



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

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: 3580 FLUX

SDS Number: SDS-HG4024

Revised Date: 7 FEBRUARY 2015

Product Use: Industrial Use- 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 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
- 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 + 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 cause irritation.
- Inhalation:** May cause throat irritation, headache or dizziness.
- Skin Contact:** May cause irritation.
- Chronic:** Not established.

NOTE: **The Indium Corporation does not recommend, manufacture, market or endorse any of it's 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 |
|---|-------|------------------------|--------------------------|------------------------------|-------------------------------|
| ISOPROPYL ALCOHOL (propan-2-ol) | 80-90 | 67-63-0/200-661-7 (US) | 980 | 983 | 1230 |
| | | (EU) | - | 999 | 1250 |
| | | (Canada) | - | 983 | 1228 |
| | | (Singapore) | 983 | - | 1230 |
| | | (Mexico) | - | 980 | 1225 |
| | | (China) | - | 350 | 700 |
| MINERAL SPIRITS (solvent naphtha (petroleum)) | 5-10 | 64742-88-7/265-191-7 | N.E. | N.E. | N.E. |
| PROPRIETARY | 5-10 | - | N.E. | N.E. | N.E. |

Symbol: XI, F

Risk Phrases: R36/37/38, R11, R67

N.E. = Not established

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:** 14C(57F) **Method:** TCC
- Auto-ignition Temperature:** 750F
- 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 material to enter sewer system or waterway. Follow applicable local regulations. 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.

Personal protection:

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

Respirator: An 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.

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: | Liquid, clear | Boiling Point: | 79°C (175°F) |
| Odor: | Alcoholic | Melting Point: | Not applicable |
| Specific Gravity: | 0.817@60F | pH: | Not available |
| Vapor Pressure: | 33 mm HG @68°C | Solubility in Water: | Soluble |
| Vapor Density: | 2.1 | Evaporation Rate: | 2.64 |
| Volatile by Volume: | 90% | | |

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. |

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. Generally considered hazardous waste (flammable).

14. TRANSPORT INFORMATION

Transport in accordance with applicable regulations and requirements. Flammable.

UN1219, Isopropanol, 3, PG II (mixture)

North American Emergency Guide Book – Guide #129



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).



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.

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
 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
 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: | 2 |
| | Fire: | 3 |
| | Physical Hazard: | 0 |

Revised Date: 7 FEBRUARY 2015

Prepared by: Nancy Swarts, Indium Corporation of America

Approved by: Nancy Swarts, Indium Corporation of America

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