



## SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier:** FC-NC-LT-B

**SDS Number:** SDS-IN FC019

**Revised Date:** 18 APRIL 2018

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

#### MANUFACTURER:

##### In America:

**The Indium Corporation of America®.**

34 Robinson Rd., Clinton, NY 13323

Information: (315) 853-4900

[nswarts@indium.com](mailto:nswarts@indium.com)

##### EMERGENCY PHONE:

**CHEMTREC 24 hrs.**

**USA: 1 (800) 424-9300**

**Outside USA: +1 (703) 527-3887**

##### In Europe:

**The Indium Corporation of America® (European Operations)**

7 Newmarket Ct

Kingston, Milton Keynes, UK, MK 10 OAG

Information: +44 [0] 1908 580400

##### In China:

Indium Corporation (Suzhou), Co., Ltd.

No. 428 Xinglong Street

Suzhou Industrial Park

Suchun Industrial Square

Unit No. 14-C

Jiangsu Province, China 215126

Information: (86) 512-6283-4900

##### In Asia:

Indium Corporation of America

Asia-Pacific Operations-Singapore

29 Kian Teck Avenue

Singapore 628908

Information: +65 6268-8678

## 2. HAZARDS IDENTIFICATION

### PRIMARY ROUTES OF ENTRY:

\*Eye      \*Inhalation      \*Skin      \*Ingestion      NTP

### Carcinogen listed in

IARC      OSHA      \*Not Listed

GHS:



Signal Word: Danger

#### Hazard statement(s)

H226	Flammable liquid and vapor
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H336	May cause drowsiness or dizziness
H361	Suspected of damaging fertility or the unborn child
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
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:

Flammable liquid- Category 3  
 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:

**Eye Contact:** Moderately 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:** Harmful if swallowed. May cause irritation.

**Inhalation:** Heated vapor concentrations may be harmful if inhaled. Irritating to respiratory tract. High concentrations may cause headache or dizziness or light headedness.

**Skin Contact:** Causes burns to skin. May cause skin irritation.

**Chronic:** Not established.

**NOTE:** The Indium Corporation does not recommend, manufacture, market or endorse any of its products 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>
2-PROPANOL (ISOPROPYL ALCOHOL)	20-25	67-63-0 (US)	980	980	1225
		(EU)	N.E.	999	1250
		(Singapore)	983	-	1230
		(Mexico)	-	980	1225
		(China)	-	350	700
		(Canada)	N.E.	983	1228
POLYGLYCOL ETHER	65-75	9038-95-3	N.E.	N.E.	N.E.
PROPRIETARY	5-10	-	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:** 24 C (76 F)      **Method:** Closed cup

**Auto-ignition Temperature:** Not established.

**Flammable Limits:** Flammable, limits not established

**Extinguishing Media:** Use extinguishers appropriate for the surrounding fire conditions. Foam, dry chemical, water spray.

**Special Fire Fighting** Firefighters must wear NIOSH approved self-contained breathing apparatus and full

**Procedures:** protective clothing.

## 6. ACCIDENTAL RELEASE MEASURES

**Spill or Leak Procedures:** Wear a respirator and appropriate personal protection (See Exposure Control Personal Protective Section). Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Turn off all sources of ignition. Keep unnecessary personnel away from spill. 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 ventilation should be sufficient to control airborne contaminant levels.

**Personal protection:**

**Eyes:** Chemical safety glasses/goggles. Face shield should be used for 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.

**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-clear	<b>Boiling Point:</b>	100 C
<b>Odor:</b>	Mild characteristic odor.	<b>Melting Point:</b>	Not applicable
<b>Specific Gravity:</b>	0.9144	<b>pH:</b>	5.2 (not a certifiable parameter)
<b>Vapor Pressure:</b>	Not applicable.	<b>Solubility in Water:</b>	None
<b>Vapor Density:</b>	(air=1) Not applicable.		

## 10. STABILITY AND REACTIVITY

**General:** Stable.

**Conditions to Avoid:** High temperatures, open flame and other sources of ignition.

**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:** None known

## 12. ECOLOGICAL INFORMATION

Product not tested.

Contains a substance that is harmful to aquatic life.

## 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. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

## 14. TRANSPORT INFORMATION

Transport in accordance with applicable international regulations and requirements.



UN2924, Flammable Liquids, Corrosive, N.O.S., 3, PG II (isopropyl alcohol/alkylphenol)

North American Emergency Guide Book- Guide 132

IMDG: UN2924, Flammable Liquids, Corrosive, N.O.S., 3, PG II (isopropyl alcohol/alkylphenol) (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

Canadian WHMIS: Class B Division 2 Flammable, D2B Toxic Material Causing Other Toxic Effects (eye irritation in animals).



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.

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

This product has been classified in accordance with the 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).

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 Domestic Substance List.

## 16. OTHER INFORMATION

<b>HMIS Hazard Rating:</b>	<b>Health:</b>	2
	<b>Fire:</b>	3
	<b>Reactivity:</b>	0

**Revised Date:** 18 APRIL 2018

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

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

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