

# INDIUM CORPORATION OF AMERICA ®\EUROPE®\ASIA-PACIFIC® **INDIUM CORPORATION (SUZHOU)** SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: 66 SOLDERING FLUX

SDS Number: SDS-HG4102 Revised Date: 14 MARCH 2015

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

### **MANUFACTURER:**

In America:

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#### 2. HAZARDS IDENTIFICATION

### PRIMARY ROUTES OF ENTRY:

# Carcinogen listed in

⊗ Eye ⊗ Inhalation ⊗ Skin ⊗ Ingestion NTP 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 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 are 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 it's

products for human consumption.

WARNING: This product may contain a chemical(s) known to the State of California to cause cancer

and/or birth defects (or other reproductive harm). (trace levels of ethylene oxide and 1,4

dioxane)

3. COMPOSITION /	INFORMATION	ON INGREDIENTS

Components	% wt	CAS Registry #	<b>PEL</b> mg/m³	TLV-TWA mg/m³	TLV-STEL mg/m³
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.

Symbol: X<sub>n</sub>C Risk Phrases: R21, R36/37/38

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** Keep containers tightly closed when not in use. Use care to avoid spills. Wear personal

**Precautions:** 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 Maintain good housekeeping. Clean up spills immediately.

**Practices:** 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**: 212°F

Odor: Slight amine Melting Point: <0 F
Specific Gravity: 1.080@60F pH: <1

Vapor Pressure: Not determined Solubility in Water: Soluble

Vapor Density: Not determined Evaporation Rate: 1

Volatile by Volume: 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 / toxic fumes of bromide/carbon monoxide.

Combustion:

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.).

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).



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 in accordance with Mexican regulations NOM-0180STPS-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.

WARNING: This product may contain a chemical(s) known to the State of California to cause cancer

and/or birth defects (or other reproductive harm). (trace levels of ethylene oxide and 1,4

dioxane)

SARA 313 Listing - 40 CFR 372.65: None

All ingredients are listed on the EPA TSCA Inventory.

EC Classification, Packaging and Labeling Requirements:

Symbol and Hazard Classification of Product

 $X_n$  C

### **Risk Phrases:**

R21 Harmful in contact with skin

R36/37/38 Irritating to eyes, respiratory system and skin

### **Safety Phrases:**

S20/21 When using do not eat, drink or smoke

S23 Do not breathe fumes

S24/25 Avoid contact with skin and eyes

S27 Take off immediately all contaminated clothing

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: 0 Reactivity: 0

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