SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: TACFLUX 016C
SDS Number: SDS-IN TF4039  Revised Date: 21 MAY 2018
Product Use: Industrial Use- Tacflux

MANUFACTURER:

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

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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: X Eye x Inhalation x Skin x Ingestion

Carcinogen listed in
NTP IARC OSHA x Not Listed

GHS

Signal Word: Danger

Hazard Statements:
H225 Highly Flammable liquid and vapor
H317 May cause an allergic skin reaction
H319 Causes serious eye irritation
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
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
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 + 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
Eye irritant – (Category 2A)
Flammable liquids - (Category 2)
Skin irritation- (Category 3)
Specific target organ systemic 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.

Inhalation: Heated vapor concentrations may be harmful if inhaled. Irritating to the respiratory tract. May cause headache, nausea or light headedness. 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 product's for human consumption.
## 3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>% wt</th>
<th>CAS Registry #</th>
<th>PEL mg/m³</th>
<th>TLV-TWA mg/m³</th>
<th>TLV-STELE mg/m³</th>
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<tbody>
<tr>
<td>ROSIN</td>
<td>20-23</td>
<td>65997-05-9 (US)</td>
<td>N.E.</td>
<td>N.E.</td>
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<tr>
<td></td>
<td></td>
<td>(EU) 0.05</td>
<td>N.E.</td>
<td>0.15 (sensitiser)</td>
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<tr>
<td>ISOPROPYL ALCOHOL</td>
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<td>67-63-0 (US)</td>
<td>980</td>
<td>983</td>
<td>1230</td>
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<tr>
<td></td>
<td></td>
<td>(EU) -</td>
<td>999</td>
<td></td>
<td>1250</td>
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<td>(China) -</td>
<td>350</td>
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<td>700</td>
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<tr>
<td>POLYGLYCOL ETHER</td>
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<td>-</td>
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<td>N.E.</td>
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<tr>
<td>PROPRIETARY</td>
<td>15-35</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:** 12 C (54 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/carbon dioxide/water/dry chemical).  
- **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 is recommended and 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. 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>
<th>Property</th>
<th>Value</th>
</tr>
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<tbody>
<tr>
<td>Appearance</td>
<td>Flux</td>
<td>Boiling Point</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Odor</td>
<td>Alcoholic characteristic odor.</td>
<td>Melting Point</td>
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</tr>
<tr>
<td>Specific Gravity</td>
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<td>pH</td>
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</tr>
<tr>
<td>Vapor Pressure</td>
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<td>Solubility in Water</td>
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<tr>
<td>Vapor Density</td>
<td>(air=1) Not applicable.</td>
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</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.  
Other: None known

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 international 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.).

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

Canadian WHMIS: Class B Division 2 Flammable, D2B Toxic Material Causing Other Toxic Effects (eye irritation in animals).  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.

Malaysia:  
This product has been classified in accordance with: Malaysian – OCCUPATIONAL SAFETY AND HEALTH
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.
All ingredients are listed on the China Chemical Inventory.

This product has been classified in accordance with Mexican regulations NOM-018-STPS-2015 and NOM-010-STPS-2014.

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

16. OTHER INFORMATION

HMIS Hazard Rating:  
Health: 2  
Fire: 3  
Reactivity: 0

Revised Date: 21 MAY 2018
Prepared by: Nancy Swarts, Indium Corporation of America
Approved by: Nancy Swarts, Indium Corporation of America

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