



## SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier:** FLIP CHIP FLUX NC-826

**SDS Number:** SDS-5881

**Revised Date:** 19 MARCH 2018

**Product Use:** Industrial Use (mixture) - Flip chip flux

#### MANUFACTURER:

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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:** Warning

**Hazard statement(s)**

H319 Causes serious eye irritation  
 H410 Very toxic 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 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

Eye irritation (Category 2A)  
 Acute aquatic toxicity (Category 1)  
 Chronic aquatic toxicity (Category 1)

**POTENTIAL HEALTH EFFECTS:**

**Eye Contact:** Irritating to the eyes. Spray or liquid may cause damage to eyes.

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

**Inhalation:** May cause irritation.

**Skin Contact:** Causes skin irritation or burns.

**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>
POLYGLYCOL ETHER	80 - 85	9038-95-3	N.E	N.E	N.E.
CARBOXYLIC ACID	5 - 10	68937-68-8	N.E.	N.E.	N.E.
AMINE	5-10	68876-81-3	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:** >200F **Method:** Not available

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

**Flammable Limits:** Limits not established. Not 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. Evacuate area and fight fire from a safe distance. Containers can build up pressure if exposed to heat (fire) or flame.

### 6. ACCIDENTAL RELEASE MEASURES

**Spill or Leak Procedures:** Wear a respirator and appropriate personal protection (See Exposure Controls/Personal Protective Section). Size of spill shall determine respiratory protection from air purifying to self-contained breathing apparatus. Keep unnecessary and unprotected personnel from entering the spill area. 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. Do not allow material to enter any waterway. Contains a chemical that is harmful to aquatic life.

## 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. Keep away from sources of heat and flame.

**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. Store in well ventilated area.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Controls:** Exhaust ventilation should be sufficient to control airborne levels and reduce exposure levels. Proper exhaust ventilation designed for hazardous chemicals is required having a face velocity of at least 100 feet per minute.

**Personal protection:**

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

**Respirator:** An approved or compliant marked air-purifying respirator with an organic vapor chemical cartridge is recommended under certain circumstances where airborne concentrations are expected to be elevated. Confined spaces require additional protection. Use in well ventilated areas. Assess work area before performing work.

**Skin:** Compatible chemical resistant gloves. Protective outer garment, apron and sleeves as appropriate. Face shield for splash protection. Avoid handling without protection.

**Other:** Eyewash fountain in work area. Avoid the use of contact lenses in high fume/splash 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>	Clear - liquid	<b>Boiling Point:</b>	Not available
<b>Odor:</b>	Slight characteristic odor.	<b>Melting Point:</b>	Not applicable
<b>Specific Gravity:</b>	Not available	<b>pH:</b>	5 -7
<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>	Strong oxidizing agents
<b>Hazardous Decomposition / Combustion:</b>	Carbon monoxide/carbon dioxide
<b>Hazardous Polymerization:</b>	Will not occur.

## 11. TOXICOLOGICAL INFORMATION

**Carcinogenicity:** NTP: No  
OSHA: No  
IARC: No

**LD50:** Not established.

**LC50:** Not established.

Product not tested.

## 12. ECOLOGICAL INFORMATION

Product not tested.

Harmful to aquatic life. Contains a chemical that is rated as a severe marine pollutant.

## 13. DISPOSAL CONSIDERATION

**Waste Disposal Method:** Dispose of in accordance with all applicable Federal, State and Local environmental regulations.

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

Contains chemicals that are classified as harmful to aquatic life.

## 14. TRANSPORT INFORMATION

Transport in accordance with applicable regulations and requirements.

Contains a chemical that is rated as a severe marine pollutant.

UN 3082, Environmentally Hazardous Substance Liquid, N.O.S., 9, PG III (Marine Pollutant) (polyglycol ether)



## 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 - polyglycol ether - 5-30%

All ingredients are listed on the: EPA TSCA Inventory

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulation (CPR).

Canadian WHMIS: no classification

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

This product has been classified in accordance with 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). (GHS)

In China:

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 using the Chinese Occupational Limit for Hazardous Agents in the Workplace, GBZ2-2007.

Product contains substances that are listed on the Philippines Inventory of Chemicals and Chemical Substances.

**16. OTHER INFORMATION**

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

**Revised Date:** 19 MARCH 2018

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

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

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