SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name	Wood's Metal Fusible Alloy Sticks
CAS number	See Section 3
Synonyms	No information available

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Laboratory Chemicals

1.3 Details of the supplier of the safety data sheet

Company	Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A.
Telephone	512-668-9918
Fax	512-886-4008

1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute oral toxicity	Category 4
Acute Inhalation Toxicity - Dusts and Mists	Category 2
Germ Cell Mutagenicity	Category 2
Carcinogenicity	Category 1B

Reproductive Toxicity	Category 1A
Specific target organ toxicity - (repeated exposure) Target Organs - Liver, Kidney, Blood, Central nervous system (CNS), skeletal system.	Category 1

2.2 GHS Label elements, including precautionary statements

Pictogram

Signal Word: Danger

Hazard statements:
Harmful if swallowed
Fatal if inhaled
Suspected of causing genetic defects
May cause cancer
May damage the unborn child. Suspected of damaging fertility
Causes damage to organs through prolonged or repeated exposure

Precautionary statements:
Prevention:
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Wear respiratory protection
Response:
IF exposed or concerned: Get medical attention/advice
Inhalation:
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Immediately call a POISON CENTER or doctor/physician
Ingestion:
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth
Storage:
Store locked up
Store in a well-ventilated place. Keep container tightly closed
Disposal:
Dispose of contents/container to an approved waste disposal plant

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Very toxic to aquatic life with long lasting effects.
WARNING! This product contains a chemical known in the State of California to cause cancer, birth defects or other reproductive harm.

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Bismuth alloy, base, Bi 50, Pb 25, Cd 12, Sn 12	No information available	76093-98-6	100%
Bismuth	No information available	7440-69-9	-
Lead	No information available	7439-92-1	-
Tin	No information available	7440-31-5	-
Cadmium	No information available	7440-43-9	-

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

If inhaled Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device. Immediate medical attention is required.

In case of skin contact Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.

In case of eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.

If swallowed Do not induce vomiting. Obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Water spray. Carbon dioxide (CO 2). Dry chemical. chemical foam.

Unsuitable extinguishing media No information available

5.2 Specific hazards arising from the substance or mixture

Non-combustible. Do not allow run-off from fire fighting to enter drains or water courses.

5.3 Special protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

5.4 Further information

Flash Point No information available

Autoignition Temperature No information available

Explosion limits

Upper No data available
Lower No data available

Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

NFPA

Health	Flammability	Instability	Physical hazards
4	0	0	N/A

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with the skin and the eyes.

6.2 Environmental precautions

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained. Should not be released into the environment. See Section 12 for additional ecological information. Avoid release to the environment. Collect spillage.

6.3 Methods and materials for containment and cleaning up

Wear self-contained breathing apparatus and protective suit. Sweep up or vacuum up spillage and collect in suitable container for disposal. Do not let this chemical enter the environment.

6.4 Reference to other sections

See Section 12.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Ensure adequate ventilation. Wear personal protective equipment. Use only in area provided with appropriate exhaust ventilation. Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation. Avoid breathing dust/fume/gas/mist/vapours/spray.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep in a dry, cool and well-ventilated place. Keep container tightly closed.

Incompatibilities

See Section 10.

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Component	Type	Value
Bismuth alloy, base, Bi 50, Pb 25, Cd 12, Sn 12	(Vacated) TWA)	2 mg/m3
Lead	TWA	50 µg/m3
Tin	(Vacated) TWA)	2 mg/m3
Cadmium	Ceiling Ceiling (Vacated) STEL TWA TWA TWA	0.3 mg/m3 0.6 mg/m3 0.3 ppm 0.1 mg/m3 0.2 mg/m3 5 µg/m3

US. ACGIH Threshold Limit Values

Component	Type	Value
Bismuth alloy, base, Bi 50, Pb 25, Cd 12, Sn 12	TWA TWA TWA TWA	2 mg/m3 0.05 mg/m3 0.01 mg/m3 0.02 mg/m3
Lead	TWA	0.05 mg/m3
Tin	TWA	2 mg/m3
Cadmium	TWA TWA	0.01 mg/m3 0.002 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value
Bismuth alloy, base, Bi 50, Pb 25, Cd 12, Sn 12	IDLH IDLH TWA TWA	100 mg/m3 9 mg/m3 2 mg/m3 0.05 mg/m3
Lead	IDLH TWA	100 mg/m3 0.05 mg/m3

Tin	IDLH TWA	100 mg/m3 2 mg/m3
Cadmium	IDLH	9 mg/m3

Biological occupational exposure limits
No information available.

