



## SAFETY DATA SHEET

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

**1.1 Product Identifier:** FLIP CHIP FLUX NC-26S

**SDS Number:** SDS-8000

**Revised Date:** 1 NOVEMBER 2018

**1.2 Relevant Identified uses of the substance or mixture and uses advised against**

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

**1.3 Details of the supplier of the safety data sheet**

#### **MANUFACTURER/SUPPLIER/IMPORTER:**

##### **In America:**

The Indium Corporation of America®  
34 Robinson Rd., Clinton, New York 13323  
Technical & Safety Information: (315) 853-4900  
Safety & SDS Information: [nswarts@indium.com](mailto:nswarts@indium.com)  
Corporation web page: <http://www.indium.com>

##### **In Europe:**

The Indium Corporation of America (European Operations)  
7 Newmarket Ct.  
Kingston, Milton Keynes, UK, MK 10 OAG  
Information: (normal business hours) +44 [0] 1908 580400  
EU Contact: [aday@indium.com](mailto:aday@indium.com)

##### **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

**1.4 Emergency telephone number**

**FOR CHEMICAL EMERGENCY ONLY PHONE \*:**

**CHEMTREC 24 hrs.**

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

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

**In China: Emergency 86+ 4008417580**

**\* Used only for spill/leak/fire/exposure/accident**

**ALL OTHER INQUIRIES: TOLL FREE: +1-800-448-9240 Indium Corporation**

**SECTION 2. HAZARDS IDENTIFICATION**

**PRIMARY ROUTES OF ENTRY:**

⊕Eye    ⊕Inhalation    ⊕Skin    ⊕Ingestion    NTP    Carcinogen listed in IARC    OSHA    ⊕Not Listed

**2.1 Classification:**

**2.2 Label Elements**

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 + 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

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

**2.3 OTHER HAZARDS:**

**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.

## SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

### 3.2 Mixture:

Components	% wt	CAS Registry
POLYGLYCOL ETHER	80 - 85	9038-95-3
CARBOXYLIC ACID	5 - 10	68937-68-8
AMINE	5 - 10	68876-81-3

N.E. = Not established

## SECTION 4. FIRST AID MEASURES

### 4.1 Description of 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.

### 4.2 Most important symptoms and effect, both acute and delayed:

Skin contact may cause irritation. Eye exposure may cause irritation.

### 4.3 Indication of any immediate medical attention and special treatment needed:

No specific special treatment information is available on this mixture. Review data provided in this document to understand the hazards when working with the product. No other information is available at this time. Seek medical attention if eye irritation continues after flushing. If respiratory discomfort is evident seek medical advice. Seek immediate medical attention.

## SECTION 5. FIRE FIGHTING MEASURES

**5.1 Extinguishing Media:** Use extinguishers appropriate for the surrounding fire conditions. Water, CO2, foam media.

**5.2 Special hazards arising from the substance or mixture:**

May produce toxic fumes of carbon monoxide if burning.

**5.3 Advice for Firefighters** Firefighters must wear approved self-contained breathing apparatus and full protective clothing.

Material product is not flammable. No other information is available

**SECTION 6. ACCIDENTAL RELEASE MEASURES****6.1 Personal precautions, protective equipment and emergency procedures:****For non-emergency personnel:**

Keep away from the spill. Remove sources of ignition. Keep exhaust ventilation system running. In the event of a fire evacuate area.

**For emergency responders:**

Wear safety glasses, gloves when cleaning up any spill. Other equipment may be necessary based on the immediate area and other chemicals unrelated to the product that may be in use. Adequate ventilation should be available. Keep unnecessary personnel away from area during clean up. If on floor wear foot protection to avoid any direct contamination to shoes and boots.

**6.2 Environmental Precautions:** Dispose contaminated rags or absorbents following all applicable governmental regulations. Material is non-hazardous. May not have any reclaim value. Do not allow material to enter any waterway. Contains a chemical that is harmful to aquatic life

**6.3 Methods and material for containment and cleaning up:**

Spill or leak procedures: Using a spatula, scoop up flux and place into a plastic pail or drum and tightly cap.

**6.4 Reference to other sections:** See Section 8 for exposure levels.

**SECTION 7. HANDLING AND STORAGE**

**7.1 Precautions for Safe Handling** Keep containers tightly closed when not in use. Use care to avoid spills. Use only with production equipment specifically designed for use with flux. Wear appropriate personal protective equipment when working or handling solder paste. Always thoroughly wash your hands after handling this product. DO NOT touch or rub eyes until hands are washed. Do not eat, drink or smoke when handling this product. Utilize exhaust ventilation especially during heating product. General exhaust recommended when using the product.

**7.2 Conditions for Safe Storage, including any incompatibilities:**

**Storage Precautions:** Store product in tightly capped original containers in a cool, dry area. Refer to product label and product data sheet for specific storage temperature requirements. Rotate stock to ensure use before expiration date.

