



SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: 1210 BATTERY FLUX

SDS Number: SDS-4166

Revised Date: 28 MARCH 2018

Product Use: INDUSTRIAL USE - SOLVENT BASED BATTERY FLUX

MANUFACTURER:

In America:

The Indium Corporation of America®.

34 Robinson Rd., Clinton, NY 13323

Information: (315) 853-4900

nswarts@indium.com

In Europe:

The Indium Corporation of America® (European Operations)

7 Newmarket Ct

Kingston, Milton Keynes, UK, MK 10 OAG

Information: +44 [0] 1908 580400

In Asia:

Indium Corporation of America

Asia-Pacific Operations-Singapore

29 Kian Teck Avenue

Singapore 628908

Information: +65 6268-8678

EMERGENCY PHONE:

CHEMTREC 24 hrs.

USA: 1 (800) 424-9300

Outside USA: +1 (703) 527-3887

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

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.

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 [trace amounts of 1,4 dioxane and ethylene oxide] which are known to the State of California to cause cancer, and can cause 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
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

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: 85°F **Method:** Closed Cup

Auto-ignition Temperature:

Flammable Limits: Upper: 12.7 ; Lower 2.0

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 flame and other ignition sources.

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 recommended.

Personal protection:

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

Respirator: A NIOSH approved or EU compliant CE marked air-purifying respirator with a fume/organic chemical cartridge is recommended where airborne concentrations are expected to be elevated. Additional protection may be required in confined areas.

Skin: Compatible chemical resistant gloves. Use gloves such as nitrile, which are compatible with alcohol 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 regulations and requirements.

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

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 and ethylene oxide] which are known to the State of California to cause cancer, and can 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 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

16. OTHER INFORMATION

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

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Prepared by: Nancy Swarts, Indium Corporation of America

Approved by: Nancy Swarts, Indium Corporation of America

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