



SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: INDIUM SULFATE SOLUTION

SDS Number: SDS-IB012S

Revised Date: 11 APRIL 2018

Product Use: Industrial Use- Indium Sulfate Solution $[(\text{In}_2 \text{O}_{12}\text{S}_3 \text{--Solution})]$

MANUFACTURER:

In America:

The Indium Corporation of America®.
34 Robinson Rd., Clinton, NY 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:

The Indium Corporation of America® (European Operations)
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:

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

2. HAZARDS IDENTIFICATION**PRIMARY ROUTES OF ENTRY:**

XEye XInhalation XSkin XIngestion

CARCINOGEN LISTED IN:

NTP IARC OSHA XNot Listed

GHS



Signal Word: Danger

Hazard statement(s)

H303 May be 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 + P364 Take off contaminated clothing and wash before reuse
 P301 + P314 IF SWALLOWED: Get medical attention/advice 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
 Skin irritation- Category 1C

POTENTIAL HEALTH EFFECTS:**Eye Contact:** May cause severe irritation or damage.**Ingestion:** May cause burns or irritation to the gastrointestinal tract.**Inhalation:** May cause respiratory irritation.**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.

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



WARNING: This product can expose you to chemicals including [trace levels of lead, cadmium and nickel] which are known to the State of California to cause cancer and [trace levels of lead and cadmium] which are known to the State of California to cause birth defects and/or other reproductive harm. For more information go to www.P65Warnings.ca.gov

3. COMPOSITION / INFORMATION ON INGREDIENTS

Components	% wt	CAS Registry #	PEL mg/m ³	TLV-TWA mg/m ³	TLV-STEL mg/m ³
INDIUM SULFATE	5-40	13464-82-9	0.1 (as Indium*)	0.1	N.E.
		(EU)	-	0.1 (as Indium)	0.3
		(Canada)	-	0.1 (as Indium)	0.3
		(Mexico)	0.1 (as Indium)	-	0.3
		(Singapore)	0.1 (as Indium)	-	-
		(China)	-	0.1(as indium)	0.3
PROPRIETARY	5-20	-	-	1	3
WATER	40-90	-	-	-	-

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 by absorption or neutralization. Place into the proper waste container. An approved air purifying respirator with acid 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 has reclaim value.
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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.

Personal protection:

Eyes: Wear chemical safety glasses/goggles. Face shield for splash hazards.

Respirator: A NIOSH approved air-purifying respirator with an acid filter is recommended under certain circumstances where airborne concentrations are expected to be elevated.

Skin: Gloves are recommended when handling corrosive materials.

Other: Lab coat, apron, eyewash fountain in work area. Avoid the use of contact lenses in high fume or acidic 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:	Clear liquid	Boiling Point:	Not established
Odor:	Odorless	Melting Point:	Not established
Specific Gravity:	Not available	pH:	1 (Corrosive)
Vapor Pressure:	Not applicable.	Solubility in Water:	Soluble
Vapor Density:	Not applicable		

10. STABILITY AND REACTIVITY

General: Stable.

Conditions to Avoid: Not established.

Incompatible Materials: Bases

Hazardous Decomposition / Combustion: Toxic fumes (SO_x) may form at elevated temperatures.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Carcinogenicity: National Toxicology Program (NTP): No
Occupational Safety & Health Administration (OSHA): No
U.N. International Agency for Research on Cancer (IARC): No

LD50: No information available

Irritancy of Product: May be an irritant **Mutagenicity:** Not established

Sensitization to Product: Not established

Teratogenicity: Not established

Reproductive Toxicity: Not established

Synergistic Products: Not established

12. ECOLOGICAL INFORMATION

No information available.

13. DISPOSAL CONSIDERATION

Waste Disposal Method: Scrap indium metal has 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 international regulations and requirements.

Shipping Name: UN3264, Corrosive Liquid, Acidic, Inorganic, N.O.S., 8,PG III (indium sulfate solution)



North America Emergency Guide Book – Guide # 154

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.).

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

WHMIS: Insufficient data available at this time.

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



WARNING: This product can expose you to chemicals including [trace levels of lead, cadmium and nickel] which are known to the State of California to cause cancer and [trace levels of lead and cadmium] which are known to the State of California to cause birth defects and/or other reproductive harm. For more information go to www.P65Warnings.ca.gov

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 guidelines, as set, by the Dept of Industrial Health of the Republic of Singapore.

SARA 313 listing - 40 CFR 372.65: None

All ingredients are listed on the EPA TSCA Inventory and Canadian Domestic Substance List.

16. OTHER INFORMATION

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

Revised Date: 11 APRIL 2018

Prepared by: Nancy Swarts, Indium Corporation of America

Approved by: Nancy Swarts, Indium Corporation of America

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