SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: TACFLUX 020-UV
SDS Number: SDS-4640
Revised Date: 2 MAY 2018

Product Use: Industrial Use- Soldering flux with ultra violet indicator

MANUFACTURER:

In America:
The Indium Corporation of America®.
34 Robinson Rd., Clinton, NY 13323
Information: (315) 853-4900
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Singapore 628908
Information: +65 6268-8678

EMERGENCY PHONE:
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In China:
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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:**
- Eye
- Inhalation
- Skin
- Ingestion

**Carcinogen listed in:**
- NTP
- IARC
- OSHA
- Not Listed

**GHS**

<table>
<thead>
<tr>
<th>Signal Word: Warning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>H317</strong></td>
</tr>
<tr>
<td><strong>H334</strong></td>
</tr>
<tr>
<td><strong>H335</strong></td>
</tr>
<tr>
<td><strong>EUH208</strong></td>
</tr>
</tbody>
</table>

**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 irritation-Category 2
- Respiratory sensitization-Category 1B
- Respiratory irritation- Category 3

**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 be harmful if swallowed. May cause irritation.

**Inhalation:** Heated vapor concentrations may be harmful if inhaled. Irritating to respiratory tract. Rosin may cause occupational asthma.

**Skin Contact:** May cause skin irritation. Allergic reactions are possible, especially with repeated or prolonged exposure.
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>30-40</td>
<td>65997-05-9 (US)</td>
<td>N.E.</td>
<td>N.E.</td>
<td>N.E.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(EU) 0.05</td>
<td>N.E.</td>
<td>0.15 (sensitiser)</td>
<td></td>
</tr>
<tr>
<td>POLYGLYCOL ETHER</td>
<td>25-35</td>
<td>9038-95-3</td>
<td>N.E.</td>
<td>N.E.</td>
<td>N.E.</td>
</tr>
<tr>
<td>PROPRIETARY</td>
<td>25-40</td>
<td>N.E.</td>
<td>N.E.</td>
<td>N.E.</td>
<td>N.E.</td>
</tr>
<tr>
<td>PROPRIETARY UV TRACER</td>
<td>0-0.8</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: >200 F  Method: ASTM D93-02A

Auto-ignition Temperature: Not established.

Flammable Limits: Limits not established, not flammable.

Extinguishing Media: Use extinguishers appropriate for the surrounding fire conditions.

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 Protective (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 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: Good general ventilation should be sufficient to control airborne levels.

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. 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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Flux</td>
</tr>
<tr>
<td>Odor</td>
<td>Mild characteristic odor.</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>(air=1) Not applicable.</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Insoluble</td>
</tr>
<tr>
<td>VOC</td>
<td>&lt;487,000 ug/kg</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

General: Stable.

Conditions to Avoid: Freezing temperatures. High temperatures.

Incompatible Materials: Not established

Hazardous Decomposition / Combustion: Harmful organic fumes and toxic oxide fumes may form at elevated temperatures.

Hazardous Polymerization: Will not occur.
11. TOXICOLOGICAL INFORMATION

Carcinogenicity:
- NTP: No
- OSHA: No
- IARC: No

LD50: Not established.  LC50: Not established.

Other: None known. Does not contain any carcinogens.

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 international regulations and requirements. Not regulated under US DOT (United States Department of Transportation).


UN – none
Not regulated - IATA

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).

WHMIS: Not classified because of insufficient information.

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 the Mexican guidelines, NOM-018-STPS-2015 and NOM –010-STPS-2014.

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).

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.

SARA 313 Listing - 40 CFR 372.65 - None
All ingredients are listed on the EPA TSCA Inventory.

16. OTHER INFORMATION

HMIS Hazard Rating:

- Health: 1
- Fire: 1
- Reactivity: 0

Revised Date: 2 MAY 2018
Prepared by: Nancy Swarts, Indium Corporation of America
Approved by: Nancy Swarts, Indium Corporation of America

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