



SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: FC-X5-G

SDS Number: SDS-IN FC009

Revised Date: 9 APRIL 2018

Product Use: Industrial Use - Flip chip flux

MANUFACTURER:

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The Indium Corporation of America®.

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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

Hazard statement(s)

H226	Flammable liquid and vapor
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H336	May cause drowsiness or dizziness
H361	Suspected of damaging fertility or the unborn child
H412	Harmful to aquatic life with long lasting effects

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:

Flammable liquid-Category 3
 Eye damage- Category 1
 Skin corrosion- Category 1B
 Reproductive toxicity- Category 2
 Acute toxicity, Oral – Category 4
 Acute aquatic toxicity- Category 3
 Chronic aquatic toxicity – Category 3

POTENTIAL HEALTH EFFECTS:

Eye Contact: Causes irritation to the eyes. If splashed in eyes and not removed promptly, may result in serious eye damage.

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. May cause headache. May be harmful to the mucous membranes and upper respiratory tract.

Skin Contact: May cause skin irritation. May be harmful.

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 ³	TLV-TWA mg/m ³	TLV-STEL mg/m ³
2-PROPANOL (ISOPROPYL ALCOHOL)	20-25	67-63-0 (US)	980	980	1225
		(EU)	-	999	1250
		(Canada)	-	983	1228
		(Mexico)	-	980	1225
		(Singapore)	983	-	1230
		(China)	-	350	700
PROPRIETARY SOLVENT	65-70	-	N.E.	N.E.	N.E.
PROPRIETARY ADDITIVES	5-15	-	N.E.	N.E.	N.E.

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

- Flash Point:** 24 C (75 F) **Method:** ASTM D93-80
- 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 exhaust ventilation should be sufficient to control airborne levels.

Personal protection:

Eyes: Chemical safety glasses/goggles. Face shield for splash hazards.

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 and 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 established
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, open flame.

Incompatible Materials: Strong oxidizing agents

Hazardous Decomposition / Combustion: Carbon monoxide/carbon dioxide

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Carcinogenicity: NTP: No

OSHA: No

IARC: No

LD50: Not established.

LC50: Not established.

Product contains a substance that is suspected of causing reproductive toxicity.

phenol: LD50, rat (male/female)- 1,412 mg/kg.

12. ECOLOGICAL INFORMATION

Product mixture not tested.

phenol: Eye rabbit, corrosive- 72h

Product contains substances that are harmful to the aquatic life with long lasting effects.

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.



UN2924, Flammable Liquids, Corrosive, N.O.S., 3, PG II (isopropyl alcohol/alkylphenol)

North American Emergency Guide Book- Guide 132

MARINE POLLUTANT: YES (ALKYPHENOL)

IMDG: UN2924, Flammable Liquids, Corrosive, N.O.S., 3, PG II (isopropyl alcohol/alkylphenol) Marine Pollutant



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.).

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).

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulation (CPR).

WHMIS: Class B Division 2 Flammable. Class D2B materials causing other toxic effects.



This product has been classified in accordance with the guidelines set, by the Dept of Industrial Health of the Republic of Singapore.

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

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

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