



## 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:** FC-NC-LT-C

**SDS Number:** SDS-IN FC020

**Revised Date:** 11 MARCH 2019

**Product Use:** Industrial Use - Flip chip flux

#### MANUFACTURER:

##### In America:

The Indium Corporation of America®.

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#### EMERGENCY PHONE:

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**In China: Emergency 86+ 4008417580**

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## 2. HAZARDS IDENTIFICATION

### PRIMARY ROUTES OF ENTRY:

XEye

XInhalation

XSkin

XIngestion

### Carcinogen listed in

NTP

IARC

OSHA

XNot Listed

GHS:



Signal Word: Danger

#### Hazard statement(s)

H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H361	Suspected of damaging fertility or the unborn child
H412	Harmful to aquatic life with long lasting effects

#### 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:

Eye damage- Category 1  
 Skin corrosion- Category 1B  
 Reproductive toxicity- Category 2  
 Acute toxicity, Oral – Category 4  
 Acute aquatic toxicity- Category 3  
 Chronic aquatic toxicity – Category 3

### POTENTIAL HEALTH EFFECTS:

<b>Eye Contact:</b>	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.
<b>Ingestion:</b>	Harmful if swallowed. May cause burns.
<b>Inhalation:</b>	Heated vapor concentrations may be irritating if inhaled. Material may be destructive to the tissue of the mucous membranes and upper respiratory tract.
<b>Skin Contact:</b>	May cause skin irritation and burns to skin. Harmful if absorbed through the skin.
<b>Chronic:</b>	Not established.
<b>NOTE:</b>	<b>The Indium Corporation does not recommend, manufacture, market or endorse any of its products for human consumption.</b>

**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>
POLYGLYCOL ETHER	10-40	9038-95-3	N.E.	N.E.	N.E.
CARBOXYLIC ACID	1-10	68937-72-4	N.E.	N.E.	N.E.
ALCOHOL	50-90	-	N.E.	N.E.	N.E.

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:** 110 C (230 F)      **Method:** Not available
- 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.

**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. 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 general exhaust ventilation exhaust should be sufficient to control airborne levels.

**Personal protection:**

**Eyes:** Chemical safety glasses/goggles. 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.

**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

<b>Appearance:</b>	Liquid/paste	<b>Boiling Point:</b>	No data available
<b>Odor:</b>	Mild characteristic odor.	<b>Melting Point:</b>	Not applicable
<b>Specific Gravity:</b>	0.94	<b>pH:</b>	No data available
<b>Vapor Pressure:</b>	Not applicable.	<b>Solubility in Water:</b>	Not established
<b>Vapor Density:</b>	(air=1) Not applicable.		

## 10. STABILITY AND REACTIVITY

<b>General:</b>	Stable.
<b>Conditions to Avoid:</b>	High temperatures, open flame.
<b>Incompatible Materials:</b>	Not established
<b>Hazardous Decomposition / Combustion:</b>	Not established
<b>Hazardous Polymerization:</b>	Will not occur.

## 11. TOXICOLOGICAL INFORMATION

<b>Carcinogenicity:</b>	<b>NTP:</b> No		
	<b>OSHA:</b> No		
	<b>IARC:</b> No		
<b>LD50:</b>	Not established.	<b>LC50:</b>	Not established.
<b>Other:</b>	Alcohol- LD50-Oral-Rat-1,620 mg/kg		

## 12. ECOLOGICAL INFORMATION

Product has not been tested.

Contains an ingredient that is very toxic to aquatic organisms, with long-term adverse effects in the aquatic environment.

An environmental hazard cannot be excluded in the event of unprofessional handling, use or disposal of this product.

Bioaccumulation Gasterosteus aculeatus – 16d

Toxicity to fish LC50 – Pimephales promelas (fathead minnow) – 1.4 mg/l –96h

Toxicity to daphnia and other aquatic invertebrates LC50 – Daphnia pulex (Water flea) – 0.14 mg/l – 48h

### 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.

UN 3145, ALKYLPHENOLS, LIQUID, n.o.s., 8, PG III

Contains a chemical that is harmful to aquatic life.



IMDG:

UN 3145, ALKYLPHENOLS, LIQUID, n.o.s., 8, PG III (MARINE POLLUTANT) (ALKYLPHENOL)



### 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:

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other

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 and the Canadian Domestic Substance List.

This product has been classified in accordance with the Mexican guidelines, 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>	3
	<b>Fire:</b>	1
	<b>Physical Hazard:</b>	0

**Revised Date:** 11 MARCH 2019

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

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

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