



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

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier:** CS-112

**MSDS Number:** MSDS-1006

**Revised Date:** 10 FEBRUARY 2006

**Product Use:** Cleaning Solvent

#### MANUFACTURER:

##### In America:

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

##### EMERGENCY PHONE:

**CHEMTREC 24 hrs.**

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

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 No. 428 Xinglong Street  
 Suzhou Industrial Park  
 Suchun Industrial Square  
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 Jiangsu Province, China 215126  
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##### In Asia:

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	TLV-TWA	TLV-STEL
POLYGLYCOL ETHER	90-100	9038-95-3	mg/m <sup>3</sup> N.E.	mg/m <sup>3</sup> N.E.	mg/m <sup>3</sup> N.E.
PROPRIETARY ADDITIVES	0-10		N.E.	N.E.	N.E.

Symbol: X<sub>n</sub>

N.E. = Not established

Risk Phrases: R36/37/38

EU = European Union Occupational Exposure Limits

### 3. HAZARDS IDENTIFICATION

#### PRIMARY ROUTES OF ENTRY:

✓✓✓ Eye    ✓✓✓ Inhalation  
 ✓✓✓ Not Listed

✓✓✓ Skin

#### Carcinogen listed in

✓✓✓ Ingestion

NTP

IARC

OSHA

#### POTENTIAL HEALTH EFFECTS:

**Eye Contact:** May cause irritation to the eyes, redness and pain.

**Ingestion:** Large oral doses may cause irritation to the gastrointestinal tract. Ingestion may cause signs of intoxication, such as nausea, headache, lack of coordination, dizziness, drowsiness and slurred speech depending on the amount ingested.

**Inhalation:** May cause irritation to the respiratory tract. Symptoms may include coughing, sore throat, labored breathing and chest pain. May be absorbed into the bloodstream with symptoms similar to ingestion.

**Skin Contact:** May cause mild skin irritation. A prolonged exposure is likely to result in the material being absorbed through the skin.

**Chronic:** Not established.

**NOTE:** The Indium Corporation does not recommend, manufacture, market or endorse any of its products 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:** 78 C (172 F)      **Method:** Not available

**Auto-ignition Temperature:** 204C

**Flammable Limits:** LEL = 0.85; UEL = 24.6      Combustible Liquid

**Extinguishing Media:** Use extinguishers appropriate for the surrounding fire conditions. Foam, dry chemical. Water spray to cool only.

**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 Protective (See Exposure Controls/Personal Protective Section). Keep non-emergency personnel from area. Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Do not use combustibles such as saw dust. 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 exhaust ventilation should be sufficient to control airborne levels. Local exhaust may be necessary for some operations.

### 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. Most conditions do not require respiratory protection.

**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>	Clear Liquid	<b>Boiling Point:</b>	231C (448 F)
<b>Odor:</b>	Faint butyl odor.	<b>Melting Point:</b>	< -68 C (-90F)
<b>Vapor Density:</b>	5.6 (Air = 1)	<b>pH:</b>	Not established
<b>Vapor Pressure:</b>	<0.02 mmHG @ 20C	<b>Solubility in Water:</b>	Miscible in water
<b>Specific Gravity:</b>	0.95 @ 25/25	<b>Evaporation Rate:</b>	<0.01

## 10. STABILITY AND REACTIVITY

<b>General:</b>	Stable.
<b>Conditions to Avoid:</b>	Heat, flames, ignition sources and incompatibles
<b>Incompatible Materials:</b>	Strong bases, acids, alkalis, and strong oxidizers.
<b>Hazardous Decomposition / Combustion:</b>	Carbon dioxide and carbon monoxide
<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>	Oral rat: 5660 mg/kg, Skin rabbit 2700 mg/kg, Irritation eye rabbit, standard draize: 20 mg severe
<b>LC50:</b>	Not established.

## 12. ECOLOGICAL INFORMATION

This section is subject to future development.

**Biodegradability:** When released into the soil, this material is not expected to evaporate significantly. When released into the soil, this material may leach into the groundwater. When released into the soil, this material may biodegrade to a moderate extent. When released into the water, this material may biodegrade to a moderate extent. This material has a log octanol-water partition coefficient of less than 3.0. This material is not expected to significantly bioaccumulate. When released into the air, this material is expected to be readily degraded, by reaction with photochemically produced hydroxyl radicals. When released into the air, this material is expected to have a half life of less than 1 day.

**Aquatic Toxicity:** The LC50/96-hour values for fish are over 100 mg/l. This material is not expected to be toxic to aquatic fish.

## 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. Do not dump into any sewers, on the ground or into any body of water.

## 14. TRANSPORT INFORMATION

Transport in accordance with applicable regulations and requirements.  
North American Emergency Guide Book: Not specifically listed or categorized.

## 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 Mexican regulations: NOM-018-STPS-2000 and NOM-010-STPS-1999.

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

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 - Yes (90-100%) Proprietary Polyglycol Ether

All ingredients are listed on the EPA TSCA Inventory and the Domestic Substance List.

EC Classification, Packaging and Labeling Requirements:

Symbol and Hazard Classification of Product

X<sub>n</sub>

### Risk Phrases:

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/gas/vapor/spray

S24/25 Avoid contact with skin and eyes

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

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

S7 Keep container tightly closed

## 16. OTHER INFORMATION

<b>HMIS Hazard Rating:</b>	<b>Health:</b>	2
	<b>Fire:</b>	2
	<b>Reactivity:</b>	0

**Revised Date:** 10 FEBRUARY 2006

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

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

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