



## SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier:** WAFERFLUX SC 5R

**SDS Number:** SDS-4570

**Revised Date:** 4 OCTOBER 2018

**Product Use:** Industrial Use - Liquid flux - wafer bumping flux

#### MANUFACTURER:

**In America:**

**The Indium Corporation of America®.**

34 Robinson Rd., Clinton, NY 13323

Information: (315) 853-4900

[nswarts@indium.com](mailto: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: Emergency 86+ 4008417580**

**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

<http://www.indium.com>

**2. HAZARDS IDENTIFICATION**

**PRIMARY ROUTES OF ENTRY:**

⊗Eye    ⊗Inhalation    ⊗Skin    ⊗Ingestion    NTP

**Carcinogen listed in**

IARC    OSHA    ⊗Not Listed

GHS:



Signal Word: Danger

**Hazard statement(s)**

- H225            Highly flammable liquid and vapor
- H317            May cause an allergic skin reaction
- H319            Causes eye irritation
- H334            May cause allergy or asthma symptoms or breathing difficulties if inhaled
- H336            May cause drowsiness or dizziness
- EUH208        Contains rosin. May produce an allergic reaction

**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
- P242            Use only non-sparking tools
- 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
- P301 +P312    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)
- P362 +P364    Take off contaminated clothing and wash before reuse

Classification:

- Flammable Liquid – Category 2
- Eye irritation – Category 2A
- Skin sensitization- Category 1B
- Respiratory sensitization- Category 1B
- Specific target organ toxicity- single exposure – Category 3- central nervous system

**POTENTIAL HEALTH EFFECTS:**

- Eye Contact:**    Irritating to the eyes and if not removed promptly, may result in serious eye injury. Do not allow material to come in contact with the eyes.
- Ingestion:**        May cause irritation and damage to the mouth, esophagus and gastrointestinal tract.
- Inhalation:**        Heated vapor concentrations may be harmful if inhaled. Irritating to respiratory tract. May cause headache or lightheadedness. Rosin may cause occupational asthma.
- Skin Contact:**     May cause skin irritation. Allergic reactions are possible, especially with repeated or prolonged

exposure.

**Chronic:** Not established.

**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 <sup>3</sup>	TLV-TWA mg/m <sup>3</sup>	TLV-STEL mg/m <sup>3</sup>
ROSIN	50-60	65997-05-9	N.E.	N.E.	N.E.
		(EU)	0.05	N.E.	0.15
ISOPROPYL ALCOHOL	40-50	67-63-0	980	983	1230
		(EU)	-	999	1250
		(Canada)	-	983	1228
		(Mexico)	-	980	1225
		(Singapore)	983	-	1230
(China)	-	350	700		

N.E. = Not established      EU = European Union Occupational 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:** 11 C (52 F)      **Method:** Not available
- Auto-ignition Temperature:** Not established.
- Flammable Limits:** Limits not established. Flammable
- Extinguishing Media:** Use extinguishers appropriate for the surrounding fire conditions. Foam, dry chemical, water spray.
- Special Fire Fighting Procedures:** Firefighters must wear NIOSH approved self-contained breathing apparatus and full protective clothing. Evacuate area and fight fire from a safe distance. Containers can build up pressure if exposed to heat (fire) or flame.

## 6. ACCIDENTAL RELEASE MEASURES

**Spill or Leak Procedures:** Wear a respirator and appropriate Personal Protective (See Exposure Controls/Personal Protective Section). Size of spill shall determine respiratory protection from air purifying to self - contained breathing apparatus. Keep unnecessary and unprotected personnel from entering the spill area. Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. 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. Avoid breathing vapors from heated material. Avoid contact with eyes, skin and clothing. Use with adequate ventilation. Ground containers.

**Storage Precautions:** Store product in tightly capped original containers in a cool, dry area. Keep away from heat and flame. Store away from incompatible materials. Empty containers may be hazardous as they contain product residue.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Controls:** Exhaust point source ventilation should be sufficient to control airborne levels. Use ventilation.

**Personal protection:**

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

**Respirator:** A NIOSH approved or EU compliant CE marked air-purifying respirator with a fume/organic chemical cartridge is recommended under certain circumstances where airborne concentrations are expected to be elevated.

**Skin:** Compatible chemical resistant gloves. Protective outer garment, apron or sleeves as appropriate and face shield.

**Other:** Eyewash fountain in work area. Avoid the use of contact lenses.

**Work/Hygienic Practices:** Maintain good housekeeping. Clean up spills immediately. 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>	Liquid	<b>Boiling Point:</b>	84 C (183 F)
<b>Odor:</b>	Slight characteristic odor.	<b>Melting Point:</b>	Not applicable
<b>Specific Gravity:</b>	0.90	<b>pH:</b>	Not applicable
<b>Vapor Pressure:</b>	Not applicable.	<b>Solubility in Water:</b>	Not established
<b>Vapor Density:</b>	(air=1) Not applicable.		

## 10. STABILITY AND REACTIVITY

**General:** Stable.

**Conditions to Avoid:** High temperatures, open flame.

**Incompatible Materials:** Not established

**Hazardous Decomposition / Combustion:** Not established  
**Hazardous Polymerization:** Will not occur.

## 11. TOXICOLOGICAL INFORMATION

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

**LD50:** Not established.                      **LC50:** Not established.

**Other:** None known

## 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. Flammable waste.

## 14. TRANSPORT INFORMATION

Transport in accordance with applicable international regulations and requirements.

UN1219, Isopropanol, 3, PG II



North American Emergency Guide Book – Guide Page #129

## 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).

Canadian WHMIS: Class B Division 2 Flammable, D2B Toxic Material Causing Other Toxic Effects (eye irritation in

animals).



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 the 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 Exposure Limit for Hazardous Agents in the Workplace, GBZ2-2007.

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>	3
	<b>Reactivity:</b>	0

**Revised Date:** 4 OCTOBER 2018

**Prepared by:** Nancy Swarts, Indium Corporation of America

**Approved by:** Nancy Swarts, Indium Corporation of America

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