



**INDIUM CORPORATION OF AMERICA®\EUROPE®\ASIA-PACIFIC®  
INDIUM CORPORATION (SUZHOU)®  
SAFETY DATA SHEET**

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier:** 25 BIO-CLEANER

**SDS Number:** SDS-4425

**Revised Date:** 8 FEBRUARY 2015

**Product Use:** Industrial Use -Flux Cleaner

#### MANUFACTURER:

##### In America:

The Indium Corporation of America  
1676 Lincoln Ave., Utica NY 13502  
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nswarts@indium.com

##### EMERGENCY PHONE:

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##### In Europe:

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##### In China:

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No. 428 Xinglong Street  
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##### In Asia:

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Asia-Pacific Operations-Singapore  
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Singapore 628908  
Information: +65 6268-8678

**2. HAZARDS IDENTIFICATION**

**PRIMARY ROUTES OF ENTRY:**

\*Eye      \*Inhalation      \*Skin      \*Ingestion      NTP      IARC      OSHA      \*Not Listed

**Carcinogen listed in**

GHS



Signal word: Danger

Hazard statement(s)

H302 + H312 + H332      Harmful if swallowed, in contact with skin or if inhaled  
 H314      Causes severe skin burns and eye damage  
 H412      Harmful 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 + 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:

Acute toxicity, oral- Category 4  
 Acute toxicity, dermal- Category 4  
 Acute toxicity, inhalation – Category 4  
 Chronic aquatic toxicity- Category 3

**POTENTIAL HEALTH EFFECTS:**

**Eye Contact:**      Vapors may be irritating, liquid may damage or irritation eye tissue.

**Ingestion:**      May result in gastric disturbances. Harmful if swallowed.

**Inhalation:**      May cause throat irritation or burns. Harmful if inhaled.

**Skin Contact:**      May cause irritation or skin burns. May be harmful if absorbed through the skin.

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

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

Components	% wt	CAS Registry #	PEL	TLV-TWA	TLV-STEL
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			mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>
<b>ETHANOLAMINE</b>	30-45	141-43-5(US)	6	7.5	15
		(EU)	-	7.6	15
		(Canada)	-	7.5	15
		(Singapore)	7.5	-	15
		(Mexico)	-	8	-
		(China)	-	8	15
<b>PROPRIETARY</b>	20-40	-	N.E.	N.E.	N.E.
<b>ETHYLENE GLYCOL BUTYL ETHER (2-BUTOXYETHANOL)</b>	30-35	111-76-2(US)	240	97 5ppm (skin)	-
		(EU)	-	25ppm	50ppm
		(Canada)	-	120	360
		(Singapore)	121	-	-
		(Mexico)	-	120(skin)	360(skin)

Symbol: X<sub>n</sub>C                      Risk Phrases: R20/21/22, R36/37/38  
N.E. = Not established

**PRODUCT DOES NOT CONTAIN ANY EU REACH SUBSTANCES OF VERY HIGH CONCERN**

#### 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:** 220F                      **Method:** TCC
- Auto-ignition Temperature:** Not available
- Flammable Limits:** NA
- Extinguishing Media:** Use extinguishers appropriate for the surrounding fire conditions.
- Special Fire Fighting Procedures:** Standard fire fighting equipment

## 6. ACCIDENTAL RELEASE MEASURES

**Spill or Leak Procedures:** Do not allow material to enter sewer system or waterway. Wear personal protective equipment, such as gloves and depending on the quantity a respirator with organic cartridges may be required. Clean up by absorption. Eliminate sources of ignition. Keep unnecessary personnel away. Put clean-up materials in a properly labeled compatible drum. 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. Wear personal protective equipment. Do not breathe vapors.

**Storage Precautions:** Store product in tightly capped original containers in a cool, dry area away from sources of ignition. Refer to product label for specific storage temperature requirements. Rotate stock to ensure use before expiration date on the label.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Controls:** Face velocity >2.1 cubic feet/minute in confined areas. Exhaust ventilation is recommended to keep exposure limits as low as possible. Use engineering controls.

### 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 where airborne concentrations are expected to be elevated.

**Skin:** Compatible chemical resistant gloves for corrosive chemicals.

**Other:** Lab coat, 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. Good personal hygiene is essential. 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>	Light straw	<b>Boiling Point:</b>	329F
<b>Odor:</b>	Ammonical	<b>Melting Point:</b>	Not applicable
<b>Specific Gravity:</b>	0.972	<b>pH:</b>	13 Corrosive
<b>Vapor Pressure:</b>	NA	<b>Solubility in Water:</b>	Soluble
<b>Vapor Density:</b>	NA	<b>Evaporation Rate:</b>	ND
<b>Volatile by Volume:</b>	90%		

## 10. STABILITY AND REACTIVITY

**General:** Stable.

**Conditions to Avoid:** Direct heat, open flames.

<b>Incompatible Materials:</b>	Strong oxidizing agents
<b>Hazardous Decomposition / Combustion:</b>	Hydrogen bromide/Carbon dioxide
<b>Hazardous Polymerization:</b>	Will not occur.

## 11. TOXICOLOGICAL INFORMATION

<b>Carcinogenicity:</b>	<b>NTP:</b> No		
	<b>OSHA:</b> No		
	<b>IARC:</b> No		
<b>LD50:</b>	Not established.	<b>LC50:</b>	Not established.

Glycol ether: LD50 oral rat – 470 mg/kg  
 LD50 oral rat >5,000 mg/kg

## 12. ECOLOGICAL INFORMATION

Product not tested.

Glycol ether: Toxicity to fish: LC50 –other fish- 220 mg/l – 96h

Contains a substances that is harmful to the 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.

## 14. TRANSPORT INFORMATION

Transport in accordance with applicable regulations and requirements.

UN2491, Ethanolamine Solution, 8, PG III



North American Emergency Guide Book – Guide 153

## 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



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-0180STPS-2000 and NOM-010-STPS-1999.

This product has been classified using the Chinese Occupational Exposure Limit for Hazardous Agents in the Workplace, GBZ2-2002.

SARA 313 Listing - 40 CFR 372.65: glycol ether

All ingredients are listed on the EPA TSCA Inventory.

EC Classification, Packaging and Labeling Requirements:

Symbol and Hazard Classification of Product

X<sub>n</sub> C

**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

**Safety Phrases:**

S20/21 When using do not eat, drink or smoke

S23 Do not breathe fumes

S24/25 Avoid contact with skin and eyes

S27 Take off immediately all contaminated clothing

S28 After contact with skin wash immediately with plenty of soap and water

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection

S62 If swallowed, do not induce vomiting seek medical advice immediately and show container or label

S7 Keep container tightly closed

**16. OTHER INFORMATION**

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

**Revised Date:**            8 FEBRUARY 2015

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

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

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