



MD-BOTH INDUSTRIES

40 Nickerson Road
Ashland, MA 01721-1912
Tel: (508) 881-4100
Fax: (508) 881-1656

Hazard Ratings			
Minimal	0	HEALTH	0
Slight	1	FLAMMABILITY	2
Moderate	2	REACTIVITY	1
Serious	3	PERSONAL	
Severe	4	PROTECTION	B

MATERIAL SAFETY DATA SHEET

Date of Preparation: Mar. 12, 2002

Prepared by: Max Hui

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 (non-leaving) pasted in water

Trade Name: AQUAMET - NPW/30, NPW/70, NPW/90, NPW/110, NPW/1200, NPW/1500, NPW/1700, NPW/2600, NPW/2900, NPW/3100, NPW3200, NPW 3300, NPW 3400, NPW 3800, AQUAMET NPW/AM 70, Constant NPW VP 110800, Constant 3400 NPW VP10802, NPW 6600.

SECTION 2 – HAZARDOUS INGREDIENTS

This product contains no 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.

This product contains:

<u>CAS#</u>	<u>Chemical Name</u>	<u>% by Weight</u>	<u>TLV</u>	<u>LEL</u>	<u>Vapor Pressure</u>
7429-90-5	Aluminum	60	N/A	30 oz/ 1000ft ³	N/A

All of the components of these products are listed in the TSCA Inventory and can be found on the Canadian DSL.

SECTION 3 – PHYSICAL DATA

Boiling range (°F): 212

Vapor density: N/A

Liquid density: Greater than water

Type of odor: None
Evaporation rate: 1.8 (Butyl acetate = 1.0)
% VOC: 0

Appearance: Silver colored paste
% Solids: 60

SECTION 4 -- FIRE AND EXPLOSION DATA

Flammability Classification: OSHA: Not Classified
DOT: Not regulated

Flash Point of solvent (°F): None

ALUMINUM POWDER IS FLAMMABLE WHEN DRY

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 can react to form hydrogen gas. Although NPW pastes are stabilized mixtures of water and aluminum, they may slowly produce hydrogen, an explosive gas. Store NPW pastes in containers with pressure relief valves. Do not store NPW pastes for more than six months.

Aluminum burns at very high temperatures as a mass. If water completely evaporates from NPW 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 Fire fighting 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 an approved landfill or an approved incinerator 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.

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: NPW aluminum pastes can slowly produce hydrogen gas. Store these aluminum pastes in plastic containers or in plastic bags if metal containers are used. These containers should be equipped with pressure relief valves. Do not store NPW 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

