

WOOD'S METAL

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1. Product Identification

Synonyms: Wood's Alloy Fusible Sticks

CAS No.: N/A Mixture

Molecular Weight: N/A

Chemical Formula: N/A

Product Codes: CHEM-373 and others

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Bismuth	7440-69-9	50%	Yes
Lead	7439-92-1	25-27%	Yes
Tin	7440-31-5	12.5-14%	Yes
Cadmium	7440-43-9	10-12.5%	Yes

3. Hazards Identification

Emergency Overview: CAUTION! Slightly toxic by ingestion, contains possible carcinogens. Target organs: Central nervous system, liver, kidneys, heart, skeletal system. This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

SAF-T-DATA^(tm) Ratings

Health Rating: 1 - Slight

Flammability Rating: 0 - None

Reactivity Rating: 0 - None

Contact Rating: 1 - Slight

Lab Protective Equip: GOGGLES; LAB COAT; PROPER GLOVES

Storage Color Code: Green (General Storage)

4. First Aid Measures

Always seek professional medical attention after first aid measures are provided.

Eyes: Immediately flush eyes with excess water for 15 minutes, lifting lower and upper eyelids occasionally.

Skin: Immediately flush skin with excess water for 15 minutes while removing contaminated clothing.

Ingestion: Call Poison Control immediately. Rinse mouth with cold water. Give victim 1-2 cups of water or milk to drink.

Induce vomiting immediately.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration.

5. Fire Fighting Measures

When heated to decomposition, emits acrid fumes.

Protective equipment and precautions for firefighters: Use foam or dry chemical to extinguish fire. Firefighters should wear full fire fighting turn-out gear and respiratory protection (SCBA). Cool container with water spray. Material is not sensitive to mechanical impact or static discharge.

6. Accidental Release Measures

Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Sweep up spill and place in sealed bag or container for disposal. Wash spill area after pickup is complete. See Section 13 for disposal information.

7. Handling and Storage

Handling: Use with adequate ventilation and do not breathe dust or vapor. Avoid contact with skin, eyes, or clothing. Wash hands thoroughly after handling.

Storage: Store in General Storage Area [Green Storage] with other items with no specific storage hazards. Store in a cool, dry, well-ventilated, locked store room away from incompatible materials.

8. Exposure Controls/Personal Protection

Use ventilation to keep airborne concentrations below exposure limits. Have approved eyewash facility, safety shower, and fire extinguishers readily available. Wear chemical splash goggles and chemical resistant clothing such as gloves and aprons. Wash hands thoroughly after handling material and before eating or drinking. Use NIOSH-approved respirator with an dust cartridge. Exposure guidelines: Bismuth: OSHA PEL: N/A, ACGIH: TLV: N/A, STEL: N/A, Lead: OSHA PEL: 0.05 mg/m³, ACGIH: TLV: 0.05 mg/m³, STEL: N/A, Cadmium compounds: OSHA PEL: 0.005 mg/m³, ACGIH: TLV: 0.01 mg/m³, STEL: N/A.

9. Physical and Chemical Properties

Appearance:

Silver metal sticks or pieces.

Odor:

No odor.

Specific Gravity:

9.7 g/mL @ 20°C.

Odor Threshold:

N/A.

Vapor Density (air=1):

N/A.

Solubility:

Insoluble.

Melting Point:

69-75°C.

Evaporation rate:

N/A. (Butyl acetate = 1).

Boiling Point/Range:

N/A.

Partition Coefficient:

N/A. (*log POW*).

Vapor Pressure (20°C):

N/A.

pH:

N/A.

Flash Point:

N/A.

LEL:

N/A.

Autoignition Temp.:

N/A.

UEL:

N/A

10. Stability and Reactivity

Avoid heat and moisture.

Stability:

Stable under normal conditions of use and storage.

Incompatibility:

Strong oxidizers.

Shelf life:

Indefinite if stored properly.

11. Toxicological Information

Acute Symptoms/Signs of exposure:

Eyes: Redness, tearing, itching, burning, conjunctivitis. **Skin:** Redness, itching.

Ingestion: Irritation and burning sensations of mouth and throat, nausea, vomiting and abdominal pain.

Inhalation: Irritation of mucous membranes, coughing, wheezing, shortness of breath,

Chronic Effects: Lead and Cadmium has chronic effects on nervous system and reproductive systems, possible carcinogens.

Sensitization: none expected

Bismuth: LD50 [oral, rat]; N/A; LC50 [rat]; N/A; LD50 Dermal [rabbit]; N/A,

Lead: LD50 [oral, rat]; N/A; LC50 [rat]; N/A; LD50 Dermal [rabbit]; N/A,

Cadmium: LD50 [oral, rat]; 225 mg/kg; LC50 [rat]; 25 mg/m³/30 min; LD50 Dermal [rabbit]; N/A

Material has been found to be a carcinogen or produce genetic, reproductive, or developmental effects.

12. Ecological Information

Ecotoxicity (aquatic and terrestrial): Contains heavy metals – Toxic to terrestrial and aquatic plants and animals. Do not release to the environment

13. Disposal Considerations

Check with all applicable local, regional, and national laws and regulations. Local regulations may be more stringent than regional or national regulations. Small amounts of this material may be suitable for sanitary sewer or trash disposal.

14. Transport Information

Not regulated.

15. Regulatory Information

EINECS: Not Listed.

WHMIS Canada: Not WHMIS Controlled.

TSCA: All components are listed or are exempt.

California Proposition 65: Not listed.

The product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

16. Other Information

NFPA Ratings: Health: 1 Flammability: 0 Reactivity: 0

Product Use:

Laboratory Reagent and Consumer Hobby.

Revision Information:

None

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