



# INDIUM CORPORATION OF AMERICA®\EUROPE®\ASIA-PACIFIC®

## MATERIAL SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier:** PK-002 Epoxy Flux

**MSDS Number:** MSDS-IN EF002

**Revised Date:** 10 September 2002

**Product Use:** Epoxy Flux

#### MANUFACTURER:

##### In America:

The Indium Corporation of America  
1676 Lincoln Ave., Utica NY 13502  
Information: (315) 853-4900

##### EMERGENCY PHONE:

**CHEMTREC 24 hrs.**  
**USA: 1 (800) 424-9300**  
**Outside USA: 1 (703) 527-3887**

##### In Europe:

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Asia-Pacific Operations-Singapore  
29 Kian Teck Avenue  
Singapore 628908  
Information: +65 6268-8678

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

Components	% wt	CAS Registry #	OSHA PEL mg/m <sup>3</sup>	TLV-TWA mg/m <sup>3</sup>	TLV-STEL mg/m <sup>3</sup>
<b>PROPRIETARY EPOXY RESIN</b>	45-70		N.E.N.E.	N.E.	
<b>ANHYDRIDE</b>	30-45	935-79-5	N.E.	N.E.	N.E.
<b>PROPRIETARY ADDITIVES</b>	5-10		N.E.	N.E.	N.E.

Symbol: X<sub>n</sub>

Risk Phrases: R20/21/22, R36/37/38, R42

N.E. = Not established

### 3. HAZARDS IDENTIFICATION

#### PRIMARY ROUTES OF ENTRY:

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

#### POTENTIAL HEALTH EFFECTS:

**Eye Contact:** Excessive redness and swelling of the conjunctiva may occur. Causes irritation, experienced as stinging and discomfort or pain.

**Ingestion:** Ingestion may irritate the digestive tract.

**Inhalation:** May cause irritation if heated, otherwise harmful health effects are not expected at ambient temperatures.

**Skin Contact:** Brief contact may cause slight irritation with itching and local redness.

**Chronic:** Prolonged or repeated overexposure to mist or vapor generated at high temperatures may result in the inhalation of harmful amounts of material.

**NOTE:** **The Indium Corporation does not recommend, manufacture, market or endorse any of its product's for human consumption.**

### 4. FIRST AID MEASURES

**Eye Contact:** Hold eyelids apart and flush eyes with plenty of 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:** Not established.    **Method:** Not established.

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

**Flammable Limits:** Limits not established, not flammable.

**Extinguishing Media:** Use extinguishers appropriate for the surrounding fire conditions, such as water spray all purpose-type foam or dry chemical.

**Special Fire Fighting Procedures:** Firefighters must wear NIOSH approved or equivalent self-contained breathing apparatus and full protective clothing.

## 6. ACCIDENTAL RELEASE MEASURES

**Spill or Leak Procedures:** Wear a respirator and appropriate Personal Protective (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 ventilation should be sufficient to control airborne levels.

**Personal protection:**

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

**Respirator:** A NIOSH approved or EU compliant CE 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. 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>	Amber	<b>Boiling Point:</b>	Not applicable.
<b>Odor:</b>	Slight characteristic odor.	<b>Melting Point:</b>	Not applicable
<b>Specific Gravity:</b>	Not applicable.	<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:** Freezing temperatures. High temperatures.

**Incompatible Materials:** Not established

**Hazardous Decomposition / Combustion:** Carbon monoxide, carbon dioxide

**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

This section is subject to future development.

Biodegradability: Data not established.

Aquatic Toxicity: Data not established.

## 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 regulations and requirements. Not regulated under US DOT (United States Department of Transportation).

## 15. REGULATORY INFORMATION

The information in this Material 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.).

The information in this Material Safety Data Sheet meets the requirements of the EU under Chemicals (Hazard Information and Packaging for Supply) Regulations 1994 (CHIP 2) Regulation 6.

This product has been classified in accordance with the hazard criteria of the Commission Directive 91/155/EEC and EH40.

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

WHMIS: Not classified because of insufficient information.

This product has been classified in accordance with the guidelines, as 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.

EC Classification, Packaging and Labeling Requirements:

## Symbol and Hazard Classification of Product

 $X_n$ **Risk Phrases:**

- R20/21/22 Harmful by inhalation, in contact with skin and if swallowed  
R36/37/38 Irritating to eyes, respiratory system and skin  
R42 May cause sensitization by inhalation

**Safety Phrases:**

- S20/21 When using do not eat, drink or smoke  
S23 Do not breathe fumes/gas/vapor/spray  
S24/25 Avoid contact with skin and eyes  
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection  
S7 Keep container tightly closed

**16. OTHER INFORMATION**

**HMIS Hazard Rating:**      **Health:**            2  
   **Fire:**                    1  
   **Reactivity:**         0

**Revised Date:**            10 September 2002

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

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

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