8.2 Exposure controls

Appropriate engineering controls
Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Eye/face protection
Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin protection
Wear appropriate protective gloves and clothing to prevent skin exposure.

Body Protection
Use personal protective equipment as required.

Respiratory protection
Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Control of environmental exposure
No information available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Solid
Appearance	Grey
Odor	No information available
Odor Threshold	No information available
pH	No information available
Melting Point/Range	70 °C / 158 °F
Boiling Point/Range	No information available
Evaporation Rate	Not applicable

Flammability (solid)	No information available
Flammability or explosive limit	No information available
Upper	No information available
Lower	No information available
Vapor Pressure	No information available
Vapor Density	Not applicable
Density	No information available
Solubility	Insoluble
Partition coefficient; n-octanol/water	No information available
Autoignition Temp	No information available
Decomposition Temp	No information available
Viscosity	No information available
Molecular Formula	Bi . Cd . Pb . Sn
Molecular Weight	No information available
VOC Content(%)	No information available
Oxidizing properties	No information available

9.2 Other safety information No information available

SECTION 10: Stability and reactivity

10.1 Reactivity
See Section 10.2.

10.2 Chemical stability
Stable under normal conditions.

10.3 Possibility of hazardous reactions
None under normal processing.

10.4 Conditions to avoid
Incompatible products.

10.5 Incompatible materials
Strong oxidizing agents

10.6 Hazardous decomposition products
Highly toxic fumes, Heavy metal oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Bismuth alloy, base, Bi 50, Pb 25, Cd 12, Sn 12	Category 4. ATE = 300 - 2000 mg/kg.	Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.	Category 2. ATE = 0.05 - 0.5 mg/l.
Bismuth	LD50 = 5 g/kg (Rat)	Not listed	Not listed
Tin	LD50 = 700 g/kg (Rat)	Not listed	Not listed
Cadmium	LD50 = 1140 g/kg (Rat)	Not listed	LC50 = 25 mg/m3 (Rat) 30 min

Skin corrosion/irritation

No information available

Serious eye damage/eye irritation

No information available

Respiratory or skin sensitization

No information available

Germ cell mutagenicity

Contains a known or suspected mutagen

Carcinogenicity

Possible cancer hazard. May cause cancer based on animal data. This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B). The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Bismuth alloy, base, Bi 50, Pb 25, Cd 12, Sn 12	76093-98-6	Not listed	Known Reasonably Anticipated	A3 A2	Not listed	Not listed
Bismuth	7440-69-9	Not listed	Not listed	Not listed	Not listed	Not listed
Lead	7439-92-1	Group 2A	Reasonably Anticipated	A3	X	A3
Tin	7440-31-5	Not listed	Not listed	Not listed	Not listed	Not listed
Cadmium	7440-43-9	Group 1	Known	A2	X	A2

Specific target organ toxicity - single exposure

None known

Specific target organ toxicity - repeated exposure

Liver Kidney Blood Central nervous system (CNS) skeletal system

Reproductive toxicity

Product is or contains a chemical which is a known or suspected reproductive hazard. May impair fertility. Possible risk of harm to the unborn child.

