

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

# SAFETY DATA SHEET

# 1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: FC-WS-HT-A1

SDS Number: SDS-IN FC08R Revised Date: 21 JANUARY 2014

Product Use: Industrial Use - Flip chip flux

## **MANUFACTURER:**

In America:

The Indium Corporation of America 1676 Lincoln Ave., Utica NY 13502 Information: (315) 853-4900 nswarts@indium.com

In Europe:

Indium Corporation of Europe 7 Newmarket Ct.

Kingston, Milton Keynes, UK, MK 10 OAG

Information: +44 [0] 1908 580400

In Asia:

Indium Corporation of America Asia-Pacific Operations-Singapore 29 Kian Teck Avenue

Singapore 628908

Information: +65 6268-8678

**EMERGENCY PHONE:** 

CHEMTREC 24 hrs. USA: 1 (800) 424-9300

Outside USA: +1 (703) 527-3887

In China:

Indium Corporation (Suzhou), Co., Ltd. No. 428 Xinglong Street

Suzhou Industrial Park Suchun Industrial Square

Unit No. 14-C

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

http://www.indium.com

# 2. HAZARDS IDENTIFICATION

#### PRIMARY ROUTES OF ENTRY:

# Carcinogen listed in

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

**GHS** 





Signal Word: Danger

Hazard statement(s)

H225 Highly flammable liquid and vapor
 H319 Causes serious eye irritation
 H335 May cause respiratory 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/Bond 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 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 – isopropyl alcohol

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 irritation. Do

Not allow material to come in contact with the eyes.

Ingestion: May cause irritation and damage to the mouth, esophagus and gastrointestinal

tract.

**Inhalation:** Heated vapor concentrations may be irritating if inhaled. High concentrations may cause headache

or dizziness or light headiness.

**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 #	<b>PEL</b> mg/m³	TLV-TWA mg/m³	TLV-STEL mg/m³
2-PROPANOL (ISOPROPYL ALCOHOL)	85-90	67-63-0 (US)	980	980	1225
		(EU)	-	999	1250
		(Canada)	-	983	1228
		(Singapore)	983	-	1230
		(Mexico)	-	980	1225
		(China)	-	350	700
PROPRIETARY ACTIVATORS	10-15	trade secret	N.E.	N.E.	N.E.

#### PRODUCT DOES NOT CONTAIN ANY EU LISTED 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: 11 C (52 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 Firefighters must wear NIOSH approved self-contained breathing apparatus and full

**Procedures:** protective clothing.

# **6. ACCIDENTAL RELEASE MEASURES**

Spill or Leak Procedures: Wear a respirator and appropriate personal protection (See Exposure Control

Personal Protective Section). Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Turn off all sources of ignition. Keep unnecessary personnel away from spill. Dispose of following all Federal, State

and Local regulations. In the EU refer to the Special Waste Regulations.

#### 7. HANDLING AND STORAGE

**Handling**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. Ground containers.

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: Exhaust ventilation should be sufficient to control airborne contaminant levels. Do

not use without proper ventilation.

Personal protection:

**Eyes:** Chemical safety glasses/goggles. Face shield should be used 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 areas.

Work/Hygienic Maintain good housekeeping. Clean up spills immediately.

**Practices:** 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:LiquidBoiling Point:Not applicable.Odor:Alcohol like odor.Melting Point:Not applicableSpecific Gravity:Not applicable.pH:Not applicable

Vapor Pressure: Not applicable.

Vapor Density: (air=1) Not applicable.

# 10. STABILITY AND REACTIVITY

General: Stable.

**Conditions to Avoid:** High temperatures, open flame and other sources of ignition.

Incompatible Materials: Not established Hazardous Decomposition / Not established

Combustion:

Hazardous Polymerization: Will not occur.

# 11. TOXICOLOGICAL INFORMATION

Carcinogenicity: NTP: No

OSHA: No IARC: No

\* Product FC-WS-HT-A1 is not considered to be a carcinogen.

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

Other: Product not tested Oral LD50 (isopropyl alcohol) LD50 Oral- rat- 5,045 mg/kg

Inhalation LC50 (isopropyl alcohol) LC50 inhalation-rat-8h-16000 ppm

Dermal LD50

LD50 - Dermal- rabbit-12,800 mg/kg

RTECS: Isopropyl alcohol NT8050000

# 12. ECOLOGICAL INFORMATION

Product mixture not tested.

LC50-Pimephales promelas (fathead minnow)- 9,640 mg/l – 96h (isopropyl alcohol)

EC50-Daphnia magna (water flea) – 5,102 mg/l – 24h (isopropyl alcohol)

# 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. Recycle when possible.

## 14. TRANSPORT INFORMATION

Transport in accordance with applicable regulations and requirements.

Shipping Name: UN1219, Isopropanol, 3, PGII

North American Emergency Response Guidebook 2012: Guide No. 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 and the Domestic Substance List.

This product is in compliance with the Directive of the European Parliament and of the Council on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS 2 (2011/65/EU)).

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:**

S16 Keep away from sources of ignition – No Smoking

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	
S7	Keep container tightly closed	

# **16. OTHER INFORMATION**

HMIS Hazard Rating: Health: 2

Fire: 3 Reactivity: 0

Revised Date: 21 JANUARY 2014

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

The information and recommendations contained herein are, to the best of The Indium Corporation of America's knowledge and belief, accurate and reliable as of the date issued. The Indium Corporation of America does not warrant or guarantee their accuracy or reliability, and The Indium Corporation of America shall not be liable for any loss or damage arising out of the user thereof. The information and recommendations are offered for the user's consideration and examination, and it is the user's responsibility to satisfy itself that they are suitable and complete for its particular use. If buyer repackages this product, legal counsel should be consulted to insure proper health, safety and other necessary information is included on the container.