



## SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION

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

**SDS Number:** SDS-IN FC001

**Revised Date:** 5 DECEMBER 2018

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

#### MANUFACTURER:

##### In America:

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## 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  
 H319            Causes serious eye irritation  
 H336            May cause drowsiness or dizziness

### 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  
 P241            Use explosion-proof electrical/ventilating/lightening/equipment  
 P242            Use only non- sparking tools  
 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 + P341    IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing  
 P305 + P351    IF IN EYES: Rinse continuously with water for several minutes (15 mins)

### Classification:

Flammable Liquid – Category 2  
 Eye irritation – Category 2A  
 Specific target organ toxicity- single exposure – Category 3- central nervous system

### POTENTIAL HEALTH EFFECTS:

**Eye Contact:**    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:**        May cause irritation and damage to the mouth, esophagus and gastrointestinal tract. May cause nausea, vomiting and diarrhea.

**Inhalation:**        Heated vapor concentrations may be harmful if inhaled. Material may be destructive to the tissue of the mucous membranes and upper respiratory tract. High concentrations can cause headache, nausea, and vomiting.

**Skin Contact:**    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>
ISOPROPYL ALCOHOL	75-80	67-63-0	980	983	1230
		(EU)	N.E.	999	1250
		(Singapore)	983	-	1230
		(Mexico)	-	980	1225
		(China)	-	350	700
		(Canada)	N.E.	983	1228
<b>PROPRIETARY</b>	20-25	-	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:** 23 C (73 F)      **Method:** Not available
- Auto-ignition Temperature:** Not established.
- Flammable Limits:** Limits not established. Flammable
- 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. Do not dispose of down the drain. Use spark resistant tools. Ground containers. Dispose of following all Federal, State and Local regulations. In the EU refer to the Special Waste Regulations.

## 7. HANDLING AND STORAGE

**Handling** 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.

**Precautions:**

**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. Ground containers. Have spill equipment near by.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Controls:** Local exhaust ventilation is necessary to control airborne levels.

**Personal protection:**

**Eyes:** Chemical safety glasses/goggles. Face shield 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/paste	<b>Boiling Point:</b>	83 C
<b>Odor:</b>	alcohol like odor.	<b>Melting Point:</b>	Not applicable
<b>Specific Gravity:</b>	0.8378	<b>pH:</b>	Not applicable
<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

**General:** Stable.

**Conditions to Avoid:** High temperatures, open flame.

**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.

## 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. Flammable material classification.

## 14. TRANSPORT INFORMATION

Transport in accordance with applicable international regulations and requirements.

UN1219, Isopropanol, 3, PG II (mixture)



North American Emergency Guide Book – Guide #129

## 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.).

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 hazard criteria of the Canadian Controlled Products Regulation (CPR).

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



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

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

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 Mexican regulations NOM-018-STPS-2015 and NOM-010-STPS-2014.

This product has been classified in accordance with: Malaysian – OCCUPATIONAL SAFETY AND HEALTH

**16. OTHER INFORMATION**

<b>HMIS Hazard Rating:</b>	<b>Health:</b>	1
	<b>Fire:</b>	3
	<b>Reactivity:</b>	0

**Revised Date:** 5 DECEMBER 2018

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

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

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