



**INDIUM CORPORATION OF AMERICA®/ EUROPE®/ ASIA PACIFIC®  
INDIUM CORPORATION (SUZHOU)®**

**SAFETY DATA SHEET**

**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product Identifier:** INDIUM TRICHLORIDE POWDER

**SDS Number:** SDS-IB006

**Revised Date:** 7 APRIL 2017

**Product Use:** Industrial Use - Indium Trichloride ( $\text{InCl}_3$ ) (powder)

**MANUFACTURER:**

**In America:**

The Indium Corporation of America  
34 Robinson Rd., Clinton, New York 13323  
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:**

The Indium Corporation of America  
Asia-Pacific Operations-Singapore  
29 Kian Teck Avenue  
Singapore 628908  
Information: +65 6268-8678

## 2. HAZARDS IDENTIFICATION

**GHS:**



Signal Word: Danger

Hazard statement(s)

- H302 Harmful if swallowed
- H314 Causes severe skin burns and eye damage

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 + P311 IF SWALLOWED: Call POISON CENTER or doctor/physician
- 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)

GHS Classification

- Acute toxicity, Oral (Category 4)
- Skin corrosion (Category 1B)
- Serious eye damage (Category 1)

**PRIMARY ROUTES OF ENTRY:**

- √Eye
- √Inhalation
- √Skin
- √Ingestion

**CARCINOGEN LISTED IN:**

- NTP
- IARC
- OSHA
- √Not Listed

**POTENTIAL HEALTH EFFECTS:**

- Eye Contact:** May cause severe irritation and possible burns.
- Ingestion:** Harmful if swallowed. May cause burns to the gastrointestinal tract. Kidney and liver damage from injected indium compounds has been reported based on limited animal testing.
- Inhalation:** May cause respiratory irritation or harm if inhaled. Severe exposure could cause pulmonary damage.
- Skin Contact:** May cause skin irritation or burns.
- Chronic:** Kidney and liver damage from injecting indium compounds has been reported based on limited animal testing but no systematic effects from human exposure has been reported.
- Other:** Hygiene practices should be in place when handling this product. Avoid breathing dust.

**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 not intentionally added).

### 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>
INDIUM TRICHLORIDE	100	10025-82-8/233-043-0	0.1 (as Indium*)	0.1	-
		(EU)	-	0.1 (as Indium)	0.3
		(Canada)	-	0.1 (as Indium)	0.3
		(Singapore)	0.1	-	-
		(Mexico)	-	0.1(as indium)	0.3
		(China)	-	0.1(as indium)	0.3

N.E. = Not established \* Indium CAS# 7440-74-6

### 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. Not flammable.
- Extinguishing Media:** Use extinguishers appropriate for the surrounding fire conditions.
- Special Fire Fighting Procedures:** Firefighters must wear NIOSH approved or equivalent self-contained breathing apparatus and full protective clothing.

### 6. ACCIDENTAL RELEASE MEASURES

- Spill or Leak Procedures:** Isolate spill and clean up with vacuum. Avoid conditions, which create fumes or fine dust. DO NOT SWEEP SOLIDS. Do not raise dust levels. Place material in proper waste container. An approved air purifying respirator with particulate cartridge and

other personal protective equipment such as gloves is recommended. Dispose of in accordance with Federal, State and Local regulations. In Europe dispose of following the Special Waste Regulations. Indium may have reclaim value.

## 7. HANDLING AND STORAGE

**Handling:** Keep containers tightly closed when not in use. Use care to avoid spills. Wear appropriate personal protective equipment. Always thoroughly wash your hands after handling this product. DO NOT touch or rub eyes until hands are washed.

**Storage Precautions:** Store product in tightly capped original containers in a cool, well ventilated and dry area.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Controls:** Local and/or Mechanical (general) exhaust ventilation is recommended to control any air contaminants. Ventilation required if dust generated.

### Personal protection:

**Eyes:** Wear chemical safety glasses/goggles. Face shield with splash application.

**Respirator:** A NIOSH or authority approved air-purifying respirator with a particulate filter is recommended under certain circumstances where airborne concentrations are expected to be elevated. Confined areas may require additional protection.

**Skin:** Gloves are recommended when handling solids. Disposable nitrile or other chemical glove.

**Other:** Lab coat, apron, eyewash fountain in work area. Avoid the use of contact lenses in high fume or 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

<b>Appearance:</b>	White flakes/powder	<b>Boiling Point:</b>	No data available
<b>Odor:</b>	Odorless	<b>Melting Point:</b>	No data available
<b>Specific Gravity:</b>	3.46 (H <sub>2</sub> O=1)	<b>pH:</b>	Not available (Corrosive)
<b>Vapor Pressure:</b>	Not applicable.	<b>Solubility in Water:</b>	Soluble
<b>Vapor Density:</b>	Not applicable	<b>Molecular Weight:</b>	221.18
<b>Flash Point:</b>	Not applicable	<b>Viscosity:</b>	No information available

## 10. STABILITY AND REACTIVITY

**General:** Stable.

**Conditions to Avoid:** Dust generation.

**Incompatible Materials:** Strong acids

**Hazardous Decomposition /** Toxic chlorine fumes may form when heated to decomposition. May release toxic fumes.

**Combustion:** Deliquescent, hydrolyzes to form In (OH)<sub>3</sub>

**Hazardous Polymerization:** Will not occur.

**11. TOXICOLOGICAL INFORMATION**

<b>Carcinogenicity:</b>	<b>National Toxicology Program (NTP):</b>	No
	<b>Occupational Safety &amp; Health Administration (OSHA):</b>	No
	<b>U.N. International Agency for Research on Cancer (IARC):</b>	No
	See NIOSH RTECS# NL1400000	
	Oral toxicity – LD50 rat- 1,100 mg/kg	

**12. ECOLOGICAL INFORMATION**

. Product not tested.

**13. DISPOSAL CONSIDERATION**

**Waste Disposal Method:** Scrap indium metal may have some 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.  
Shipping Information: UN3260, Corrosive Solid, Acidic, Inorganic, N.O.S., 8, PG II (indium trichloride)



North America Emergency Guide Book – Guide 154  
Marine Pollutant: No

**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.).

SARA 313 listing - 40 CFR 372.65: None

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). (Trace lead levels).

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

(CPR).



WHMIS: Class E Corrosive Material

This product complies with EU Directive 2011/65/EU, Restriction of Hazardous Substances (RoHS 2).

Swiss Poison Class: 4

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

Malaysia:

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). (GHS)

In China:

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

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

GB/T 16483-2008, GB/T 17517-2013

This product has been classified using the Chinese Occupational 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.

All ingredients are listed on the EPA TSCA Inventory, Japanese Chemical list, Korean Inventory, Philippines Inventory and Canadian Domestic Substance List.

**16. OTHER INFORMATION**

<b>HMIS Hazard Rating:</b>	<b>Health:</b>	3
	<b>Fire:</b>	0
	<b>Physical Hazard:</b>	0

**Revised Date:** 7 APRIL 2017

**Prepared by:** Nancy Swarts, Indium Corporation of America

**Approved by:** Nancy Swarts, Indium Corporation of America

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