



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

**SAFETY DATA SHEET**

**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product Identifier:** TACFLUX 020B

**MSDS Number:** MSDS-IN TF038

**Revised Date:** 10 FEBRUARY 2012

**Product Use:** Industrial Use -Tacflux

**MANUFACTURER:**

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**2. HAZARDS IDENTIFICATION**

GHS:



**PRIMARY ROUTES OF ENTRY:**

Eye      Inhalation      Skin      Ingestion      NTP

**Carcinogen listed in**

IARC      OSHA      Not Listed

Signal Word: Danger

Hazard Statements:

- H317            May cause an allergic skin reaction
- H226            Flammable liquid and vapor
- H302            Harmful if swallowed
- H332            Harmful if inhaled
- H334            May cause allergy or asthma symptoms or breathing difficulties if inhaled
- H360FD        May damage fertility. May damage the unborn child
- EUH208        Contains rosin. May produce an allergic reaction

Precautionary statement(s)

- P210            Keep away from heat/sparks/open flames/hot surfaces. – No smoking
- 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
- 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

### POTENTIAL HEALTH EFFECTS:

- Eye Contact:** Irritating to the eyes and if not removed promptly, may result in serious eye injury. Do not allow material to come in contact with the eyes.
- Ingestion:** Harmful if swallowed. May cause irritation and damage to the mouth, esophagus and gastrointestinal tract.
- Inhalation:** Heated vapor concentrations may be harmful if inhaled. May cause irritation or harm to respiratory tract. Rosin may cause occupational asthma.
- Skin Contact:** May cause skin irritation. Allergic reactions or dermatitis are possible, especially with repeated or prolonged exposure. May be harmful if absorbed through the skin
- Chronic:** Not established. Contains a chemical that may impair fertility or cause harm to the unborn child. Target organs(2-methoxyethanol): CNS/liver/lungs/kidneys/immune system/bone marrow.
- Warning:** This product contains a chemical known to the State of California to cause cancer and/or birth defects (or other reproductive harm). (2-methoxyethanol)
- NOTE:** **The Indium Corporation does not recommend, manufacture, market or endorse any of its product's 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>
ROSIN	45-55	65997-05-9 (US)	N.E.	N.E.	N.E.
		(EU)	0.05	N.E.	0.15 (sensitiser)
2-METHOXYETHANOL	30-45	109-86-4	80 (skin)	16	N.E.
		(EU)	16 (MEL-skin)	N.E.	N.E.
		(Canada)	N.E.	16	32
PROPRIETARY ADDITIVES NON-HAZARDOUS	10-15		N.E.	N.E.	N.E.

N.E. = Not established

**PRODUCT DOES CONTAIN A REPORTABLE EU SUBSTANCES OF VERY HIGH CONCERN (SVHC) (2-methoxyethanol)**

#### 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:** 46 C (115 F)      **Method:** Not available
- Auto-ignition Temperature:** Not established.
- Flammable Limits:** Flammable - not established
- Extinguishing Media:** Use extinguishers appropriate for the surrounding fire conditions.
- 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 protection (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. Keep sources of ignition away.

#### 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 sources of ignition away. Ground containers.
- 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:** Exhaust ventilation is recommended to control airborne levels and keep exposures as low as possible. Recommend material not be used without proper ventilation.
- Personal protection:**
- Eyes:** Chemical safety glasses with side shields or goggles. Face shield for splash hazards.
- Respirator:** An authority approved or compliant marked air-purifying respirator with a fume/organic chemical cartridge is recommended under certain circumstances where airborne concentrations are expected to be elevated or when proper ventilation is not available.
- Skin:** Compatible chemical resistant gloves. Protective outer garment, apron and sleeves as appropriate. Latex gloves not recommended. Use rubber gloves or nitrile.

**Other:** Eyewash fountain in work area. Avoid the use of contact lenses.  
**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 after handling.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Flux	<b>Boiling Point:</b>	Not applicable.
<b>Odor:</b>	Mild 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>	Insoluble
<b>Vapor Density:</b>	(air=1) Not applicable.		

## 10. STABILITY AND REACTIVITY

**General:** Stable.

**Conditions to Avoid:** Freezing temperatures. High temperatures.

**Incompatible Materials:** Ignition sources

**Hazardous Decomposition / Combustion:** Harmful organic fumes and toxic oxide fumes may form at elevated temperatures.

**Hazardous Polymerization:** Will not occur.

## 11. TOXICOLOGICAL INFORMATION

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

**LD50:** Not established. **LC50:** Not established.

**Other:** 2-methoxyethanol  
 LD50 oral- 2370 mg/kg (rat)  
 LD50 Dermal – 1280 mg/kg (rabbit) & 2000 mg/kg (rat)

## 12. ECOLOGICAL INFORMATION

Product not tested.

2-methoxyethanol

500 mg/l LC50 96h (freshwater fish)

10000 mg/l LC50 96h (freshwater fish)

## 13. DISPOSAL CONSIDERATION

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

**14. TRANSPORT INFORMATION**

Transport in accordance with applicable regulations and requirements.

Shipping name: UN 1188, Ethylene Glycol Monomethyl Ether, 3, PG III



North American Emergency Guide Book – Guide #127

UN – UN 1188

**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.).

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



Canadian WHMIS: Class B Division 2 Flammable, D2B Toxic Material Causing Other Toxic Effects (eye irritation in animals) (skin irritant/skin sensitizer).

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

California Prop 65: Warning: This product contains a chemical known to the State of California to cause cancer and/or birth defects (or other reproductive harm). (2-methoxyethanol)

SARA 313 Listing - 40 CFR 372.65 : 2-methoxyethanol

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> F, T (2-methoxyethanol)

**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

R42/43	May cause sensitization by inhalation and by skin contact
R10	Flammable
R60	May impair fertility (contains a chemical). Note: This does not reflect the entire product.
R61	May cause harm to the unborn child (contains a chemical). Note: This does not reflect the entire product.

**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
S62	If swallowed, do not induce vomiting seek medical advice immediately and show container or label
S7	Keep container tightly closed

**16. OTHER INFORMATION**

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

**Revised Date:** 10 FEBRUARY 2012

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

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

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