



## SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier:** 5RA-RC FLUX

**SDS Number:** SDS-4149

**Revised Date:** 19 MARCH 2018

**Product Use:** INDUSTRIAL USE-FLUX

#### MANUFACTURER:

##### In America:

The Indium Corporation of America®  
34 Robinson rd., Clinton, New York 13323  
Information: (315) 853-4900

##### EMERGENCY PHONE:

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

Chicago Material Division  
80 Scott St.  
Elk Grove Village, Illinois 60007  
(847) 439-9134

##### 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  
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Jiangsu Province, China 215126

##### 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



Signal Word: Danger

### Hazard Statements:

H225 Highly Flammable liquid and vapor  
 H317 May cause an allergic skin reaction  
 H319 Causes serious eye irritation  
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled  
 H336 May cause drowsiness or dizziness

### Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking  
 P233 Keep container tightly closed  
 P240 Ground container and receiving equipment  
 H242 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  
 P362 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:

Eye irritant – (Category 2A)  
 Flammable liquids - (Category 2)  
 Specific target organ systemic toxicity (single exposure) – (Category 3), Central nervous system  
 Skin sensitizer- Category 1B  
 Respiratory sensitizer- Category 1B

### POTENTIAL HEALTH EFFECTS:

**Eye Contact:** Vapors may be irritating, liquid may damage eye tissue.  
**Ingestion:** May cause persistent nausea, vomiting and abdominal pain.  
**Inhalation:** Vapor may cause headaches and or dizziness.  
**Skin Contact:** Prolonged contact may cause irritation and dermatitis.  
**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>
ISOPROPANOL (PROPAN-2-OL)	40-45	67-63-0 (US)	980	983	1225
		(EU)	-	999	1250
		(Canada)	-	983	1228
		(Mexico)	980	-	1225
		(Singapore)	983	-	1230
		(China)	-	350	700
ISOBUTYL ALCOHOL (2-Methylpropan-1-ol)	25-35	78-83-1(US)	300	152	-
		(EU)	-	154	231
		(Canada)	-	152	227
		(Singapore)	152	-	-
		(Mexico)	-	150	225
ROSIN	20-25	8050-09-7	N.E.	N.E.	N.E.
		(EU)	0.05	-	0.15(sensitizer)
PROPRIETARY	1-10	-	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

<b>Flash Point:</b>	61°F	<b>Method:</b>	Closed Cup
<b>Auto-ignition Temperature:</b>	N/A		
<b>Flammable Limits:</b>	Lower 1.7 and Upper 10.7		
<b>Extinguishing Media:</b>	Dry chemical, Water or CO <sub>2</sub> . Use extinguishers appropriate for the surrounding fire conditions.		
<b>Special Fire Fighting Procedures:</b>	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. All containers should be grounded. 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.

**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. Recommend personal protective equipment, if ventilation equipment is not available or is not adequate.

**Personal protection:**

**Eyes:** Chemical safety glasses/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 where airborne concentrations are expected to be elevated.

**Skin:** Compatible chemical resistant gloves. Use gloves such as nitrile, which are compatible with alcohols.

**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**

<b>Appearance:</b>	Amber	<b>Boiling Point:</b>	175°F
<b>Odor:</b>	Alcohol odor.	<b>Evaporation Rate:</b>	2.5
<b>Specific Gravity:</b>	0.8534	<b>pH:</b>	Neutral

<b>Vapor Pressure:</b>	33 mm HG @68 F	<b>Solubility in Water:</b>	Not Soluble
<b>Vapor Density:</b>	2.1 (air=1)	<b>% Volatiles by volume:</b>	85

## 10. STABILITY AND REACTIVITY

<b>General:</b>	Stable.
<b>Conditions to Avoid:</b>	Direct heat, open flames and storage in aluminum.
<b>Incompatible Materials:</b>	Anhydrides, halogens, phosphorus, trichlorides, monomers, aldehydes
<b>Hazardous Decomposition / Combustion:</b>	Carbon dioxide/carbon monoxide/unidentified organics during combustion.
<b>Hazardous Polymerization:</b>	Will not occur.

## 11. TOXICOLOGICAL INFORMATION

<b>Carcinogenicity:</b>	National Toxicity Program	<b>NTP:</b>	No
	Occupational Safety & Health Administration	<b>OSHA:</b>	No
	International Agency for Research on Cancer	<b>IARC:</b>	No
<b>LD50:</b>	Not established.	<b>LC50:</b>	Not established.

## 12. ECOLOGICAL INFORMATION

Biodegradability: Data not established.  
 Aquatic Toxicity: Data not established.  
 Product not tested. Contains a substance that is harmful to aquatic life.

## 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.  
 Alcohols, N.O.S., 3, UN 1987, PGII (isopropanol, isobutyl alcohol)  
 Flammable label North American Emergency Guide – Guide Page #127



## 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.).

SARA 313 Listing - 40 CFR 372.65: None

All ingredients are listed on the EPA TSCA Inventory.

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 Mexican regulations: NOM-018-STPS-2015 and NOM-010-STPS-2014.

### 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

Information on exposure levels in China is from regulation document GBZ2-2002 Occupational Exposure Limit for Hazardous Agents in the Workplace.

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).

## 16. OTHER INFORMATION

<b>HMIS Hazard Rating:</b>	<b>Health:</b>	2
	<b>Fire:</b>	3
	<b>Reactivity:</b>	0

**Revised Date:** 19 MARCH 2018

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

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

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