



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

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: NV-STI-F1 LIQUID FLUX

SDS Number: SDS-4427

Revised Date: 11 APRIL 2015

Product Use: Industrial Use - Liquid flux

MANUFACTURER:

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2. HAZARDS IDENTIFICATION

PRIMARY ROUTES OF ENTRY:

⊕Eye ⊕Inhalation ⊕Skin ⊕Ingestion NTP

Carcinogen listed in

IARC OSHA ⊕Not Listed

GHS:



Signal Word: Danger

Hazardous statement(s)

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

- Flammable Liquid – Category 2
- Eye irritation – Category 2A
- Skin sensitization- Category 1B
- Respiratory sensitization- Category 1B
- Specific target organ toxicity- single exposure – Category 3- central nervous system

POTENTIAL HEALTH EFFECTS:

Eye Contact:	Irritating to the eyes and if not removed promptly, may result in serious eye injury. Do not allow material to come in contact with the eyes.
Ingestion:	May cause irritation and damage to the mouth, esophagus and gastrointestinal tract. May be harmful.
Inhalation:	Heated vapor concentrations may be harmful if inhaled. Material may be destructive to the tissue of the mucous membranes and upper respiratory tract. Inhalation may cause headache or dizziness. May be harmful
Skin Contact:	May cause skin irritation. May be harmful if absorbed through the skin. Allergic reactions are possible, especially with repeated or prolonged exposure.
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 #/EINECS#	PEL mg/m ³	TLV-TWA mg/m ³	TLV-STEL mg/m ³
ROSIN MIXTURE	40-50	65997-05-9	N.E.	N.E.	N.E.
		(EU)	0.05	N.E.	0.15
ISOPROPYL ALCOHOL (PROPAN-2-OL)	30-40	67-63-0/200-661-7 (US)	980	983	1230
		(EU)	-	999	1250
		(Canada)	-	983	1230
		(Singapore)	983	-	1230
		(Mexico)	-	980	1225
		(China)	-	350	700
METHYL ETHYL KETONE (BUTANONE)	10-30	78-93-3/201-159-0 (US)	590	590	885
		(EU)	-	600	899
		(Canada)	-	590	885
		(Singapore)	590	-	885
		(Mexico)	-	590	885
		(China)	-	300	600
PROPRIETARY	1-2	-	N.E.	N.E.	N.E.

Symbol: Xi, F

Risk Phrases: R36/37/38, R11, R66, R67, R42/43

N.E. = Not established

EU = European Union Occupational Exposure Limits

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:** 11 C (52 F) **Method:** Not available
- Auto-ignition Temperature:** Not established.
- Flammable Limits:** Limits not established. Flammable
- Extinguishing Media:** Use extinguishers appropriate for the surrounding fire conditions. Foam, dry chemical, water spray.
- Special Fire Fighting Procedures:** Firefighters must wear NIOSH approved self-contained breathing apparatus and full protective clothing. Evacuate area and fight fire from a safe distance. Containers can build up pressure if exposed to heat (fire) or flame.

6. ACCIDENTAL RELEASE MEASURES

- Spill or Leak Procedures:** Wear a respirator and appropriate personal protection (See Exposure Controls/Personal Protective Section). Size of spill shall determine respiratory protection from air purifying to self-contained breathing apparatus. Keep unnecessary and unprotected personnel from entering the spill area. Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Dispose of following all Federal, State and Local regulations.

7. HANDLING AND STORAGE

- Handling Precautions:** Keep containers tightly closed when not in use. Use care to avoid spills. Avoid breathing vapors from heated material. Avoid contact with eyes, skin and clothing. Use with adequate ventilation. Keep away from sources of heat and flame. Properly ground containers.
- Storage Precautions:** Store product in tightly capped original containers in a cool, dry area. Keep away from heat and flame. Store away from incompatible materials. Empty containers may be hazardous as they contain product residue. Store in well ventilated area.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Exhaust ventilation should be sufficient to control airborne levels and reduce exposure levels. Proper ventilation is required. Avoid inhalation of solvent vapors.

Personal protection:

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

Respirator: An approved or compliant marked air-purifying respirator with a fume/organic chemical cartridge is recommended under certain circumstances where airborne concentrations are expected to be elevated. Confined spaces require additional protection. Use in well ventilated areas.

Skin: Compatible chemical resistant gloves, such a butyl rubber is recommended for heavy exposure protection. Neoprene type may be used for limited handling. Viton and nitrile gloves are not recommended for use in handling methyl ethyl ketone. Protective outer garment, apron and sleeves as appropriate. Face shield for splash protection. Avoid handling without protection.

Other: Eyewash fountain in work area. Avoid the use of contact lenses in high fume/splash areas.

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

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 (yellow)

Boiling Point: 84 C (183 F)

Odor: Slight characteristic odor.

Melting Point: Not applicable

Specific Gravity: 0.9001

pH: Approximately 5

Vapor Pressure: Not applicable.

Solubility in Water: Not established

Vapor Density: (air=1) Not applicable.

10. STABILITY AND REACTIVITY

General: Stable.

Conditions to Avoid: High temperatures, open flame.

Incompatible Materials: Heat, flame, water, acid, aluminum

Hazardous Decomposition / Combustion: Not established

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Carcinogenicity: NTP: No

OSHA: No

IARC: No

LD50: Not established.

LC50: Not established.

Other: Rosin fume has been known to cause occupational asthma in workers.

12. ECOLOGICAL INFORMATION

Product not tested. Product contains a substance that is harmful to aquatic organisms, and may cause long term effects in the aquatic environment.

13. DISPOSAL CONSIDERATION

Waste Disposal Method: Dispose of in accordance with all Federal, State and Local environmental regulations. Product is flammable and is therefore considered to be hazardous waste. Empty containers must be disposed of properly as well.

14. TRANSPORT INFORMATION

Transport in accordance with applicable regulations and requirements.

UN1993, Flammable Liquid, N.O.S., 3, PG II (methyl ethyl ketone, isopropyl alcohol)



North America 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).



Canadian WHMIS: Class B Division 2 Flammable, D2B Toxic Material Causing Other Toxic Effects (eye irritation in animals).

D2B Materials Causing Other Toxic Effects -irritant

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 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.

SARA 313 Listing - 40 CFR 372.65 - Methyl Ethyl Ketone CAS#78-93-3

All ingredients are listed on the EPA TSCA Inventory and the Domestic Substance List.

EC Classification, Packaging and Labeling Requirements:

Symbol and Hazard Classification of Product

Xi, F

Risk Phrases:

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed
 R36/37/38 Irritating to eyes, respiratory system and skin
 R11 Highly Flammable
 R42/43 May cause sensitization by inhalation and skin contact
 R66 Repeated exposure may cause skin dryness or cracking
 R67 Vapors may cause drowsiness and dizziness

Safety Phrases:

S20/21 When using do not eat, drink or smoke
 S16 Keep away from sources of ignition – No Smoking
 S23 Do not breathe fumes/gas/vapor/spray
 S24/25 Avoid contact with skin and eyes
 S7 Keep container tightly closed
 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:** 2
 Fire: 3
 Reactivity: 0

Revised Date: 11 APRIL 2015

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Note: This SDS may be translated into an international language. If there is any misinterpretation or misunderstanding of any words or phrases that may occur within any translation the ENGLISH language shall always prevail.