



SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: FC-MC-M

SDS Number: SDS-IN FC029

Revised Date: 28 MARCH 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: Warning

Hazard statement (s)

H226 Flammable liquid and vapor
 H303 May be harmful if swallowed
 H319 Causes serious eye irritation
 H336 May cause drowsiness or dizziness
 H412 Harmful to aquatic life with long lasting effects

Precautionary statement(s)

P210 Keep away from heat/spark/open flames/hot surfaces – No Smoking
 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 +P351 IF IN EYES: Rinse cautiously with water for several minutes (15 mins)

Classification:

Flammable liquid- Category 3
 Eye irritation- Category 2B
 Acute toxicity, Oral – Category 5
 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 cause damage to the eyes.

Ingestion: May be harmful if swallowed. May cause irritation.

Inhalation: Heated vapor concentrations may be harmful or irritating if inhaled.

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 ³	TLV-TWA mg/m ³	TLV-STEL mg/m ³
2-PROPANOL (ISOPROPYL ALCOHOL)	22-27	67-63-0 (US)	980	980	1225
		(EU)	N.E.	999	1250
		(Canada)	N.E.	983	1228
		(Singapore)	983	-	1230
		(China)	-	350	700
		(Mexico)	N.E.	980	1225
PROPRIETARY SOLVENT	60-70	-	N.E.	N.E.	N.E.
PROPRIETARY ADDITIVES	8-13	-	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:** 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

- | | | | |
|------------------------|---------------------------|-----------------------------|-----------------|
| Appearance: | Liquid | Boiling Point: | Not applicable. |
| Odor: | Mild characteristic odor. | Melting Point: | Not applicable |
| Density: | 0.909 g/cc | pH: | 5.7 |
| 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.

Other: Contains a substance that is suspected of damaging fertility or the unborn child.

12. ECOLOGICAL INFORMATION

Product not tested.

Contains an ingredient with the following warning message:

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic organisms with long-term 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.



UN 1987, ALCOHOLS, N.O.S., 3, PG III

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).



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 Mexican guidelines, 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). (GHS)

In China:

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

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

GB/T 16483-2008, GB/T 17517-2013

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

All ingredients are listed on the China Chemical Inventory

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.

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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