



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

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier:** FC-WS-HT-A

**MSDS Number:** MSDS-IN FC008

**Revised Date:** 21 MARCH 2012

**Product Use:** Industrial Use - Flip chip flux.

### MANUFACTURER:

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## 2. HAZARDS IDENTIFICATION

### PRIMARY ROUTES OF ENTRY:

\*Eye   \*Inhalation   \*Skin   \*Ingestion   NTP

### Carcinogen listed in

IARC   OSHA   \*Not Listed

GHS:



Signal Word: Danger

Hazardous statement(s)

H319 Causes serious eye irritation  
 H225 Highly flammable liquid and vapor  
 H335 May cause respiratory irritation  
 H336 May cause drowsiness and dizziness

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 (15 mins)

### POTENTIAL HEALTH EFFECTS:

**Eye Contact:** Irritating to the eyes and if not removed promptly, may result in serious eye irritation. 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. Irritating to respiratory tract.

**Skin Contact:** May cause skin irritation.

**Chronic:** Not established.

**NOTE:** **The Indium Corporation does not recommend, manufacture, market or endorse any of its products 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>
2-PROPANOL (ISOPROPYL ALCOHOL)	45-55	67-63-0 (US)	980	980	1225
		(EU)	-	999	1250
		(Canada)	-	983	1228
		(Singapore)	983	-	1230
		(Mexico)	-	980	1225
		(China)	-	350	700
ETHOXYLATED ALCOHOLS	20-25	68876-79-9	N.E.	N.E.	N.E.
PROPRIETARY	20-35	-	N.E.	N.E.	N.E.

Please note that there was an error in reporting the percentage range of the ingredients on the previous SDS. This SDS represents the correct range percentages.

The actual product made has no change in its content.

**Product does not contain any reportable EU Substances of Very High Concern (SVHC)**

Symbol: Xi, F

Risk Phrases: R36/37/38, R11, R67

N.E. = Not established

EU = European Union Occupational Exposure Limits

### 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:** 12 C (53 F)      **Method:** Not established.

**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 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. In the EU refer to the Special Waste Regulations.

## 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 should be sufficient to control airborne levels. Do not use product without ventilation.

### Personal protection:

**Eyes:** Chemical safety glasses/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.

**Skin:** Compatible chemical resistant gloves. Protective outer garment, apron and sleeves as appropriate.

**Other:** Eyewash fountain in work area. Avoid the use of contact lenses in high fume/splash 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

<b>Appearance:</b>	Liquid	<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>	Not established
<b>Vapor Density:</b>	(air=1) Not applicable.		

## 10. STABILITY AND REACTIVITY

**General:** Stable.

**Conditions to Avoid:** High temperatures, open flame.

<b>Incompatible Materials:</b>	Not established
<b>Hazardous Decomposition / Combustion:</b>	Not established
<b>Hazardous Polymerization:</b>	Will not occur.

## 11. TOXICOLOGICAL INFORMATION

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

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

**Other:** None known. Product is not considered a carcinogen.

## 12. ECOLOGICAL INFORMATION

. Product not tested.

## 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.

UN1219 Isopropanol, 3, PG II



North American Emergency Guide Book – Guide 129

## 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).



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 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, F

**Risk Phrases:**

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

R11 Highly flammable

R67 Vapors may cause drowsiness and dizziness

**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

**HMIS Hazard Rating:**

<b>Health:</b>	1
<b>Fire:</b>	3
<b>Reactivity:</b>	0

**Revised Date:** 21 MARCH 2012

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

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

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