



INDIUM CORPORATION OF AMERICA

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

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: 3577-TF NO-CLEAN FLUX

SDS Number: SDS-HG4047

Revised Date: 25 JANUARY 2015

Product Use: Industrial Use-Flux material

MANUFACTURER:

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2. HAZARDS IDENTIFICATION

PRIMARY ROUTES OF ENTRY:

Eye Inhalation Skin Ingestion

Carcinogen listed in

NTP 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 + P341	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 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 result in gastric disturbances such as nausea and vomiting.**Inhalation:** May cause mild throat irritation, headache or dizziness.**Skin Contact:** Prolonged contact may cause irritation or dermatitis.**Chronic:** Not established.**NOTE:** **The Indium Corporation does not recommend, manufacture, market or endorse any of it's products for human consumption.****WARNING:** This product contains chemical known to the State of California to cause cancer and birth defects or other reproductive harm.**2. COMPOSITION / INFORMATION ON INGREDIENTS**

Components	% wt	CAS Registry #	PEL mg/m ³	TLV-TWA mg/m ³	TLV-STEL mg/m ³
ISOPROPYL ALCOHOL	85-95	67-63-0 (US)	980	983	1230
(Isopropanol)		(EU)	-	999	1250
		(Canada)	-	983	1228
		(Singapore)	983	-	1230
		(Mexico)	-	980	1225

		(China)	-	350	700
NAPHTHA	3-7	8030-30-6(US)	400	1590	-
		(Canada)	-	1600	2000
		(Singapore)	1370	-	-
ROSIN	0.5-2	8050-09-7	-	-	-
		(EU)	0.05	-	0.15
PROPRIETARY	1-6	-	N.E.	N.E.	N.E.

Symbol: Xi, F Risk Phrases: R36/37/38, R11, R67
 N.E. = Not established

PRODUCT DOES NOT CONTAIN ANY EU REACH SUBSTANCES OF VERY HIGH CONCERN

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: 58F **Method:** TCC

Auto-ignition Temperature: Not established

Flammable Limits: Upper limit 12, Lower limit 2.

Extinguishing Media: Use extinguishers appropriate for the surrounding fire conditions.

Special Fire Fighting Procedures: Standard fire fighting equipment

6. ACCIDENTAL RELEASE MEASURES

Spill or Leak Procedures: DO NOT allow chemical products to enter sewer system or waterway. Always check with local authorities. Wear personal protective equipment, such as gloves and depending on the quantity a respirator with organic cartridges may be required. Clean up by absorption. Eliminate sources of ignition. Keep unnecessary personnel away. Put clean-up materials in a properly labeled metal drum. 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 away from sources of ignition. 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

Engineering Controls: Face velocity >2.1 cubic feet/minute in confined areas. Exhaust ventilation is recommended to keep exposure limits as low as possible. Avoid exposure to alcohol fumes.

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.

Other: Lab coat, eyewash 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:	Clear	Boiling Point:	177°F
Odor:	Alcoholic	Melting Point:	Not applicable
Specific Gravity:	0.802 @60F	pH:	Neutral
Vapor Pressure:	33 mm HG @68°F	Solubility in Water:	Insoluble
Vapor Density:	2.1	Evaporation Rate:	1.7
Volatile by Volume:	96%		

10. STABILITY AND REACTIVITY

General:	Stable.
Conditions to Avoid:	Direct heat, open flames and storage in aluminum.
Incompatible Materials:	phosphorus, halogens, anhydrides, 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.

NIOSH RTECS – NT8050000

Oral rat LD50 - 4396 mg/kg
 Dermal rat LD50 – 12800 mg/kg
 Dermal rabbit – 12870 mg/kg
 Inhalation rat – 72.6 mg/l 4 h

12. ECOLOGICAL INFORMATION

Product not tested.
 Freshwater Algae – 1000 mg/l EC50 >72h
 Freshwater Fish – 1400000 ug/l LC50 96h
 Water Flea – 13299 mg/l EC50 48 h

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 1993, Flammable Liquid, N.O.S., 3, PG II (isopropanol, naphtha)



North American Emergency Guide Book – Guide #128

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).

WHMIS: Class B2 Flammable Liquid, 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.

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. [trace levels of 1, 4 dioxane (0.025-0.10%)]

SARA 313 Listing - 40 CFR 372.65: 1,4 dioxane trace levels

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

R11 Highly Flammable

Safety Phrases:

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

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:** 1
 Fire: 3
 Reactivity: 0

Revised Date: 25 JANUARY 2015

Prepared by: Nancy Swarts, Indium Corporation of America

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