



**INDIUM CORPORATION OF AMERICA®\EUROPE®\ASIA-PACIFIC®**  
**INDIUM CORPORATION (SUZHOU)®**

**SAFETY DATA SHEET**

**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product Identifier:** 2212-15 LIQUID FLUX

**SDS Number:** SDS-4532

**Revised Date:** 29 MARCH 2015

**Product Use:** INDUSTRIAL USE - FLUX

**MANUFACTURER:**

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**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
- 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
- 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            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 irritation. May be harmful.
- Inhalation:**        Vapor may cause headaches and or dizziness. Rosin may cause occupational asthma. May be harmful.
- 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>
<b>ISOPROPANOL</b> (PROPAN-2-OL)	74-80	67-63-0 (US)	980	983	1225
		(EU)	-	999	1250
		(Canada)	-	983	1228
		(Mexico)	980	-	1225
		(Singapore)	983	-	1230
		(China)	-	350	700
<b>ISOBUTYL ALCOHOL</b> (2-Methylpropan-1-ol)	6-7	78-83-1(US)	300	152	-
		(EU)	-	154	231
		(Canada)	-	152	227
		(Singapore)	152	-	-
		(Mexico)	-	150	225
<b>ROSIN</b>	12-18	65997-05-9	N.E.	N.E.	N.E.
		(EU)	0.05	-	0.15(sensitizer)
<b>PROPRIETARY ACTIVATORS</b>	02-08	-	N.E.	N.E.	N.E.

Symbol: XI, F

Risk Phrases: R20/21/22, R36/37/38, R11, R42/43

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

<b>Handling Precautions:</b>	Keep containers tightly closed when not in use. Use care to avoid spills. Wear personal protective equipment.
<b>Storage Precautions:</b>	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

<b>Engineering Controls:</b>	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.
<b>Personal protection:</b>	
<b>Eyes:</b>	Chemical safety glasses/goggles. Faceshield for splash hazard.
<b>Respirator:</b>	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.
<b>Skin:</b>	Compatible chemical resistant gloves. Use gloves such as nitrile, which are compatible with alcohols.
<b>Other:</b>	Lab coat, eye-wash fountain in work area. Avoid the use of contact lenses in high fume/splash areas.
<b>Work/Hygienic Practices:</b>	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>	Not available
<b>Odor:</b>	Alcohol odor.	<b>Evaporation Rate:</b>	Not available
<b>Specific Gravity:</b>	Not available	<b>pH:</b>	6.7
<b>Vapor Pressure:</b>	Not available	<b>Solubility in Water:</b>	Not Soluble
<b>Vapor Density:</b>	Not available		

### 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

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 regulations and requirements.



UN 1987, Alcohols, N.O.S., 3, 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.).

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-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.

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

XI,F

### Risk Phrases:

- R36/37/38 Irritating to eyes, respiratory system and skin
- R 11 Highly Flammable
- R67 Vapors may cause drowsiness and dizziness
- R42/43 May cause sensitization by inhalation and skin contact

### Safety Phrases:

- S16 Keep away from sources of ignition - "No Smoking"
- S20/21 When using do not eat, drink or smoke
- S23 Do not breathe fumes
- S24/25 Avoid contact with skin and eyes
- 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**

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

**Revised Date:** 29 MARCH 2015

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

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

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