



MATERIAL SAFETY DATA SHEET

1533 W. Henrietta Rd.
Avon, New York 14414
(716) 226-6177

MSDS No. SS 1121
Effective Date March 3, 1998

SECTION V HEALTH HAZARD DATA

SS 1121

Threshold Limited Value None established for this mixture. For Sulfuric Acid:
TWA: 1 mg/m³, STEL: 3 mg/m³ (ACGIH 1992-93).

Effects of Overexposure May be harmful if swallowed. Contact may cause irritation to skin, eyes and mucous membranes. Exercise appropriate procedures to minimize potential hazards.

Emergency and First Aid Procedures **SKIN:** Flush thoroughly with water for 15 minutes while removing contaminated clothing. **INGESTION:** If swallowed, do NOT induce vomiting. If conscious, drink large quantities of milk or water. Get immediate medical attention. Never give anything by mouth to an unconscious person. **EYES:** Flush thoroughly with water for 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention. **INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

SECTION VI REACTIVITY DATA

Stability	Unstable		Conditions to Avoid	Excessive temperature and heat.
	Stable	X		

Incompatibility (Materials to Avoid) Attacks many metals, bases. Reacts with alkalies.

Hazardous Decomposition Products When heated to decomposition, may release sulfur dioxide fumes.

Hazardous Polymerization	Conditions to Avoid		Not applicable.
	May Occur	Will Not Occur	
		X	

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled Neutralize with sodium bicarbonate (soda ash) and flush to sewer with copious amounts of water.

Waste Disposal Method Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities only.

Flush neutralized acid to sewer with copious amounts of water.

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type) None needed in normal laboratory handling. If misty conditions prevail, work in ventilation hood or wear a NIOSH/MSHA approved respirator.

Ventilation	Local Exhaust	Recommended.	Special	No.
	Mechanical (General)	Recommended.	Other	No.

Protective Gloves Rubber. **Eye Protection** Chemical safety glasses.

Other Protective Equipment Goggles, smock, apron, eye wash station, proper gloves.

SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing Store in a cool place. Wash thoroughly after handling.
Keep container tightly closed when not in use.

Other Precautions Read label on container before using. Do not wear contact lenses when working with chemicals.

Do not get in eyes, on skin or on clothing. Remove and wash contaminated clothing.

For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Revision No. 7	Date 3/03/98	Approved Michael Raszeja	Chemical Safety Coordinator MR
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The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. * Hazardous Materials Industrial Standards. Printed on recycled paper.

SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

Product	SULFURIC ACID AQUEOUS SOLUTION	<p>CHEMTREC 800-424-9300 Day 716-226-6177</p>	Health	2
Chemical Synonyms	(1.0 Normal) (0.5 Molar)		Fire	0
Formula	Mixture. See Section II.		Reactivity	1
Unit Size	up to 4 Lt.		NFPA HAZARD RATING LEAST SLIGHT MODERATE HIGH EXTREME 0 1 2 3 4	
C.A.S. No.	Mixture. See Section II.	HMIS * 0 1 2 3 4		

SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Sulfuric Acid: (CAS No. 7664-93-9)	2.62%	See Section V.
Water: (CAS No. 7732-18-5)	97.38%	None established.

WARNING! CORROSIVE! MAY BE HARMFUL IF

SWALLOWED. MAY CAUSE SKIN IRRITATION.

SECTION III PHYSICAL DATA

Melting Point (°F)	Freezes approx. 0°C (32°F)	Specific Gravity (H₂O = 1)	Approx. 1.0
Boiling Point (°F)	Approx. 100°C (212°F)	Percent Volatile by Volume (%)	97.38%
Vapor Pressure (mm Hg)	14 (water)	Evaporation Rate (Water = 1)	Slightly less than 1.
Vapor Density (Air=1)	0.7 (water)		
Solubility in Water	Complete.		
Appearance & Odor	Clear colorless liquid; no odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	Non-flammable (NA).	Flammable Limits in Air % by Volume	NA	Lower	Upper
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Extinguisher Media If involved in a fire situation use water spray.

SPECIAL FIREFIGHTING PROCEDURES

These solutions are very dilute. In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective clothing and eye protection.

(1996 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.7, GUIDE PAGE NO. 157)

UNUSUAL FIRE AND EXPLOSION HAZARDS

Attacks many metals, releasing hydrogen. Fire or excessive heat may produce hazardous decomposition products; can react vigorously with alkali materials.

D.O.T. SULFURIC ACID, 8, UN 2796, PG II

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20