

MSDS

ZINC SULFATE, 0.01 - 0.1 Molar (0.02 - 0.2 Normal) Aqueous Solutions

Material Safety Data Sheet

Section 1: Chemical Product and Company Identification

Catalog Number: 9658, 9659, 9660, 9662, SZ116530, SZ116600, SZ116700, Z116600, Z116700, ZX-903, ZX-906	
Product Identity: ZINC SULFATE, 0.01 - 0.1 Molar (0.02 - 0.2 Normal) Aqueous Solutions	
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: 2/25/99	Revision: 7 Last Revised: 05/04/2007 Date Printed: 06/15/2007 4:28:25 pm

Section 2. Composition/Information on Ingredients

Component	CAS Registry #	Concentration	ACGIH TLV	OSHA PEL
Zinc Sulfate Heptahydrate	7446-20-0	< 3	Not Available Not Available	Not Available 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. Wash areas of contact with water.

Target Organs: eyes, skin, mucous membranes.

Eye Contact: May cause slight irritation.

Inhalation: Not likely to be hazardous by inhalation.

Skin Contact: May cause slight irritation.

Ingestion: Irritation of the mucous membranes due to hydrolysis and formation of acid in the stomach can occur. Large amounts can produce stomach cramps, vomiting, blood pressure decrease, 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 Zinc Sulfate Heptahydrate.

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

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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. Vomiting may occur spontaneously but do not induce. 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: 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 inert material (vermiculite, dry sand, etc) and place in a chemical waste container for proper disposal. Do not flush to sewer. 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, colorless liquid

Odor: Odorless

Solubility in Water: Infinite

Specific Gravity: Approximately 1

pH: Approximately 4.5

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: Lead, Calcium, Strontium salts, Borax, Alkali Carbonates and Hydroxides, Silver protein and Tannins.

Hazardous Decomposition Products: Oxides of Zinc and Sulfur.

Hazardous Polymerization: Will not occur.

Section 11. Toxicological Information

LD50, Oral, Rat: 2150 mg/kg (Zinc Sulfate Heptahydrate), details of toxic effects not reported other than lethal dose value. Zinc Sulfate is investigated as a mutagen.

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Section 12. Ecological Information

Ecotoxicological Information: Zinc and its salts have high acute and chronic toxicity to aquatic life. Toxicity is related to water hardness, with increased toxicity occurring in softer waters. Insufficient data are available to evaluate the short and long-term effects of Zinc exposure to plants, birds or land animals.

Chemical Fate Information: Zinc and its salts are highly persistent in water with a half-life of greater than 200 days.

Section 13. Disposal Considerations

Do not flush to sewer. Absorb with suitable material and containerize for disposal with a RCRA-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 Categories: No

Section 313 Toxic Chemicals: Not Applicable.

California: None Reported.

Pennsylvania: Zinc Sulfate Heptahydrate is listed as an Environmental Hazard on the state's Hazardous Substances List.

RCRA Status: Not Applicable.

CERCLA Reportable Quantity: Zinc Sulfate Heptahydrate - 1000 pounds.

WHMIS: Not Applicable.

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)

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Rev 1, 9-26-2000: Reformatted from WordPerfect® to Microsoft Word®; (Section 1) Revised emergency telephone number to CHEMTREC® 800-424-9300; (Section 3) added anhydrous reference; (Section 7) added storage code; (Section 15) added TSCA statement regarding hydrates.
Rev 2, 10-10-2000: (Section 15) removed Nitric Acid from Pennsylvania reference.
Rev 3, 10-09-2001: Reformatted to electronic data format.
Rev 4, 10-16-2002: (Section 1) added Solutions Plus catalog number Z116600.
Rev 5, 02-04-2003: (Section 1) added Solutions Plus catalog number Z116700.
Rev 6, 03-31-2006: (Section 1) added Red Bird catalog number ZX-903.
Rev 7, 05-12-2006: (Section 1) added Red Bird catalog number ZX-906.

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.