# SAFETY DATA SHEET

## 1. PRODUCT AND COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th>Product Identifier:</th>
<th>TACFLUX 483</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDS Number:</td>
<td>SDS-4259</td>
</tr>
<tr>
<td>Revised Date:</td>
<td>20 MARCH 2018</td>
</tr>
</tbody>
</table>

**Product Use:** Industrial use - No Clean 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)
7 Newmarket Ct
Kingston, Milton Keynes, UK, MK 10 OAG
Information: +44 [0] 1908 580400

**In Asia:**
Indium Corporation of America
Asia-Pacific Operations-Singapore
29 Kian Teck Avenue
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>Eye</th>
<th>Inhalation</th>
<th>Skin</th>
<th>Ingestion</th>
<th>Carcinogen listed in</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>NTP IARC OSHA Not Listed</td>
</tr>
</tbody>
</table>

### GHS:

- **Signal Word:** Warning

- **Hazard statement(s):**
  - H317: May cause an allergic skin reaction
  - H319: Causes eye irritation
  - H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled
  - EUH208: Contains rosin. May produce an allergic reaction

- **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 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:
- Skin sensitization- Category 1B
- Serious eye irritation- Category 2A
- Respiratory sensitizer- Category 1B

### POTENTIAL HEALTH EFFECTS:

#### Eye Contact:
Irritating to the eyes and if not removed promptly.

#### Ingestion:
May be harmful if swallowed. May cause irritation.

#### Inhalation:
Heated vapor concentrations may be harmful if inhaled. Irritating to the respiratory tract. Rosin has been known to cause occupational asthma.

#### Skin Contact:
May cause skin irritation. Allergic reactions are possible, especially with repeated or prolonged exposure. Rosin may cause dermatitis.

#### 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>
</tr>
</thead>
<tbody>
<tr>
<td>ROSIN</td>
<td>48-54</td>
<td>65997-05-9</td>
<td>N.E.</td>
<td>N.E.</td>
<td>N.E.</td>
</tr>
<tr>
<td>POLYGLYCOL ETHER</td>
<td>32-38</td>
<td>9038-95-3</td>
<td>N.E.</td>
<td>N.E.</td>
<td>N.E.</td>
</tr>
<tr>
<td>PROPRIETARY AMINE</td>
<td>1</td>
<td></td>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>(Singapore)</td>
<td></td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PROPRIETARY ACTIVATORS</td>
<td>7-14</td>
<td></td>
<td>N.E.</td>
<td>N.E.</td>
<td>N.E.</td>
</tr>
</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:** Not applicable  **Method:** Not applicable

**Auto-ignition Temperature:** Not established

**Flammable Limits:** Limits not established

**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.
7. HANDLING AND STORAGE

Handling

Precautions: 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.

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: Local exhaust ventilation is necessary to control airborne levels. Use exhaust ventilation.

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 such, as nitrile should be worn. Protective outer garment, apron and sleeves as appropriate.

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

Boiling Point: Not established

Odor: Slight characteristic odor.

Melting Point: Not applicable

Specific Gravity: Not established

pH: Not applicable

Vapor Pressure: Not applicable.

Vapor Density: (air=1) Not applicable.

10. STABILITY AND REACTIVITY

General: Stable.

Conditions to Avoid: High temperatures, open flame.

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.
Other: None known

12.  ECOLOGICAL INFORMATION
    Product not tested.
    Contains substances that may be harmful to the aquatic environment.

13.  DISPOSAL CONSIDERATION
    Waste Disposal Method: Dispose of in accordance with all Federal, State and Local environmental regulations.

14.  TRANSPORT INFORMATION
    Transport in accordance with applicable regulations and requirements. Not classified as hazardous in shipping under US DOT. Non-hazardous under shipping modes.
    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).
    Canadian WHMIS: D2B Materials Causing Other Toxic Effects -irritant
    This product has been classified in accordance with the guidelines set, by the Dept of Industrial Health of the Republic of Singapore.
    This product has been classified in accordance with Mexican regulations NOM-0180STPS-2015 and NOM-010-STPS-2014.
    Regulatory Information China:
    GB/T 16483-2008, GB/T 17519-2013, Safety Data Sheets for Chemical Products
    GB 30000.2-29-2013, Rules for classification and labeling of chemicals (GHS)
    Decree No. 591: Regulations on the Control Over Safety of Hazardous Chemicals.
    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: Malaysian – OCCUPATIONAL SAFETY AND HEALTH (CLASSIFICATION, LABELING AND SAFETY DATA SHEET OF HAZARDOUS CHEMICALS) REGULATION OCTOBER 2013 – (CLASS)
All ingredients are listed on the EPA TSCA Inventory.

16. OTHER INFORMATION

HMIS Hazard Rating:  
- Health: 1  
- Fire: 1  
- Reactivity: 0

Revised Date: 20 MARCH 2018
Prepared by: Nancy Swarts, Indium Corporation of America
Approved by: Nancy Swarts, Indium Corporation of America

The information and recommendations contained herein are, to the best of The Indium Corporation of America's knowledge and belief, accurate and reliable as of the date issued. The Indium Corporation of America does not warrant or guarantee their accuracy or reliability, and The Indium Corporation of America shall not be liable for any loss or damage arising out of the user thereof. The information and recommendations are offered for the user's consideration and examination, and it is the user's responsibility to satisfy itself that they are suitable and complete for its particular use. If buyer repackages this product, legal counsel should be consulted to insure proper health, safety and other necessary information is included on the container.