



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

To better serve all of our customers Indium Corporation has generated one MSDS, for this product, to be used within the United States as well as internationally. Some of the regulatory information contained within may not be applicable to the customer's individual state or country. Unless otherwise stated the health and safety information provided within is applicable to all products.

### SAFETY DATA SHEET

#### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier:** NC-771

**SDS Number:** SDS-IN LF013

**Revised Date:** 1 APRIL 2014

**Product Use:** Industrial Use - Liquid Flux

##### MANUFACTURER:

###### In America:

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Asia-Pacific Operations-Singapore  
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**CHEMTREC 24 hrs.**

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Suchun Industrial Square  
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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 Statements:

H225            Highly Flammable liquid and vapor  
 H316            Causes mild skin irritation  
 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 container and receiving equipment  
 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 – isopropyl alcohol

Eye irritant – (Category 2A)

Flammable liquids - (Category 2)

Skin irritation- (Category 3)

Specific target organ systemic 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.

**Inhalation:** Heated vapor concentrations may be irritating to respiratory tract. Vapors may cause drowsiness and dizziness. Acute effects to high levels of isopropyl alcohol through inhalation are alcoholic intoxication and narcosis.

**Skin Contact:** May cause skin irritation.

**Chronic:** Isopropyl alcohol target organs: nerves/kidneys. Otherwise not established.

**Note:** The Indium Corporation does not recommend, manufacture, market or endorse any of its product's for human consumption.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Components	% wt	CAS Registry #/EINECS	PEL mg/m <sup>3</sup>	TLV-TWA mg/m <sup>3</sup>	TLV-STEL mg/m <sup>3</sup>
<b>2-PROPANOL</b>					
(ISOPROPYL ALCOHOL)	85-95	67-63-0/200-661-7			
		(US)	980	983	1230
		(EU)	N.E.	999	1250
		(Canada)	N.E.	983	1228
		(Singapore)	983	-	1230
		(Mexico)	-	980	1225
		(China)	-	350	700
<b>PROPRIETARY</b>	5-15		N.E.	N.E.	N.E.

Symbol: XI, F

Risk Phrases: R11, R36, R67

**PRODUCT DOES NOT CONTAIN ANY EU SUBSTANCES OF VERY HIGH CONCERN (SVHC)**

N.E. = Not established

EU = European Union Occupational Exposure

### 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:** 16°C(60°F) **Method:** Closed cup equilibrium method.

**Auto-ignition Temperature:** Not established.

**Flammable Limits:** Flammable, limits not established

<b>Extinguishing Media:</b>	Use extinguishers appropriate for the surrounding fire conditions.
<b>Special Fire Fighting Procedures:</b>	Firefighters must wear NIOSH approved self-contained breathing apparatus and full protective clothing.

## 6. ACCIDENTAL RELEASE MEASURES

<b>Spill or Leak Procedures:</b>	Wear a respirator and appropriate personal protection (See Exposure Controls/Personal Protective Section). Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Do not allow to enter waterway. Keep flame away or other sources of ignition. Dispose of following all Federal, State and Local regulations. In the EU refer to the Waste assessment rules.
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## 7. HANDLING AND STORAGE

<b>Handling Precautions:</b>	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.
<b>Storage Precautions:</b>	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. Ground containers for static protection.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Engineering Controls:</b>	Local exhaust ventilation may be necessary to control any air contaminants to within their exposure limits during the use of this product. Additionally, the odor threshold of isopropyl alcohol is 50 ppm and ventilation may be required to keep annoyance odors to the minimum levels. Ventilation is recommended when heating product. Use non-sparking tools and equipment.
<b>Personal protection:</b>	
<b>Eyes:</b>	Chemical safety glasses/goggles. Face shield for splash hazards.
<b>Respirator:</b>	An authority approved or compliant marked air-purifying respirator with a fume/organic chemical cartridge is recommended under certain circumstances where airborne concentrations are expected to be elevated.
<b>Skin:</b>	Compatible chemical resistant gloves(nitrile). Protective outer garment, apron and sleeves as appropriate.
<b>Other:</b>	Eyewash 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. 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 Liquid mixture	<b>Boiling Point:</b>	Not applicable.
<b>Odor:</b>	Mild alcoholic odor.	<b>Melting Point:</b>	Not applicable

<b>Specific Gravity:</b>	0.8255		
<b>Vapor Pressure:</b>	Not applicable.	<b>Solubility in Water:</b>	Soluble
<b>Vapor Density:</b>	(air=1) Not applicable.		