Chronic effects

No information available

11.2 Additional Information

No information available

SECTION 12: Ecological information

12.1 Toxicity

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment. May cause long-term adverse effects in the environment. Do not allow material to contaminate ground water system.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Lead	Not listed	LC50: = 1.32 mg/L, 96h static (Oncorhynchus mykiss) LC50: = 1.17 mg/L, 96h flow-through (Oncorhynchus mykiss) LC50: = 0.44 mg/L, 96h semi-static (Cyprinus carpio)	Not listed	EC50: = 600 µg/L, 48h (water flea)

Cadmium	Not listed	LC50: 0.0004 - 0.003 mg/L, 96h (Pimephales promelas) LC50: = 0.016 mg/L, 96h (Oryzias latipes) LC50: = 21.1 mg/L, 96h flow-through (Lepomis macrochirus) LC50: = 0.24 mg/L, 96h static (Cyprinus carpio) LC50: = 4.26 mg/L, 96h semi-static (Cyprinus carpio) LC50: = 0.002 mg/L, 96h (Cyprinus carpio) LC50: = 0.006 mg/L, 96h static (Oncorhynchus mykiss) LC50: = 0.003 mg/L, 96h flow-through (Oncorhynchus mykiss)	Not listed	EC50: = 0.0244 mg/L, 48h Static (Daphnia magna)

12.2 Persistence and degradability

Insoluble in water. May persist.

12.3 Bio accumulative potential

No information available.

12.4 Mobility in soil

Is not likely mobile in the environment due its low water solubility.

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

May cause respiratory irritation. May be harmful if absorbed through the skin. May cause irritation of the digestive tract. The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information.

SECTION 13: Disposal considerations

13.1 Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified

as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14: Transport information

DOT (US)

UN Number	UN2570
Proper Shipping name	CADMIUM COMPOUNDS
Hazard Class	6.1
Packaging Group	II
Technical name	Bismuth alloy, base, Bi 50, Pb 25, Cd 12, Sn 12

IMDG

UN Number	UN2570
Proper Shipping name	CADMIUM COMPOUNDS
Hazard Class	6.1
Packaging Group	II

IATA

UN Number	UN2570
Proper Shipping name	CADMIUM COMPOUNDS
Hazard Class	6.1
Packaging Group	II

SECTION 15: Regulatory information

US federal regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not applicable

CERCLA Hazardous Substance List (40 CFR 302.4)
Not applicable

SARA 304 Emergency release notification
No information available

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Component	Specially Regulated Substances
Bismuth alloy, base, Bi 50, Pb 25, Cd 12, Sn 12	30 µg/m3 Action Level 50 µg/m3 TWA 5 µg/m3 TWA 2.5 µg/m3 Action Level

Lead	30 µg/m3 Action Level 50 µg/m3 TWA
Cadmium	5 µg/m3 TWA 2.5 µg/m3 Action Level

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

No information available

SARA 311/312 Hazardous

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

SARA 313 (TRI reporting)

Component	CAS-No	Weight %	SARA 313 - Threshold Values %
Bismuth alloy, base, Bi 50, Pb 25, Cd 12, Sn 12	76093-98-6	100	0.1
Lead	7439-92-1	-	0.1
Cadmium	7440-43-9	-	0.1

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

This Product and its components of Lead and Cadmium are listed on the HAPs List.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

No information available.

Safe Drinking Water Act

This Product and its components of Lead and Cadmium are listed as Toxic Pollutants and Priority Pollutants.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

No information available

US state regulations

US. Massachusetts RTK - Substance List

Lead, Tin, and Cadmium as listed as RTK.

US. New Jersey Worker and Community Right-to-Know Act

Lead, Tin, the Bismuth alloy, base, Bi 50, Pb 25, Cd 12, Sn 12, and Cadmium as listed as RTK.

US. Pennsylvania Worker and Community Right-to-Know Law

Lead, Tin, the Bismuth alloy, base, Bi 50, Pb 25, Cd 12, Sn 12, and Cadmium as listed as RTK.

California Proposition 65

Cadmium	CAS-No	California Prop. 65	Prop 65 NSRL	Category
Bismuth alloy, base, Bi 50, Pb 25, Cd 12, Sn 12	76093-98-6	Carcinogen Developmental	-	Developmental Carcinogen
Lead	7439-92-1	Carcinogen Developmental Female Reproductive Male Reproductive	15 µg/day	Developmental Carcinogen
Cadmium	7440-43-9	Carcinogen Developmental Male Reproductive	0.05 µg/day	Developmental Carcinogen

SECTION 16: Other information

Date of Issue: 12/22/2025

SECTION 17: Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.