

MSDS

ARSENIC ATOMIC ABSORPTION STANDARD in 3% Sulfuric Acid

Material Safety Data Sheet

Section 1: Chemical Product and Company Identification

Catalog Number: AAS1KS	
Product Identity: ARSENIC ATOMIC ABSORPTION STANDARD in 3% Sulfuric Acid	
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: 3/11/03	Revision: 1 Last Revised: 08/06/2004 Date Printed: 08/31/2006 2:21:44 pm

Section 2: Composition/Information on Ingredients

Component	CAS Registry #	Concentration	ACGIH TLV	OSHA PEL
Arsenic Trioxide	1327-53-3	< 0.2	Not Available	Not Available
			0.01 mg/m3	Not Available
Sulfuric Acid	7664-93-9	2 - 4	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: WARNING! This solution is toxic and contains a known carcinogen. May be fatal if swallowed. May cause liver and kidney damage. If ingested, dilute immediately with water and induce vomiting. Call a physician. Wash areas of contact with plenty of water. For eyes, get medical attention. Contains materials known to the state of California to cause cancer.

Target Organs: eyes, skin, respiratory system, teeth, skeletal system, central nervous system, lymphatic system, cardiovascular system, kidneys, liver.

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

Inhalation: May cause mild irritation of the nose, throat, and respiratory tract. Main inhalation hazard is in reference to Arsenic dust, which may cause inflammation of the mucous membranes with cough and foamy sputum, restlessness, dyspnea, cyanosis.

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

Ingestion: Arsenic is highly toxic! May cause throat irritation, vomiting and diarrhea. May cause damage to liver and kidneys. A suspected fetal toxin.

Chronic Effects/Carcinogenicity: Chronic exposure may lead to kidney and liver damage.

IARC - Arsenic Trioxide is carcinogenic to humans.

NTP - Arsenic Trioxide - Substances or groups of substances, and medical treatments that are known to be carcinogenic.

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OSHA - No.

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 Arsenic Trioxide.

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 Arsenic Trioxide.

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: 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: 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 breathing equipment appropriate for the surrounding fire.

Section 6: Accidental Release Measures

Do not flush to sewer. Absorb with suitable material. Containerize for disposal with a hazardous waste disposal facility. 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: 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 1.0

pH: Not Available.

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: Organics, chlorates, carbides, fulminates, picrates, alkalines, reducing agents, nitrates, Acetic Acid, oxidizing agents, metals.

Hazardous Decomposition Products: Emits highly toxic fumes of Sulfur Oxides and Arsenic when heated to decomposition.

Hazardous Polymerization: Will not occur.

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Section 11. Toxicological Information

LD50, Oral, Rat: 14.6 mg/kg (Arsenic Trioxide), details of toxic effects not reported other than lethal dose value. 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/m³/2H, No toxic effect noted.

Section 12. Ecological Information

Ecotoxicological Information: This material is expected to be slightly toxic to aquatic life.

Chemical Fate Information: This material may bioaccumulate to some extent.

Section 13. Disposal Considerations

Absorb with suitable material and containerize for disposal at a RCRA approved hazardous waste disposal facility in accordance with local regulations. Do not flush to sewer. 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, Chronic: Yes Fire, Pressure, Reactivity: No

Section 313 Toxic Chemicals: Not Applicable.

California: Contains an ingredient (Arsenic Trioxide) known to the state of California to cause cancer.

Pennsylvania: Sulfuric Acid is listed as an Environmental Hazard on the state's Hazardous Substances List. Arsenic Trioxide is listed as both Special and Environmental Hazards on the state's Hazardous Substances List.

RCRA Status: P012

CERCLA Reportable Quantity: Sulfuric Acid - 1,000 pounds. Arsenic Trioxide - 1 pounds.

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

**Section 16. Other Information**



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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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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)

Rev 1, 08-06-2004: Reformatted to electronic data format.

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.