

**MD-BOTH INDUSTRIES**

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

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

MATERIAL SAFETY DATA SHEET

Date of Preparation: September 1, 1999

Prepared by: Brian J. Kelly

SECTION 1

Manufacturer's Name: MD-BOTH Industries

Street Address: 40 Nickerson Road, Ashland, MA 01721

Emergency Telephone #: CHEMTREC 800-424-9300 24 HRS

Chemical Name: Aluminum flake pasted in 35% mineral oil

Trade Name: 1880-M, 2411-M, FM/4500, FM6500, 1980-1135, Maripaste aluminum, 2480-1135, 1911-M, 2080-1135

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 the following hazardous ingredients:

<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	62	NA	30 oz/1000 ft ³	NA
64742-46-7	Mineral Oil	35	NA	5mg/m ³	0.05mm Hg

All of the components of these products are listed in the TSCA inventory and are found in the Canadian DLS.

MARKETED BY

**HARWICK STANDARD
 DISTRIBUTION CORPORATION**

60 S. Seiberling Street • Akron, Ohio 44305

SECTION 3 – PHYSICAL DATA

Boiling range (°F): 460-520

Vapor density: Greater than air

Type of odor: Oil like

Evaporation rate: Slower than ether

Specific Gravity = 1.36

Liquid density: Greater than water

Appearance: Silver colored paste

% VOC: 35

Density = 11.35 Lbs per Gal.

SECTION 4 – FIRE AND EXPLOSION DATA

Flammability Classification: OSHA: Combustible liquid III B
DOT: Not regulated

Flash Point of solvent (°F) : 215 ASTM D-93

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.

Aluminum burns at very high temperatures as a mass. If solvent has completely burned out or evaporated, any disturbance that might create a dust cloud can result in Explosion. LEL of dry aluminum flake is 30 oz./ft. LEL of mineral oil is 5 mg/m³.

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.

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

Ingestion: may cause irritation of gastrointestinal tract.

Primary Routes of Entry: Inhalation of solvent vapors and 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, water, acids, alkalis, strong oxidizing agents

Hazardous decomposition products: Aluminum reacts with water, acids, and alkalis to form hydrogen gas. Incomplete combustion of solvent can form carbon monoxide.

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. Absorb excess solvent with earth, sand, or other absorbent material.

Waste Disposal Method: Dispose of contaminated material in approved landfill or incinerator that can accept metal containing organic material in accordance with local, state, and federal regulations.

SECTION 8 -- SPECIAL PROTECTION INFORMATION

Ventilation: Use with ventilation sufficient to prevent buildup of dangerous concentrations of solvent vapor. Use explosion-proof equipment. No smoking or open lights.

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

Respiratory Protection: Not normally needed when product is used with adequate ventilation.

Eye Protection: Use chemical goggles to minimize chance of eye contact.

SECTION 9 -- SPECIAL PRECAUTIONS

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

Other Precautions: 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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