

RECD JUNE 2002

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

Form Approved
OMB No. 14-11307

MATERIAL SAFETY DATA SHEET

Aluminum
135-122/459173

Required under USDL Safety and Health Regulations for Ship Repairing,
Shipbuilding, and Shipbreaking (29 CFR 1916, 1918, 1917)

SECTION I

MANUFACTURER'S NAME Alumax Foils, Inc.		EMERGENCY TELEPHONE NO. (314) 481-7000	
ADDRESS (Number, Street, City, State, and ZIP Code) 6100 S. Broadway St. Louis, MO 63111			
CHEMICAL NAME AND SYNONYMS Aluminum		TRADE NAME AND SYNONYMS 1100 alloy Foil or sheet	
CHEMICAL FAMILY Aluminum	FORMULA Al		

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL Aluminum, min 99	00	10 mg/m ³
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	%	TLV (Units)
Ozone (may be emitted as by-product during welding)		0.2 mg/m ³

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	2467°C	SPECIFIC GRAVITY (H ₂ O=1)	2.71
VAPOR PRESSURE (mm Hg.) at 1540°C	1 mm Hg	PERCENT VOLATILE BY VOLUME (%)	
VAPOR DENSITY (AIR=1)		EVAPORATION RATE	
SOLUBILITY IN WATER	insoluble	melting point	640°C
APPEARANCE AND ODOR	silvery colored metal		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	FLAMMABLE LIMITS		
EXTINGUISHING MEDIA	Lel	Uel	
SPECIAL FIRE FIGHTING PROCEDURES	If product is melted, explosion can occur on contact with water or moist surfaces.		
UNUSUAL FIRE AND EXPLOSION HAZARDS	Explosive if converted to dust or powder. Do not use water, use suitable dry powder to extinguish.		

Aluminum (2)

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE Total dust: 10 mg/m³. Respirable dust: 5 mg/m³ - Aluminum Dust

EFFECTS OF OVEREXPOSURE If converted to dust, high exposure may produce irritation of eyes and respiratory system. * +

EMERGENCY AND FIRST AID PROCEDURES Wash eyes with copious amounts of water for 15 minutes. Seek medical advise if irritation persists.

SECTION VI - REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	If converted to dust, the bulk dust is reactive with water.
INCOMPATIBILITY (Materials to avoid) If product is melted, do not expose to water or moist containers/utensils			
HAZARDOUS DECOMPOSITION PRODUCTS The dust reacts with some acids and caustic solutions to produce hydrogen.			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

WASTE DISPOSAL METHOD

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type) If TLV's exceeded, use approved particulate respirator			
VENTILATION	LOCAL EXHAUST	Yes, if TLV's exceeded	SPECIAL
	MECHANICAL (General)	-	OTHER
PROTECTIVE GLOVES	None	EYE PROTECTION	Eye glasses or goggles, as needed
OTHER PROTECTIVE EQUIPMENT None			

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

OTHER PRECAUTIONS

* If exposure to aluminum oxide dust is kept below the TLV, the alloy components will be below their TLV's and should not present any health risk.

+ High exposure (above TLV) to O zone may produce respiratory irritation and pulmonary edema.

5/17/86