



INDIUM CORPORATION OF AMERICA

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

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: 3590-T FLUX

SDS Number: SDS-HG008

Revised Date: 1 MAY 2015

Product Use: Industrial Use - No residue wave solder flux

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 Statements:

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 container and receiving equipment
 P241 Use explosion-proof electrical/ventilating/lightening/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 + 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

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 cause persistent nausea, vomiting and abdominal pain.
- Inhalation:** Vapor may cause headaches and or dizziness. Irritating to respiratory tract.
- Skin Contact:** Prolonged contact may cause irritation and dermatitis.
- Chronic:** Not established.
- NOTE:** **The Indium Corporation does not recommend, manufacture, market or endorse any of its products for human consumption.**
- WARNING:** **This product contains a chemical known to the State of California to cause cancer and/or birth defects (or other reproductive harm). (trace levels of 1,4 dioxane)**

3. COMPOSITION / INFORMATION ON INGREDIENTS

Components	% wt	CAS Registry #	PEL mg/m ³	TLV-TWA mg/m ³	TLV-STEL mg/m ³
ISOPROPANOL	90-95	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
PROPRIETARY	0 - 5	-	N.E.	N.E.	N.E.
ORGANIC ACID	0 - 5	68603-87-2	N.E.	N.E.	N.E.

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

Risk Phrases: R36, R11, R67

Product does not contain any RoHS related substances as ingredients. Therefore, product is compliant.

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: 12°C (54°F) **Method:** Closed Cup
Auto-ignition Temperature: None
Flammable Limits: Upper: 12.7 @77°F; Lower 2 @ 77°F
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 Keep containers tightly closed when not in use. Use care to avoid spills. Wear personal
Precautions: protective equipment. Ground containers when in use.

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 EU compliant CE marked air-purifying respirator with a fume/organic chemical cartridge is recommended where airborne concentrations are expected to be elevated. Additional protection especially in confined areas may be required.
Skin: Compatible chemical (alcohol) resistant gloves.
Other: Lab coat, eye-wash/shower 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:	Liquid, clear	Boiling Point:	79°C (175°F)
Odor:	Alcohol odor.	Melting Point:	Not applicable
Specific Gravity:	0.808 @ 60° F	pH:	3.2 (as is) 3.6 (1% solution)
Vapor Pressure:	33 mm HG @68°F	Solubility in Water:	Soluble
Vapor Density:	2.1 (air=1)		

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.



UN1219, Isopropanol, 3, PG II

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 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 a chemical (s) known to the State of California to cause cancer and/or birth defects (or other reproductive harm). (Contains trace amounts of 1, 4 Dioxane)

SARA 313 Listing - 40 CFR 372.65: trace amounts 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
- R 11 Highly Flammable
- 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: 1 MAY 2015

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