



INDIUM CORPORATION OF AMERICA®\EUROPE®\ASIA-PACIFIC®
INDIUM CORPORATION (SUZHOU)®
SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: Cu BRAID WITH INDALLOY 2 CLAD

SDS Number: SDS-928

Revised Date: 1 JUNE 2017

Product Use: INDUSTRIAL USE - METAL ALLOY MIX WITH COPPER CLAD BRAID

MANUFACTURER:

In America:

The Indium Corporation of America
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Information: (315) 853-4900

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In Asia:

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Asia-Pacific Operations-Singapore
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Singapore 628908
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2. HAZARDS IDENTIFICATION

PRIMARY ROUTES OF ENTRY:

XEye XInhalation XSkin XIngestion

CARCINOGEN LISTED IN:

NTP IARC OSHA XNot Listed

GHS



Signal Word: Warning

Hazard statement(s)

- H303 May be harmful if swallowed
- H351 Suspected of causing cancer (lead)
- H361 Suspected of damaging fertility or the unborn child (lead)
- H373 May cause damage to organs through prolonged or repeated exposure (lead)
- H410 Very toxic to aquatic life with long lasting effects (lead)
- EUH201A Warning! Contains lead

Precautionary statement(s)

- P233 Keep container tightly closed
- P261 Avoid breathing dust/fume/gas/mist/vapors/spray
- P270 Do not eat, drink or smoke when using this product
- P273 Avoid release to the environment
- P280 Wear protective gloves/protective clothing/eye protection/face protection
- P362 Take off contaminated clothing and wash before reuse
- P301 + P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell
- P302 + P352 IF ON SKIN: Wash with plenty of soap and water
- P304 + 341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
- P305 + 351 IF IN EYES: Rinse continuously with water for several minutes (15 mins)

Classification:

- Acute toxicity, Oral (Category 5) (lead)
- Carcinogenicity (Category 2) (lead)
- Reproductive toxicity (Category 2) (lead)
- Specific target organ toxicity-repeated exposure-Category 2 (lead)
- Acute aquatic toxicity (Category 1) (lead)
- Chronic aquatic toxicity (Category 1) (lead)

POTENTIAL HEALTH EFFECTS:

- Eye Contact:** Contact with molten metal alloy or fume from molten metal may cause irritation. Severe eye damage may result from hot molten metal being splashed into the eyes. Wear safety glasses and face shield when working with molten metal.
- Ingestion:** May be harmful.
- Inhalation:** Inhalation of fume or dust may cause local irritation to the respiratory system.
- Skin Contact:** Normal handling should not cause any adverse health effects. May cause skin irritation. Hot molten metal may cause burns to the skin. Wear protective equipment when handling molten

metal.

- Chronic:**
- TIN: Has been shown to increase incidence of sarcoma in animal tests.
 - LEAD: Prolonged exposure to vapors or fumes at higher temperatures may cause respiratory irritation and systematic lead poisoning. Symptoms of lead poisoning include headache, nausea, abdominal pain, muscle and joint pain and damage to the nervous system, blood system and kidneys.
 - SILVER: Chronic skin contact or ingestion of silver dusts, salts or fume can result in a condition known as Argyria, a condition with bluish pigmentation of the skin and eyes.
 - INDIUM: May cause damage to respiratory system.
 - COPPER: Long term overexposure to copper dust or fume may cause skin irritation or discoloration of skin and hair.
- WARNING:** This product contains a chemical known to the State of California to cause cancer and/or birth defects (or other reproductive harm). (lead)
- NOTE:** The Indium Corporation does not recommend, manufacturer, market or endorse any of its products for human consumption.

Normal handling of solid metal does not pose a hazard.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Components	% wt	CAS Registry #	OSHA PEL mg/m ³	TLV-TWA mg/m ³	TLV-STEL mg/m ³
LEAD	4.05	7439-92-1 (US)	0.05	0.05	-
		(EU)	-	0.15	-
		(Canada)	-	0.05	-
		(Singapore)	0.15	-	-
		(Mexico)	-	0.15	-
		(China)	-	0.05(dust)	-
					0.03(fume)
SILVER	5	7440-22-4 (US)	0.01	0.1	-
		(EU)	-	0.1	-
		(Canada)	-	0.1	0.3
		(Singapore)	0.1	-	-
		(Mexico)	-	0.1	-
INDIUM	21.6	7440-74-6 (US)	0.1	0.1	-
		(EU)	-	0.1	0.3
		(Canada)	-	0.1	0.3

		(Singapore)	0.1	-	-
		(Mexico)	-	0.1	0.3
		(China)	-	0.1	0.3
TINNED COPPER	73		0.1	0.1	-
		(EU)	0.2(fume)	1(dust)	2(dust)
		(Canada)	-	0.2	0.6
	*as copper	(Singapore)	0.2(fume)	1(dust)	-
		(Mexico)	-	0.2(fume)	2
		(China)	-	1(dust)	2.5
				0.2(fume)	0.6
ROSIN	1-2	65997-05-9	N.E.	N.E.	N.E.
		(EU)	0.05	-	0.15(sensitizer)
PROPRIETARY	1-2	-	-	-	-

N.E. = Not established

4. FIRST AID MEASURES

Eye Contact: Hold eyelids apart and flush eyes with plenty of tepid water for at least 15 minutes. Seek medical attention if irritation persists.

