SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: WS3500 FLUX
SDS Number: SDS- WS4409 Revised Date: 27 MAY 2020 Version 1.1
Product Use: Industrial Use - Water wash flux

MANUFACTURER:

In America:
The Indium Corporation of America®.
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Information: (315) 853-4900
nswarts@indium.com

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Suchun Industrial Square
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Jiangsu Province, China 215126
Information: (86) 512-6283-4900

http://www.indium.com

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

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2. HAZARDS IDENTIFICATION

PRIMARY ROUTES OF ENTRY: 

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

GHS

Signal Word: Danger

Hazard statement(s)

- **H225**: Highly flammable liquid and vapor
- **H315**: Causes skin irritation
- **H319**: Causes serious eye irritation
- **H335**: May cause respiratory irritation
- **H336**: May cause drowsiness or dizziness
- **H412**: Harmful to aquatic life with long lasting effects

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
- **P242**: Use only non-sparking tools
- **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)

Flammable Liquid – Category 2
Eye irritation – Category 2A
Skin irritant- Category 2
Acute aquatic toxicity-Category 3
Chronic aquatic toxicity- Category 3
Specific target organ toxicity- single exposure – Category 3- central nervous system

POTENTIAL HEALTH EFFECTS:

**Eye Contact:** 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. May cause irritation.

**Skin Contact:** Causes skin irritation.

**Chronic:** Not established.

NOTE: The Indium Corporation does not recommend, manufacture, market or endorse any of its products.
products for human consumption.

WARNING: This product can expose you to chemicals including [trace amounts of 1,4 dioxane, propylene oxide, ethylene oxide] which are known to the State of California to cause cancer and [trace amounts of ethylene oxide] which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>% wt</th>
<th>CAS Registry #</th>
<th>PEL(\text{mg/m}^3)</th>
<th>TLV-TWA(\text{mg/m}^3)</th>
<th>TLV- STEL(\text{mg/m}^3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLYGLYCOL ETHER</td>
<td>18-30</td>
<td>9038-95-3</td>
<td>N.E.</td>
<td>N.E.</td>
<td>N.E.</td>
</tr>
<tr>
<td>ISOPROPYL ALCOHOL</td>
<td>24-28</td>
<td>67-63-0 (US)</td>
<td>980</td>
<td>983</td>
<td>1225</td>
</tr>
<tr>
<td>(EU)</td>
<td>-</td>
<td>999</td>
<td>1250</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Canada)</td>
<td>-</td>
<td>983</td>
<td>1228</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Mexico)</td>
<td>980</td>
<td>-</td>
<td>1225</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Singapore)</td>
<td>983</td>
<td>-</td>
<td>1230</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(China)</td>
<td>-</td>
<td>350</td>
<td>700</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CARBOXYLIC ACIDS</td>
<td>3 – 15</td>
<td>70248-25-8</td>
<td>N.E.</td>
<td>N.E.</td>
<td>N.E.</td>
</tr>
<tr>
<td>ALCOHOL</td>
<td>25 – 38</td>
<td>68603-15-6</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:** 11°C(52°F)
- **Method:** Closed cup
- **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.

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**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. Keep away from sources of ignition. Keep unauthorized personnel away. Dispose of following all Federal, State and Local regulations. In the EU refer to the Special Waste Regulations.

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**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. Ground containers.

**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.

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**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Engineering Controls:** Local exhaust ventilation is necessary to control airborne levels and keep exposures to as low as possible. Use ventilation.

**Personal protection:**

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

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**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>Slight characteristic odor.</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>Not established</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Vapor Density (air=1)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not established</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>Water Soluble</td>
</tr>
</tbody>
</table>
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.

Contains substances that are harmful to the aquatic environment with long lasting effects.

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.

UN1219, Isopropanol, 3, PG II (mixture)


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.).
WARNING: This product can expose you to chemicals including [trace amounts of 1,4 dioxane, propylene oxide, ethylene oxide] which are known to the State of California to cause cancer and [trace amounts of ethylene oxide] which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

SARA 313 Listing - 40 CFR 372.65 (trace levels of ethylene oxide and 1, 4 dioxane) and 25% proprietary alcohol
All ingredients are listed on the EPA TSCA Inventory.

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 irritant 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-018-STPS-2015 and NOM-010-STPS-2014.

Malaysia:
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). (GHS)

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

16. OTHER INFORMATION

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

Revised Date: 27 MAY 2020
Prepared by: Nancy Swarts, Indium Corporation of America
Approved by: Nancy Swarts, Indium Corporation of America

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