1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: 16-1088-D FLUX THINNER
SDS Number: SDS-4180
Product Use: INDUSTRIAL USE-THINNER
Revised Date: 24 JANUARY 2015

MANUFACTURER:

In America:
The Indium Corporation of America
1676 Lincoln Ave., Utica NY 13502
Information: (315) 853-4900
nswarts@indium.com

EMERGENCY PHONE:
CHEMTREC 24 hrs.
USA: 1 (800) 424-9300
Outside USA: +1 (703) 527-3887

In Europe:
Indium Corporation of Europe
7 Newmarket Ct.
Kingston, Milton Keynes, UK, MK 10 OAG
Information: +44 [0] 1908 580400

In Asia:
Indium corporation of America
Asia-Pacific Operations-Singapore
29 Kian Teck Avenue
Singapore 628908
Information: +65 6268-8678

In China:
Indium Corporation (Suzhou) Co., Ltd.
No. 428 Xinglong Street
Suzhou Industrial Park
Suchun Industrial Square
Unit No. 14-C
Jiangsu Province, China 215126
Information: (86) 512-6283-4900
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
- H301+H311+H331: Toxic if swallowed, in contact with skin or if inhaled
- H370: Causes damage to organs

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
- P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
- P302 + P352: IF ON SKIN: Wash with plenty of soap and water
- P304 + P311: IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
- P305 + P311: IF IN EYES: Rinse continuously with water for several minutes (15 mins)

Classification:

- Flammable liquids- Category 2
- Acute toxicity, oral - Category 3
- Acute toxicity, inhalation - Category 3
- Acute toxicity, dermal - Category 3
- Specific target organ toxicity-single exposure - Category 1

POTENTIAL HEALTH EFFECTS:

Eye Contact: Vapors may be irritating, liquid may damage eye tissue.

Ingestion: May cause persistent nausea, vomiting and abdominal pain. Fatal dose 2-8 ounces.

Inhalation: Vapor may cause headaches and or dizziness, irritant, breathing difficulty, visual disturbance and light-headedness. [50,000 ppm can cause death within 1-2 hours].

Skin Contact: Prolonged contact may cause irritation and dermatitis, swelling or scaling.

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

<table>
<thead>
<tr>
<th>Components</th>
<th>% wt</th>
<th>CAS Registry #</th>
<th>PEL mg/m³</th>
<th>TLV-TWA mg/m³</th>
<th>TLV-STEL mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>METHANOL (METHYL ALCOHOL)</td>
<td>100</td>
<td>67-56-1 (US)</td>
<td>260</td>
<td>262</td>
<td>328</td>
</tr>
<tr>
<td>EU</td>
<td></td>
<td>-</td>
<td>266</td>
<td>333</td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td></td>
<td>-</td>
<td>262</td>
<td>328</td>
<td></td>
</tr>
<tr>
<td>Singapore</td>
<td></td>
<td>262</td>
<td>-</td>
<td>328</td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td></td>
<td>-</td>
<td>260</td>
<td>310</td>
<td></td>
</tr>
<tr>
<td>China</td>
<td></td>
<td>-</td>
<td>25(skin)</td>
<td>50(skin)</td>
<td></td>
</tr>
</tbody>
</table>

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

Symbol: Xn, F  Risk Phrases: R20/21/22, R36/37/38, R11
N.E. = Not established  EU = European Exposure Limits  IDLH LEVEL: 6000 PPM

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: 53°F  Method: Closed Cup

Auto-ignition Temperature: N/A

Flammable Limits: Upper: 36%; Lower 6% vapor

Extinguishing Media: Dry chemical, Water or CO₂. Use extinguishers appropriate for the surrounding fire conditions.

Special Fire Fighting Procedures: Wear protective clothing and self-contained breathing apparatus. Use water to cool fire exposed containers. Flammable vapors may travel great distances to ignition source and flash back.
6. ACCIDENTAL RELEASE MEASURES

Spill or Leak Procedures: DO NOT allow material to enter sewer system or waterway. Dike area. Wear personal protective equipment. Eliminate sources of ignition. Use spark resistant tools. Depending on the location and size of spilt material, the immediate area may need to be evacuated. Keep unnecessary personnel away. 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 protective equipment.

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. Ground containers. Storage should be in areas away from sources of ignition and sparks.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Face velocity >2.1 cubic feet/minute in confined areas. Exhaust ventilation recommended to keep airborne concentrations as low as possible. Ground containers and transfer equipment and process systems to avoid static sparks. Minimize or eliminate sources of sparks and ignition when handling product.

Personal protection:

Eyes: Chemical safety glasses/goggles.

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. Use gloves such as butyl rubber, Viton, Tychem 10000 to prevent skin contact. [Nitrile, neoprene and natural rubber not recommended because they may degrade after contact].

Other: Lab coat, eye-wash fountain in work area. Avoid the use of contact lenses.

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: Colorless Boiling Point: 148F
Odor: Alcohol odor. Evaporation Rate: 2.4
Specific Gravity: 0.790 pH: Neutral
Vapor Pressure: 138 mm HG @25C Solubility in Water: Soluble
Vapor Density: 1.1 (air=1) % Volatiles by volume: 100
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: National Toxicity Program NTP: No
Occupational Safety & Health Administration OSHA: No
International Agency for Research on Cancer IARC: No
LD50: Not established. LC50: Not established.

12. ECOLOGICAL INFORMATION

This section is subject to future development.

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.
UN1230, Methanol, 3, PG II

North America Emergency Guide Book – Guide #131  Methyl alcohol or Methanol
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.).

The information in this Material Safety Data Sheet meets the requirements of the EU under Chemicals (Hazard Information and Packaging for Supply) Regulations 1994 (CHIP 2) Regulation 6.

This product has been classified in accordance with the hazard criteria of the Commission Directive 91/155/EEC and EH40.

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulation (CPR).

WHMIS: Class B2 Flammable Liquid

This product has been classified in accordance with the guidelines set by the Dept of Industrial Health of the Republic of Singapore.

SARA 313 Listing - 40 CFR 372.65: None

All ingredients are listed on the EPA TSCA Inventory.

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.

EC Classification, Packaging and Labeling Requirements:

Symbol and Hazard Classification of Product

\[ X_{n,F} \]

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
R 11 Highly Flammable

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
S62 If swallowed, do not induce vomiting seek medical advice immediately and show container or label
S7 Keep container tightly closed
## 16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>HMIS Hazard Rating</th>
<th>Health: 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire: 3</td>
<td></td>
</tr>
<tr>
<td>Reactivity: 0</td>
<td></td>
</tr>
</tbody>
</table>

**Revised Date:** 27 NOVEMBER 2007

**Prepared by:** Nancy Swarts, Indium Corporation of America

**Approved by:** Nancy Swarts, Indium Corporation of America

The information and recommendations contained herein are, to the best of The Indium Corporation of America's knowledge and belief, accurate and reliable as of the date issued. The Indium Corporation of America does not warrant or guarantee their accuracy or reliability, and The Indium Corporation of America shall not be liable for any loss or damage arising out of the user thereof. The information and recommendations are offered for the user's consideration and examination, and it is the user's responsibility to satisfy itself that they are suitable and complete for its particular use. If buyer repackages this product, legal counsel should be consulted to insure proper health, safety and other necessary information is included on the container.