



## SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier:** FC-WS-HT-B1

**SDS Number:** SDS-IN FC026

**Revised Date:** 5 DECEMBER 2018

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

#### MANUFACTURER:

##### In America:

**The Indium Corporation of America®.**

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<http://www.indium.com>

## 2. HAZARDS IDENTIFICATION

### PRIMARY ROUTES OF ENTRY:

XEye      XInhalation      XSkin      XIngestion      NTP

### Carcinogen listed in

IARC      OSHA      XNot Listed

GHS:



Signal Word: Danger

### Hazard Statements:

H225      Highly Flammable liquid and vapor  
 H316      Causes mild skin irritation  
 H319      Causes serious eye irritation  
 H336      May cause drowsiness or dizziness

### 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)

### Classification:

Eye irritant – (Category 2A)  
 Flammable liquids - (Category 2)  
 Skin irritation- (Category 3)  
 Specific target organ systemic toxicity (single exposure) – (Category 3), Central nervous system

### POTENTIAL HEALTH EFFECTS:

**Eye Contact:**      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:**      May cause irritation and may be harmful .

**Inhalation:**      Heated vapor concentrations may be harmful if inhaled. May cause irritation. High concentrations can cause headache

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

**Chronic:**      Not established.



**WARNING:** This product can expose you to chemicals including [ trace amounts of ethylene oxide and 1,4 dioxane] which is known to the State of California to cause cancer, and [trace amounts of ethylene oxide] which causes birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

**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>
ISOPROPYL ALCOHOL	20-30	67-63-0	980	983	1230
		(EU)	-	999	1250
		(Canada)	-	983	1228
		(Singapore)	983	-	1230
		(Mexico)	-	980	1225
		(China)	-	350	700
POLYGLYCOL ETHER	30-40	9038-95-3	N.E.	N.E.	N.E.
PROPRIETARY	15-30		N.E.	N.E.	N.E.
PROPRIETARY ALCOHOL	15-20		15	10	-
		(EU)	-	10	-
		(Canada)	-	10	20
		(Mexico)	-	10	-

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

## 5. FIRE FIGHTING MEASURES

<b>Flash Point:</b>	24C (76 F)	<b>Method:</b>	Closed cup (11/6/2013)
<b>Auto-ignition Temperature:</b>	Not established.		
<b>Flammable Limits:</b>	Limits not established		
<b>Extinguishing Media:</b>	Use extinguishers appropriate for the surrounding fire conditions. Foam, dry chemical, water spray.		
<b>Special Fire Fighting Procedures:</b>	Firefighters must wear NIOSH approved self-contained breathing apparatus and full protective clothing.		

## 6. ACCIDENTAL RELEASE MEASURES

<b>Spill or Leak Procedures:</b>	Isolate area and keep unnecessary personnel away. Wear a respirator and appropriate Personal Protective (See Exposure Control/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

<b>Handling Precautions:</b>	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.
<b>Storage Precautions:</b>	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

<b>Engineering Controls:</b>	Local exhaust ventilation is necessary to control airborne contaminant levels.	
<b>Personal protection:</b>		
<b>Eyes:</b>	Chemical safety glasses/goggles. Face shield for splash hazards.	
<b>Respirator:</b>	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.	
<b>Skin:</b>	Compatible chemical resistant gloves. Protective outer garment, apron. Sleeves as appropriate.	
<b>Other:</b>	Eyewash fountain in work area. Avoid the use of contact lenses in high fume areas.	
<b>Work/Hygienic Practices:</b>	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/paste	<b>Boiling Point:</b>	94C
<b>Odor:</b>	Alcohol like odor.	<b>Melting Point:</b>	Not applicable
<b>Specific Gravity:</b>	1.05	<b>pH:</b>	Not applicable
<b>Vapor Pressure:</b>	Not applicable.	<b>Solubility in Water:</b>	Soluble
<b>Vapor Density:</b>	(air=1) Not applicable.		

## 10. STABILITY AND REACTIVITY

<b>General:</b>	Stable.
<b>Conditions to Avoid:</b>	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

<b>Carcinogenicity:</b>	<b>NTP:</b> No		
	<b>OSHA:</b> No		
	<b>IARC:</b> No		
<b>LD50:</b>	Not established.	<b>LC50:</b>	Not established.
<b>Other:</b>	None known		

## 12. ECOLOGICAL INFORMATION

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 international regulations and requirements.

UN1219, Isopropanol, 3, PGII

North American Emergency Guide Book – Guide #129



Marine pollutant: No

## 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: Division 2 Class B 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.

Regulatory Information China:

GB/T 16483-2008, GB/T 17519-2013, Safety Data Sheets for Chemical Products

GB 30000.2-29-2013, Rules for classification and labeling of chemicals (GHS)

Decree No. 591: Regulations on the Control Over Safety of Hazardous Chemicals.

This product has been classified using the Chinese Occupational Exposure Limit for Hazardous Agents in the Workplace, GBZ2-2007.

This product has been classified in accordance with the Mexican regulations NOM-018-STPS-2015 and NOM-010-STPS-2014.

Malaysia:

This product has been classified in accordance with: Malaysian – OCCUPATIONAL SAFETY AND HEALTH (CLASSIFICATION, LABELING AND SAFETY DATA SHEET OF HAZARDOUS CHEMICALS) REGULATION OCTOBER 2013 – (CLASS).



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SARA 313 Listing - 40 CFR 372.65 - None

All ingredients are listed on the EPA TSCA Inventory and the Domestic Substance List.

## 16. OTHER INFORMATION

<b>HMIS Hazard Rating:</b>	<b>Health:</b>	1
	<b>Fire:</b>	3
	<b>Reactivity:</b>	0

**Revised Date:** 5 DECEMBER 2018

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

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

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