



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

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: ANTIMONY

MSDS Number: MSDS-4526

Revised Date: 16 APRIL 2007

Product Use: METAL ALLOY CONTAINING ANTIMONY – (Solid metal form)

MANUFACTURER:

In America:

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

EMERGENCY PHONE:

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

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In Asia:

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

2. COMPOSITION / INFORMATION ON INGREDIENTS

Components	% wt	CAS Registry #	PEL mg/m ³	TLV-TWA mg/m ³	TLV-STEL mg/m ³
ANTIMONY	100	7440-36-0 (US)	0.5	0.5	-
		(EU)	0.5	-	-
		(Canada)	-	0.5	1.5
		(Singapore)	0.5	-	-
		(Mexico)	-	0.5	-
		(China)	-	0.5	-

Symbol: X_n
N.E. = Not established

Risk Phrases: R20/21/22, R36/37/38

3. HAZARDS IDENTIFICATION

PRIMARY ROUTES OF ENTRY:

Eye Inhalation Skin Ingestion

CARCINOGEN LISTED IN:

NTP IARC OSHA Not Listed

POTENTIAL HEALTH EFFECTS:

Eye Contact: Contact with powered 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. Dust may produce eye discomfort.

Ingestion: Ingestion may be discomforting to the gastrointestinal tract. May be harmful if large amounts are swallowed.

Inhalation: Inhalation of fume or dust may cause local irritation to the respiratory system and gastrointestinal tract. Discomfort may cause sore throat, dizziness, weight loss, anemia. Pulmonary congestion and edema may occur. Those persons with impaired respiratory function may incur further disability if excessive amounts of dust and particulate are inhaled.

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. Antimony may cause dermatitis.

Chronic: Dust greater than 5 micron may cause irritation to nose and throat. Small particulates of less than 1.5 micron may be trapped in the lungs. This may cause serious health consequences.

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, manufacturer, market or endorse any of its products for human consumption.

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:	None combustible	Method:	Not established.
Auto-ignition Temperature:	420C (cloud)		
Flammable Limits:	Limits not established. Massive metal is not flammable; however dust or powder may be flammable.		
Extinguishing Media:	Use extinguishers appropriate for the surrounding fire conditions. Sand or dry powder. Do NOT use water.		
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 - POLLUTANT. If molten, cool to allow metal to solidify. If a solid metal, wear gloves, pickup 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.
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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 eye-wash 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Silver grey solid metal	Boiling Point:	1635 C (2975F)
Odor:	Odorless	Melting Point:	630C (1166F)
Specific Gravity:	6.68@25C	pH:	Not applicable
Vapor Pressure:	0.13 @886C	Solubility in Water:	Insoluble
Vapor Density:	(air=1) Not applicable.	Mohs hardness:	3 – 3.5

10. STABILITY AND REACTIVITY

General:	Stable.
Conditions to Avoid:	Not established.
Incompatible Materials:	Avoid contact with mineral acids, oxidizing agents. Avoid reaction with aqua regia and hot, concentrated sulfuric acid.
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):	No

LD50:	Not established	LC50:	Not established
Other: Oral (rat) LD 50: 7000 mg/kg Antimony: RTECS CC 4025000			

12. ECOLOGICAL INFORMATION

.Environmental: No data available.

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.
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14. TRANSPORT INFORMATION

Transport in accordance with applicable regulations and requirements. Not regulated under US DOT (United States Department of Transportation), as a solid metal form.

Other forms of material such as powder may be classified as hazardous for shipping. Review applicable regulations.

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.).

The information in this Material Safety Data Sheet meets the requirements of the EU under Chemicals (Hazard Information and Packaging for Supply) Regulations 1994 (CHIP 2) Regulation 6.

This product has been classified in accordance with the hazard criteria of the Commission Directive 91/155/EEC and EH40.

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.

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: Antimony CAS# 7440-36-0

All ingredients are listed on the EPA TSCA Inventory.

Listed on the Canadian Domestic Substance List.

EC Classification, Packaging and Labeling Requirements:

Symbol and Hazard Classification of Product

Risk Phrases:

R36/37/38 Irritating to eyes, respiratory system and skin

Safety Phrases:

S20/21 When using do not eat, drink or smoke

S22 Do not breathe dust

S23 Do not breathe fumes

S24/25 Avoid contact with skin and eyes

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

16. OTHER INFORMATION

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

Revised Date: 16 APRIL 2007

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Approved by: Nancy Swarts, Indium Corporation of America

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