

**MD-BOTH INDUSTRIES**

BOX 306  
 NICKERSON ROAD  
 ASHLAND  
 MASSACHUSETTS 01721  
 TEL (508) 881-4100  
 FAX (508) 881-1656

**Hazard Ratings**

Minimal.....0  
 Slight.....1  
 Moderate.....2  
 Serious.....3  
 Severe.....4

HEALTH	0
FLAMMABILITY	1
REACTIVITY	1
PERSONAL PROTECTION	B

**MATERIAL SAFETY DATA SHEET**

Date of Preparation: August 5, 1991  
 Prepared by: R. T. Marshall  
 Revised: April 4, 1996  
 Revised by: R.T. Marshall

**SECTION 1**

Manufacturer's Name: MD-BOTH Industries  
 Street Address: 40 Nickerson Road, Ashland, MA 01721  
 Emergency Telephone #: CHEMTREC 800-424-9300 24HRS  
 Chemical Name: Aluminum powder pasted in water  
 Trade Name: WP-480, WP-980, LPW-70, LPW-110, LPW-980, LPW-1180.

**SECTION 2 -- HAZARDOUS INGREDIENTS**

This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning & Community Right-To-Know Act of 1986 and 40 CFR 372:

CAS#	Chemical Name	% by Weight	TLV	LEL	Vapor Pressure
7429-90-5	Aluminum	65.0	N/A	30 oz per 1000 cu Feet	N/A

All components in these products are listed in the TSCA-Inventory and are found on the Canadian DSL. These products comply with current CONEG Regulations.

**SECTION 3 -- PHYSICAL DATA**

Boiling range (deg. F): 212  
 Vapor density: N/A  
 Specific Gravity: 1.62 / 13.0 lbs./gal.  
 Type of odor: None  
 Appearance: Silver colored paste  
 Evaporation rate: 1.8 (Butyl acetate = 1.0)  
 % VOC: 0

#### SECTION 4 -- FIRE AND EXPLOSION DATA

Flammability Classification: OSHA: Metallic Paste/Pigment  
DOT: Not regulated

Flash Point of solvent(deg. F): None

Extinguishing 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.

##### Unusual Fire and Explosion Hazards:

Closed containers may explode when exposed to extreme heat. Water and finely divided aluminum react to form hydrogen gas. Although the pastes are a stabilized mixture of water and aluminum, they will slowly produce hydrogen, an explosive gas. Store the pastes in containers with pressure relief valves. Do not store these products for more than six months.

Aluminum burns at very high temperatures as a mass. If water completely evaporates from these pastes, any disturbance that might create a dust cloud can result in explosion. LEL of dry aluminum flake is 30 ounces per 1000 cubic feet.

Special Firefighting Procedures: If solvent has completely burned out and the aluminum has ignited, drum should be carefully isolated and fine dry sand placed around outside of container. Do not disturb the powder until it has cooled down to ambient temperature. Do not allow dust clouds to form.

#### SECTION 5 -- HEALTH HAZARD DATA

##### Effects of Overexposure:

Eye contact may cause irritation.

Skin contact: prolonged exposure may cause irritation.

Inhalation may cause irritation in respiratory tract.

Primary Route of Entry: Skin contact.

##### Emergency and First Aid Procedures:

Eye contact: Flush with large amounts of water for 15 minutes or until irritation subsides. If irritation persists, call physician.

Skin contact: Wash with soap and water. Remove and wash contaminated clothing.

Inhalation: Remove affected person to fresh air. Restore normal breathing and administer oxygen if necessary. Call physician.

Ingestion: Drink 1 or 2 glasses of water to dilute. Do not induce vomiting. Consult physician or poison control center immediately. Treat symptomatically.

## SECTION 6 -- REACTIVITY DATA

Product Stability: stable

Conditions to avoid: Heat, sparks, open flames, acids, alkalis, strong oxidizing agents

Hazardous decomposition products: Aluminum reacts with water, acids, and alkalis to form hydrogen gas.

Hazardous polymerization: Does not occur.

## SECTION 7 -- SPILL OR LEAK PROCEDURES

Procedure When Material Spilled or Released: Remove all sources of ignition. Keep people away. Ventilate area. Using spark-proof tools remove material to leak-proof container for disposal.

Waste Disposal Method: Dispose of contaminated material in accordance with local, state, and federal regulations.

## SECTION 8 -- SPECIAL PROTECTION INFORMATION

Use explosion-proof equipment. No smoking or open lights.

Protective Gloves: Use chemical resistant gloves to avoid prolonged skin contact.

Respiratory Protection: None required for aluminum pasted in water.

Eye Protection: Use chemical goggles or face shield.

Other Protective Equipment: Use chemical apron.

## SECTION 9 -- SPECIAL PRECAUTIONS

Handling and Storage: Do not store above 120 degrees F. Store in closed containers in a cool, well-ventilated area.

Other Precautions: These aluminum pastes will slowly produce hydrogen gas. Store the paste in containers with pressure relief valves. Do not store aluminum paste for more than six months.

DO NOT ALLOW MATERIAL TO EVAPORATE TO DRYNESS. Do not ingest. Avoid prolonged contact with skin, contact with eyes, and breathing vapor. More detailed information on storage and handling of aluminum powders may be found in the Aluminum Association's brochure entitled "Recommendations for Storage and Handling of Aluminum Powders and Pastes".

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