Monica

MD-BOTH INDUSTRIES
40 Nickerson Road
Ashland, MA 01721-1912
Tel: (508) 881-4100
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Hazard Ratings			
Slight	0	HEALTH	2
Minimal	1	FLAMMABILITY	2
Moderate	2	REACTIVITY	1
Serious	3	PERSONAL PROTECTION	B
Severe	4		

MATERIAL SAFETY DATA SHEET

Date of Preparation: Dec. 11, 2002
Prepared by: Max Hui

SECTION 1

Manufacturer's Name: MD-BOTH Industries
Street Address: 40 Nickorson Road, Ashland, MA 01721
Emergency Telephone #: CHEMTREC 800-424-9300 24 HRS

Chemical Name: Non Leafing Aluminum flake pasted in 30% a solvent mixture of mineral spirits with aromatics

Trade Name:
Alubright 3100, 3200, 3250, 3300, 3350, 3400, 3600, 3700
Alushine 6200, 6400, 6600, 6900, 6950

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 also contains the following hazardous ingredients:

CAS#	Chemical Name	% by Weight	TLV	LEL	Vapor Pressure
7429-90-5	Aluminum	66-70	N/A	30 oz/1000 ft^3	N/A
64742-82-1	Mineral Spirits	10-20	100 ppm (8 hr TWA)	0.8% by vol.	6 mm Hg @ 41°C
64742-95-6	Solvent Naptha (petrol.) light aromatic	10-20	100 ppm (8 hr TWA)	0.8% by vol	<5mm Hg @ 100 F

All components of these products are listed in the TSCA inventory and on the Canadian DSL.

SECTION 3 – PHYSICAL DATA

Boiling range (°C): 142
Vapor density: Heavier than air Specific gravity: 1.57
Type of odor: hydro carbon odor Appearance: Silver colored paste
Evaporation rate: Slower than ether % VOC: 70

SECTION 4 – FIRE AND EXPLOSION DATA

Flammability Classification: OSHA: Flammable solid; DOT: Flammable Solid, Organic, NOS (Aluminum Paste), 4.1, UN1325, II
Flash Point of solvent (°C): Minimum 40 Tag Closed Cup.
Extinguishing Media: Foam, carbon dioxide, 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: Estimated flammable limits for solvent (% by volume in air): lower--0.6%; upper--7.5% vol %. 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/1000 ft^3.
Special Fire fighting Procedures: Use supplied-air breathing equipment, if necessary, to avoid breathing solvent and decomposition products. 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--Liquid is mildly irritating to the eyes may cause irritation.
Skin contact--Liquid may cause dryness, leading to irritation or dermatitis, or aggravating existing dermatitis. Acute dermal LD50 (rabbit) of solvent is judged to be greater than 3,000 mg/kg body weight
Inhalation- - Solvent vapor is are irritating to the respiratory tract and may cause headaches, dizziness, and other central nervous system effects including death. LC50 (rat) us greater than 700 ppm (4 hours). If solvent completely burns out or evaporates, aluminum dust may be formed. TLV for aluminum dust is 10 mg/m^3 (nuisance dust).
Ingestion-- Small amounts of solvent aspirated into the lungs during ingestion or vomiting may cause pulmonary injury or possibly death. LD50 (rat) of solvent is greater than 5g/kg body weight.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. If irritation develops, seek medical attention.
Inhalation: Remove affected person to fresh air. Restore normal breathing and administer oxygen if necessary. Call physician.
Ingestion: Do not induce vomiting. Call physician immediately.

SECTION 6 – REACTIVITY DATA

Product Stability: stable
Conditions to avoid: Heat, sparks, open flames, water, acids, alkalis, strong oxidizing agents. Avoid contact with strong oxidants, such as liquid chlorine, concentrated oxygen, sodium hypochlorite, calcium hypochlorite, magnesium metal, acetylene gas.
Hazardous decomposition products: Aluminum reacts with water, acids, and alkalis to form hydrogen gas which can explode. Incomplete combustion of solvent can form carbon monoxide, aldehydes, fumes, smoke and other hazardous decomposition products.
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. Use absorbent material to collect excess solvent.
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 in air. Use explosion-proof equipment. No smoking or open lights.
Protective Gloves: Use chemical resistant gloves to avoid prolonged skin contact.
Respiratory Protection: Use supplied-air respiratory protection in confined or enclosed spaces, if needed.
Eye Protection: Use chemical goggles or face shield to reduce the chance of eye contact.

SECTION 9 – SPECIAL PRECAUTIONS

Handling and Storage: Do not store above 120 degrees F. Store in closed containers in a cool well-ventilated area. Do not store near heat, sparks, open flames, or strong oxidants. Do not reuse containers.
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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