## 10. STABILITY AND REACTIVITY

<b>General:</b>	Stable.
<b>Conditions to Avoid:</b>	Open flame or other sources of ignition and high temperatures. Acids, halogens, aluminum and oxidizing agents.
<b>Hazardous Decomposition / Combustion:</b>	Elemental oxides
<b>Hazardous Polymerization:</b>	Will not occur.

## 11. TOXICOLOGICAL INFORMATION

<b>Carcinogenicity:</b>	<b>NTP:</b> No
	<b>OSHA:</b> No
	<b>IARC:</b> No

Oral LD50 (isopropyl alcohol)

LD50 Oral- rat- 5,045 mg/kg

Inhalation LC50 (isopropyl alcohol)

LC50 inhalation-rat-8h-16000 ppm

Dermal LD50

LD50 – Dermal- rabbit-12,800 mg/kg

RTECS: Isopropyl alcohol NT8050000

## 12. ECOLOGICAL INFORMATION

Product not tested.

LC50-Pimephales promelas (fathead minnow)- 9,640 mg/l – 96h (isopropyl alcohol)

EC50-Daphnia magna (water flea) – 5,102 mg/l – 24h (isopropyl alcohol)

## 13. DISPOSAL CONSIDERATION

<b>Waste Disposal Method:</b>	Dispose of in accordance with all Federal, State and Local environmental regulations. In Europe follow the Special Waste Regulations. Recycle or dispose of as hazardous waste.
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## 14. TRANSPORT INFORMATION

Transport in accordance with applicable regulations and requirements.

**Shipping Name:** UN1219, Isopropanol ,3, PG II

Marine Pollutant: No



North American Emergency Guide Book 2012: Guide #129  
Marine Pollutant: No

Shipping small quantities: Ground ONLY

40 CFR 173.150 - Exceptions for Class 3 (Flammable Liquids). Limited quantities of flammable liquids, Class 3, are excepted from labeling requirements for ground shipment only. For Packing Group II, inner packaging not over 5.0L (1.3 gallons) net capacity each, packed in a strong outer packaging.

40 CFR 172.203 – Limited quantities- when a shipping paper is required the description for a material offered for transportation as “limited quantity” must include the words “Limited Quantity” following the basic description.

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

Review 40 CFR for clarification and further information.

Shipping via aircraft requires compliance with the regulations and not under exceptions.

## 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 complies with the requirements under the EU Directive 2002/95/EC (RoHS).

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 under the Mexican regulations NOM-018-STPS-2000 and NOM-010-STPS-1999.

This product has been classified using the Chinese Occupational Exposure Limit for Hazardous Agent 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:**

R11 Highly Flammable  
R36 Irritating to eyes  
R67 Vapors may cause drowsiness and dizziness

**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/gas/vapor/spray  
S24/25 Avoid contact with skin and eyes  
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection  
S28 After contact with skin wash immediately with plenty of soap and water  
S62 If swallowed, do not induce vomiting seek medical advice immediately and show container or label  
S7 Keep container tightly closed

**16. OTHER INFORMATION**

**HMIS Hazard Rating:**      **Health:**            2  
   **Fire:**                3  
   **Reactivity:**        0

**Revised Date:**            1 APRIL 2014

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

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

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Note: This MSDS may be translated into an international language. If there is any misinterpretation or misunderstanding of any words or phrases that may occur within any translation the ENGLISH language shall always prevail.