



SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: 80 LIQUID FLUX

SDS Number: SDS-HG4133

Revised Date: 26 MARCH 2018

Product Use: Industrial Use - Flux

MANUFACTURER:

In America:

The Indium Corporation of America®.

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2. HAZARDS IDENTIFICATION

PRIMARY ROUTES OF ENTRY:

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

Carcinogen listed in

GHS:



Signal Word: Danger

Hazard statement(s)

- H315 Causes skin irritation
- H319 Causes serious eye irritation
- H335 May cause respiratory irritation
- H360 May damage fertility or the unborn child

Precautionary statement(s)

- P233 Keep container tightly closed
- 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 + P311 IF SWALLOWED: Call 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:

- Skin irritation-Category 2
- Eye irritation-Category 2A
- Reproductive toxicity-Category 1B
- Specific target organ toxicity- single exposure-Category 3-respiratory system

POTENTIAL HEALTH EFFECTS:

- Eye Contact:** Vapors may be irritating, liquid may damage eye tissue.
- Ingestion:** May cause irritation.
- Inhalation:** May be harmful if inhaled. May cause irritation to respiratory tract.
- Skin Contact:** Causes irritation to skin. May be harmful if absorbed through the skin.

NOTE: The Indium Corporation does not recommend, manufacture, market or endorse any of its products for human consumption.



WARNING: This product can expose you to chemicals including [1-methyl-2-pyrrolidone] which is known to the State of California to cause cancer and/or birth defects (or other reproductive harm). For more information go to www.P65Warnings.ca.gov

3. COMPOSITION / INFORMATION ON INGREDIENTS

Components	% wt	CAS Registry #	PEL mg/m ³	TLV-TWA mg/m ³	TLV-STEL mg/m ³
1-METHYL-2-PYRROLIDONE	65-75	872-50-4 (US)	N.E	N.E	N.E.
		(EU)	-	103	309
MINERAL ACID	5-20	10035-10-6(US)	10	N.E.	9.9(ceiling)
		(EU)	-	-	10
		(Canada)	-	-	9.9(ceiling)
		(Singapore)	-	-	9.9
(Mexico)	-	-	10		
WATER	15 - 25	7732-18-5	N.E	N.E	N.E.

N.E. = Not established

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:** >200 F **Method:** NA
- Auto-ignition Temperature:** ND
- Flammable Limits:** ND
- 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. Check with local authority on discharge to any body of water. Product has a low end pH which may be regulated under state or local laws. Wear personal

protective equipment. Eliminate sources of ignition. Ventilate area. 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. Wear personal protective equipment as needed. Avoid inhalation of mist or vapors. Take measures to prevent build-up of static charge.
- Storage Precautions:** Store product in tightly capped original containers in a cool, dry and well-ventilated 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 recommended.

Personal protection:

- Eyes:** Chemical safety glasses/goggles. Splash hazard also requires a face shield.
- 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.
- 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:	Liquid Amber	Boiling Point:	396°F
Odor:	Mild	Evaporation Rate:	>1
Specific Gravity:	1.100 @ 60° F	pH:	2.15
Vapor Pressure:	>1	Solubility in Water:	Soluble
Vapor Density:	ND	% Volatiles by volume:	100

10. STABILITY AND REACTIVITY

- General:** Stable.
- Conditions to Avoid:** Direct heat, open flames and storage in aluminum.
- Incompatible Materials:** Strong alkali
- Hazardous Decomposition / Combustion:** Carbon dioxide/carbon monoxide, brominated oxides.
- Hazardous Polymerization:** Will not occur.

11. TOXICOLOGICAL INFORMATION

Carcinogenicity: NTP: No
OSHA: No
IARC: No

LD50: Not established.

LC50: Not established.

Contains an ingredient:

LD50 Oral – rat – 3,914 mg/kg

LD50 – Dermal – rabbit – 8,000 mg/kg

RTECS: UY5790000

Reproductive toxicity- damage to fetus possible

12. ECOLOGICAL INFORMATION

Product not tested.

Product contains an ingredient, which is readily 90% biodegradable.

Toxicity to fish: LC50 – other fish – 4,000 mg/l – 96h

LC50 – *Leuciscus idus* > 500 mg/l – 96h

Toxicity to bacteria: >9,000 mg/l

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. Not hazardous under shipping requirements.

UN-NONE

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).

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



WARNING: This product can expose you to chemicals including [1-methyl-2-pyrrolidone] which is known to the State of California to cause cancer and/or birth defects (or other reproductive harm). For more information go to

www.P65Warnings.ca.gov

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

In China:

This product has been classified using the Chinese Occupational Limit for Hazardous Agents in the Workplace, GBZ2-2007. 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 in accordance with: Malaysian – OCCUPATIONAL SAFETY AND HEALTH (CLASSIFICATION, LABELING AND SAFETY DATA SHEET OF HAZARDOUS CHEMICALS) REGULATION OCTOBER 2013 – (CLASS).

SARA 313 Listing - 40 CFR 372.65: None

All ingredients are listed on the EPA TSCA Inventory.

Ingredients are listed on the Canadian Domestic Substance List.

16. OTHER INFORMATION

HMIS Hazard Rating:	Health:	2
	Fire:	1
	Reactivity:	0

Revised Date: 26 MARCH 2018

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