



## 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 countries 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:** TACFLUX089HFA

**SDS Number:** SDS- 5423

**Revised Date:** 2 OCTOBER 2018

**Product Use:** Industrial Use - Soldering Flux

#### MANUFACTURER:

##### In America:

**The Indium Corporation of America®.**

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<http://www.indium.com>

## 2. HAZARDS IDENTIFICATION

### PRIMARY ROUTES OF ENTRY:

⊗Eye    ⊗Inhalation    ⊗Skin    ⊗Ingestion    NTP    IARC    OSHA    ⊗Not Listed

### Carcinogen listed in

### GHS



**Signal Word:** Warning

### Hazard statement(s)

H317                    May cause an allergic skin reaction  
 H319                    Causes serious eye irritation  
 H334                    May cause allergy or asthma symptoms or breathing difficulties if inhaled  
 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 +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 + 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:

Sensitisation, skin- Category 1B  
 Serious eye damage/eye irritation- Category 2A  
 Sensitisation, respiratory- Category 1B

### POTENTIAL HEALTH EFFECTS:

**Eye Contact:**        Irritating to the eyes. Do not allow material to come in contact with the eyes.

**Ingestion:**            May be harmful if swallowed. May cause irritation.

**Inhalation:**            Heated vapor concentrations may be harmful if inhaled. Irritating to respiratory tract. Rosin may cause occupational asthma upon decomposition.

**Skin Contact:**        May cause skin irritation. Allergic reactions are possible, especially with repeated or prolonged exposure.

**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

Components	% wt	CAS Registry #	PEL mg/m <sup>3</sup>	TLV-TWA mg/m <sup>3</sup>	TLV-STEL mg/m <sup>3</sup>
ROSIN	40-45	65997-05-9	N.E.	N.E.	N.E.
		(EU)	0.05	N.E.	0.15 (sensitiser)
POLYGLYCOL ETHER	35-40	9038-95-3	N.E.	N.E.	N.E.
NON HAZARDOUS PROPRIETARY ACTIVATORS	15-25	-	N.E.	N.E.	N.E.

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:** Not established.      **Method:** Not established.
- Auto-ignition Temperature:** Not established.
- Flammable Limits:** Limits not established, not flammable.
- Extinguishing Media:** Use extinguishers appropriate for the surrounding fire conditions.
- 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 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. Dispose of following all Federal, State and Local regulations. Ensure area is properly vented. 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 exhaust ventilation should be sufficient to control airborne levels and keep exposures to as low as possible.

**Personal protection:**

**Eyes:** Chemical safety glasses/goggles. Use face shield for splash hazards.

**Respirator:** An 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. Protective outer garment, apron and sleeves as appropriate. Protect the skin from direct 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 **Boiling Point:** Not established

**Odor:** Mild characteristic odor. **Melting Point:** Not established

**Specific Gravity:** Not established **pH:** Not applicable

**Vapor Pressure:** Not established **Solubility in Water:** Insoluble

**Vapor Density:** (air=1) Not applicable.

## 10. STABILITY AND REACTIVITY

**General:** Stable.

**Conditions to Avoid:** Freezing temperatures. High temperatures.

**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.

**Other:** Prolonged or repeated exposure to rosin flux fume may cause workers to develop occupational asthma. None of the ingredients including proprietary are listed as a carcinogen.

## 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 regulated under US DOT (United States Department of Transportation).

Non hazardous for shipping under all modes.

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).

Canadian WHMIS: D2B –Materials Causing Other Toxic Effects (irritant or sensitizer)



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 (TRI Reporting) - 40 CFR 372.65 - 14% Proprietary polyglycol ether

All ingredients are listed on the USEPA TSCA Inventory.

RoHS2 = Restriction of Hazardous Substances. Product does not contain any ingredients that are listed.

This product has been classified under the Mexican regulations NOM-018-STPS-2015 and NOM-010-STPS-2014.

In China:

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

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 in accordance with: Malaysian – OCCUPATIONAL SAFETY AND HEALTH (CLASSIFICATION, LABELING AND SAFETY DATA SHEET OF HAZARDOUS CHEMICALS) REGULATION OCTOBER 2013 – (CLASS).

**16. OTHER INFORMATION**

<b>HMIS Hazard Rating:</b>	<b>Health:</b>	1
	<b>Fire:</b>	1
	<b>Physical Hazard:</b>	0

**Revised Date:** 2 OCTOBER 2018

**Prepared by:** Nancy Swarts, Indium Corporation of America

**Approved by:** Nancy Swarts, Indium Corporation of America

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