1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: WS641 FLUX

SDS Number: SDS-5552 Revised Date: 21 APRIL 2015

Product Use: INDUSTRIAL USE (MIXTURE) – WATER WASH FLUX

MANUFACTURER:

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2. HAZARDS IDENTIFICATION

PRIMARY ROUTES OF ENTRY:  
⊙Eye  ⊗Inhalation  ⊙Skin  ⊗Ingestion  NTP  IARC  OSHA  ⊗Not Listed

GHS:

Signal Word: Warning

Hazard statement(s)

H315  Causes skin irritation
H319  Causes serious eye irritation
H335  May cause respiratory irritation

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 +P341  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 irritant- Category 2
Eye irritant- Category 2A
Specific target organ toxicity- single exposure – Category 3- respiratory system

POTENTIAL HEALTH EFFECTS:

Eye Contact:  Causes irritation to the eyes if not removed promptly.

Ingestion:  May cause irritation.

Inhalation:  May cause irritation to the respiratory tract.

Skin Contact:  Causes skin irritation.

Chronic:  Not established.

NOTE:  The Indium Corporation does not recommend, manufacture, market or endorse any of it's product's for human consumption.
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>AMIDES (C10-16)</td>
<td>50 - 60</td>
<td>67700-97-4</td>
<td>N.E.</td>
<td>N.E.</td>
<td>N.E.</td>
</tr>
<tr>
<td>PROPRIETARY ALCOHOLS</td>
<td>30 – 40</td>
<td>-</td>
<td>N.E.</td>
<td>N.E.</td>
<td>N.E.</td>
</tr>
<tr>
<td>PROPRIETARY ACTIVATORS</td>
<td>10</td>
<td>-</td>
<td>N.E.</td>
<td>N.E.</td>
<td>N.E.</td>
</tr>
</tbody>
</table>

Risk Phrases: R36/37/38
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 applicable
Method: Not available.
Auto-ignition Temperature: Not established.
Flammable Limits: Limits not established.
Extinguishing Media: Use extinguishers appropriate for the surrounding fire conditions. CO₂, foam, water.
Special Fire Fighting Procedures: Firefighters must wear NIOSH approved or equivalent self-contained breathing apparatus and full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Spill or Leak Procedures: Wear a respirator and appropriate personal protective equipment (See Exposure Controls/Personal Protective Section). Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Ventilate area. Dispose of following all Federal, State and Local regulations. Ensure area is ventilated.
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 contain product residue, handle properly. Do not re-use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Exhaust or point source ventilation should be sufficient to control airborne levels and keep exposure levels low.

Personal protection:

Eyes: Chemical safety glasses/goggles. Face shield for any splash 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 or when proper ventilation is not adequate to protect the worker.

Skin: Compatible chemical resistant gloves, nitrile type is recommended. Recommend protective outer garment, apron and sleeves as appropriate. Avoid skin exposure.

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

Appearance: Flux -yellow

Odor: Slight characteristic odor.

Specific Gravity: 1g/cc

Vapor Pressure: Not applicable.

Vapor Density: (air=1) Not applicable.

Boiling Point: Not applicable.

Melting Point: Not applicable

pH: 4-8

Solubility in Water: Not established

10. STABILITY AND REACTIVITY

General: Stable.

Conditions to Avoid: Freezing temperatures. High temperatures.

Incompatible Materials: Not established

Hazardous Decomposition / Combustion: Carbon monoxide, carbon dioxide. Gas 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.

12. ECOLOGICAL INFORMATION
Product mixture 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). Not hazardous under the shipping regulations and shipping modes.

UN – none
Not regulated: IATA, ground, ocean

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 Mexican regulations: NOM-018-STPS-2000 and NOM-010-STPS-1999.

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

This product has been classified in accordance with the guidelines set by the Dept. of Industrial Health of the Republic of Singapore.

SARA 313 Listing - 40 CFR 372.65 - None
All ingredients are listed on the EPA TSCA Inventory.
EC Classification, Packaging and Labeling Requirements:
Symbol and Hazard Classification of Product
Xi
Risk Phrases:
R36/37/38 Irritating to eyes, respiratory system and skin
Safety Phrases:
S20/21 When using do not eat, drink or smoke
S23  Do not breathe fumes/gas/vapor/spray
S24/25 Avoid contact with skin and eyes
S28  After contact with skin wash immediately with plenty of soap and water
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection

16. OTHER INFORMATION

HMIS Hazard Rating:

Health: 1
Fire: 0
Reactivity: 0

Revised Date: 21 APRIL 2015
Prepared by: Nancy Swarts, Indium Corporation of America
Approved by: Nancy Swarts, Indium Corporation of America

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