



## SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier:** 66 SOLDERING FLUX

**SDS Number:** SDS-HG4102

**Revised Date:** 26 MARCH 2018

**Product Use:** Industrial Use - Solder Flux

#### MANUFACTURER:

##### In America:

**The Indium Corporation of America®.**

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Information: (315) 853-4900

[nswarts@indium.com](mailto:nswarts@indium.com)

##### In Europe:

**The Indium Corporation of America® (European Operations)**

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Kingston, Milton Keynes, UK, MK 10 OAG

Information: +44 [0] 1908 580400

##### In Asia:

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Information: +65 6268-8678

#### EMERGENCY PHONE:

**CHEMTREC 24 hrs.**

**USA: 1 (800) 424-9300**

**Outside USA: +1 (703) 527-3887**

##### In China:

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Suchun Industrial Square

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Jiangsu Province, China 215126

Information: (86) 512-6283-4900

## 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)

H314 Causes severe skin burns and eye damage

H318 Causes serious eye damage

H335 May cause respiratory irritation

### 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 +P364 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 corrosion (Category 1B)

Serious eye damage (Category 1)

Specific target organ toxicity-single exposure-Category 3-respiratory system

### POTENTIAL HEALTH EFFECTS:

**Eye Contact:** Vapors may be corrosive and irritating. Damage can occur from splashes. May cause burns to the eyes.

**Ingestion:** Corrosive, may cause burns or other harm.

**Inhalation:** May be corrosive and irritating to the respiratory tract.

**Skin Contact:** Corrosive. May cause irritation, redness and burns.

**Chronic:** Prolonged exposure to vapors may cause skin and respiratory tract irritation.

**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 levels of ethylene oxide and 1,4 dioxane] 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](http://www.P65Warnings.ca.gov)

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

Components	% wt	CAS Registry #	PEL mg/m <sup>3</sup>	TLV-TWA mg/m <sup>3</sup>	TLV-STEL mg/m <sup>3</sup>
WATER	70-75	-	N.E.	N.E.	N.E.
HYDROBROMIC ACID	10-15	10035-10-6(US)	10	-	9.9(ceiling)
		(EU)	-	10	-
		(Canada)	-	-	9.9(ceiling)
		(Singapore)	-	-	9.9(ceiling)
		(Mexico)	-	-	10
		(China)	-	10(max)	-
PROPRIETARY ADDITIVES	10-20	-	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:** None                      **Method:** Not applicable
- Auto-ignition Temperature:** Not established
- Flammable Limits:** Not established
- Extinguishing Media:** Use extinguishers appropriate for the surrounding fire conditions.
- Special Fire Fighting Procedures:** Standard fire fighting equipment

**6. ACCIDENTAL RELEASE MEASURES**

**Spill or Leak Procedures:** DO NOT allow material to enter sewer system or waterway. Wear personal protective equipment, such as gloves and depending on the quantity a respirator with acid gas cartridges may be required. Clean up by absorption or neutralization. Eliminate sources of ignition. Keep unnecessary personnel away. Put clean-up materials in a properly labeled metal drum. 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.

**Storage Precautions:** Store product in tightly capped original containers in a cool, dry area away from sources of ignition. 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 is recommended to keep exposure limits as low as possible.

**Personal protection:**

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

**Respirator:** An approved or compliant marked air-purifying respirator with an acid gas chemical cartridge is recommended where airborne concentrations are expected to be elevated.

**Skin:** Compatible chemical resistant gloves.

**Other:** Lab coat, 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.

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**

<b>Appearance:</b>	Clear	<b>Boiling Point:</b>	212°F
<b>Odor:</b>	Slight amine	<b>Melting Point:</b>	<0 F
<b>Specific Gravity:</b>	1.080@60F	<b>pH:</b>	<1
<b>Vapor Pressure:</b>	Not determined	<b>Solubility in Water:</b>	Soluble
<b>Vapor Density:</b>	Not determined	<b>Evaporation Rate:</b>	1
<b>Volatile by Volume:</b>	90%		

**10. STABILITY AND REACTIVITY**

**General:** Stable.

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

**Incompatible Materials:** Ammonia, strong oxidizing agents, alkalis

**Hazardous Decomposition / Combustion:** toxic fumes of bromide/carbon monoxide.

**Hazardous Polymerization:** Will not occur.

**11. TOXICOLOGICAL INFORMATION**

**Carcinogenicity:**        **NTP:** No  
                                   **OSHA:** No  
                                   **IARC:** No

**LD50:**                      Not established.

**LC50:**                      Not established.

**12. ECOLOGICAL INFORMATION**

Biodegradability: Data not established.

Aquatic Toxicity: Data not established.

**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 for ground, air and sea.

UN3265, Corrosive Liquid, Acidic, Organic, N.O.S., 8, PG III (hydrobromic acid)

North American Emergency Guide Book – Guide #153

**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 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).

WHMIS: Class E Corrosive



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

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).



**WARNING:** This product can expose you to chemicals including [trace levels of ethylene oxide and 1,4 dioxane] 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](http://www.P65Warnings.ca.gov)

SARA 313 Listing - 40 CFR 372.65: None

All ingredients are listed on the EPA TSCA Inventory.

## 16. OTHER INFORMATION

<b>HMIS Hazard Rating:</b>	<b>Health:</b>	2
	<b>Fire:</b>	0
	<b>Reactivity:</b>	0
<b>Revised Date:</b>	26 MARCH 2018	
<b>Prepared by:</b>	Nancy Swarts, Indium Corporation of America	
<b>Approved by:</b>	Nancy Swarts, Indium Corporation of America	

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