

MATERIAL SAFETY DATA SHEET

MANUFACTURER: Alvin Products, Inc.
350 Merrimack St.
Lawrence, MA 01843-1748

Emergency Telephone: (800) 535-5053
Poison Control Center: (800) 682-9211
Information Telephone: (978) 975-4580 • **FAX:** (978) 975-2621

PRODUCT IDENTIFICATION: Product Name: Hi-Temp Lab-metal Product Class: Metal repair compound MSDS Revision Date: 2/00

HAZARDOUS INGREDIENTS: Ingredient	CAS Number	Percent Wt.	Occupational Exposure Limits		Vapor Pressure mm Hg
			(TLV)	(PEL)	
Toluene	108-88-3	5-15	(skin)50 ppm	100 ppm	21 @ 20°C
Methyl ethyl ketone	78-93-3	5-15	200ppm	200ppm	71 @ 20°C
Zinc powder	7440-66-6	13-27	none assigned		
Aluminum powder	7429-90-5	43-57	10mg/m ³	15mg/m ³	as dust

HMIS (Hazardous Materials Identification System - National Paint & Coatings Association):

Health: 1 Slight **Reactivity:** 1 Slight **Flammability:** 3 Serious **Personal Protection:** G Gloves, Goggles, Vapor Mask

PHYSICAL DATA: **Boiling Range:** 175-231°F **% Volatile Volume:** 27
Evaporation Rate: slower than ether **Weight/Gallon:** 14.75 pounds **Vapor Density:** heavier than air

FIRE AND EXPLOSION DATA: **Flammability Classification:** OSHA: FLAMMABLE LIQUID CLASS IB
Flash Point: 25°F DOT: FLAMMABLE LIQUID
Lower Explosive Limit: 1.5%

Extinguishing Media: Use National Fire Protection Association (NFPA) Class B extinguishers (carbon dioxide, dry chemical or foam) designed to extinguish NFPA Class B liquid fires.

Special Fire Fighting Procedures: Do not use water to fight fires where aluminum pigments are involved. Water reacts with hot aluminum dust to form hydrogen and tends to spread the fire. Carefully and completely cover the fire with dry chemical fire extinguishing agent. Full protective equipment, including self contained breathing apparatus, should be used.

Unusual Fire and Explosion Hazards: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Closed containers may explode when exposed to extreme heat. During emergency operations over-exposure to decomposition products may be a health hazard. Symptoms may not be immediately apparent. Obtain medical attention. Do not apply this product to hot surfaces.

HEALTH HAZARD DATA: **Effects of overexposure:** **INHALATION:** Anesthetic. Irritation of the respiratory tract or acute nervous system depression characterized by dizziness, headache, staggering gait, confusion, unconsciousness or coma. **SKIN CONTACT:** Prolonged or repeated contact with skin will dry and defat skin, leading to irritation and dermatitis. **EYE CONTACT:** Direct contact with product will result in eye irritation. **INGESTION:** May be harmful if swallowed. **Primary routes of entry:** Dermal and inhalation

Toxicity information: Toluene: oral LD₅₀: 7.0 g/kg (rat), Inhalation LC₅₀: 5320 ppm (rat) 4 hours. Moderate inhalation toxicity. Eye irritant.
Emergency First Aid Procedures: **INHALATION:** Remove to fresh air, get medical attention. Restore breathing if necessary.

EYE AND SKIN CONTACT: Promptly and thoroughly wash eyes with water for 15 minutes and get medical attention; remove contaminated clothing and wash with soap and water. Wash clothing before reuse.

INGESTION: If victim is conscious, give two glasses of water to drink. Do not induce vomiting. Get medical attention. Do not give anything by mouth to an unconscious person.

REACTIVITY DATA: **Stability:** Stable **Hazardous Polymerization:** Will not occur.
Hazardous Decomposition Products: Fumes and smoke. May explode.

Incompatibility (Materials to avoid): May react with strong oxidizing agents when heated to decomposition. Aluminum slowly reacts with water to form hydrogen gas. Keep containers closed. **Conditions to avoid:** High temperatures, sparks, open flame. Strong oxidizers.

SPILL OR LEAK PROCEDURES: **Steps to be taken in case material is released or spilled:** Remove all ignition sources. Keep unnecessary people away. Dike and contain spill with inert material (sand, earth, etc.) and transfer the liquid to containers for recovery or disposal. Minimize breathing vapor. Ventilate confined spaces. Keep spill out of sewers and watercourses. Advise authorities if product has entered sewers, watercourses or extensive land areas. Floors may be slippery, care should be taken to avoid falls. **Waste disposal method:** Assure conformity with applicable disposal regulations. Dispose of absorbed material at an approved disposal site or facility. Spilled product is a hazardous waste.

SAFE HANDLING AND USE INFORMATION: **Respiratory protection:** In outdoor or open areas use Bureau of Mines approved mechanical filter respirator to remove solid air borne particles of mist or dust during application. In restricted ventilation areas, use Bureau of Mines approved chemical-mechanical filters designed to remove a combination of particulate and vapor. In confined areas, use Bureau of Mines approved air line type respirators or hoods. **Ventilation:** Provide general dilution or local exhaust ventilation in volume and pattern to keep occupational exposure limits and Lel below required limits. **Protective Gloves:** Impervious, solvent resistant gloves should be worn.

Eye protection: Use safety eyewear designed to protect against mist and dust. **Hygienic practices:** Wash before eating or smoking. Smoke in designated areas only. Remove contaminated clothing and wash before reuse.

SPECIAL PRECAUTIONS: **Precautions to be taken in handling and storing:** Do not store above 120°F. Store large quantities in buildings designed and protected for storage of flammable liquids. Keep containers closed. Avoid eye and skin contact. Avoid inhalation of vapors.

Other precautions: Do not take internally. Containers should be grounded when pouring. Do not flame cut, braze, or weld without Bureau of Mines approved respirator or ventilation. **WARNING!** Vapor harmful. Keep away from heat and open flame. Close container after each use. Hazardous product residue may remain after the product has been removed from its container. Do not reuse "empty" container without commercial cleaning or reconditioning. This product contains a chemical known to the state of California to cause cancer, birth defects, or other reproductive harm.

NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. **FOR INDUSTRY USE ONLY**

SARA TITLE III SUPPLIER NOTIFICATION

This product is subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372. The product contains the following Toxic Chemicals as listed in 40 CFR 372.65 in Quantities above the applicable de minimis concentrations as specified in 40 CFR 372.38(a).

Material	CAS No.	% by Weight
Toluene	108-88-3	5-15
Methyl ethyl ketone	78-93-3	5-15
Aluminum powder	7429-90-5	43-57
Zinc powder	7440-66-6	13-27

Non-warranty: All data contained herein is based on the data available to us and is believed to be correct. However, no warranty is intended or implied. mds-hlpm65

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360 Merrimack St., Bldg. 5
Lawrence, MA 01843-1740

Emer
Polac
Infor

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Reauthorization Act of 1986 and 40 CFR Part 372. The product
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Distributed By -
FREEMAN Mfg. & Supply Co.
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