

MSDS

MERCURIC CHLORIDE AQUEOUS SOLUTIONS

Material Safety Data Sheet

Section 1: Chemical Product and Company Identification

Catalog Number: 4650, 4655, 4660, M057500, R4670000, SM057500	
Product Identity: MERCURIC 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: 7/25/02	Revision: 4 Last Revised: 01/03/2007 Date Printed: 04/22/2008 1:49:09 pm

Section 2. Composition/Information on Ingredients

Component	CAS Registry #	Concentration	ACGIH TLV	OSHA PEL
Mercuric Chloride	7487-94-7	> 2%	Not Available 0.025 mg/m3	Not Available C 0.1 mg/m3
Water, Deionized	7732-18-5	Balance	Not Available Not Available	Not Available Not Available

Section 3: Hazard Identification

Emergency Overview: This product is highly toxic and should be handled with extreme care. Harmful if absorbed through the skin. Do not get in eyes, on skin, or on clothing. If ingested, give large quantity of water and induce vomiting. Call a physician. Wash areas of contact with plenty of water for at least 15 minutes. For eyes, get medical attention.

Target Organs: eyes, skin, respiratory system, mucous membranes, central nervous system, kidneys.

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

Inhalation: May cause irritation to respiratory tract, including sore throat, coughing and labored breathing.

Skin Contact: May cause irritation, redness and pain. May be absorbed through skin on prolonged exposure.

Ingestion: Can cause vomiting, diarrhea, abdominal pain, tremors, faintness, paralysis of extremities and irregular heartbeat. Severe cases may produce collapse and death on respiratory failure.

Chronic Effects/Carcinogenicity: Chronic exposure through any route can produce central nervous system damage. Can cause skin allergies and accumulate in the

IARC - Mercuric Chloride is unclassifiable as to carcinogenicity to humans.

NTP - No.

OSHA - No.

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

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

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. Call a physician immediately.

Skin Contact: Immediately flush with plenty of water for at least 15 minutes. Remove any contaminated clothing. Wash with soap and water, then flush again with water. Call a physician if irritation develops.

Ingestion: Dilute immediately with water or milk. Induce vomiting. Call a physician.

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 (Water, water spray, foam, or dry chemical). If using water, do not allow water run off to enter sewer.

Fire & Explosion Hazards: Not considered to be a fire or explosion hazard.

Fire Fighting Instructions: Poisonous gases are produced in fire. Do not release runoff from fire-fighting measures to sewers or waterways.

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

Section 6: Accidental Release Measures

Wear gloves to protect from absorption through skin. Absorb with suitable material and containerize for proper disposal. Do not flush to sewer. Sprinkle area with Sulfur to suppress Mercury.

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: Health

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

pH: 3.2 (0.2 Molar)

Boiling Point(°C): Approximately 100

Melting Point(°C): Approximately 0

Vapor Pressure: Not applicable

Section 10: Stability and Reactivity

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

Incompatibility: Formates, sulfites, phosphates, albumin, ammonia, gelatin, carbonates, hypophosphites, sulfides, alkalis, alkaloid salts, lime water, arsenic, antimony, bromides.

Hazardous Decomposition Products: May emit toxic fumes of Mercury when heated to decomposition.

Hazardous Polymerization: Will not occur.

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Section 11. Toxicological Information

LD50 (Oral, rat): Mercuric Chloride (1 mg/kg); LD50 (dermal, rat): Mercuric Chloride (41 mg/kg), details of toxic effects not reported other than lethal dose value. LDLo (Oral, man): 29 mg/kg, gastrointestinal effects noted; TDLo (Oral, man): 29 mg/kg, gastrointestinal, respiratory and kidney effects noted.

Section 12. Ecological Information

Ecotoxicological Information: Mercuric compounds are expected to be toxic to aquatic life.

Chemical Fate Information: Mercury is highly persistent in water with a half-life greater than 200 days. When released into water, microorganisms convert Mercuric salts into Methyl Mercury which is rapidly taken up by algae and enters the food chain. It concentrates in the edible tissues of fish and eventually can cause human poisoning as well. Mercuric compounds are expected to significantly bioaccumulate.

Section 13. Disposal Considerations

Absorb with suitable material. Do not flush to the sewer. Containerize for disposal in a RCRA approved hazardous waste facility. Always dispose of in accordance with local, state and federal regulations.

Section 14. Transport Information

Part Numbers: 4650-16, 4650-32, 4655-1, 4655-16, 4655-2.5, 4655-32, 4655-5, 4660-16, R4670000-1C, R4670000-500C, SM057500-100C

D.O.T. Shipping Name: Mercury compounds, liquid, n.o.s.

D.O.T. Hazard Class: 6.1

U.N. / N.A. Number: UN2024

Packing Group: II

D.O.T. Label: 6.1



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: Yes Fire, Pressure, Reactivity: No

Section 313 Toxic Chemicals: Not Applicable.

California: None Reported.

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

RCRA Status: Not Applicable.

CERCLA Reportable Quantity: None Reported.

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WHMIS: D-1A: Poisonous and Infectious Material. Materials causing immediate and serious toxic effects - Very Toxic Material. D-2A: Poisonous and Infectious Material. Materials causing other toxic effects - Very Toxic Material.

**Section 16. Other Information**

NFPA Ratings:

Health: 3 Flammability: 0 Reactivity: 0 Special Notice Key:None

HMIS Ratings:

Health: 3* Flammability: 0 Reactivity: 0 Protective Equipment:B (Protective Eyewear, Gloves)

Rev 1, 12-22-2003: (Section 1) added Solutions Plus catalog number M057500.

Rev 2, 04-13-2005: (Section 1) revised title, added catalog numbers 4650 and 4655; (Section 14) revised DOT information from Toxic Liquid, UN3287.

Rev 3, 08-16-2006: (Section 1) added catalog number R4670000.

Rev 4, 01-03-2007: (Section 2) revised concentration range of Mercuric Chloride from 4 - 7%.

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.

