



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

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: 1088-D FLUX

SDS Number: SDS-4136

Revised Date: 7 FEBRUARY 2015

Product Use: INDUSTRIAL USE - SOLDER FLUX

MANUFACTURER:

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2. HAZARDS IDENTIFICATION

PRIMARY ROUTES OF ENTRY:

XEye XInhalation XSkin XIngestion NTP IARC OSHA XNot Listed

Carcinogen listed in

GHS:



Signal word: Danger

Hazard statement(s)

H225 Highly flammable liquid and vapour
 H301 +H311+ H331 Toxic if swallowed, in contact with skin and if inhaled
 H370 Causes damage to organs

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
 P241 Use explosion-proof electrical/ventilating/lightening/equipment
 P242 Use only non- sparking tools
 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 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
 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 liquids – Category 2
 Acute toxicity, oral- Category 3
 Acute toxicity, inhalation- Category 3
 Acute toxicity, dermal- Category 3
 Specific target organ toxicity- single exposure- Category 1

POTENTIAL HEALTH EFFECTS:

Eye Contact: Vapors or liquid may be irritating, liquid may damage eye tissue.

Ingestion: May cause persistent nausea, vomiting and abdominal pain. Methanol is toxic if swallowed. May be fatal or cause blindness if swallowed. Effects due to ingestion include: nausea, vomiting, dizziness, weakness, confusion, drowsiness, unconsciousness and may cause convulsions.

Inhalation: Vapor may cause headaches and or dizziness. Methanol is toxic by inhalation. May cause irritation.

Skin Contact: Prolonged contact may cause irritation. Methanol is toxic by skin absorption. May cause irritation.

Chronic: Methanol target organ CNS, eyes, kidney, liver, heart. Methanol is slowly eliminated from the body.

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
METHANOL	80-85	67-56-1 (US)	260	262	328
		(EU)	-	266	333
		(Canada)	-	262	328
		(Singapore)	262	-	328
		(Mexico)	-	260	310
		(China)	-	25(skin)	50(skin)
SALICYLIC ACID	5	69-72-7	N.E.	N.E.	N.E.
TRIETHANOLAMINE	10	102-71-6	N.E.	N.E.	N.E.

PRODUCT DOES NOT CONTAIN ANY SUBSTANCES OF VERY HIGH CONCERN (SVHC)

Symbol: X_n, F

Risk Phrases: R39/23/24/25, R11

N.E. = Not established

EU = European 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:** 52 F **Method:** Closed Cup
- Auto-ignition Temperature:** 850 F
- Flammable Limits:** Upper: 36 ; Lower 7
- Extinguishing Media:** Dry chemical, Water or CO₂. Use extinguishers appropriate for the surrounding fire conditions.

Special Fire Fighting

Procedures: Wear protective clothing and self-contained breathing apparatus. Use water to cool fire exposed containers. Flammable vapors may travel great distances to ignition source and flash back.

6. ACCIDENTAL RELEASE MEASURES

Spill or Leak Procedures: DO NOT allow material to enter sewer system or waterway. Wear personal protective equipment. Eliminate sources of ignition. Ventilate area in accordance with regulations. 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. Wear personal protective equipment. Ground containers. Keep away from sources of ignition.

Storage Precautions: Store product in tightly capped original containers in a cool, dry area. Refer to product label for specific storage temperature requirements. Rotate stock to ensure use before expiration date on the label.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Face velocity >2.1 cubic feet/minute in confined areas. Exhaust ventilation required when using this product.

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 where airborne concentrations are expected to be elevated.

Skin: Compatible chemical resistant gloves. Use gloves such as nitrile, which are compatible with alcohol's.

Other: Lab coat, eye-wash 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. Good personal hygiene is essential. 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:	Clear	Boiling Point:	149 F
Odor:	Alcohol odor.	Evaporation Rate:	3.5
Specific Gravity:	0.878	pH:	Neutral
Vapor Pressure:	4.3#/SQ.IN. 100F	Solubility in Water:	Soluble
Vapor Density:	ND	% Volatiles by volume:	ND
LEL	6%	UEL	36%

10. STABILITY AND REACTIVITY

General: Stable.

Conditions to Avoid: Direct heat, open flames and storage in aluminum.

Incompatible Materials: Anhydrides, halogens, phosphorus, trichlorides, monomers, aldehydes

Hazardous Decomposition / Combustion: Carbon dioxide/carbon monoxide and unidentified organics during combustion

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Carcinogenicity: National Toxicity Program **NTP:** No
 Occupational Safety & Health Administration **OSHA:** No
 International Agency for Research on Cancer **IARC:** No

LD50 Oral rat – 5,628 mg/kg (methanol)
 LC50 Inhalation – rat – 4h – 64000 ppm (methanol)
 LD50 dermal – rabbit – 15,800 mg/kg (methanol)
 Methyl alcohol may be fatal or cause blindness if swallowed.
 Causes damage to organs.

RTECS: See NIOSH (PC 1400000)

12. ECOLOGICAL INFORMATION

Product not tested.

LC50 – rainbow trout – 19,000 mg/l – 96h (methanol)
 LC50 – carp – 36,000 mg/l – 48h (methanol)
 Avoid release to the environment.

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.



UN1230, Methanol mixture, 3, PG II
 Methanol has an RQ = 5,000 lbs
 North America Emergency Guide Book – Guide #131

IATA:

UN1230, Methanol Mixture, 3 (6.1) PG II



IMDG:

UN1230, Methanol mixture, 3 (6.1), PG II

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.).

The information in this Material Safety Data Sheet meets the requirements of the EU under Chemicals (Hazard Information and Packaging for Supply) Regulations 1994 (CHIP 2) Regulation 6.

This product has been classified in accordance with the hazard criteria of the Commission Directive 91/155/EEC and EH40.

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



Canadian WHMIS:

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: Methanol

All ingredients are listed on the EPA TSCA Inventory.

This product has been classified under 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.

EC Classification, Packaging and Labeling Requirements:

Symbol and Hazard Classification of Product

X_n,F

Risk Phrases:

R39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

R11 Highly Flammable

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
S24/25	Avoid contact with skin and eyes
S28	After contact with skin wash immediately with plenty of soap and water
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection
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:

Health:	2
Fire:	3
Reactivity:	0

Revised Date: 7 FEBRUARY 2015

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Approved by: Nancy Swarts, Indium Corporation of America

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