



ALDON CORPORATION

MATERIAL SAFETY DATA SHEET

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Avon, New York 14414
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MSDS No. WW 40
Effective Date July 8, 1998

SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

Product	WOOD'S METAL ALLOY
Chemical Synonyms	Wood's Alloy Fusible Sticks
Formula	Mixture: Bi/Pb/Sn/Cd
Unit Size	up to 2.5 Kg.
C.A.S. No.	Mixture

CHEMTREC
800-424-9300
Day 716-226-6177

Health	3
Fire	0
Reactivity	0

NFPA HAZARD RATING

LEAST	SLIGHT	MODERATE	HIGH	EXTREME
0	1	2	3	4

HMIS *

SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Bismuth: (CAS No. 7440-69-9)	50%	None established.
Lead: (CAS No. 7439-92-1)	25%	0.15 mg/m ³
Tin: (CAS No. 7440-31-5)	12.5%	2 mg/m ³
Cadmium: (CAS No. 7440-43-9)	12.5%	0.05 mg/m ³ (Dust)

SECTION III PHYSICAL DATA

Melting Point (°F)	70-72°C (158-162°F)	Specific Gravity (H ₂ O = 1)	9.7 at 20°C
Boiling Point (°F)	Data not listed.	Percent Volatile by Volume (%)	Non-volatile at 25°C
Vapor Pressure (mm Hg)	Negligible as solid.	Evaporation Rate ()	N/A
Vapor Density (Air=1)	Data not listed.		
Solubility in Water	Insoluble.		
Appearance & Odor	Silver metal sticks or stick pieces; no odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	Non-flammable.	Flammable Limits in Air % by Volume	N/A	Lower	Upper
Extinguisher Media	Use any media suitable for extinguishing supporting fire.				

SPECIAL FIREFIGHTING PROCEDURES

Do not use water on fire where molten metal is present. In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Molten metals produce fume, vapor and/or dust that may be toxic and/or respiratory irritants. Metal reacts with oxidizing agents.

D.O.T. NON-REGULATED.

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20

SECTION V HEALTH HAZARD DATA

WW 40

Threshold Limited Value

None established for Wood's Metal Alloy. (ACGIH 1992-93).

Effects of Overexposure

NOTE: Lead and cadmium have been identified as potential human carcinogens. and can result in both acute and chronic overexposure. **INHALATION:** Dust, vapor and/or fume may be irritating to the respiratory system. **INGESTION:** Dust, vapor and/or fume may be absorbed by the digestive system and can result in both acute and chronic overexposure. **EYES:** Dust, vapor and/or fume may cause irritation. **SYMPTOMS OF OVEREXPOSURE:** Bismuth: Not established. Cadmium: Dryness of throat, headache, shortness of breath and vomiting may occur from overexposure to fumes or dust. Lead: Inhalation of fumes or dust can cause dryness of throat, nausea, vomiting and chills. Tin: Dust of tin oxides may cause pneumoconiosis.

Emergency and First Aid Procedures

INHALATION AS FUME OR DUST: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. **INGESTION:** Get immediate medical attention. **EYES:** Flush with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention immediately. **SKIN:** Wash thoroughly with soap and water.

SECTION VI REACTIVITY DATA

Stability	Unstable	Conditions to Avoid	Excessive temperature and heat.
	Stable	X	

Incompatibility (Materials to Avoid)	Strong oxidizers may cause violent reaction.
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Hazardous Decomposition Products	At temperatures above melting point toxic fumes or vapors may be emitted.
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Hazardous Polymerization	Conditions to Avoid
May Occur	Will Not Occur
	X
	Not applicable.

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled	Sweep up and recover for reuse or recycle.
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Waste Disposal Method

Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities only.

Dispose of in an approved chemical landfill or contract with a licensed waste disposal agency.

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type)	None needed in normal laboratory handling at room temperature. At extreme temperature producing fumes, work in ventilation hood or wear a NIOSH/MSHA approved self-contained breathing apparatus.
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Ventilation	Local Exhaust	For dust or fumes.	Special	No.
	Mechanical (General)	For dust or fumes.	Other	No.

Protective Gloves	None needed.	Eye Protection	Chemical safety glasses.
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Other Protective Equipment	Lab coat, apron, ventilation hood (at temperatures above melting).
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SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing	Store in a cool, dry place away from strong oxidizing materials and fire hazards. Wash thoroughly after handling. Remove and wash contaminated clothing.
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Keep container tightly closed when not in use.

Other Precautions Read label on container before using. Do not wear contact lenses when working with chemicals.

Overheating of alloy can produce metal fumes and oxides. Machining operations such as grinding, sawing, buffing can generate airborne particulate in the work area. Under normal handling conditions the solid alloy presents no significant health hazards.

For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Revision	No. 5	Date	7/8/98	Approved	Michael Raszeja	Chemical Safety Coordinator	MR
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