



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

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: 836 ROSIN FLUX

SDS Number: SDS-4827

Revised Date: 11 MAY 2015

Product Use: INDUSTRIAL USE - WAVE SOLDERING FLUX

MANUFACTURER:

In America:

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Singapore 628908
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2. HAZARDS IDENTIFICATION

PRIMARY ROUTES OF ENTRY:

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

Carcinogen listed in

GHS



Signal Word: Warning

Hazard statement(s)

H227 Combustible Liquid
 H303 May be harmful if swallowed
 H315 Causes skin irritation
 H317 May cause an allergic skin reaction
 H319 Causes eye irritation
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled

Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking
 P233 Keep container tightly closed
 P240 Ground container and receiving equipment
 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 + 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)
 P501 Dispose of in accordance with applicable local, state or federal requirements.

GHS Classification:

Flammable Liquid (Category 4)
 Skin irritation (Category 2)
 Acute toxicity, Oral (Category 4)
 Skin sensitization- Category 1B
 Respiratory sensitization-Category 1B

POTENTIAL HEALTH EFFECTS:

Eye Contact: Irritating to the eyes.

Ingestion: May be harmful if swallowed. May cause irritation.

Inhalation: Heated vapor/mists concentrations may be harmful if inhaled. Rosin may cause occupational asthma.

Skin Contact: Brief contact may cause slight irritation with itching and local redness. Allergic skin reaction or

dermatitis may occur with prolonged exposure.

Chronic: Prolonged or repeated overexposure to mist or vapor generated at high temperatures may result in the inhalation of harmful amounts of material. Rosin fumes generated by heating may lead to respiratory sensitization (asthma) in susceptible individuals. Polyglycol ether may cause reproductive and birth defects, anemia, liver and kidney damage.

Note: The Indium Corporation does not recommend, manufacture, market or endorse any of its products for human consumption.

California Prop 65: This product contains substances which are known to the State of California to cause, birth defects or other reproductive harm. Trace amounts not intentionally added: naphthalene/ethylbenzene/toluene.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Components	% wt	CAS Registry #	TLV-TWA mg/m ³	PEL mg/m ³	TLV-STEL mg/m ³
ROSIN	30-40	65997-05-9 (EU)	N.E. 0.05	N.E. N.E.	N.E. 0.15(sensitiser)
POLYGLYCOL ETHER	30-45	9038-95-3 (Canada) (EU) (Singapore) (Mexico)	50 ppm(skin) - - 25 ppm 26 ppm	20 ppm 25ppm 20 ppm - -	N.E. 75ppm 50ppm - 75ppm
PROPRIETARY HYDROCARBON SOLVENT	25-30	-	100ppm	500ppm	N.E.

Symbol: X Risk Phrases: R20/22, R36/37/38, R42/43 EU = European Exposure Limits
N.E. = Not established

The formulation percentage have not changed. Any changes to the percentage range is more representative of the ingredients.

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/rinse affected area with soap and plenty of water. Wash clothing before reuse. If irritation persists, obtain medical attention.

5. FIRE FIGHTING MEASURES

Flash Point:	66C (150F)	Method:	Not available.
Auto-ignition Temperature:	Not established.		
Flammable Limits:	Limits not established. Material considered a combustible material.		
Extinguishing Media:	Use extinguishers appropriate for the surrounding fire conditions. Foam, dry chemical, water spray and carbon dioxide.		
Special Fire Fighting Procedures:	Firefighters must wear an approved self-contained breathing apparatus and full protective clothing.		

6. ACCIDENTAL RELEASE MEASURES

Spill or Leak Procedures:	Wear respirator and other personal protective clothing. (See Exposure Controls/Personal Protection Section). Extinguish or remove all sources of ignition. Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Keep unnecessary personnel away. Combustible liquid.
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7. HANDLING AND STORAGE

Handling Precautions:	Avoid breathing vapors/mists from heated material. Avoid contact with eyes, skin and clothing. Follow routine safe handling procedures. Use with adequate ventilation. Grounding of container may be necessary since product is a potential combustible material.
Storage Precautions:	Keep away from heat and flame. Store in suitable, tightly capped, and labeled containers in cool dry, well-ventilated area. Store away from incompatible materials. Empty containers may be hazardous as they contain product residue.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls:	Local exhaust ventilation is required especially during heating in order to keep Exposures of mists and vapors as low as possible. Vent to reduce workers exposure.
Personal protection:	
Eyes:	Chemical safety glasses/goggles. Face shield for splash hazards.
Respirator:	An 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.
Skin:	Compatible chemical resistant gloves. Nitrile rubber gloves or other solvent resistant gloves. Latex and disposable nitrile gloves not recommended
Other:	Lab coat, eye-wash fountain in work area. Avoid the use of contact lenses in high fume areas.
Work/Hygienic	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. Ventilate area.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Flux (solid) amber	Boiling Point:	Not applicable.
Odor:	Slight characteristic odor.	Melting Point:	Not applicable
Specific Gravity:	Not applicable.	pH:	4.5
Vapor Pressure:	Not applicable.	Solubility in Water:	Not established
Vapor Density:	(air=1) Not applicable.	Flammability:	Combustible material

10. STABILITY AND REACTIVITY

General:	Stable.
Conditions to Avoid:	High temperatures/heat/flame/sparks.
Incompatible Materials:	Strong acids/alkalies/strong oxidizing agents
Hazardous Decomposition / Combustion:	Carbon monoxide
Hazardous Polymerization:	Will not occur.

11. TOXICOLOGICAL INFORMATION

Carcinogenicity:	NTP: No
	OSHA: No
	IARC: No

Product mixture not tested.

Polyglycol Ether:

Rat, oral LD50 470 mg/kg

Rabbit, skin, LD50 220 mg/kg

Hydrocarbon Solvent:

LD50 Oral-rabbit-2,835 mg/kg

Skin-rabbit-irritating to skin-24h-draize test.

12. ECOLOGICAL INFORMATION

Product not tested. No data available on mixture.

Contains a substance that is toxic to aquatic life with long lasting effects.

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

Toxicity to daphnia magna (water flea)- 1,815 mg/l- 24h

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

13. DISPOSAL CONSIDERATION

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

Transport in accordance with applicable regulations and requirements.

Marine Pollutant: No

NA 1993, Combustible Liquid N.O.S., PG III (hydrocarbon solvent/polyglycol ether)

Reference 49 CFR 173.150 on the paperwork for shipping.

IATA: Not regulated/ Flash Point 150F

Marking (ground):



This can be used on containers however must be used on containers classified as bulk.

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 (CPR).



WHMIS: D2B Materials Causing Other Toxic Effects –irritant

California Prop 65: This product contains substances which are known to the State of California to cause, birth defects or other reproductive harm. Trace amounts not intentionally added: naphthalene/ethylbenzene/toluene.

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

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

This product has been classified in accordance with the Mexican regulations NOM-018-STPS-2000 and NOM-010-STPS-1999.

SARA 313 Listing - 40 CFR 372.65 (FORM R REPORTING) – polyglycol ether

All ingredients are listed on the EPA TSCA Inventory.

EC Classification, Packaging and Labeling Requirements:

Symbol and Hazard Classification of Product

X

Risk Phrases:

- R20/22 Harmful by inhalation and if swallowed
 R42/43 May cause sensitization by inhalation and skin contact
 R36/37/38 Irritating to eyes, respiratory system and skin

Safety Phrases:

- S16 Keep away from sources of ignition- No Smoking
 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
 S7 Keep container tightly closed

16. OTHER INFORMATION

HMIS Hazard Rating:

Health:	2
Fire:	2
Reactivity:	0

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