



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

To better serve all of our customers Indium Corporation has generated one MSDS, for this product, to be used within the United States as well as internationally. Some of the regulatory information contained within may not be applicable to the customer's individual state or country. Unless otherwise stated the health and safety information provided within is applicable to all products.

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: WS446-NRD FLUX

MSDS Number: MSDS-5720

Revised Date: 15 OCTOBER 2012

Product Use: Industrial Use (mixture) - Liquid flux

MANUFACTURER:

In America:

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2. HAZARDS IDENTIFICATION

PRIMARY ROUTES OF ENTRY:

Eye
 Inhalation
 Skin
 Ingestion
 NTP
 Carcinogen listed in IARC
 OSHA
Not Listed



Signal Word: Warning

Hazard statement(s)

H315 Causes skin irritation
 H317 May cause an allergic skin reaction
 H319 Causes serious eye irritation
 H335 May cause respiratory irritation

Precautionary statement(s)

P233 Keep container tightly closed
 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
 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

POTENTIAL HEALTH EFFECTS:

Eye Contact: Moderately to severely 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.

Inhalation: Heated vapor concentrations may be harmful if inhaled. Moderately irritating to respiratory tract. May cause headache or light headedness.

Skin Contact: Causes skin irritation. Allergic reactions (dermatitis) 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.

WARNING: Applicable ONLY to users in the State of California. This product may contain a chemical known to the State of California to cause cancer and/or birth defects (or other reproductive harm). (trace levels of ethylene oxide, 1,4 dioxane and acetaldehyde, not intentionally added).

3. COMPOSITION / INFORMATION ON INGREDIENTS

Components	% wt	CAS Registry #	PEL mg/m ³	TLV-TWA mg/m ³	TLV-STEL mg/m ³
POLYGLYCOL ETHER	40-45	9038-95-3	N.E.	N.E.	N.E.
AMIDES	35-40	67700-97-4	N.E.	N.E.	N.E.
PROPRIETARY ADDITIVES	15-25	-	N.E.	N.E.	N.E.

Symbol: XI
N.E. = Not established

Risk Phrases: R36/37/38, R43

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:** >100C (212F) **Method:** Not available
- Auto-ignition Temperature:** Not established.
- Flammable Limits:** Limits not established
- 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.

6. ACCIDENTAL RELEASE MEASURES

- Spill or Leak Procedures:** Wearing a respirator may be necessary and appropriate personal protection (See Exposure Controls/Personal Protective Section). 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** 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.
- Precautions:**
- 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.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- Engineering Controls:** Exhaust ventilation is necessary to control airborne levels and to keep exposures as low as possible.
- 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 under certain circumstances where airborne concentrations are expected to be elevated.
- Skin:** Compatible chemical resistant gloves such as nitrile should be worn. Protective outer garment, apron and sleeves as appropriate. Latex gloves are not recommended.
- Other:** 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. 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: | Flux - yellowish | Boiling Point: | Not established |
| Odor: | Mild characteristic odor. | Melting Point: | Not applicable |
| Specific Gravity: | Not established | pH: | Not applicable |
| Vapor Pressure: | Not applicable. | Solubility in Water: | Water wash |
| Vapor Density: | (air=1) Not applicable. | | |

10. STABILITY AND REACTIVITY

- General:** Stable.
- Conditions to Avoid:** High temperatures, open flame.
- Incompatible Materials:** Not established
- 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:

Product contains trace levels of ethylene oxide, 1,4 dioxane and acetaldehyde.

12. ECOLOGICAL INFORMATION

This section is subject to future development. Product not tested.

13. DISPOSAL CONSIDERATION

Waste Disposal Method: Dispose of in accordance with all Federal, State and Local environmental regulations.

14. TRANSPORT INFORMATION

Transport in accordance with applicable regulations and requirements. Not regulated under the USDOT. Non hazardous material.

Non hazardous for all shipping modes.

UN – none.

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).

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.

Applicable ONLY to the users within the State of California - California Prop 65 (Safe Drinking Water Standard): This product may contain a chemical known to the State of California to cause cancer and/or birth defects (or other reproductive harm). (trace levels of ethylene oxide, 1,4 dioxane and acetaldehyde, not intentionally added).

SARA 313 Listing - 40 CFR 372.65 - (ethylene oxide/1,4 dioxane/acetaldehyde)

All ingredients are listed on the EPA TSCA Inventory.

EC Classification, Packaging and Labeling Requirements:

Symbol and Hazard Classification of Product

XI

Risk Phrases:

