



## SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier:** 5-RA-1 FLUX

**SDS Number:** SDS-4271

**Revised Date:** 13 AUGUST 2018

**Product Use:** INDUSTRIAL USE - LIQUID FLUX MIXTURE

#### MANUFACTURER:

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## 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)

- 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/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
- 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 + P341              IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
- P305 + P351              IF IN EYES: Rinse continuously with water for several minutes (15 mins)

### Classification:

- Flammable Liquid – Category 2
- Eye irritation – Category 2A
- Skin sensitization- Category 1B
- Respiratory sensitization- 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.



**WARNING:** This product can expose you to chemicals including [trace amounts of methanol] which is known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

**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>
ISOPROPYL ALCOHOL	45-49	67-63-0	980	983	1230
		(EU)	-	999	1250
		(Canada)		983	1228
		(Singapore)	983	-	1230
		(Mexico)	-	980	1225
		(China)	-	350	700
ROSIN	50	65997-05-9	N.E.	N.E.	N.E.
		(EU)	0.05	N.E.	0.15
PROPRIETARY	1-5	-	N.E.	N.E.	N.E.

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:** Closed Cup
- Auto-ignition Temperature:** N/A
- Flammable Limits:** Not established

**Extinguishing Media:** Dry chemical, Water or CO<sub>2</sub>. 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.

## 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 sparks and other ignition sources and heat.

**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. Keep away from sources of ignition and heat.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Controls:** Face velocity >2.1 cubic feet/minute in confined areas. Exhaust ventilation recommended. Keep exposure as low as possible.

### Personal protection:

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

**Respirator:** An authority approved or compliant 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. Sleeve protectors, apron or other personal protection may be necessary if skin comes in contact with product.

**Other:** Lab coat, eye-wash 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>	Colorless	<b>Boiling Point:</b>	84°C (183°F)
<b>Odor:</b>	Alcohol odor.	<b>Evaporation Rate:</b>	Not available
<b>Specific Gravity:</b>	0.9440	<b>pH:</b>	Neutral
<b>Vapor Pressure:</b>	Not available	<b>Flash Point:</b>	52F (11C)
<b>Vapor Density:</b>	Not available		

**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.  
**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.

Other: Chronic Toxicity: Prolonged or repeated exposure to rosin flux fume may cause workers to develop occupational asthma.

**12. ECOLOGICAL INFORMATION**

Product not tested.

**13. DISPOSAL CONSIDERATION**

**Waste Disposal Method:** Dispose of in accordance with all Federal, State and Local environmental regulations.

**14. TRANSPORT INFORMATION**

Transport in accordance with applicable international regulations and requirements.

Shipping Name: UN 1219, Isopropanol, 3, PG II (mixture)



North American Emergency Guide Book – Guide #129      Flammable Liquid

**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).



**WARNING:** This product can expose you to chemicals including [trace amounts of methanol] which is known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Canadian WHMIS: Class B2 Flammable Liquid, D2B Toxic Material Causing Other Toxic Effects (eye irritation in animals). D2B Materials Causing Other Toxic Effects -irritant



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

SARA 313 Listing - 40 CFR 372.65: 1.25% proprietary ingredient listed

All ingredients are listed on the EPA TSCA Inventory.

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).

## 16. OTHER INFORMATION

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

**Revised Date:** 2 MAY 2018

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

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

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