



## SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier:** 3540 FLUX

**SDS Number:** SDS-4137

**Revised Date:** 23 AUGUST 2018

**Product Use:** INDUSTRIAL USE- SOLDERING FLUX

#### MANUFACTURER:

##### In America:

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##### In China:

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**2. HAZARDS IDENTIFICATION**

**PRIMARY ROUTES OF ENTRY:**

\*Eye      \*Inhalation      \*Skin      \*Ingestion      NTP

**Carcinogen listed in**

IARC      OSHA      \*Not Listed



Signal Word: Danger

**Hazard statement(s)**

H225      Highly flammable liquid and vapor  
 H319      Causes serious eye irritation  
 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  
 P241      Use explosion-proof electrical/ventilating/lightening/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 + 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:**

Flammable Liquid – Category 2  
 Eye irritation – Category 2A  
 Specific target organ toxicity- single exposure – Category 3- central nervous system

**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.**



**WARNING:** This product can expose you to chemicals including [trace amounts of 1,4 dioxane] which is known to the State of California to cause cancer. 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>
ISOPROPANOL ( PROPAN-2-OL)	85-90	67-63-0 (US)	980	983	1225
		(EU)	-	999	1250
		(Canada)	-	983	1228
		(Mexico)	980	-	1225
		(China)	-	350	700
		(Singapore)	983	-	1230
PETROLEUM HYDROCARBON	5-10	8052-41-3(US)	2900	572	-
		(Canada)	525	-	1050
		(Singapore)	525	-	-
		(Mexico)	-	523	1050
ORGANIC ACID	0-5	68603-87-2	N.E.	N.E.	N.E.
ROSIN	0-5	8050-09-7	N.E.	N.E.	N.E.
N.E. = Not established		EU = European Exposure Limits			

**4. FIRST AID MEASURES**

<b>Eye Contact:</b>	Hold eyelids apart and flush eyes with plenty of tepid water for at least 15 minutes. Seek medical attention if irritation persists.
<b>Ingestion:</b>	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.
<b>Inhalation:</b>	Remove to fresh air. If not breathing, give artificial respiration or oxygen by trained personnel. Seek immediate medical attention.
<b>Skin Contact:</b>	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>	54°F	<b>Method:</b>	Closed Cup
<b>Auto-ignition Temperature:</b>	750 F		
<b>Flammable Limits:</b>	Upper: 12 @77°F; Lower 2 @ 77°F		
<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. 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. Overall general exhaust ventilation recommended.

### 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>	Clear light yellow	<b>Boiling Point:</b>	175°F
<b>Odor:</b>	Alcohol odor.	<b>Evaporation Rate:</b>	1.7
<b>Specific Gravity:</b>	0.804 @ 60° F	<b>pH:</b>	6
<b>Vapor Pressure:</b>	33 mm HG @68 F	<b>Solubility in Water:</b>	98%
<b>Vapor Density:</b>	2.1 (air=1)	<b>% Volatiles by volume:</b>	90

## 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.

## 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.

## 14. TRANSPORT INFORMATION

Transport in accordance with applicable international regulations and requirements.

UN 1219, Isopropanol, 3, PG II



North America Emergency Guide Book – Guide #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).

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



This product has been classified in accordance with the guidelines, as 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.

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).

Regulatory Information China:

GB/T 16483-2008, GB/T 17519-2013, Safety Data Sheets for Chemical Products

GB 30000.2-29-2013, Rules for classification and labeling of chemicals (GHS)

Decree No. 591: Regulations on the Control Over Safety of Hazardous Chemicals.

This product has been classified using the Chinese Occupational Limit for Hazardous Agents in the Workplace, GBZ2-2007

SARA 313 Listing - 40 CFR 372.65: None



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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:** 23 AUGUST 2018

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

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

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