) and treat as normal refuse if local regulations allow. Liquid may be flushed to the sewer. Always dispose of in accordance with local, state and federal 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, colorless liquid pH: 5.5 - 7.2

 Odor: Odorless
 Boiling Point(°C): Approximately 100

 Solubility in Water: Inifinite
 Melting Point(°C): Approximately 0

Specific Gravity: Approximately 1 Vapor Pressure: Not Applicable.

Section 10: Stability and Reactivity

Chemical Stability: Stable under normal conditions of use and storage. **Incompatibility:** Strong Oxidizing agents, strong acids, strong bases.

Hazardous Decomposition Products: Ammonia and Hydrogen Chloride may form when heated to decomposition.

Hazardous Polymerization: Will not occur.

Section 11. Toxicological Information

LD50, Oral, Rat: 1650 mg/kg (Ammonium Chloride), details of toxic effects not reported other than lethal dose value.



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Ecotoxicological Information: No information found **Chemical Fate Information:** No information found

Section 13. Disposal Considerations

Dilute with water, then flush to sewer if local regulations allow. If not allowed, save for recovery or recycling in an approved waste disposal facility. 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: The above items either do not contain any specifically hazardous material or the potentially hazardous material is present in such low concentration that the items do not present any immediate threat to health and safety. These items do not 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 Catagories:No

Section 313 Toxic Chemicals: Not Applicable.

California: None Reported.

Pennsylvania: Ammonium Chloride is listed as an Environmental Hazard on the state's Hazardous Substances List.

RCRA Status: Not Applicable.

CERCLA Reportable Quantity: Ammonium Chloride - 5,000 pounds.

WHMIS: Not Applicable.

Section 16. Other Information

NFPA Ratings:

Health: 0 Flammability: 0 Reactivity: 0 Special Notice Key:None

HMIS Ratings:

Health: 0 Flammability: 0 Reactivity: 0 Protective Equipment:B (Protective Eyewear, Gloves)



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Rev 1, 9-14-2000: Reformatted from WordPerfect® to Microsoft Word®. (Section 1) Revised emergency telephone number to CHEMTREC® 800-424-9300, revised title from 0.01 - 0.10 Molar; (Section 2) revised concentration from 0.05 - 0.54; (Section 7) added storage code; (Section 15) added CERCLA RQ information, added Florida and Pennsylvania state references.

Rev 2, 10-09-2001: Reformatted to electronic data format.

Rev 3, 11-26-2001: (Section 1) added catalog number 626.2.

Rev 4, 12-09-2003: (Section 1) added catalog numbers 623, 623.1, 623.6, 623.7.

Rev 5, 02-19-2004: (Section 1) added Solutions Plus catalog number A002210.

Rev 6, 02-09-2005: (Section 1) added internal part number M00I0042.

Rev 7, 07-13-2005: (Section 9) added pH range.

Rev 8, 11-16-2005: (Section 1) added Red Bird catalog number A-355.

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.