



ALDON CORPORATION

MATERIAL SAFETY DATA SHEET

1533 W. Henrietta Rd.
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MSDS No. AA 140
Effective Date January 18, 1999

SECTION V HEALTH HAZARD DATA

AA 140

Threshold Limited Value

TWA 10 mg/m³ (ACGIH 1992-93) as aluminum metal dust.

Effects of Overexposure

INHALATION: It has been reported in the literature that chronic exposure to aluminum dust has been suspected of causing lung injury. **EYES:** Particles of aluminum in the eye may cause injury to the cornea. **INGESTION:** May cause irritation. Exercise appropriate procedures to minimize potential hazards.

Emergency and First Aid Procedures

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. **SKIN:** Wash thoroughly with soap and water. **EYES:** Immediately flush eyes with plenty of water for 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention. **INGESTION:** Treat symptomatically and supportively. Get medical attention.

SECTION VI REACTIVITY DATA

Stability	Unstable	Conditions to Avoid
	Stable	X Heat, spark, flame, water, strong oxidizing agents.

Incompatibility (Materials to Avoid)	Strong oxidizers, mineral acids, and strong alkalis, halogenated hydrocarbons, water.
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Hazardous Decomposition Products	Aluminum reacts with water, acids or alkalis to generate hydrogen gas.
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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 ignition sources. Using plastic tools transfer spilled material to a fiber container. Recover when possible. Wash spill area well 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 accordance with federal, state and local regulations.

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type)		None needed in normal laboratory handling. If dusty conditions prevail, wear a NIOSH/MSHA-approved dust mask or work in ventilation hood.			
Ventilation	Local Exhaust	If needed.	Special	No.	
	Mechanical (General)	Recommended.	Other	No.	
Protective Gloves		Rubber if sensitive to irritation.	Eye Protection		Chemical safety glasses.

Other Protective Equipment	Goggles, safety glasses, lab coat, fire extinguisher, eye wash station.
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SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing	Store in a dry place away from acids, oxidizers and alkalis. Wash thoroughly after handling. Dangerous when wet, take precautions.
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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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Remove and wash contaminated clothing.

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

Revision	No. 8	Date	1/18/99	Approved	Michael Raszeja	Chemical Safety Coordinator	MR
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	ALUMINUM METAL POWDER
Chemical Synonyms	Aluminum
Formula	Al
Unit Size	up to 2.5 Kg.
C.A.S. No.	7429-90-5

NFPA HAZARD RATING
LEAST SLIGHT MODERATE HIGH EXTREME
0 1 2 3 4

HEALTH 1
FIRE 4
REACTIVITY 2

HMIS *
3 4

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

SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Aluminum Metal, Powder	>99.5	See Section V.
Silicon: (CAS No. 7440-21-3)	<1.0	5 mg/m ³ (Air).
Iron: (CAS No. 7439-89-6)	<1.0	5 mg/m ³ (Air).

WARNING! FLAMMABLE SOLID. ALUMINUM POWDER DISPERSED IN AIR FORMS AN EXPLOSION HAZARD.

SECTION III PHYSICAL DATA

Melting Point (°F)	782°C (1439°F)	Specific Gravity (H ₂ O = 1)	2.7
Boiling Point (°F)	Not determined.	Percent Volatile by Volume (%)	N/A
Vapor Pressure (mm Hg)	N/A	Evaporation Rate (≈1)	N/A
Vapor Density (Air=1)	N/A		
Solubility in Water	Insoluble.		
Appearance & Odor	Silver gray colored metal-fine powder. No odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	Flammable.	Flammable Limits in Air		Lower	Upper
		% by Volume	Unknown	40 mg/l	-----
Extinguisher Media	Class "D" dry chemical extinguishing agent or other suitable extinguishing material such as dry sand. Do not use class "A", "B", or "C" extinguishers or halogenated agents. Do not use water.				

SPECIAL FIREFIGHTING PROCEDURES

In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective clothing. Gently cover the burning powder and form a ring around it with the extinguishing agents referred to above. Do not actually mix the agent with the burning powder and do not disturb until it has cooled. At no time allow dust clouds to form.

(1996 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.7, GUIDE PAGE NO. 138)

UNUSUAL FIRE AND EXPLOSION HAZARDS

Water and burning finely divided aluminum react violently, forming hydrogen gas and aluminum oxide. Aluminum particles will burn at a very high temperature as a mass of material or be potentially explosive if loosened and dispersed in air. Sensitive to static discharge.

D.O.T. ALUMINUM POWDER, UNCOATED, 4.3, UN 1396, PG II

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