



## SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier:** INDIUM MONO IODIDE

**SDS Number:** SDS-6002

**Revised Date:** 21 DECEMBER 2018

**Product Use:** Industrial Use: Indium iodide (IIn)

#### MANUFACTURER:

##### In America:

**The Indium Corporation of America®.**  
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##### In Europe:

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##### In China:

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<http://www.indium.com>

## 2. HAZARDS IDENTIFICATION

### PRIMARY ROUTES OF ENTRY:

\*Inhalation \*Eye \*Ingestion \*Skin NTP IARC OSHA \*Not Listed

GHS



Signal Word: Danger

### Hazard statement(s)

H302 Harmful if swallowed  
 H315 Causes skin irritation  
 H319 Causes serious eye irritation  
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled  
 H335 May cause respiratory irritation

### Precautionary statement(s)

P233 Keep container tightly closed  
 P261 Avoid breathing dust/fume/gas/mist/vapors/spray  
 P264 Wash skin thoroughly after handling  
 P270 Do not eat, drink or smoke when using this product  
 P271 Use only outdoors or in well-ventilated area  
 P273 Avoid release to the environment  
 P280 Wear protective gloves/protective clothing/eye protection/face protection  
 P285 In case of inadequate ventilation wear respiratory 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)  
 P332 + P313 If skin irritation occurs: Get medical advice/attention  
 P337 + P313 If eye irritation persists: Get medical advice/attention  
 P405 Store locked up  
 P501 Dispose of contents/container to an approved waste disposal plant or recycle if possible

### Classification:

Acute toxicity, Oral – Category 4  
 Skin irritation- Category 2  
 Eye irritation – Category 2A  
 Respiratory sensitization – Category 1  
 Specific target organ toxicity- single exposure – Category 3

### POTENTIAL HEALTH EFFECTS:

**Eye Contact:** May cause severe irritation and possible burns.

**Ingestion:** Harmful if swallowed. 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. Allergy or asthma like effects may occur.

**Skin Contact:** Causes skin 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.
- Pulmonary edema/pneumonitis/dental erosion/malaise.
- Other:** Hygiene practices should be in place when handling this product. Avoid breathing dust. The toxicological properties of this material have not been fully investigated.
- Note:** 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 amounts of lead] which is known to the State of California to cause cancer, and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

| Components    | % wt | CAS Registry #/EINECS# | PEL<br>mg/m <sup>3</sup> | TLV-TWA<br>mg/m <sup>3</sup> | TLV-STEL<br>mg/m <sup>3</sup> |
|---------------|------|------------------------|--------------------------|------------------------------|-------------------------------|
| INDIUM IODIDE | 100  | 13966-94-4/237-746-3   | 0.1 (as Indium*)         | 0.1                          | N.E.                          |
|               |      | (EU)                   | N.E.                     | 0.1 (as Indium)              | 0.3                           |
|               |      | (Canada)               | N.E.                     | 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 EU = EUROPEAN EXPOSURE LIMITS  
 \* 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.

|  |  |
|--|--|
| <b>Flammable Limits:</b>                 | Limits not established. Not flammable.   |
| <b>Extinguishing Media:</b>              | Use extinguishers appropriate for the surrounding fire conditions.   |
| <b>Special Fire Fighting Procedures:</b> | Firefighters must wear NIOSH approved or equivalent self-contained breathing apparatus and full protective clothing. |

## 6. ACCIDENTAL RELEASE MEASURES

|                                  |   |
|----------------------------------|---|
| <b>Spill or Leak Procedures:</b> | 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

|                             |   |
|-----------------------------|---|
| <b>Handling:</b>            | Keep containers tightly closed when not in use. Use care to avoid spills. Wear appropriate personal protective equipment. Avoid breathing dust, vapor, mist or gas. Always thoroughly wash your hands after handling this product. DO NOT touch or rub eyes until hands are washed. |
| <b>Storage Precautions:</b> | Store product in tightly capped original containers in a cool, well ventilated and dry area.  |

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

|                              |  |
|------------------------------|--|
| <b>Engineering Controls:</b> | Local and/or Mechanical (general) exhaust ventilation is recommended to control any air contaminants.  |
| <b>Personal protection:</b>  |  |
| <b>Eyes:</b>                 | Wear chemical safety glasses/goggles.  |
| <b>Respirator:</b>           | A NIOSH approved air-purifying respirator with a particulate filter is recommended under certain circumstances where airborne concentrations are expected to be elevated.  |
| <b>Skin:</b>                 | Gloves are recommended when handling solids.   |
| <b>Other:</b>                | Lab coat, apron, eyewash fountain in work area. Avoid the use of contact lenses in high fume areas.  |
| <b>Work/Hygienic</b>         | 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>       | Solid – black/purplish    | <b>Boiling Point:</b>    | No information available |
| <b>Odor:</b>             | Odorless                  | <b>Melting Point:</b>    | No information available |
| <b>Hygroscopic:</b>      | Absorbs moisture from air | <b>pH:</b>               | Not applicable           |
| <b>Specific Gravity:</b> | No information available  |                          |                          |
| <b>Vapor Pressure:</b>   | Not applicable.           |                          |                          |
| <b>Vapor Density:</b>    | No information available  | <b>Molecular Weight:</b> | 241.72 g/mol             |

**10. STABILITY AND REACTIVITY**

**General:** Stable.  
**Conditions to Avoid:** No data available.  
**Incompatible Materials:** Oxidizing agents  
**Hazardous Decomposition / Combustion:** Indium and indium oxides  
**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

**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

Prolonged exposures to iodides may product iodism in sensitive individuals. Symptoms of exposure include: skin rash, running nose, headache and irritation of the mucous membrane.

Possible stomach irregularities-based on human evidence.

**12. ECOLOGICAL INFORMATION**

Product not tested.

**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. Not regulated under the Department of Transportation.

North America Emergency Guide Book – Not applicable

UN- NONE

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.).

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

WHMIS: Insufficient data available at this time.



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

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

### In China:

This product has been classified using the Chinese Occupational 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 17517-2013

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).

This product has been classified in accordance with the guidelines 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

|                            |                    |   |
|----------------------------|--------------------|---|
| <b>HMIS Hazard Rating:</b> | <b>Health:</b>     | 2 |
|                            | <b>Fire:</b>       | 0 |
|                            | <b>Reactivity:</b> | 0 |

**Revised Date:** 21 DECEMBER 2018

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

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