



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

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: Sn 995

MSDS Number: MSDS-5709

Revised Date: 21 AUGUST 2012

Product Use: Tin alloy (Sn 995) cobalt-doped, lead free soldering alloy

MANUFACTURER:

In America:

The Indium Corporation of America
1676 Lincoln Ave., Utica NY 13502
Information: (315) 853-4900
nswarts@indium.com

EMERGENCY PHONE:

CHEMTREC 24 hrs.
USA: 1 (800) 424-9300
Outside USA: 1 (703) 527-3887

In Europe:

Indium Corporation of Europe
7 Newmarket Ct.
Kingston, Milton Keynes, UK, MK 10 OAG
Information: +44 [0] 1908 580400

In China:

Indium Corporation (Suzhou) Co., Ltd.
No. 428 Xinglong Street
Suzhou Industrial Park
Suchun Industrial Square
Unit No. 14-C
Jiangsu Province, China 215126
Information: (86) 512-6283-4900

In Asia:

Asia-Pacific Operations-Singapore
29 Kian Teck Avenue
Singapore 628908
Information: +65 6268-8678

2. HAZARDS IDENTIFICATION

PRIMARY ROUTES OF ENTRY:

⊕ Eye ⊕ Inhalation ⊕ Skin ⊕ Ingestion NTP

Carcinogen listed in

IARC OSHA ⊕Not Listed

POTENTIAL HEALTH EFFECTS:

Eye Contact: Contact with material at room temperature or fume from material at typical re-flow temperatures over 100°C may cause eye irritation. Molten metal can cause damage to eyes.

Ingestion: This product contains metal. May be harmful if ingested.

Inhalation: Heated vapor concentrations may be harmful if inhaled. Prolonged or repeated exposure to smoke or fumes may cause respiratory irritation or sensitization.

Skin Contact: Not expect to cause any issues. Molten metal may cause burns or irritation.

Chronic: Prolonged or repeated overexposure to mist or vapor generated at high temperatures may result in the inhalation of harmful amounts of material.

TIN: Has been shown to increase incidence of sarcoma in animal tests at site or application.

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

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 (ppm), cobalt)

3. COMPOSITION / INFORMATION ON INGREDIENTS

Components	% wt	CAS Registry #/EINECS#	PEL mg/m ³	TLV-TWA mg/m ³	TLV-STEL mg/m ³
TIN	99.5	7440-31-5/231-141-8			
		(US)	2	2	-
		(EU)	-	2	4
		(Singapore)	2	-	-
		(Canada)	-	2	4
COBALT (doped)	0.5	7440-48-4/231-158-0	0.1	0.02	N.E.

N.E. = Not established

**DOES NOT CONTAIN ANY EU SUBSTANCES OF VERY HIGH CONCERN (SVHC)
PRODUCT IS RoHS COMPLIANT**

4. FIRST AID MEASURES

- Eye Contact:** Hold eyelids apart and flush eyes with plenty of 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 flammable **Method:** Not established.
- Auto-ignition Temperature:** Not established.
- Flammable Limits:** Limits not established.
- Extinguishing Media:** Use extinguishers appropriate for the surrounding fire conditions. Foam, dry chemical, water spray and carbon dioxide.
- Special Fire Fighting Procedures:** Firefighters must wear an approved self-contained breathing apparatus and full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Spill or Leak Procedures: Wear respirator if conditions warrant and other personal protective clothing. (See Exposure Controls/Personal Protection Section). Keep unnecessary personnel away. If molten allow metal to cool. Scoop up and reclaim/recycle.

7. HANDLING AND STORAGE

- Handling Precautions:** Avoid breathing vapors from heated material. Avoid contact with eyes, skin and clothing.
- Storage Precautions:** 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. Store away from incompatible materials.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Local exhaust ventilation (point source) is recommended especially during heating, cutting and grinding. Avoid breathing dust/fume/gas/spray/vapours.

Personal protection:

Eyes: Chemical safety glasses/goggles. Face shield over eye protection for splash protection.

Respirator: A NIOSH approved or EU compliant CE marked air-purifying respirator with a

particulate/fume chemical cartridge is recommended under certain circumstances where airborne concentrations are expected to be elevated.

- Skin:** Compatible chemical resistant gloves. Hot gloves for handling molten metal.
- Other:** Lab coat, eye-wash fountain in work area. Avoid the use of contact lenses in high fume/dusty areas.
- Work/Hygienic** 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

- | | | | |
|--------------------------|-------------------------|-----------------------------|-----------------|
| Appearance: | Solid metal | Boiling Point: | Not applicable. |
| Odor: | None | Melting Point: | 228C |
| Specific Gravity: | 7.3 | pH: | Not applicable |
| Vapor Pressure: | Not applicable. | Solubility in Water: | Not soluble |
| Vapor Density: | (air=1) Not applicable. | | |

10. STABILITY AND REACTIVITY

- General:** Stable.
- Conditions to Avoid:** High temperatures.
- Incompatible Materials:** Acids, bases, oxidizers
- Hazardous Decomposition / Combustion:** Carbon monoxide, Carbon dioxide
- Hazardous Polymerization:** Will not occur.

11. TOXICOLOGICAL INFORMATION

- Carcinogenicity:** **NTP:** No Product mixture
OSHA: No “
IARC: No “

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

RTECS= XP7320000 (tin) GF8750000 (cobalt)

Cobalt: Pulmonary function Asthma Myocardial effects Substances for which there is a biological Exposure Index or Indices (see BEI® section) Confirmed animal carcinogen with unknown relevance to humans.

LD50 Oral – rat-6,171 mg/kg

IARC: 2B – Group 2B: Possibly carcinogenic to humans (cobalt)

12. ECOLOGICAL INFORMATION

Product not tested.

Cobalt is very toxic to aquatic life. Avoid release to environment.

13. DISPOSAL CONSIDERATION

Waste Disposal Method: Dispose of in accordance with all Federal, State and Local environmental regulations. In Europe follow the Special Waste Regulations. Product has reclaim value. Avoid release to environment.

14. TRANSPORT INFORMATION

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

UN - none

North American Emergency Guide Book – Not applicable

15. REGULATORY INFORMATION

The information in this Material 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.).

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

WHMIS: Not classified, insufficient data.

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-2000 and NOM-010-STPS-1999.

This product has been classified using the Chinese Occupational Exposure Limit for Hazardous Agents in the Workplace, GBZ2-2002.

SARA 313 Listing - 40 CFR 372.65 (FORM R REPORTING) – Cobalt

All ingredients are listed on the EPA TSCA Inventory.

EC Classification, Packaging and Labeling Requirements:

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 (ppm), cobalt)

Safety Phrases:

S20/21 When using do not eat, drink or smoke
 S23 Do not breathe fumes
 S24/25 Avoid contact with skin and eyes
 S27 Take off immediately all contaminated clothing
 S28 After contact with skin wash immediately with plenty of soap and water
 S36/37/39 Wear suitable protective clothing, gloves and eye/face protection

