



SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: #70 BATTERY FLUX

SDS Number: SDS-4161

Revised Date: 12 SEPTEMBER 2018

Product Use: Industrial Use - Solder Flux

Product Use: INDUSTRIAL USE - SOLVENT BASED BATTERY FLUX

MANUFACTURER:

In America:

The Indium Corporation of America®
34 Robinson Rd., Clinton, New York 13323
Information: (315) 853-4900
nswarts@indium.com

EMERGENCY PHONE:

CHEMTREC 24 hrs.
USA: 1 (800) 424-9300
Outside USA: +1 (703) 527-3887

In Europe:

Indium Corporation of America (European Operations)
7 Newmarket Ct.
Kingston, Milton Keynes, UK, MK 10 OAG
Information: +44 [0] 1908 580400

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

In Asia:

Indium Corporation of America
Asia-Pacific Operations-Singapore
29 Kian Teck Avenue
Singapore 628908
Information: +65 6268-8678

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)

- H226 Flammable liquid and vapour
- H302 Harmful if swallowed
- H314 Causes severe skin burns and eye damage
- H333 May be harmful if inhaled
- H335 May cause respiratory irritation
- H402 Harmful to aquatic life

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 +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
- Acute toxicity, oral- Category 4
- Skin corrosion- Category 1C
- Acute toxicity, inhalation- Category 5
- Specific target organ, single exposure, respiratory tract irritation- Category 3
- Acute aquatic – Category 3

POTENTIAL HEALTH EFFECTS:

- Eye Contact:** Vapors may be irritating, liquid may damage eye tissue.
- Ingestion:** Harmful if swallowed
- Inhalation:** Vapor may cause headache and or dizziness. May cause irritation to respiratory system.
- Skin Contact:** May cause irritation. Prolonged contact may cause burns to the skin
- Chronic:** Not established.



WARNING: This product can expose you to chemicals including [trace amounts of 1,4 dioxane, acetaldehyde, ethylene oxide] which are known to the State of California to cause cancer and [trace amounts of ethylene oxide] which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

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
ISOBUTYL ALCOHOL	35-45	78-33-1 (US)	300	152	-
		(Canada)	-	152	227
		(Singapore)	152	-	-
		(Mexico)	-	150	225
		(China)	-	350	700
HYDROBROMIC ACID	10-15	10035-10-6(US)	10	N.E.	9.9(ceiling)
		(EU)	-	-	10
		(Canada)	-	-	9.9(ceiling)
		(Singapore)	-	-	9.9(ceiling)
		(Mexico)	-	-	10
		(China)	-	10	-
PROPRIETARY ALCOHOL	20-25	-	N.E.	N.E.	N.E.
ETHANOLAMINE	5-10	141-43-5(US)	6	7.5	15
		(EU)	-	7.6	15
		(Canada)	-	7.5	15
		(Singapore)	7.5	-	15
		(Mexico)	-	8	15
		(China)	-	8	15

N.E. = Not established

EU = European Exposure Limits

and corrosive substances. Latex gloves are not recommended.

Other: Lab coat, eye-wash fountain in work area. Avoid the use of contact lenses in high fume 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:	Colorless	Boiling Point:	225 F
Odor:	Alcohol odor.	Evaporation Rate:	>2
Specific Gravity:	1.045 @60F	pH:	<1
Vapor Pressure:	20 mm HG @ 68F	Solubility in Water:	Soluble
Vapor Density:	NA	% Volatiles by volume:	90

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/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:	Not established.	LC50: Not established.

Isobutyl alcohol- RTECS: NP9625000
 Hydrobromic acid- RTECS: MW3850000
 Ethanolamine- RTECS: KJ5775000

Product mixture not tested.

12. ECOLOGICAL INFORMATION

Product not tested.

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 international regulations and requirements.

Corrosive liquid, Flammable, N.O.S., (isobutyl alcohol, hydrobromic acid), 8, UN 2920, PGII

North America Emergency Guide Book – Guide #132



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).



WHMIS: Class B2 Flammable Liquid

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 [trace amounts of 1,4 dioxane, acetaldehyde, ethylene oxide] which are known to the State of California to cause cancer and [trace amounts of ethylene oxide] which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

SARA 313 Listing - 40 CFR 372.65: trace levels of ethylene oxide, 1,4 dioxane, ethylene oxide.

All ingredients are listed on the EPA TSCA Inventory.

This product has been classified in accordance with 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). (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

16. OTHER INFORMATION

HMIS Hazard Rating: **Health:** 3
 Fire: 2
 Reactivity: 0

Revised Date: 12 SEPTEMBER 2018

Product Use: Industrial Use - Solder Flux

Prepared by: Nancy Swarts, Indium Corporation of America

Approved by: Nancy Swarts, Indium Corporation of America

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