



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

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: WAVE FLUX #2036

MSDS Number: MSDS-HG4022

Revised Date: 23 MAY 2013

Product Use: Industrial Use - Non-activated Rosin Flux

MANUFACTURER:

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2. HAZARDS IDENTIFICATION

PRIMARY ROUTES OF ENTRY:

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

Carcinogen listed in

GHS:



Warning Word: Danger

- H225 Highly flammable liquid and vapor
 H317 May cause an allergic skin reaction
 H319 Causes serious eye irritation
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
 H335 May cause respiratory irritation
 H336 May cause drowsiness or dizziness
 EUH208 Contains rosin. May produce an allergic reaction

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 + P IF SWALLOWED: Call POISON CENTER or doctor/physician 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)

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. Prolonged or repeated exposure may cause respiratory sensitization. Rosin may cause occupational asthma.

- Skin Contact:** Prolonged contact may cause irritation and dermatitis. Prolonged exposure may cause skin sensitization in susceptible individuals.
- 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 ³	TLV-TWA mg/m ³	TLV-STEL mg/m ³
ISOPROPANOL	55-60	67-63-0 (US)	980	983	1225
PROPAN-2-OL		(EU)	-	999	1250
		(Canada)	-	983	1228
		(Singapore)	983	-	1230
		(Mexico)	-	980	1225
		(China)	-	350	700
ROSIN	40-45	8050-09-7(US)	N.E.	N.E.	N.E.
		(EU)	0.05	-	0.15

Symbol: XI, F
N.E. = Not established

Risk Phrases: R36/37/38, R11, R42/43, R67
EU = European Exposure Limits

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

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:** 12°C (54°F) **Method:** TCC
- Auto-ignition Temperature:** None

Flammable Limits:	Upper: 12, Lower 2
Extinguishing Media:	Dry chemical. Use extinguishers appropriate for the surrounding fire conditions.
Special Fire Fighting	Wear protective clothing. Use water to cool fire exposed containers.
Procedures:	

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. Keep away from flame, or ignition points.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Face velocity >2.1 cubic feet/minute in confined areas. Recommend exhaust ventilation to reduce exposure to vapors.

Personal protection:

Eyes: Chemical safety glasses/goggles. Face shield for splash hazards.

Respirator: 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.

Skin: Compatible chemical resistant gloves such as nitrile.

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

Appearance:	Amber	Boiling Point:	79 - 83C (175 - 182F)
Odor:	Alcohol odor.	Evaporation Rate:	1.7
Specific Gravity:	0.874 +/-0.005 @60F	pH:	Not available
Vapor Pressure:	33 mm HG @68°F	Solubility in Water:	Insoluble
Vapor Density:	2.1 (air=1)	Volatiles by volume:	57%

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:	NTP: No		
	OSHA: No		
	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 regulations and requirements.

Shipping: UN1219, Isopropanol, 3, PGII



North American Emergency Guide Book – Guide #129

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 Canadian Controlled Products Regulation (CPR).



Canadian WHMIS: Class B2 Flammable Liquid.
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-0180STPS-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.

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
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
	Physical Hazard:	0
Revised Date:	23 MAY 2013	
Prepared by:	Nancy Swarts, Indium Corporation of America	

Approved by: Nancy Swarts, Indium Corporation of America

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