# 1. PRODUCT AND COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th><strong>Product Identifier:</strong></th>
<th>WF-9940 ROSIN FLUX</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SDS Number:</strong></td>
<td>SDS-4817</td>
</tr>
<tr>
<td><strong>Product Use:</strong></td>
<td>INDUSTRIAL USE - FLUX</td>
</tr>
<tr>
<td><strong>Revised Date:</strong></td>
<td>1 MAY 2015</td>
</tr>
</tbody>
</table>

**MANUFACTURER:**

**In America:**
The Indium Corporation of America  
1676 Lincoln Ave., Utica NY 13502  
Information: (315) 853-4900  
nswarts@indium.com

**In Europe:**
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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  
29 Kian Teck Avenue  
Singapore 628908  
Information: +65 6268-8678

**EMERGENCY PHONE:**
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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:**

- Eye
- Inhalation
- Skin
- Ingestion

<table>
<thead>
<tr>
<th>Carcinogen listed in</th>
<th>NTP</th>
<th>IARC</th>
<th>OSHA</th>
<th>Not Listed</th>
</tr>
</thead>
</table>

GHS – global harmonized system

Signal Word: Danger

**Hazard statement(s)**

- H225  Highly flammable liquid and vapor
- H319  Causes serious eye irritation
- H335  May cause respiratory 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/Bond 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 + 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 – isopropyl alcohol

Eye irritant – (Category 2A)

Flammable liquids - (Category 2)

Specific target organ systemic toxicity (single exposure) – (Category 3), Central nervous system

**POTENTIAL HEALTH EFFECTS:**

**Eye Contact:**  Vapors may be irritating, liquid may irritate or damage eye tissue.

**Ingestion:**  May result in gastric disturbances such as nausea and vomiting.

**Inhalation:**  May cause irritation, headache or dizziness. Rosin has been known to cause occupational asthma. Rosin may cause sensitization by inhalation.

**Skin Contact:**  Prolonged contact may cause irritation, dermatitis or sensitization.

**Chronic:**  Not established.

**NOTE:**  The Indium Corporation does not recommend, manufacture, market or endorse any of it's products for human consumption.
WARNING: This product contains a chemical known to the State of California to cause cancer and/or birth defects (or other reproductive harm). (trace levels of 1,4 dioxane)

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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</thead>
<tbody>
<tr>
<td>ISOPROPYL ALCOHOL</td>
<td>85-89</td>
<td>67-63-0 (US)</td>
<td>980</td>
<td>983</td>
<td>1230</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(EU)</td>
<td>-</td>
<td>999</td>
<td>1250</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Canada)</td>
<td>-</td>
<td>983</td>
<td>1228</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Singapore)</td>
<td>983</td>
<td>-</td>
<td>1230</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Mexico)</td>
<td>-</td>
<td>980</td>
<td>1225</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(China)</td>
<td>-</td>
<td>350</td>
<td>700</td>
</tr>
<tr>
<td>ROSIN</td>
<td>1-3</td>
<td>65997-05-9</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(EU)</td>
<td>0.05</td>
<td>-</td>
<td>0.15</td>
</tr>
<tr>
<td>MINERAL SPIRITS</td>
<td>8 - 11</td>
<td>8052-41-3</td>
<td>N.E.</td>
<td>N.E.</td>
<td>N.E.</td>
</tr>
<tr>
<td>PROPRIETARY</td>
<td>1-3</td>
<td>-</td>
<td>N.E.</td>
<td>N.E.</td>
<td>N.E.</td>
</tr>
<tr>
<td>ACTIVATORS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Symbol: XI, F
Risk Phrases: R36/37/38, R11, R67
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: 12C (54F) Method: TCC Flammable
6. ACCIDENTAL RELEASE MEASURES

Spill or Leak Procedures: DO NOT allow material to enter sewer system or waterway. Wear personal protective equipment, such as gloves and depending on the quantity a respirator with organic cartridges may be required. Clean up by absorption. Eliminate sources of ignition. Keep unnecessary personnel away. Put clean-up materials in a properly labeled metal drum. 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. Wear personal protective equipment. Ground containers when in use. Keep away from sources of heat.

Storage Precautions: Store product in tightly capped original containers in a cool, dry area, well ventilated away from sources of ignition. Refer to product label for specific storage temperature requirements. Rotate stock to ensure use before expiration date on the label.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Face velocity >2.1 cubic feet/minute in confined areas. Exhaust ventilation is recommended to keep exposure limits as low as possible. Keep exposure as low as possible.

Personal protection:

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

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

Skin: Compatible chemical resistant gloves. Do not use latex gloves.

Other: Lab coat, sleeve protectors, 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. 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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Amber</td>
</tr>
<tr>
<td>Odor</td>
<td>Alcoholic</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.8</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not available</td>
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<tr>
<td>Vapor Density</td>
<td>Not established</td>
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<tr>
<td>Boiling Point</td>
<td>Not available</td>
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<tr>
<td>Melting Point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>pH</td>
<td>4.6</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Insoluble</td>
</tr>
</tbody>
</table>
10. STABILITY AND REACTIVITY

General: Stable.
Conditions to Avoid: Direct heat, open flames and storage in aluminum.
Incompatible Materials: phosphorus, halogens, anhydrides, monomers, aldehydes, trichlorides
Hazardous Decomposition / Combustion: Carbon dioxide/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. Contains mineral spirits which is harmful to aquatic life with long lasting effects.

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.
UN1987, Alcohols, N.O.S, 3, PG II (isopropanol, mineral spirits)

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).

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-2000 and NOM-010-STPS-1999.

This product has been classified using the Chinese Occupational Exposure Limit for Hazardous Agents in the Workplace, GBZ2-2002.

WARNING: This product contains a chemical known to the State of California to cause cancer and/or birth defects (or other reproductive harm). (trace levels of 1,4 dioxane)

SARA 313 Listing - 40 CFR 372.65: trace levels of 1,4 dioxane

All ingredients are listed on the EPA TSCA Inventory.

EC Classification, Packaging and Labeling Requirements:
Symbol and Hazard Classification of Product

XI, F

Risk Phrases:
R36/37/38 Irritating to eyes, respiratory system and skin
R11 Highly Flammable
R42/43 May cause sensitization by inhalation and skin contact
R66 Repeated exposure may cause skin dryness or cracking
R67 Vapors may cause drowsiness and dizziness

Safety Phrases:
S20/21 When using do not eat, drink or smoke
S23 Do not breathe fumes
S24/25 Avoid contact with skin and eyes
S27 Take off immediately all contaminated clothing
S28 After contact with skin wash immediately with plenty of soap and water
<table>
<thead>
<tr>
<th>S36/37/39</th>
<th>Wear suitable protective clothing, gloves and eye/face protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>S62</td>
<td>If swallowed, do not induce vomiting seek medical advice immediately and show container or label</td>
</tr>
<tr>
<td>S7</td>
<td>Keep container tightly closed</td>
</tr>
</tbody>
</table>

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>HMIS Hazard Rating:</th>
<th>Health: 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fire: 3</td>
</tr>
<tr>
<td></td>
<td>Physical Hazards: 0</td>
</tr>
</tbody>
</table>

Revised Date: 1 MAY 2015

Prepared by: Nancy Swarts, Indium Corporation of America

Approved by: Nancy Swarts, Indium Corporation of America

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