



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

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier:** INDALLOY WITH CW-908 ALUMINUM CORE FLUX

**SDS Number:** SDS- 6248

**Revised Date:** 5 JULY 2016

**Product Use:** Industrial Use - Flux Cored Wire (3%). Specifically designed for soldering to aluminum and aluminum alloys.

#### MANUFACTURER:

##### In America:

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## 2. HAZARDS IDENTIFICATION

### PRIMARY ROUTES OF ENTRY:

\*Eye      \*Inhalation      \*Skin      \*Ingestion      NTP      IARC      OSHA      \*Not Listed

### Carcinogen listed in

GHS  
No signal word  
No pictogram  
No hazard statements

### Precautionary statement(s)

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 + P314      IF SWALLOWED: Get Medical advice/attention 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)

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### POTENTIAL HEALTH EFFECTS:

In General: Normal handling of wire should not cause any adverse health effects.

**Eye Contact:** Irritating to the eyes and if not removed promptly, may result in serious injury. Do not allow material to come in contact with eyes. Contact with fume from molten metal may cause irritation.

**Ingestion:** May be harmful if swallowed.

**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.

**COPPER:** Overexposure to fumes of copper may cause metal fume fever (chills, muscle aches, nausea, fever; dry throat, cough, weakness, lassitude); metallic or sweet taste; 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). (trace levels of lead)

**Note:** The Indium Corporation does not recommend, manufacture, market or endorse any of its products for human consumption.

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

Components	% wt	CAS Registry #/EINECS#	PEL mg/m <sup>3</sup>	TLV-TWA mg/m <sup>3</sup>	TLV-STEL mg/m <sup>3</sup>	
<b>TIN</b>	*	7440-31-5/231-141-8	(US)	2	2	-
			(EU)	-	2	4
			(Canada)	-	2	4
			(Singapore)	2	-	-
<b>COPPER</b>	*	7440-50-8/231-159-6	(US)	0.1 (fume)	0.2 (fume)	-
			(EU)	-	0.2 (fume)	-
			(Canada)	-	0.2 (fume)	0.6 (fume)
			(Mexico)	-	0.2(fume)	2
			(Singapore)	0.2	-	-
			(China)	-	1(dust)	2.5
					0.2(fume)	0.6
<b>SILVER</b>	*	7440-22-4/231-131-3	(US)	0.01	0.1	-
			(EU)	-	0.1	-
			(Canada)	-	0.1	0.3
			(Mexico)	-	0.1	-
			(Singapore)	0.1	-	-
<b>AMMONIUM BIFLUORIDE</b>	<1	1341-49-7	N.E.	N.E.	N.E.	
<b>PROPRIETARY</b>	2	-	N.E.	N.E.	N.E.	

N.E. = Not established

\* See alloy table

**ALLOY TABLE**

3% flux core

Indalloy (metal mixture)	%TIN	%SILVER	%COPPER	RoHS 2 Compliance
121(96.5Sn/3.5Ag)	93.6	3.4	-	Yes
128 (Sn99.5)	96.5	-	-	Yes
160 (97Sn/3Cu)	94.1	-	2.9	Yes

**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 applicable

**Flammable Limits:** Not flammable.

**Extinguishing Media:** Use extinguishers appropriate for the surrounding fire conditions. Use water spray, carbon dioxide, or foam. Do not allow water run-off to enter sewers or waterways.

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

**6. ACCIDENTAL RELEASE MEASURES**

**Spill or Leak Procedures:** Wear HEPA (high efficiency particulate filter) filter respirator and other personal protective clothing. (See Exposure Controls/Personal Protection Section). Clean up spill without generating or dispersing dust into the air. Solids pieces can be picked up or swept. Reduce airborne dust and prevent scattering by moistening with water.

**7. HANDLING AND STORAGE**

**Handling Precautions:** Avoid breathing vapors from heated material. Avoid contact with eyes, skin and clothing. Follow routine safe handling procedures. Use with adequate ventilation.

**Storage Precautions:** Keep away from heat and flame. Store in suitable, tightly capped, and labeled containers in cool dry, well-ventilated area.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Controls:** Local exhaust ventilation is recommended to control any fume or dust air contaminants.

**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 HEPA type Chemical cartridge is recommended under certain circumstances where airborne concentrations are expected to be elevated. Warning: Air purifying respirators do not protect the worker in oxygen-deficient atmospheres.

**Skin:** Wear protective gloves, clothing such as lab coat, coveralls, apron and boots.

**Other:** Eye-wash fountain/shower in work area. Avoid the use of contact lenses in high fume and dust areas. Regular shower facilities and industry laundry service may be required.

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

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Solid, gray metal wire	<b>Boiling Point:</b>	Not available
<b>Odor:</b>	Odorless/mild	<b>Melting Point:</b>	Not available
<b>Specific Gravity:</b>	Not available	<b>pH:</b>	Not applicable
<b>Vapor Pressure:</b>	Not established	<b>Water rinse:</b>	Rinse is necessary
<b>Vapor Density:</b>	(air=1) Not applicable.		

## 10. STABILITY AND REACTIVITY

**General:** Stable.

**Conditions to Avoid:** Not established

**Incompatible Materials:** Not established

**Hazardous Decomposition / Combustion** Toxic fumes are emitted at elevated temperatures, ammonia, boron trifluoride gas, hydrofluoric acid.

**Hazardous Polymerization:** Will not occur.

Product is not suited for electrical or electronic applications.

## 11. TOXICOLOGICAL INFORMATION

**Carcinogenicity:** NTP(National Toxicity Program): No  
 OSHA (Occupational Safety & Health Administration): No  
 IARC (International Agency for Research on Cancer): No

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

## 12. ECOLOGICAL INFORMATION

Product not tested

Product contains a substance that is very toxic to aquatic life.

### 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. Non - hazardous for shipping.

UN – none

Marine Pollutant: No

Not regulated- ground/IATA/ocean

### 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.).

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

SARA 313 Listing - 40 CFR 372.65 – copper

Ingredient is listed on the EPA TSCA Inventory.

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

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

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

This product has been classified in accordance with: Malaysian – OCCUPATIONAL SAFETY AND HEALTH (CLASSIFICATION, LABELING AND SAFETY DATA SHEET OF HAZARDOUS CHEMICALS) REGULATION OCTOBER 2013 – (CLASS).

Regulatory Information China:

GB/T 16483-2008, GB/T 17519-2013, Safety Data Sheets for Chemical Products

GB 30000.2-29-2013, Rules for classification and labeling of chemicals (GHS)

Decree No. 591: Regulations on the Control Over Safety of Hazardous Chemicals.

RoHS 2 (2015/863/EU) amendment to Annex II (2011/65/EU)-complies

**16. OTHER INFORMATION**

<b>HMIS Hazard Rating:</b>	<b>Health:</b>	1
	<b>Fire:</b>	0
	<b>Reactivity:</b>	0

**Revised Date:** 5 JULY 2016

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