



SAFETY DATA SHEET

User must review the contents of this (SDS) and determine what is applicable to their own country laws under Health and Safety and apply them as necessary. This (SDS) will not reference every countries Health and Safety Laws. It is the user's responsibility to determine what is applicable to them, including but not limited to review of any specific chemical lists and apply the requirements as necessary.

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: INDIUM NITRATE SOLID

SDS Number: SDS-IB005

Revised Date: 3 NOVEMBER 2017

Product Use: Indium Nitrate InN_3O_9 . Molecular weight 300.83 g/mol

MANUFACTURER:

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2. HAZARDS IDENTIFICATION

PRIMARY ROUTES OF ENTRY:

XEye XInhalation XSkin XIngestion

CARCINOGEN LISTED IN:

NTP IARC OSHA XNot Listed

GHS



Signal Word: Warning

Hazard statement(s)

H272 May intensify fire; oxidizer
 H302 Harmful if swallowed
 H315 Causes skin irritation
 H319 Cause severe eye irritation
 H335 May cause respiratory irritation

Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking
 P220 Keep/Store away from clothing/combustible materials
 P221 Take precaution to avoid mixing with combustibles
 P233 Keep container tightly closed
 P261 Avoid breathing dust/fume/gas/mist/vapors/spray
 P264 Wash hands thoroughly after handling
 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 advice/attention if you feel unwell.
 P302 + P352 IF ON SKIN: Wash with plenty of soap and water
 P304 + P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
 P305 + P351 IF IN EYES: Rinse continuously with water for several minutes (15 mins)
 P370 + P378 IN CASE OF FIRE: Use dry sand, dry chemical or alcohol resistant foam to extinguish
 P501 Dispose of contents/container by recycling if possible otherwise dispose of via approved handler

Classification:

Oxidizing solids (Category 2)
 Acute toxicity, Oral (Category 4)
 Skin irritant (Category 2)
 Eye irritant (Category 2A)

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. Severe exposure could cause pulmonary damage. Inhalation may cause lung edema. The symptoms may be aggravated by physical effort.

Skin Contact: Harmful by skin contact or causes irritation.

- 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. Pregnant women should take measures to avoid exposure.
- 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 impurities: listed metals).

3. COMPOSITION / INFORMATION ON INGREDIENTS

Components	% wt	CAS Registry #	PEL mg/m ³	TLV-TWA mg/m ³	TLV-STEL mg/m ³
INDIUM NITRATE	100	13770-61-1/237-393-5			
		(US)	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

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:** Oxidizer **Method:** Not established.
- Auto-ignition Temperature:** Not established.
- Flammable Limits:** Limits not established.
- 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. Keep sources of ignition away. 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. Keep away from sources of ignition.

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 a particulate filter is recommended under certain circumstances where airborne concentrations are expected to be elevated.

Skin: Gloves are recommended when handling solids.

Other: Lab coat, apron & eyewash fountain in work area. Avoid the use of contact lenses in high fume 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:	White to colorless	Boiling Point:	Decomposes
Odor:	Slight nitric acid odor	Melting Point:	- 2 H ₂ O @100C
Specific Gravity:	NA	pH:	Not applicable
Vapor Pressure:	Not applicable.	Solubility in Water:	Soluble in water
Vapor Density:	Not applicable	Molecular Weight:	300.85

10. STABILITY AND REACTIVITY

General: Stable.

Conditions to Avoid: Not established.

Incompatible Materials: Nitrates

Hazardous Decomposition / Combustion: Toxic fumes NO_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

RTEC# NL1750000

LD50 Oral-mouse-3,300 mg/kg

Reproductive toxicity-hamster-intravenous

Effects on Fertility: Post-implantation mortality

Developmental toxicity-hamster-intravenous

Specific developmental abnormalities: musculoskeletal system

Developmental toxicity – hamster-intravenous

Effects on Embryo or fetus: fetal death

12. ECOLOGICAL INFORMATION

No information is available

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.

14. TRANSPORT INFORMATION

Transport in accordance with applicable regulations and requirements.

UN 1477, Nitrates, Inorganic, N.O.S., 5.1, PG III



North America Emergency Guide Book – Guide 140

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 is classified in accordance with the Mexican regulations, NOM-018-STPS-2015 and NOM-010-STPS-2014.

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 levels of impurities: listed metals).

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

Regulatory Information China:

This product has been classified using the Chinese Occupational Exposure Limit for Hazardous Agents in the Workplace, GBZ2-2007.

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 17519-2013 Safety Data Sheets for Chemical Products

Malaysia – OCCUPATIONAL SAFETY AND HEALTH (CLASSIFICATION, LABELING AND SAFETY DATA SHEET OF HAZARDOUS CHEMICALS) REGULATION OCTOBER 2013 – (CLASS).

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:	2
	Special Hazard	OX

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