

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

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: FP1095-NF

SDS Number: SDS-5816 Revised Date: 8 OCTOBER 2013

Product Use: Industrial use – mixture - (liquid flux)

MANUFACTURER:

In America:

The Indium Corporation of America 1676 Lincoln Ave., Utica NY 13502 Information: (315) 853-4900 nswarts@indium.com

Chicago Materials Division

80 Scott St.

Elk Grove Village, Illinois 60004 Information: (847) 439-9135

In Europe:

Indium Corporation of Europe 7 Newmarket Ct.

Kingston, Milton Keynes, UK, MK 10 OAG Information: +44 [0] 1908 580400

In Asia:

Indium Corporation of America Asia-Pacific Operations-Singapore 29 Kian Teck Avenue

Singapore 628908

Information: +65 6268-8678

EMERGENCY PHONE:

CHEMTREC 24 hrs. USA: 1 (800) 424-9300

Outside USA: +1 (703) 527-3887

In China:

Indium Corporation (Suzhou) Co., Ltd

No. 428 Xinglong Street Suzhou Industrial Park Suchun Industrial Square

Unit No. 14-C

Jiangsu Province, China 215126 Information: (86) 512-6283-4900

2. HAZARDS IDENTIFICATION

PRIMARY ROUTES OF ENTRY:

Carcinogen listed in

⊗Eye ⊗Inhalation ⊗Skin ⊗Ingestion NTP IARC OSHA ⊗Not Listed

GHS:





Signal Word: Danger Hazard statement(s)

H225 Highly flammable liquid and vapor
 H319 Causes serious eye irritation
 H335 May cause respiratory irritation
 H336 May cause drowsiness or dizziness

H412 Harmful to aquatic life with long lasting effects

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
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

Serious eye damage/eye irritant - Category 2

Flammable liquids - Category 2

Specific target organ systemic toxicity (single exposure) - Category 3

POTENTIAL HEALTH EFFECTS:

Eye Contact: Vapors may be irritating, liquid may damage eye tissue.

Ingestion: May result in gastric disturbances.

Inhalation: May cause throat irritation, headache and nausea.

Skin Contact: May cause irritation.

Chronic: Not established.

NOTE: The Indium Corporation does not recommend, manufacture, market or endorse any of it's

products for human consumption.

WARNING: Applicable in the State of California: This product contains chemicals known to the State of

California to cause cancer and/or birth defects (or other reproductive harm). (trace levels of

contaminates not intentionally added)

3. COMPOSITION / INFORMATION ON INGREDIENTS

PEL TLV-STEL Components % wt CAS Registry # **TLV-TWA** mg/m³ mg/m³ mg/m³ **ISOPROPANOL** 75-85 67-63-0 (US) 980 983 1230 (EU) N.E. 999 1250 N.E 1228 (Canada) 983 (Mexico) N.E. 980 1225 (Singapore) 983 1230 (China) 350 700 **PROPRIETARY** 10-15 N.E. N.E. N.E

Symbol: XI, F Risk Phrases: R36/37/38, R11

5-10

N.E. = Not established

SURFACTANT

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

9003-11-6

N.E

N.E

N.E.

4. FIRST AID MEASURES

Eye Contact: Hold eyelids apart and flush eyes with plenty of 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: 54 F(12C) Method: Closed Cup

Auto-ignition Temperature: None

Flammable Limits: Upper: 12 Lower: 2

Extinguishing Media: Use extinguishers appropriate for the surrounding fire conditions (water/dry chemical).

Special Fire Fighting Wear standard fire fighting equipment.

Procedures:

6. ACCIDENTAL RELEASE MEASURES

Spill or Leak Procedures: Do not allow chemical material to enter sewer system or waterway. Eliminate sources of ignition. Contain spill and absorb if possible. Wear personal protective equipment. Dispose of following all Federal, State and Local regulations.

7. HANDLING AND STORAGE

Handling Keep containers tightly closed when not in use. Use care to avoid spills. Wear personal

Precautions: protective equipment. Ground containers. Keep away from sources of ignition.

