



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

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: INDIUM9.72 CONDITIONING MATERIAL

MSDS Number: MSDS-4406

Revised Date: 25 SEPTEMBER 2006

Product Use: 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

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Kingston, Milton Keynes, UK, MK 10 OAG
Information: +44 [0] 1908 580400

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Jiangsu Province, China 215126
Information: (86) 512-6283-4900

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 #	PEL mg/m ³	TLV-TWA mg/m ³	TLV-STEL mg/m ³
ROSIN	35-40	65997-05-9	N.E.	N.E.	N.E.
		(EU)	0.5.	N.E.	0.15(sensitizer)
POLYGLYCOL ETHER	45-50	9038-95-3	N.E.	N.E.	N.E.
PROPRIETARY ACTIVATORS	7.5-17		N.E.	N.E.	N.E.

PROPRIETARY AMINE	2	(Singapore)	N.E. 5	5 N.E.	N.E. N.E.
PROPRIETARY ORGANIC	0.5-1.0	(US)	2	2	N.E.
		(EU)	-	2	4
		(Canada)	-	2	4
		(Singapore)	2	-	-
		(China)	-	1	2

Symbol: XI

Risk Phrases: R36/37/38, R42/43

N.E. = Not established

EU = European Union Occupational Exposure Limits

Product meets the requirements under the RoHS (Restriction of Hazardous Substance). No flame retardants or metals are contained within the product.

3. HAZARDS IDENTIFICATION

PRIMARY ROUTES OF ENTRY:

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

Carcinogen listed in

POTENTIAL HEALTH EFFECTS:

- Eye Contact:** Moderately to severely 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. Moderately irritating to respiratory tract.
- Skin Contact:** May cause mild skin irritation. Allergic reactions (dermatitis) are possible, especially with repeated or prolonged exposure.
- Chronic:** Not established. Long term exposure to rosin based solder flux fume has been known to cause occupational asthma.
- 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:	>100C (212 F)	Method:	Not available
Auto-ignition Temperature:	Not established.		
Flammable Limits:	Limits not established		
Extinguishing Media:	Use extinguishers appropriate for the surrounding fire conditions. Foam, dry chemical, water spray.		
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.
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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:	Local exhaust ventilation is necessary to control airborne levels and exposure.
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 such as nitrile should be worn. 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

Appearance:	Flux - yellowish	Boiling Point:	Not established
Odor:	Mild characteristic odor.	Melting Point:	Not applicable
Specific Gravity:	Not established	pH:	Not applicable
Vapor Pressure:	Not applicable.	Solubility in Water:	Not soluble
Vapor Density:	(air=1) Not applicable.		

10. STABILITY AND REACTIVITY

General:	Stable.
Conditions to Avoid:	High temperatures, open flame.
Incompatible Materials:	Not established
Hazardous Decomposition / Combustion:	Not established
Hazardous Polymerization:	Will not occur.

11. TOXICOLOGICAL INFORMATION

Carcinogenicity:	NTP: No		
	OSHA: No		
	IARC: No		
LD50:	Not established.	LC50:	Not established.
Other:	Exposure to rosin-based solder flux fume may cause occupational asthma.		

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.

14. TRANSPORT INFORMATION

Transport in accordance with applicable regulations and requirements. Not regulated under the USDOT. Non hazardous under shipping regulations.

North American Emergency Guide Book – Not applicable

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).

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 under the Mexican regulations NOM-018-STPS-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 - None

All ingredients are listed on the EPA TSCA Inventory.

EC Classification, Packaging and Labeling Requirements:

Symbol and Hazard Classification of Product

XI

Risk Phrases:

R36/37/38 Irritating to eyes, respiratory system and skin

R42/43 May cause sensitization by inhalation and skin contact.

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

S7 Keep container tightly closed

16. OTHER INFORMATION

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

Revised Date: 25 SEPTEMBER 2006

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