SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: TACFLUX 108HF
SDS Number: SDS-7340
Revised Date: 7 FEBRUARY 2019
Product Use: Industrial Use - Flux Material (IPN: FLUXOT-84670)

MANUFACTURER:

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

EMERGENCY PHONE:
CHEMTREC 24 hrs.
USA: 1 (800) 424-9300
Outside USA: +1 (703) 527-3887
In China: Emergency 86+ 4008417580

In Europe:
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

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
3. **HAZARDS IDENTIFICATION**

**PRIMARY ROUTES OF ENTRY:**

<table>
<thead>
<tr>
<th></th>
<th>Eye</th>
<th>Inhalation</th>
<th>Skin</th>
<th>Ingestion</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**Carcinogen listed in**

<table>
<thead>
<tr>
<th></th>
<th>NTP</th>
<th>IARC</th>
<th>OSHA</th>
<th>XNot Listed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**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** 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:**

- Eye irritant- Category 2A
- Skin sensitizer- Category 1B
- Respiratory sensitizer – Category 1B

**POTENTIAL HEALTH EFFECTS:**

**Eye Contact:** Irritating to the eyes and if not removed promptly, may result in serious irritation or harm.

**Ingestion:** May cause irritation

**Inhalation:** Heated vapor concentrations may be harmful if inhaled. Rosin has been known to cause occupational asthma.

**Skin Contact:** Brief contact may cause slight irritation with itching and local redness. Allergic reaction may occur with prolonged exposure.

**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>TLV-TWA mg/m³</th>
<th>PEL mg/m³</th>
<th>TLV-STEL mg/m³</th>
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</thead>
<tbody>
<tr>
<td>ROSIN</td>
<td>50-60</td>
<td>65997-05-9(US)</td>
<td>N.E.</td>
<td>N.E.</td>
<td>N.E.</td>
</tr>
<tr>
<td>(EU)</td>
<td></td>
<td></td>
<td>0.05</td>
<td>N.E.</td>
<td>0.15(sensitiser)</td>
</tr>
<tr>
<td>(Canada)</td>
<td></td>
<td></td>
<td>N.E.</td>
<td>N.E.</td>
<td>N.E.</td>
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<tr>
<td>(Mexico)</td>
<td></td>
<td></td>
<td>N.E.</td>
<td>N.E.</td>
<td>N.E.</td>
</tr>
<tr>
<td>POLYGLYCOL ETHER</td>
<td>19-35</td>
<td>9038-95-3</td>
<td>N.E.</td>
<td>N.E.</td>
<td>N.E.</td>
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<tr>
<td>MODIFIED ADDITIVES</td>
<td>5 – 31</td>
<td>-</td>
<td>N.E.</td>
<td>N.E.</td>
<td>N.E.</td>
</tr>
</tbody>
</table>

N.E. = Not established

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.

Flammable Limits: Limits not established.

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

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

6. ACCIDENTAL RELEASE MEASURES

Spill or Leak Procedures: Wear respirator and other personal protective clothing. (See Exposure Controls/Personal Protection Section). Extinguish or remove all sources of ignition. Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Keep unnecessary personnel away.
7. HANDLING AND STORAGE
Handling: Avoid breathing vapors from heated material. Avoid contact with eyes, skin and clothing.
Precautions: Follow routine safe handling procedures. Use with adequate ventilation.
Storage Precautions: Keep away from heat and flame. Store in suitable, tightly capped, and labeled containers in cool dry, well-ventilated area. 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 recommended especially during heating.
Personal protection:
Eyes: Chemical safety glasses/goggles. Face shield for splash hazards.
Respirator: A NIOSH approved or EU compliant CE 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.
Other: Lab coat, eye-wash 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: Flux
Boiling Point: Not applicable.
Odor: Slight characteristic odor.
Melting Point: Not applicable
Specific Gravity: Not applicable.
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. Freezing temperatures
Incompatible Materials: Not established
Hazardous Decomposition / Combustion: Carbon monoxide
Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION
Carcinogenicity: NTP: No
OSHA: No
IARC: No
LD50: Not established. LC50: Not established.
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. Not regulated under US DOT (United States Department of Transportation).

UN – NONE  IATA/IMDG - 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.

All ingredients are listed on the EPA TSCA Inventory.

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).
16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>HMIS Hazard Rating:</th>
<th>Health: 1</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Fire: 1</td>
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<td>Reactivity: 0</td>
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</tbody>
</table>

Revised Date: 7 FEBRUARY 2019

Prepared by: Nancy Swarts, Indium Corporation of America

Approved by: Nancy Swarts, Indium Corporation of America

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