Storage Precautions: Store product in tightly capped original containers in a cool, dry and ventilated area. Refer to

product label for specific storage temperature requirements. Rotate stock to ensure use before

expiration date on the label. Store away from sources of ignition.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Face velocity >2.1 cubic feet/minute in confined areas. Ventilation should be sufficient to

reduce exposure to below exposure levels.

Personal protection:

Eyes: Chemical safety glasses/splash goggles/face shield.

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 for isopropanol, (such as nitrile).

Other: Lab coat, eye-wash fountain in work area. Avoid the use of contact lenses in high fume/splash areas.

Work/Hygienic Maintain good housekeeping. Clean up spills immediately.

Practices: 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

Appearance: Liquid, light yellow Boiling Point: (180°F)

Odor: Alcoholic odor. Melting Point: Not applicable

Specific Gravity: 0.838 @ 77F **pH:** 6.5 (as is) 7.0 (1% solution)

Vapor Pressure: 31 mm HG @25°C Solubility in Water: Soluble

Vapor Density: >1

10. STABILITY AND REACTIVITY

General: Stable.

Conditions to Avoid: Direct heat, open flames and storage in aluminum.

Incompatible Materials: Strong alkali, halogens, phosphorus, monomers, aldehydes & trichlorides

Hazardous Decomposition /

Combustion:

Carbon dioxide/carbon monoxide.

Hazardous Polymerization: Will not occur.

11.TOXICOLOGICAL INFORMATION

Carcinogenicity: NTP: No

OSHA: No IARC: No

LD50: Not established. LC50: Not established.

RTECS: Isopropyl alcohol NT8050000

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

12. ECOLOGICAL INFORMATION

This section is subject to future development.

Biodegradability: Data not established on product. Aquatic Toxicity: Data not established on product

Product contain a chemical ingredient that is toxic to aquatic environment. May cause long term adverse effects in the aquatic environment.

Isopropyl alcohol – 4396 mg/kg (rat) LD50 oral/ 12800 mg/kg (rat) LD50 dermal/ 72.6 mg/l (rat) 4h LC50 inhalation

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. Contains

3% of an ingredient that is harmful to the environment. Product is flammable and

generally is disposed of as hazardous waste.

14. TRANSPORT INFORMATION

Transport in accordance with applicable regulations and requirements.

Shipping Name: UN1219, Isopropanol, 3, PG II North America Emergency Guide Book: Guide Page #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 Material 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 Mexican Standards NOM-018-STPS-2000 and NOM-010-STPS-1999.

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 using the Chinese Occupational Exposure Limit for Hazardous Agents in the Workplace, GBZ2-2002.

WARNING (Applicable in the State of California): This product contains chemicals known to the State of California to cause cancer and/or birth defects (or other reproductive harm). Safe Drinking Water Standard.

Trace levels not intentionally added: ethylene oxide, propylene oxide, 1,4 dioxane

SARA 313 Listing - 40 CFR 372.65: Trace levels of ethylene oxide, propylene oxide, 1,4 dioxane

All ingredients are listed on the EPA TSCA Inventory.

Ingredients are listed on the Canadian Domestic Substance List.

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

R11 Flammable

R67 Vapors may cause drowsiness and dizziness

Keep away from sources of ignition- No Smoking

Safety Phrases:

S16

S20/21	When using do not eat, drink or smoke
S23	Do not breathe fumes
S24/25	Avoid contact with skin and eyes
S27	Take off immediately all contaminated clothing
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
S61	Avoid release to the environment
S62	If swallowed, do not induce vomiting seek medical advice immediately and show container or label
S7	Keep container tightly closed

INDUSTRIAL USE ONLY

16. OTHER INFORMATION

HMIS Hazard Rating: Health: 2

Fire: 3 Reactivity: 0

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Prepared by: Nancy Swarts, Indium Corporation of America

Approved by: Nancy Swarts, Indium Corporation of America

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