



ALDON CORPORATION

MATERIAL SAFETY DATA SHEET

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

MSDS No. FF 10
Effective Date December 19, 1997

SECTION V HEALTH HAZARD DATA

FF 10

Threshold Limited Value

Formaldehyde: Ceiling 0.3 ppm, 0.37 mg/m³. Methanol: TWA 200 ppm, 262 mg/m³, STEL 250 ppm, 328 mg/m³. Ethyl Alcohol: TWA 1000 ppm, 1880 mg/m³. Acetic Acid: TWA 10 ppm, 25 mg/m³; STEL 15 ppm, 37 mg/m³.

Effects of Overexposure

INGESTION: May be fatal if swallowed. **CONTACT:** Avoid contact with skin, eyes, and mucous membranes. Contact with skin may cause allergic irritation. **INHALATION:** May cause dizziness, drowsiness, nausea and vomiting. **EYES:** May cause irritation, burns or blindness.

Emergency and First Aid Procedures

INGESTION: Do **NOT** give anything by mouth to an unconscious or very drowsy person. If conscious, have victim drink several glasses of water. Call physician or Poison Control Center immediately. Induce vomiting if advised by physician or Poison Control Center. **SKIN:** Flush thoroughly with water, then wash with mild soap and water. **INHALATION:** Remove to fresh air. Give artificial respiration if not breathing. Oxygen may be given by qualified personnel if breathing is difficult. Obtain medical attention. **EYES:** Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SECTION VI REACTIVITY DATA

Stability	Unstable	Conditions to Avoid	Excessive temperature and heat, fire, ignition source.
	Stable		

Incompatibility (Materials to Avoid)	Concentrated nitric or sulfuric acid, strong oxidizing agents.
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Hazardous Decomposition Products	Thermal decomposition or burning can produce carbon dioxide (CO ₂) and/or carbon monoxide and oxides of nitrogen (NO _x).
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Hazardous Polymerization		Conditions to Avoid
May Occur	Will Not Occur	Not applicable.
	X	

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled	Remove all sources of ignition, provide adequate ventilation. Absorb spill in vermiculite, paper, earth or other absorbent. Place in a suitable container for incineration. Wash spill area with soap and water.
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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.
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Dispose of in an approved incinerator or contract with a licensed waste disposal service.

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type)	In normal laboratory handling work in fume hood. If misty conditions prevail, wear a NIOSH/MSHA-approved respirator. Do not use in confined area.
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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	Smock, apron, eye wash station, proper gloves, goggles, fire extinguisher, ventilation hood.
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SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing	Store in a cool, dry, well-ventilated area, away from fire hazards. Wash thoroughly after handling.
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Other Precautions	Read label on container before using. Do not wear contact lenses when working with chemicals.
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Do not take internally. Avoid contact with skin, eyes and clothing. Avoid breathing vapors. Use with adequate ventilation. Remove and wash contaminated clothing.

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

Revision	No. 6	Date	12/19/97	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	FAA SOLUTION
Chemical Synonyms	Formaldehyde-Acetic Acid-Alcohol
Formula	Mixture. See Section II.
Unit Size	up to 4 Lt.
C.A.S. No.	Mixture. See Section II.

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CHEMTREC
800-424-9300
Day 716-226-6177

NFPA
HAZARD RATING

LEAST SLIGHT MODERATE
0 1 2

Health
Fire
Reactivity

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3
2

HMIS *
HIGH EXTREME

3 4

SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Ethyl Alcohol Denatured: (CAS No. 64-17-5)	46.3%	See Section V.
Formaldehyde: (CAS No. 50-00-0)	5.5%	See Section V.
Methanol: (CAS No. 67-56-1)	3.5%	See Section V.
Glacial Acetic Acid: (CAS No. 64-19-7)	2.5%	See Section V.
Water: (CAS No. 7732-18-5)	40.7%	None established.

DANGER! FLAMMABLE! POISON MAY BE FATAL IF SWALLOWED. AVOID CONTACT WITH SKIN, EYES AND MUCOUS MEMBRANES.

SECTION III PHYSICAL DATA

Melting Point (°F)	Approx. -60°C (-72°F).	Specific Gravity (H ₂ O = 1)	Approx. 0.85-0.9
Boiling Point (°F)	Approx. 74°-79°C (163°-174°F).	Percent Volatile by Volume (%)	100%
Vapor Pressure (mm Hg)	Ca 42 @ 68°C Ethyl Alcohol.	Evaporation Rate (Water = 1)	Slightly less than 1.
Vapor Density (Air=1)	Ca 1.6 for Ethyl Alcohol.		
Solubility in Water	Complete.		
Appearance & Odor	Clear, colorless liquid; formaldehyde and vinegar like odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	Approx. 68°F (20°C) TCC.	Flammable Limits in Air % by Volume	Ethyl Alc.	Lower	3.3%	Upper	19.0%
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Extinguisher Media	Water spray; carbon dioxide (CO ₂); dry chemical (ABC); foam.
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SPECIAL FIREFIGHTING PROCEDURES

In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective clothing.

Ignition Temperature: 685°F (363°C).

(1996 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.7, GUIDE PAGE NO. 128)

UNUSUAL FIRE AND EXPLOSION HAZARDS

Vapors form from this product and may travel or be moved by air currents and ignited by pilot light, other flames, smoking, sparks, heaters, electrical equipment, static discharge, or other ignition sources at location distant from handling point. When involved in fire, formaldehyde emits highly toxic and irritating fumes. **CAUTION!** Burns with a clear, almost invisible flame, especially hard to see in strong sunlight.

D.O.T. Flammable liquids, n. o. s., (Ethyl alcohol), 3, UN 1993, PG II

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