



ALDON CORPORATION

MATERIAL SAFETY DATA SHEET

1533 W. Henrietta Rd.
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(716) 226-6177

MSDS No. SS 1117
Effective Date February 5, 1998

SECTION V HEALTH HAZARD DATA

SS 1117

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

Effects of Overexposure Ingestion of sulfuric acid can cause mucous membrane burns, abdominal pain, respiratory distress (secondary to epiglottal edema) shock, renal failure and lesions or perforations of the esophagus and gastrointestinal tract. Concentrated solutions are extremely corrosive and may cause severe skin burns. Repeated contact with dilute solutions may cause skin irritation and dermatitis. Severe damage to the eyes can occur very rapidly and concentrated solutions may cause totally irreversible damage, complete corneal opacity or perforation of the globe. Inhalation of low concentrations of vapors can cause irritation of the respiratory tract. Overexposure to higher concentrations cause bronchoconstriction and laryngeal spasm or laryngeal edema.

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) Water, many metals and strong alkali materials. Contact with oxidizers may cause violent reaction/explosion or form unstable compounds. Contact with organic materials may result in highly exothermic reaction. Contact with finely divided organic materials may cause fire.

Hazardous Decomposition Products Thermal decomposition or combustion may produce sulfur trioxide and/or sulfur dioxide. Toxic and explosive hydrogen sulfide may be formed.

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 Wear protective safety equipment and clothing. Dilute spill cautiously with 5 or 6 volumes of water, neutralize gradually with soda ash or lime. Do not allow unneutralized acid to get into sewers containing sulfides because of danger of evolving hydrogen sulfide gas.

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.

Dispose of in accordance with federal, state and local regulations.

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type) Wear a NIOSH/MSHA-approved respirator suitable for level of exposure.

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

Protective Gloves	Rubber.	Eye Protection	Chemical safety glasses.
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Other Protective Equipment Goggles, face shield, 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.

Avoid contact with skin, eyes, mucous membranes and 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. 1	Date 2/05/98	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> <p>NFPA HAZARD RATING</p> <table border="1"> <tr> <td>LEAST</td> <td>SLIGHT</td> <td>MODERATE</td> <td>HIGH</td> <td>EXTREME</td> </tr> <tr> <td>0</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> </tr> </table> <p>HMIS * Health 3 Fire 0 Reactivity 3</p>	LEAST	SLIGHT	MODERATE	HIGH	EXTREME	0	1	2	3	4
LEAST	SLIGHT		MODERATE	HIGH	EXTREME							
0	1		2	3	4							
Chemical Synonyms	(9 Molar) (18 Normal)											
Formula	Mixture.											
Unit Size	up to 4 Lt.											
C.A.S. No.	Mixture.											

SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Sulfuric Acid: (CAS No. 7664-93-9)	47%	See Section V.
Water: (CAS No. 7732-18-5)	53%	None established.

DANGER! CORROSIVE! CAUSES SEVERE BURNS TO SKIN AND EYES. HARMFUL IF SWALLOWED.

SECTION III PHYSICAL DATA

Melting Point (°F)	Not applicable.	Specific Gravity (H ₂ O = 1)	1.2
Boiling Point (°F)	Not applicable.	Percent Volatile by Volume (%)	53%
Vapor Pressure (mm Hg)	14 (Water).	Evaporation Rate (=1)	Not applicable.
Vapor Density (Air=1)	0.7 (Water).		
Solubility in Water	Complete.		
Appearance & Odor	Clear to slightly cloudy oily liquid; odorless to slightly pungent odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	Non-flammable.	Flammable Limits in Air % by Volume	N/A	Lower	Upper
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Extinguisher Media Dry chemicals.

SPECIAL FIREFIGHTING PROCEDURES Fires involving a small amount of combustibles may be smothered by dry chemical. Use water on combustibles burning in vicinity of acid but use care as water applied to the acid results in severe generation of heat and may cause boiling and splattering. Wear self-contained, positive pressure breathing apparatus and full firefighting protective clothing.

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

UNUSUAL FIRE AND EXPLOSION HAZARDS

Sulfuric acid will not burn, but is capable of igniting finely divided combustible materials on contact. May react violently with organic materials and water with the evolution of heat.

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

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