



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

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: FC-WS-LT-B

MSDS Number: MSDS-IN FC014

Revised Date: 19 SEPTEMBER 2005

Product Use: Flip chip flux

MANUFACTURER:

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The Indium Corporation of America
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Singapore 628908
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2. COMPOSITION / INFORMATION ON INGREDIENTS

Components	% wt	CAS Registry #	PEL mg/m ³	TLV-TWA mg/m ³	TLV-STEL mg/m ³
ISOPROPYL ALCOHOL	20-25	67-63-0	980	983	1225
		(EU)	-	999	1250
		(Canada)	-	983	1228
		(Singapore)	983	-	1230
		(Mexico)	-	980	1225

(China) - 350 700

PROPRIETARY 75-80 N.E. N.E. N.E.Symbol: X_n F

Risk Phrases: R36/37/38, R10

N.E. = Not established

EU = European Union Occupational Exposure Limits

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 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. May have systematic effects.**Inhalation:** Heated vapor concentrations may be harmful if inhaled. Moderately toxic. Moderately irritating to respiratory tract. High concentrations over a prolonged period may cause headache.**Skin Contact:** May cause mild skin irritation.**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:** 104 F**Method:** Not available.

Auto-ignition Temperature:	Not established.
Flammable Limits:	Flammable, 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 Protective (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. In the EU refer to the Special Waste 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:	Good general ventilation or exhaust point ventilation is recommended to control airborne levels.
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. Protective outer garment, apron. 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:	Liquid	Boiling Point:	Not applicable.
Odor:	Mild characteristic odor.	Melting Point:	Not applicable
Specific Gravity:	Not applicable.	pH:	Not applicable
Vapor Pressure:	Not applicable.	Solubility in Water:	Water 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:	None known		

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. In Europe follow the Special Waste Regulations.

14. TRANSPORT INFORMATION

Transport in accordance with applicable regulations and requirements.

Flammable Liquid, N.O.S., (isopropyl alcohol), 3, UN1993, III

North American Emergency Guide Book – Guide #128

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: Insufficient information to classify. Division 2 Class B Flammable

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 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 - None

All ingredients are listed on the EPA TSCA Inventory

EC Classification, Packaging and Labeling Requirements:

Symbol and Hazard Classification of Product

X_nF

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

S7 Keep container tightly closed

16. OTHER INFORMATION

HMIS Hazard Rating:	Health:	1
	Fire:	2
	Reactivity:	0

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