Ingestion: If patient is conscious, ONLY induce vomiting as directed by trained personnel. NEVER give anything by mouth to an unconscious person. Seek medical attention immediately.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration or oxygen by trained personnel. Seek immediate medical attention.

Skin Contact: Remove contaminated clothing. Wash affected area with soap and water. Wash clothing before reuse. If irritation persists, obtain medical attention.

5. FIRE FIGHTING MEASURES

Flash Point: Not established. **Method:** Not established.

Auto-ignition Temperature: Not established.

Flammable Limits: Limits not established. Massive metal is not flammable; however dust or powder may be combustible.

Extinguishing Media: Use extinguishers appropriate for the surrounding fire conditions.

Special Fire Fighting Procedures: Firefighters must wear NIOSH approved self-contained breathing apparatus and full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Spill or Leak Procedures: Contain spill. If molten, cool to allow metal to solidify. If a solid metal, wear gloves, pick up and return to process. If dust, wear recommended personal protective equipment. DO NOT SWEEP. Use a vacuum, place in barrels and return to process if applicable. Otherwise, dispose of following all Federal, State and Local regulations. In the EU refer to the Special Waste Regulations. Metal may have reclaim value.

7. HANDLING AND STORAGE

Handling Precautions: Only dry metals should be added to molten bath. If working with molten metals, or exposed to fume or dust, use appropriate personal protective equipment.

Storage Precautions: Store product in a cool, dry area away from incompatible materials.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Local exhaust ventilation is recommended to control any air contaminants. Control concentration of all components so that their exposure levels are not exceeded.

Personal protection:

Eyes: Chemical safety glasses/goggles and face shield with molten metal.

Respirator: A NIOSH approved or EU compliant CE marked air-purifying respirator with a fume/dust chemical cartridge is recommended under certain circumstances where airborne concentrations are expected to be elevated.

Skin: Gloves-leather or impervious (vinyl) type. Heat resistant gloves if handling hot metal. Safety type boots. Personal protective equipment is recommended when working with molten metal to avoid burns.

Other: Lab coat, safety shower and eyewash fountain in work area. Avoid the use of contact lenses in high fume areas.

Work/Hygienic Practices: Maintain good housekeeping. Clean up spills immediately. Good personal hygiene is essential. Avoid eating, smoking or drinking in the work area. Wash hands thoroughly with soap and water immediately upon leaving the work area. Follow standard lead work practices.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Silver grey solid metal	Boiling Point:	Not applicable.
Odor:	Odorless	Melting Point:	Not available
Specific Gravity:	Not available	pH:	Not applicable
Vapor Pressure:	Not applicable.	Solubility in Water:	Insoluble
Vapor Density:	(air=1) Not applicable.		

10. STABILITY AND REACTIVITY

General: Stable.

Conditions to Avoid: Not established.

Incompatible Materials: Avoid contact with mineral acids.

Hazardous Decomposition / Combustion: Harmful organic fumes and toxic oxide fumes may form at elevated temperatures.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Carcinogenicity: National Toxicity Program (NTP): No
Occupational Safety & Health Administration (OSHA): No
U.N. International Agency for Research on Cancer (IARC): Yes
 Lead and Lead compounds are listed as possible carcinogens.

LD50: Not established **LC50:** Not established

Other: Chronic Toxicity: Lead can cause potential harm to the developing fetus.

Irritancy of Product: Not established **Mutagenicity:** Not established
Sensitization to Product: Not established **Teratogenicity:** Not established
Reproductive Toxicity: No specific data is available **Synergistic Products:** Not established

12. ECOLOGICAL INFORMATION

No testing information available on mixture.

13. DISPOSAL CONSIDERATION

Waste Disposal Method: Scrap metal alloy usually has value. Contact a commercial reclaimer for recycling. Otherwise, dispose of in accordance with all Federal, State and Local environmental regulations. In Europe follow the Special Waste Regulations.

14. TRANSPORT INFORMATION

Transport in accordance with applicable regulations and requirements. Not regulated under US DOT (United States Department of Transportation).

North American Emergency Guide Book: Not applicable.

UN - None

15. REGULATORY INFORMATION

The information in this Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated hereunder (29 CFR 1910.1200 ET. SEQ.).

California PROP 65: WARNING : This product contains a chemical known to the State of California to cause cancer and/or birth defects (or other reproductive harm).

SARA 313 Listing - 40 CFR 372.65: Lead CAS# 7439-92-1 Silver CAS# 7440-22-4

All ingredients are listed on the EPA TSCA Inventory. EPA Genetic Toxicology Program - Lead CAS# 7439-92-1

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulation (CPR).

WHMIS: D2A - Materials Causing Other Toxic Effects - Very Toxic Material (Chronic), otherwise not classified.

This product has been classified in accordance with the guidelines, as set, by the Dept. of Industrial Health of the Republic of Singapore.

This product has been classified using the Chinese Occupational Exposure Limit for Hazardous Agents in the Workplace, GBZ2-2007.

This product has been classified in accordance with the Mexican regulations NOM-018-STPS-2015 and NOM-010-STPS-2014.

16. OTHER INFORMATION

HMIS Hazard Rating:	Health:	2
	Fire:	1
	Reactivity:	0

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