



Material Safety Data Sheet

Wood's Metal

MSDS# 25123

Section 1 - Chemical Product and Company Identification

MSDS Name: Wood's Metal
Catalog Numbers: AC388550000
Synonyms: Metal Alloy, S80243.
Company Identification: Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
For information in the US, call: 201-796-7100
Emergency Number US: 201-796-7100
CHEMTREC Phone Number, US: 800-424-9300

Section 2 - Composition, Information on Ingredients

Risk Phrases: 61 20/22 33 50/53 62

CAS#: 7439-92-1
Chemical Name: Lead
%: 25%
EINECS#: 231-100-4
Hazard Symbols: T N

Risk Phrases:

CAS#: 7440-31-5
Chemical Name: Tin
%: 12.5%
EINECS#: 231-141-8
Hazard Symbols:

Risk Phrases:

CAS#: 7440-43-9
Chemical Name: Cadmium
%: 12.5%
EINECS#: 231-152-8
Hazard Symbols:

Risk Phrases:

CAS#: 7440-69-9
Chemical Name: Bismuth
%: 50%
EINECS#: 231-177-4
Hazard Symbols:

Risk Phrases:

CAS#: 76093-98-6
Chemical Name: Wood's Metal
%:
EINECS#: unlisted
Hazard Symbols:

Text for R-phrases: see Section 16

Hazard Symbols:

T+ N



Risk Phrases:

45 61 22 26 33 48/23/25 50/53 62 68

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Danger! Possible risks of irreversible effects. Harmful if swallowed. Cancer hazard. May cause cancer in humans. May be fatal if inhaled. Danger of cumulative effects. Danger of serious damage to health by prolonged exposure through inhalation and if swallowed. Possible risk of impaired fertility. May cause harm to the unborn child. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Target Organs: Blood, kidneys, central nervous system, liver, skeletal structures.

Potential Health Effects

Eye: May cause eye irritation.
Skin: May cause skin irritation. May be harmful if absorbed through the skin.
Ingestion: Harmful if swallowed. May cause irritation of the digestive tract.
Inhalation: May be fatal if inhaled. May cause respiratory tract irritation.
Chronic: May cause cancer in humans. There is a danger of cumulative effects. Possible risk of irreversible effects. Possible risk of harm to the unborn child. May impair fertility.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.
Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Ingestion: Do not induce vomiting. Get medical aid immediately. Call a poison control center.
Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Notes to
Physician:

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Substance is noncombustible.

Extinguishing Media: Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

Autoignition Temperature: Not applicable.

Flash Point: Not applicable.

Explosion Limits: Not available
Lower:

Explosion Limits: Not available
Upper:

NFPA Rating: health: 4; flammability: 0; instability: 0;

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section).
Avoid generating dusty conditions. Provide ventilation. Do not let this chemical enter the environment.

Section 7 - Handling and Storage

Handling: Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale.
Use only in a chemical fume hood.

Storage: Store in a cool, dry place. Store in a tightly closed container.

Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Lead	0.05 mg/m ³	0.050 mg/m ³ TWA 100 mg/m ³ IDLH	50 æg/m ³ TWA; 50 æg/m ³ TWA (as Pb); 30 æg/m ³ Action Level (as Pb, Poison - see 29 CFR 1910.102 5)
Tin	2 mg/m ³	2 mg/m ³ TWA 100 mg/m ³ IDLH	none listed
Cadmium	0.01 mg/m ³ ; 0.002 mg/m ³ (respirable fraction)	9 mg/m ³ IDLH (dust)	5 æg/m ³ TWA; 0.1 mg/m ³ TWA (fume, applies to any operations or sectors for which the Cadmium standard is stayed or otherwise not in effect); 0.2 mg/m ³ TWA (dust, applies to any operations or sectors for
Bismuth	none listed	none listed	none listed
Wood's Metal	none listed	none listed	none listed

OSHA Vacated PELs: Lead: None listed Tin: 2 mg/m³ TWA Cadmium: None listed Bismuth: None listed Wood's Metal: None listed

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use only under a chemical fume hood.

Exposure Limits

Personal Protective Equipment

Eyes: 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: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: 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.

Section 9 - Physical and Chemical Properties

Physical State: Solid

Color: grey metal

Odor: odorless

pH: Not available

Vapor Pressure: Not available

Vapor Density: Not available

Evaporation Rate: Not available

Viscosity: Not available

Boiling Point: Not available

Freezing/Melting Point: 70 deg C (158.00°F)

Decomposition Temperature: Not available

Solubility in water: Insoluble in water

Specific Gravity/Density: Not available.