**7.3 Specific End Use(s):** Soldering applications

**SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION****8.1 Control Parameters:**

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

**8.2 Exposure Controls:**

**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.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

**9.1 Information on basic 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.	<b>Partition coefficient:</b>	Not established
<b>Relative Density:</b>	Not established	<b>Flammability:</b>	Not applicable
<b>Flash Point:</b>	>200F	<b>Method:</b>	Not applicable
<b>Auto-ignition Temperature:</b>	Not applicable	<b>Flammable Limits:</b>	Limits not established
<b>UEL/LEL Limits:</b>	Not applicable	<b>Decomposition Temp:</b>	Not applicable
<b>Viscosity:</b>	Not established	<b>Explosive properties:</b>	Not applicable
<b>Oxidizing Properties:</b>	Not established		

**9.2 Other Information:** Above data for the whole mixture.

**SECTION 10. STABILITY AND REACTIVITY**

- 10.1 Reactivity:** Stable.
- 10.2 Chemical Stability:** Stable
- 10.3 Possibility of Hazardous Reactions:** Not established
- 10.4 Conditions To Avoid:** Direct heat, open flames.
- 10.5 Incompatible Materials:** Strong oxidizing agents, acid chlorides, acid anhydrides
- 10.6 Hazardous Decomposition / Combustion:** Harmful organic fumes and toxic oxide fumes may form at elevated temperatures.

## SECTION 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects:

- |                               |                 |  |                             |
|-------------------------------|-----------------|--|-----------------------------|
| <b><u>Acute toxicity:</u></b> | Not established | <b><u>Mutagenicity:</u></b>              | Not established             |
| <b><u>Irritation:</u></b>     | Not established | <b><u>Toxicity for Reproduction:</u></b> | Not Established             |
| <b><u>Corrosivity:</u></b>    | Not applicable  | <b><u>Absence of specific data:</u></b>  | None available (not tested) |
| <b><u>Sensitization:</u></b>  | Not available   |  |                             |
- Repeated dose toxicity:** Not established
- Carcinogenicity:** Not established for product.
- Likely Routes of Entry:** eyes /skin /inhalation/ ingestion (may be harmful)
- Interactive effects:** None known

### 11.2 Symptoms related to the physical, chemical and toxicological characteristics:

May cause irritation by skin and inhalation.

### 11.3 Delayed and immediate effects as well as chronic effects from short and long-term exposure:

None known.

**Mixture verses substance information:** None known

## SECTION 12. ECOLOGICAL INFORMATION

Product mixtures not tested.

- 12.1 Toxicity:** No information available
- 12.2 Persistence and degradability:** No information available
- 12.3 Bioaccumulative potential:** No information available
- 12.4 Mobility in soil:** No information available
- 12.5 Results of PBT and vPvB assessments:** No data is available
- 12.6 Other adverse effects:** No information is available for mixture. Avoid release to environment.

## SECTION 13. DISPOSAL CONSIDERATION

### 13.1 Waste treatment method:

Dispose of in accordance with environmental regulations. Containerize material and classify according to applicable regulations. No pre-treatment on site is recommended. Do not dispose of down any drain or waterway. Contains chemicals that are classified as harmful to aquatic life. Utilize the same personal protective equipment as the user when handling for disposal. Non - hazardous flux.

**RoHS (Restriction of Hazardous Substances):** Compliant with RoHS.

## SECTION 14. TRANSPORT INFORMATION

Transport in accordance with applicable international regulations and requirements.

- 14.1 UN Number:** 3082  
**14.2 UN proper shipping name:** Environmentally Hazardous Substance Liquid, N.O.S.  
**14.2 Transport hazard class(s):** 9  
**14.4 Packing group:** III  
**14.5 Environmental hazards:** Marine Pollutant  
**14.6 Special precautions for user:** None  
**14.7 Transport in bulk:** Not applicable

Marine Pollutant: Yes



## SECTION 15. REGULATORY INFORMATION

### **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:**

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.).

All ingredients are listed on the USEPA TSCA Inventory.

All ingredients are listed on EINECS. Note Rosin was recently listed under the No Longer Polymer List, Notification of New Chemical Substances in Accordance with Directive 67/548/EEC.

Safety data sheet was developed using EC 1907/2006 amended as of 20 May 2010 EU No 453/2010 and information as stated under regulation EC No 1272/2008 CLP Regulation.

GHS = Global Harmonized System

CLP= Classification, labeling and packaging

Product does not contain any substances ozone depleting substances and therefore not subject to EC 2037/2000.

**15.2 Chemical safety assessment:** None performed for mixture.

## SECTION 16. OTHER INFORMATION

**HMIS Hazard Rating:**

<b>Health:</b>	2
<b>Fire:</b>	1
<b>Physical Hazard:</b>	0

**Revised Date:** 1 NOVEMBER 2018

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

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