SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier:    FP-300 FLUX
SDS Number:    SDS-4317
Revised Date:    13 MARCH 2018
Product Use:    Industrial Use - Rework Flux

MANUFACTURER:

In America:
The Indium Corporation of America®.
34 Robinson Rd., Clinton, NY  13323
Information: (315) 853-4900
nswarts@indium.com

In Europe:
The Indium Corporation of America® (European Operations)
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Kingston, Milton Keynes, UK, MK 10 OAG
Information: +44 [0] 1908 580400

In Asia:
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Asia-Pacific Operations-Singapore
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Singapore 628908
Information: +65 6268-8678

EMERGENCY PHONE:
CHEMTREC 24 hrs.
USA: 1 (800) 424-9300
Outside USA: +1 (703) 527-3887

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
### 2. HAZARDS IDENTIFICATION

#### PRIMARY ROUTES OF ENTRY:

<table>
<thead>
<tr>
<th>Route</th>
<th>Carcinogen listed in</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye</td>
<td>NTP</td>
</tr>
<tr>
<td>Inhalation</td>
<td>IARC</td>
</tr>
<tr>
<td>Skin</td>
<td>OSHA</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

**GHS:**

- **Signal Word:** Danger
- **Hazard Statements:**
  - H225  Highly Flammable liquid and vapor
  - H315  Causes skin irritation
  - 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 container and receiving equipment
- 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
- 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)

**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:

Moderately irritating to the eyes and if not removed promptly, may result in serious eye injury. Do not allow material to come in contact with the eyes.

#### Ingestion:

May cause irritation. May be harmful if swallowed.

#### Inhalation:

Heated vapor concentrations may cause irritation.

#### Skin Contact:

Causes skin irritation.

#### Chronic:

Not established.

**NOTE:**

The Indium Corporation does not recommend, manufacture, market or endorse any of its products for human consumption.
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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<tr>
<td>ISOPROPYL ALCOHOL</td>
<td>50-60</td>
<td>67-63-0</td>
<td>980</td>
<td>983</td>
<td>1230</td>
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<tr>
<td>(EU)</td>
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<td>-</td>
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<td>700</td>
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<tr>
<td>PROPRIETARY</td>
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<td>N.E.</td>
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</tbody>
</table>

N.E. = Not established  EU = European Union Occupational Exposure Limits

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:** 11°C (52°F)  **Method:** Not available.

**Auto-ignition Temperature:** Not established.

**Flammable Limits:** Limits not established, Flammable

**Extinguishing Media:** Use extinguishers appropriate for the surrounding fire conditions. Foam, dry chemical, water spray.

**Special Fire Fighting Procedures:** Firefighters must wear NIOSH approved self-contained breathing apparatus and full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

**Spill or Leak Procedures:** Wear a respirator and appropriate personal protection (See Exposure Controls/Personal Protective Section). Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Dispose of following all Federal, State and Local regulations. In the EU refer to the Special Waste Regulations.
7. HANDLING AND STORAGE

Handling: Keep containers tightly closed when not in use. Use care to avoid spills. Avoid breathing vapors from heated material. Avoid contact with eyes, skin and clothing. Use with adequate ventilation. Ground containers.

Storage Precautions: Store product in tightly capped original containers in a cool, dry area. Keep away from heat and flame. Store away from incompatible materials. Empty containers may be hazardous as they contain product residue.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Ventilation exhaust is required to control airborne levels.

Personal protection:

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

Respirator: An authority approved or compliant marked air-purifying respirator with a fume/organic chemical cartridge is recommended under certain circumstances where airborne concentrations are expected to be elevated.

Skin: Compatible chemical resistant gloves. Protective outer garment, apron. Sleeves as appropriate.

Other: Eyewash fountain in work area. Avoid the use of contact lenses in high fume/vapor areas.

Work/Hygienic Practices: Maintain good housekeeping. Clean up spills immediately.

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: Liquid

Boiling Point: Not applicable.

Odor: Mild characteristic odor.

Melting Point: Not applicable

Specific Gravity: 0.9102

pH: Not applicable

Vapor Pressure: Not applicable.

Solubility in Water: Not established

Vapor Density: (air=1) Not applicable.

10. STABILITY AND REACTIVITY

General: Stable.

Conditions to Avoid: High temperatures, open flame, strong reducing agents.

Incompatible Materials: Not established

Hazardous Decomposition / Combustion: Not established

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Carcinogenicity: NTP: No

OSHA: No

IARC: No

LD50: Not established.

LC50: Not established.
Oral LD50 (isopropyl alcohol)
LD50 Oral- rat- 5,045 mg/kg
Inhalation LC50 (isopropyl alcohol)
LC50 inhalation-rat-8h-16000 ppm
Dermal LD50
LD50 – Dermal- rabbit-12,800 mg/kg
RTECS: Isopropyl alcohol NT8050000

12. ECOLOGICAL INFORMATION
   Product not tested.

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.

   Shipping Name:  UN 1219, Isopropanol, 3, PG II (mixture)

   Marine Pollutant: No

   Shipping small quantities: Ground ONLY

   40 CFR 173.150 - Exceptions for Class 3 (Flammable Liquids). Limited quantities of flammable liquids, Class 3, are excepted from labeling requirements for ground shipment only. For Packing Group II, inner packaging not over 5.0L (1.3 gallons) net capacity each, packed in a strong outer packaging.

   40 CFR 172.203 – Limited quantities- when a shipping paper is required the description for a material offered for transportation as “limited quantity” must include the words “Limited Quantity” following the basic description.

   Shipping:  UN 1219, Isopropanol, 3, PG II (Limited Quantity) (mixture)

   Shipping via aircraft requires compliance with the regulations and not under exceptions.

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
All ingredients are listed on the EPA TSCA Inventory.

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulation (CPR). Product ingredients are listed on the Canadian DSL.

Canadian WHMIS: Class B Division 2 Flammable, 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.

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 30000.2-9-2013, 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 Exposure 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.

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>HMIS Hazard Rating:</th>
<th>Health:</th>
<th>2</th>
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<tbody>
<tr>
<td></td>
<td>Fire:</td>
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<tr>
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<td>Physical Hazards:</td>
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</table>

Revised Date: 13 MARCH 2018

Prepared by: Nancy Swarts, Indium Corporation of America

Approved by: Nancy Swarts, Indium Corporation of America

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