



THE INDIUM CORPORATION OF AMERICA

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

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: FP-500 FLUX

MSDS Number: MSDS-4318

Revised Date: 8 OCTOBER 2013

Product Use: INDUSTRIAL USE – FLUX.

MANUFACTURER:

In America:

The Indium Corporation of America
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Technical & Safety Information: (315) 853-4900
Safety Information: nswarts@indium.com
<http://www.indium.com>

EMERGENCY PHONE (TRANSPORTATION SPILL):

CHEMTREC 24 hrs.

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In Europe:

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In China:

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Suchun Industrial Square
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In Asia:

The Indium Corporation of America
Asia-Pacific Operations-Singapore
29 Kian Teck Avenue
Singapore 628908
Information: +65 6268-8678

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
- H317 May cause an allergic skin reaction
- 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/spark/open flames/hot surfaces – No Smoking
- 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 +P351 IF IN EYES: Rinse cautiously with water for several minutes (15 mins)

Isopropyl alcohol:

Flammable Liquid – (Category 2)

Eye irritant – (Category 2A)

Skin irritant- (Category 3)

Specific target organ systemic toxicity (single exposure) – (Category 3)- central nervous system

POTENTIAL HEALTH EFFECTS:

- Eye Contact:** Vapors may be irritating, liquid may damage eye tissue. Do not allow material to come in contact with the eyes.
- Ingestion:** May cause irritation.
- Inhalation:** Vapor may cause headaches and or dizziness. May be irritating to the respiratory tract. Inhalation of rosin fumes may cause occupational asthma.
- Skin Contact:** Prolonged contact may cause irritation and dermatitis.
- Chronic:** Not established.

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. Absorbed product and place into proper container for disposal.

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.

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. Store away from sources of heat and flame.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components	% wt	CAS Registry #/ EINECS#	PEL mg/m ³	TLV-TWA mg/m ³	TLV-STEL mg/m ³
ISOPROPANOL (PROPAN-2-OL) (IPA) (ISOPROPYL ALCOHOL)	85-90	67-63-0 /200-661-7			
		(US)	980	983	1225
		(EU)	-	999	1250
		(Canada)	-	983	1228
		(Singapore)	983	-	1230
		(Mexico)	-	980	1225
		(China)	-	350	700
ROSIN	10-12	8050-09-7(US)	N.E	N.E.	N.E.
		(EU)	0.05	-	0.15
PROPRIETARY	2-5		N.E.	N.E	N.E.

Engineering Controls: Face velocity >2.1 cubic feet/minute in confined areas. Exhaust ventilation recommended to keep exposures as low as possible.

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 alcohol and rosin chemicals.
Other:	Lab coat, eye-wash/shower 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

Appearance:	Light Amber	Boiling Point:	180F
Odor:	Alcohol odor.	Evaporation Rate:	>1
Specific Gravity:	0.817	pH:	6
Vapor Pressure:	31 mm HG @ 25C	Solubility in Water:	Partial
Vapor Density:	>1 (air=1)	% Volatiles by volume:	85

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.

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

Isopropanol:
LD50 Oral – rat -5,045 mg/kg
LC50 Inhalation – rat -8h -16000 ppm
LD50 dermal – rabbit – 12,800 mg/kg

RTECS- Isopropanol NT8050000

12. ECOLOGICAL INFORMATION

Product not tested.
Isopropanol: Toxicity to fish LC50 – Pimephales promelas (fathead minnow) – 9640 mg/l – 96h

EC50 – Daphnia (water flea) – 5,102 mg/l – 24h

13. DISPOSAL CONSIDERATION

Waste Disposal Method: Dispose of in accordance with all Federal, State and Local environmental regulations. Disposal classification as flammable material.

14. TRANSPORT INFORMATION

Transport in accordance with applicable regulations and requirements. Flammable material.

Shipping: UN1219, Isopropanol, 3, PG II



North America Emergency Guide Book – 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.).

Some additional information is in accordance with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

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.

SARA 313 Listing - 40 CFR 372.65: None

All ingredients are listed on the EPA TSCA Inventory.

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 Agents in the Workplace, GBZ2-2002.

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
- R42/43 May cause sensitization by inhalation and skin contact
- 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
- 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
- S7 Keep container tightly closed

16. OTHER INFORMATION

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

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