Molecular Formula: Bi.Cd.Pb.Sn

Molecular Weight:

Section 10 - Stability and Reactivity

Chemical Stability:	Stable under normal temperatures and pressures.
Conditions to Avoid:	Incompatible materials, dust generation.
Incompatibilities with Other Materials	Strong oxidizing agents.
Hazardous Decomposition Products	Tin/tin oxides, lead/lead oxides, bismuth oxide, toxic chromium oxide fumes.
Hazardous Polymerization	Will not occur.

Section 11 - Toxicological Information

RTECS#:	CAS# 7439-92-1: OF7525000
	CAS# 7440-31-5: XP7320000
	CAS# 7440-43-9: EU9800000
	CAS# 7440-69-9: EB2600000
	CAS# 76093-98-6: None listed
	RTECS: Not available. RTECS: Not available. RTECS:
	CAS# 7440-43-9: Inhalation, rat: LC50 = 25 mg/m ³ /30M; Oral, mouse: LD50 = 890 mg/kg; Oral, rat: LD50 = 2330 mg/kg;
	.
LD50/LC50:	RTECS:
	CAS# 7440-69-9: Oral, mouse: LD50 = 10 gm/kg; Oral, rat: LD50 = 5000 mg/kg;
	.
	RTECS:
	CAS# 76093-98-6:
	Lead - ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans California: carcinogen, initial date 10/1/92 NTP: Suspect carcinogen IARC: Group 2A carcinogen Tin - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Carcinogenicity:	Cadmium - ACGIH: A2 - Suspected Human Carcinogen (Cadmium compounds). California: carcinogen, initial date 10/1/87 NTP: Known carcinogen IARC: Group 1 carcinogen Bismuth - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65. Wood's Metal - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Other:	See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Other: Do not empty into drains.

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: CADMIUM COMPOUND

Hazard Class: 6.1

UN Number: UN2570

Packing Group: II

Canada TDG

Shipping Name: CADMIUM COMPOUND

Hazard Class: 6.1

UN Number: UN2570

Packing Group: II

USA RQ: CAS# 7439-92-1: 10 lb final RQ (no reporting of releases of this hazardous substance)

USA RQ: CAS# 7440-43-9: 10 lb final RQ (no reporting of releases of this hazardous substance)

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: T+ N

Risk Phrases:

R 45 May cause cancer.

R 61 May cause harm to the unborn child.

R 22 Harmful if swallowed.

R 26 Very toxic by inhalation.

R 33 Danger of cumulative effects.

R 48/23/25 Toxic : danger of serious damage to health by prolonged exposure through inhalation and if swallowed.

R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R 62 Possible risk of impaired fertility.

R 68 Possible risk of irreversible effects.

Safety Phrases:

S 53 Avoid exposure - obtain special instructions before use.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 60 This material and its container must be disposed of as hazardous waste.

S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

WGK (Water Danger/Protection)

CAS# 7439-92-1: Not available

CAS# 7440-31-5: Not available

CAS# 7440-43-9: Not available

CAS# 7440-69-9: Not available

CAS# 76093-98-6: Not available

Canada

CAS# 7439-92-1 is listed on Canada's DSL List

CAS# 7440-31-5 is listed on Canada's DSL List

CAS# 7440-43-9 is listed on Canada's DSL List

CAS# 7440-69-9 is listed on Canada's DSL List

Canadian WHMIS Classifications: D1A, D2A, D2B

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

CAS# 7439-92-1 is listed on Canada's Ingredient Disclosure List
CAS# 7440-31-5 is listed on Canada's Ingredient Disclosure List
CAS# 7440-43-9 is listed on Canada's Ingredient Disclosure List
CAS# 7440-69-9 is not listed on Canada's Ingredient Disclosure List.
CAS# 76093-98-6 is not listed on Canada's Ingredient Disclosure List.

US Federal

TSCA

CAS# 7439-92-1 is listed on the TSCA Inventory.
CAS# 7440-31-5 is listed on the TSCA Inventory.
CAS# 7440-43-9 is listed on the TSCA Inventory.
CAS# 7440-69-9 is listed on the TSCA Inventory.
CAS# 76093-98-6 is not listed on the TSCA Inventory. It is for research and development use only.

Section 16 - Other Information

MSDS Creation Date: 12/12/1997

Revision #8 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.
