



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

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: RMA FLUX CAKE

MSDS Number: MSDS-4286

Revised Date: 15 NOVEMBER 2005

Product Use: Flux material

MANUFACTURER:

In America:

The Indium Corporation of America
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CHEMTREC 24 hrs.

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Singapore 628908
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2. COMPOSITION / INFORMATION ON INGREDIENTS

Components	% wt	CAS Registry #	TLV-TWA mg/m ³	PEL mg/m ³	TLV-STEL mg/m ³
ROSIN	96	65997-05-9 (EU)	N.E. 0.05	N.E. -	N.E. 0.15(sensitiser)
PROPRIETARY	4		N.E.	N.E.	N.E.

Symbol: XI

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

EU = European Exposure Limits

N.E. = Not established

3. HAZARDS IDENTIFICATION

PRIMARY ROUTES OF ENTRY:

Eye
 Inhalation
 Skin
 Ingestion
 NTP
 Carcinogen listed in IARC
 OSHA
 Not Listed

POTENTIAL HEALTH EFFECTS:

- Eye Contact:** Moderately irritating to the eyes and if not removed promptly, may result in permanent damage.
- Ingestion:** Harmful if swallowed. May cause irritation and damage to mouth, esophagus and the gastrointestinal tract.
- Inhalation:** Heated vapor 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 reaction or dermatitis may occur with prolonged exposure.
- 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:** Not established. **Method:** Not established.
- 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 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.

7. HANDLING AND STORAGE

- Handling** Avoid breathing vapors from heated material. Avoid contact with eyes, skin and clothing.
- Precautions:** Follow routine safe handling procedures. Use with adequate ventilation.
- 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 recommended especially during heating. Keep personal exposure levels as low as possible.

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 and sleeve protectors if necessary.

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

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

10. STABILITY AND REACTIVITY

- General:** Stable.
- Conditions to Avoid:** High temperatures. Freezing temperatures
- Incompatible Materials:** Not established
- Hazardous Decomposition / Combustion:** Carbon monoxide
- Hazardous Polymerization:** Will not occur.

11. TOXICOLOGICAL INFORMATION**Carcinogenicity:** NTP: No

OSHA: No

IARC: No

LD50: Not established.**LC50:** Not established.**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 US DOT (United States Department of Transportation). Not hazardous under shipping regulations.

North America 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).

WHMIS: Not classified, insufficient data.

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 the Mexican regulations NOM-018-STPS-2000 and NOM-010-STPS-1999.

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

SARA 313 Listing - 40 CFR 372.65 (FORM R REPORTING) : 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:

R42/43 May cause sensitization by inhalation and skin contact
 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
 S7 Keep container tightly closed

16. OTHER INFORMATION

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

Revised Date: 15 NOVEMBER 2005

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Approved by: Nancy Swarts, Indium Corporation of America

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