

MSDS

Material Safety Data Sheet

Section 1: Chemical Product and Company Identification

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| Catalog Number: 559, 560, 561, 568, 569, 570, SA001600 | |
| Product Identity: ALUMINUM CHLORIDE AQUEOUS SOLUTIONS | |
| Manufacturer's Name: RICCA CHEMICAL COMPANY LLC | Emergency Contact(24 hr) -- CHEMTREC® Domestic: 800-424-9300 International: 703-527-3887 |
| CAGE Code: 4TCW6, 0V553, 4XZQ2 | |
| Address: 448 West Fork Dr Arlington, TX 76012 | Telephone Number For Information: 817-461-5601 |
| Date Prepared: 8/20/99 | Revision: 6 Last Revised: 08/15/2006 Date Printed: 02/03/2011 9:35:45 am |

Section 2. Composition/Information on Ingredients

| Component | CAS Registry # | Concentration | ACGIH TLV | OSHA PEL |
|-------------------------------|----------------|---------------|---------------|---------------|
| Water, Deionized | 7732-18-5 | Balance | Not Available | Not Available |
| | | | Not Available | Not Available |
| Aluminum Chloride Hexahydrate | 7784-13-6 | < 49 | Not Available | Not Available |
| | | | 2 mg/m3 | Not Available |

Section 3: Hazard Identification

Emergency Overview: Mildly corrosive. May be harmful if swallowed. If ingested, dilute with water. Do not induce vomiting. Call a physician. Wash areas of contact with water for at least 15 minutes.

Target Organs: eyes, skin, respiratory system, gastrointestinal system.

Eye Contact: May cause irritation, redness, pain, and tearing.

Inhalation: May cause irritation of the respiratory tract. Symptoms may include coughing or shortness of breath.

Skin Contact: May cause irritation, redness, and pain.

Ingestion: May cause nausea, vomiting, and diarrhea.

Chronic Effects/Carcinogenicity: None

IARC - No.

NTP - No.

OSHA - No.

Reproductive Information: Reproductive effects cited in 'Registry of Toxic Effects of Chemical Substances' for Aluminum Chloride Hexahydrate.

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

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: Wash areas of contact with soap and 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.
Extinguishing Media: 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

Cover the spill with Sodium Bicarbonate. Mix and add water to form slurry. Decant the liquid to the drain with excess water. Treat the solid residue as normal refuse. 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: 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 to pale green liquid **pH:** 2.5 - 3.5
Odor: odorless to slightly pungent **Boiling Point(°C):** Approximately 100 - 103
Solubility in Water: Infinite **Melting Point(°C):** Approximately -4 - 0
Specific Gravity: Approximately 1.0 - 1.25 **Vapor Pressure:** Not Applicable.

Section 10: Stability and Reactivity

Chemical Stability: Stable under normal conditions of use and storage.
Incompatibility: Sodium Oxide, Ethylene Oxide, Nitromethane.
Hazardous Decomposition Products: May emit toxic Chloride fumes when heated to decomposition.
Hazardous Polymerization: Will not occur.

Section 11. Toxicological Information

LD50, Oral, Rat: (Aluminum Chloride Hexahydrate) 3311 mg/kg, details of toxic effects not reported other than lethal dose value.

Section 12. Ecological Information

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Ecotoxicological Information: Aluminum Chloride has moderate acute and high chronic toxicity to aquatic life.

Chemical Fate Information: Aluminum Chloride hydrolyzes in water to Aluminum Hydroxide and Hydrochloric Acid.

Section 13. Disposal Considerations

Cover the spill with Sodium Bicarbonate. Mix and add water to form slurry. Decant the liquid to the drain with excess water if allowed by local regulations. If not allowed, save for recycling or recovery with a RCRA approved waste disposal facility. Treat the solid residue as normal refuse. Always dispose of in accordance with local, state and federal regulations.

Section 14. Transport Information

Part Numbers: 560-32, 561-16, 561-4, 569-32, 570-16, 570-4

D.O.T. Shipping Name: Aluminum Chloride Solution

D.O.T. Hazard Class: 8

U.N. / N.A. Number: UN2581

Packing Group: III

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: Yes Chronic, Fire, Pressure, Reactivity: No

Section 313 Toxic Chemicals: Not Applicable.

California: None Reported.

Pennsylvania: Aluminum Chloride Hexahydrate is listed as a Basic Hazard on the state's Hazardous Substances List. Aluminum Chloride Hexahydrate is listed as a Basic Hazard on the state's Hazardous Substances List.

RCRA Status: Not Applicable.

CERCLA Reportable Quantity: None Reported.

WHMIS: E: Corrosive Material.



Section 16. Other Information

NFPA Ratings:

Health: 2

Flammability: 0

Reactivity: 0

Special Notice Key: None

HMIS Ratings:

Health: 2

Flammability: 0

Reactivity: 0

Protective Equipment: B (Protective Eyewear, Gloves)

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Rev 1, 12-10-99: (Section 1) Revised emergency telephone number to CHEMTREC® 800-424-9300.

Rev 2, 9-12-2000: Reformatted from WordPerfect® to Microsoft Word®; (Section 3) added 'Do not induce vomiting" to overview; (Section 15) added TSCA statement on hydrates, added Florida state information.

Rev 3, 10-09-2001: Reformatted to electronic data format.

Rev 4, 12-20-2001: (Section 1) added catalog number 569.

Rev 5, 06-18-2003: (Section 1) added catalog number 561.

Rev 6, 08-15-2006: (Section 9) added pH information; (Section 15) added Section 311 Hazardous categories.

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.