1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: 16-1000 THINNER
SDS Number: SDS-HG400
Revised Date: 9 SEPTEMBER 2016
Product Use: INDUSTRIAL THINNER USED IN SOLDERING APPLICATIONS

MANUFACTURER:

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

The Indium Corporation of America
80 Scott Street
Elk Grove Village, Illinois 60004
(847) 439-9135

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
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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:**

- Eye
- Inhalation
- Skin
- Ingestion

<table>
<thead>
<tr>
<th>Carcinogen listed in</th>
</tr>
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<tbody>
<tr>
<td>NTP</td>
</tr>
<tr>
<td>IARC</td>
</tr>
<tr>
<td>OSHA</td>
</tr>
<tr>
<td>Not Listed</td>
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</table>

**GHS**

![GHS Symbols]

Signal Word: Danger

**Hazard statement(s)**

- H225  Highly flammable liquid and vapor
- H319  Causes serious eye irritation
- H336  May cause drowsiness or dizziness

**Precautionary statement(s)**

- P210  Keep away from heat/sparks/open flames/hot surfaces – No smoking
- P233  Keep container tightly closed
- P240  Ground/Bond container and receiving equipment
- P241  Use explosion-proof electrical/ventilating/lightening/equipment
- P242  Use only non-sparking tools
- 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/protection clothing/eye protection/face protection
- P362  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 + 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:**

- Flammable Liquid – Category 2
- Eye irritation – Category 2A
- Specific target organ toxicity- single exposure – Category 3- central nervous system

**POTENTIAL HEALTH EFFECTS:**

**Eye Contact:** Vapors may be irritating, liquid may damage eye tissue.

**Ingestion:** May cause persistent nausea, vomiting and abdominal pain.

**Inhalation:** Vapor may cause headaches and or dizziness. High concentrations may cause central nervous system depression.

**Skin Contact:** Prolonged contact may cause irritation and dermatitis.

**Chronic:** Repeated skin contact can cause dryness.
3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>% wt</th>
<th>CAS Registry #</th>
<th>PEL mg/m³</th>
<th>TLV-TWA mg/m³</th>
<th>TLV-STEL mg/m³</th>
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<tbody>
<tr>
<td>ISOPROPANOL</td>
<td>100</td>
<td>67-63-0 (US)</td>
<td>980</td>
<td>983</td>
<td>1225</td>
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<tr>
<td>PROPan-2-OL (IPA)</td>
<td></td>
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<td></td>
<td></td>
<td>(Germany)</td>
<td>-</td>
<td>980</td>
<td>-</td>
</tr>
</tbody>
</table>

N.E. = Not established  EU = European Exposure Limits  IDLH Level  12,000 ppm (IPA)

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: 120°C (53°F)  Method: Closed Cup
Auto-ignition Temperature: 750 F
Flammable Limits: Upper: 12 ; Lower 2
Extinguishing Media: Dry chemical, CO₂, Dry sand, alcohol foam. Use extinguishers appropriate for the surrounding fire conditions.
Special Fire Fighting Procedures: Wear protective clothing and self-contained breathing apparatus. Use water to cool fire exposed containers. Flammable vapors may travel great distances to ignition source and flash back.

6. ACCIDENTAL RELEASE MEASURES
   Spill or Leak Procedures: DO NOT allow material to enter sewer system or waterway. Wear personal protective equipment. Eliminate sources of ignition. Use non-sparking tools. Ventilate area in accordance with regulations. Dispose of following all Federal, State and Local regulations. In the EU refer to the Special Waste Regulations. Classified as a flammable liquid.

7. HANDLING AND STORAGE
   Handling Precautions: Keep containers tightly closed when not in use. Use care to avoid spills. Wear personal protective equipment.
   Storage Precautions: Store product in tightly capped original containers in a cool, dry area. Keep away from sources of ignition. Refer to product label for specific storage temperature requirements. Rotate stock to ensure use before expiration date on the label.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION
   Engineering Controls: Face velocity >2.1 cubic feet/minute in confined areas. Exhaust ventilation recommended when there is a potential for exposure. Heating of product requires ventilation and care when heating a flammable material.
   Personal protection:
   Eyes: Chemical safety glasses/goggles. Face shield/goggles for splash hazards.
   Respirator: An approved or compliant marked air-purifying respirator with a fume/organic chemical cartridge is recommended where airborne concentrations are expected to be elevated.
   Skin: Compatible chemical resistant gloves. Use gloves such as nitrile, which are compatible with alcohol.
   Other: Lab coat, eye-wash fountain in work area. Avoid the use of contact lenses in high fume/splash 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: Colorless liquid
   Boiling Point: 82°C (180°F)
   Odor: Alcohol odor. 22ppm threshold
   Evaporation Rate: 2.4
   Specific Gravity: 0.790 @ 60°F
   pH: Neutral
<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vapor Pressure</td>
<td>44 mm HG @ 25 F</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Miscible</td>
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<tr>
<td>Vapor Density</td>
<td>2.1 (air=1)</td>
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<tr>
<td>% Volatiles by volume</td>
<td>100</td>
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<tr>
<td>Molecular Weight</td>
<td>60.1</td>
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<tr>
<td>Flash Point</td>
<td>54F (12C)</td>
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<tr>
<td>Molecular Formula</td>
<td>C3 H8 O</td>
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</tbody>
</table>

### 10. STABILITY AND REACTIVITY

**General:** Stable.

**Conditions to Avoid:** Direct heat, open flames and storage in aluminum.

**Incompatible Materials:** Anhydrides, halogens, phosphorus, trichlorides, monomers, aldehydes, acids

**Hazardous Decomposition / Combustion:** Carbon dioxide/carbon monoxide, peroxides.

**Hazardous Polymerization:** Will not occur.

### 11. TOXICOLOGICAL INFORMATION

**Carcinogenicity:**
- National Toxicity Program (NTP): No
- Occupational Safety & Health Administration (OSHA): No
- International Agency for Research on Cancer (IARC): No

**LD50:** Not established.

**LC50:** Not established.

**NIOSH RTECS – NT8050000**

Oral rat LD50 - 4396 mg/kg
Dermal rat LD50 – 12800 mg/kg
Dermal rabbit – 12870 mg/kg
Inhalation rat – 72.6 mg/l 4 h

### 12. ECOLOGICAL INFORMATION

- Freshwater Algae – 1000 mg/l EC50 >72h
- Freshwater Fish – 1400000 ug/l LC50 96h
- Water Flea – 13299 mg/l EC50 48 h

No other 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. Flammable liquid classification. Recycle/reuse if possible. Empty containers should be considered as hazardous as they contain product residues.
14. TRANSPORT INFORMATION

Transport in accordance with applicable regulations and requirements.
UN 1219, Isopropanol, 3, PG II


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: Only those who manufacture by the strong acid process are subject.
CERCLA: Reportable Quantity (RQ) 100 lbs.

All ingredients are listed on the EPA TSCA Inventory, listed on the Philippines Inventory of Chemicals and Chemical Substances 2000, listed on the Canadian DSL and listed under EINECS # 200-661-7.

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

WHMIS: Class B2 Flammable Liquid, D2B Toxic Material Causing Other Toxic Effects (eye irritation in animals).

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

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 is in full compliance with the RoHS European Directive regarding the use of certain hazardous substances in electrical and electronic equipment.

16. OTHER INFORMATION

HMIS Hazard Rating:

Health: 2
Fire: 3
Reactivity: 0

Revised Date: 9 SEPTEMBER 2016
Prepared by: Nancy Swarts, Indium Corporation of America
Approved by: Nancy Swarts, Indium Corporation of America

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