SAFETY DATA SHEET

User must review the contents of this (SDS) and determine what is applicable to their own country laws under Health and Safety and apply them as necessary. This (SDS) will not reference every country’s Health and Safety Laws. It is the user’s responsibility to determine what is applicable to them, including but not limited to review of any specific chemical lists and apply the requirements as necessary.

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: 1075- EXR-45 LIQUID FLUX
SDS Number: SDS-HG4040
Product Use: Industrial Use-Soldering Flux

MANUFACTURER:

In America:
The Indium Corporation of America®.
34 Robinson Rd., Clinton, NY 13323
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nswarts@indium.com

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Singapore 628908
Information: +65 6268-8678

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No. 428 Xinglong Street
Suzhou Industrial Park
Suchun Industrial Square
Unit No. 14-C
Jiangsu Province, China 215126
Information: (86) 512-6283-4900

EMERGENCY PHONE:
CHEMTREC 24 hrs.
USA: 1 (800) 424-9300
Outside USA: +1 (703) 527-3887
In China: Emergency 86+ 4008417580
2. HAZARDS IDENTIFICATION

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

POTENTIAL HEALTH EFFECTS:

Eye Contact: Vapors may be irritating, liquid may damage or irritation to eye tissue.

Ingestion: May cause irritation

Inhalation: May cause irritation.

Skin Contact: May cause irritation.

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 can expose you to chemicals including [Trace amounts 1,4 dioxane] which is known to the State of California to cause cancer, and 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 mg/m³</th>
<th>TLV-TWA mg/m³</th>
<th>TLV-STEL mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARBOXYLIC ACID</td>
<td>4</td>
<td>68603-87-2</td>
<td>N.E.</td>
<td>N.E.</td>
<td>N.E.</td>
</tr>
<tr>
<td>WATER</td>
<td>85-95</td>
<td>7732-18-5</td>
<td>N.E.</td>
<td>N.E.</td>
<td>N.E.</td>
</tr>
<tr>
<td>PROPRIETARY</td>
<td>1-11</td>
<td></td>
<td>N.E.</td>
<td>N.E.</td>
<td>N.E.</td>
</tr>
</tbody>
</table>

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: NONE  Method: N/A
Auto-ignition Temperature: N/A
Flammable Limits: N/A
Extinguishing Media: Use extinguishers appropriate for the surrounding fire conditions.
Special Fire Fighting Procedures: Standard fire fighting equipment.

6. ACCIDENTAL RELEASE MEASURES

Spill or Leak Procedures: DO NOT allow material to enter sewer system or waterway. Clean up by absorption. Dispose of following all Federal, State and Local regulations.

7. HANDLING AND STORAGE

Handling: Keep containers tightly closed when not in use.
Precautions:

Storage Precautions: Store product in tightly capped original containers in a cool, dry area. 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.

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 where airborne concentrations are expected to be elevated.
Skin: Compatible chemical resistant gloves.
Other: Lab coat, 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

Appearance: Liquid, clear  Boiling Point: 212F
Odor: Mild  Melting Point: 32F
Specific Gravity: 1.019@60F  pH: 2.8
Vapor Pressure: 23.7 mm HG @25°C  Solubility in Water: Soluble
Vapor Density: ND  Evaporation Rate: 2.64
Volatile by Volume: 100%
10. STABILITY AND REACTIVITY

**General:** Stable.

**Conditions to Avoid:** Direct heat, open flames and storage in aluminum.

**Incompatible Materials:** Strong alkali

**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.

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 hazardous under the shipping regulations.

- North American Emergency Guide Book – Not applicable

- UN- None

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

This product has been classified in accordance with the guidelines, as set, by the Dept of Industrial Health of the Republic of Singapore.
This product has been classified in accordance with Mexican regulations NOM-0180STPS-2015 and NOM-010-STPS-2014.

This product has been classified using the Chinese Occupational Exposure Limit for Hazardous Agents in the Workplace, GBZ2-2007.

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

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.

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: 0
Reactivity: 0

Revised Date: 5 OCTOBER 2018
Prepared by: Nancy Swarts, Indium Corporation of America
Approved by: Nancy Swarts, Indium Corporation of America

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