SAFETY DATA SHEET

SECTION 1- MANUFACTURER'S IDENTIFICATION

Product Name: INDURETHANE 5000 CLEAR COAT    Product Code: D4-1031
Manufacturer's Name: Induron Protective Coatings, LLC
Address: 3333 Richard Arrington Blvd. N.
Birmingham, Alabama 35234
Emergency Phone: 1-800-424-9300
Information Phone: (205)324-9584

Section 2 - Composition / Information on Ingredients

GHS Ratings:

<table>
<thead>
<tr>
<th>Substance</th>
<th>Classification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammable liquid</td>
<td>3</td>
<td>Flash point &gt;= 23°C and &lt;= 60°C (140°F)</td>
</tr>
<tr>
<td>Skin corrosive</td>
<td>2</td>
<td>Reversible adverse effects in dermal tissue, Draize score: &gt;= 2.3 &lt; 4.0 or persistent inflammation</td>
</tr>
<tr>
<td>Eye corrosive</td>
<td>2A</td>
<td>Eye irritant: Subcategory 2A, Reversible in 21 days</td>
</tr>
<tr>
<td>Mutagen</td>
<td>1B</td>
<td>Known to produce heritable mutations in human germ cellsSubcategory 1B, Positive results: In vivo heritable germ cell tests in mammals, Human germ cell tests, In vivo somatic mutagenicity tests, combined with some evidence of germ cell mutagenicity</td>
</tr>
<tr>
<td>Carcinogen</td>
<td>1B</td>
<td>Presumed Human Carcinogen, Based on demonstrated animal carcinogenicity</td>
</tr>
<tr>
<td>Reproductive toxin</td>
<td>1B</td>
<td>Presumed, Based on experimental animals</td>
</tr>
</tbody>
</table>

GHS Hazards

- H226: Flammable liquid and vapour.
- H315: Causes skin irritation
- H319: Causes serious eye irritation
- H340: May cause genetic defects
- H350: May cause cancer
- H360: May damage fertility or the unborn child

GHS Precautions

- P201: Obtain special instructions before use
- P202: Do not handle until all safety precautions have been read and understood
- 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 equipment.
- P242: Use only non-sparking tools.
- P243: Take precautionary measures against static discharge.
- P264: Wash equipment and contaminated skin thoroughly after handling.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.
- P281: Use personal protective equipment as required
- P362: Take off contaminated clothing and wash before reuse
- P302+P352: IF ON SKIN: Wash with soap and water
- P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- P305+P351+P338: IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
- P308+P313: IF exposed or concerned: Get medical advice/attention
- P332+P313: If skin irritation occurs: Get medical advice/attention
Preexisting skin, eye, and respiratory disorders may be aggravated by exposure to this product. Impaired kidney and liver functions from preexisting disorders may be aggravated by exposure to this product.

Kidney damage may be evidenced by changes in urine output, urine appearance, or edema (swelling from fluid retention). Liver damage may be evidenced by loss of appetite, jaundice and sometimes pain in the upper abdomen on the right side.

### Section 3 - Hazards Identification

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS number</th>
<th>Weight Concentration %</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHYLENE GLYCOL MONOBUTYL ETHER ACETATE</td>
<td>112-07-2</td>
<td>20.00% - 30.00%</td>
</tr>
<tr>
<td>Mixed Xylenes</td>
<td>1330-20-7</td>
<td>5.00% - 10.00%</td>
</tr>
<tr>
<td>Naptha(Pet), light arom.</td>
<td>64742-95-6</td>
<td>5.00% - 10.00%</td>
</tr>
<tr>
<td>n-BUTYL ACETATE</td>
<td>123-86-4</td>
<td>5.00% - 10.00%</td>
</tr>
<tr>
<td>DIISOBUTYL KETONE</td>
<td>108-83-8</td>
<td>1.00% - 5.00%</td>
</tr>
<tr>
<td>2-ETHYL BENZENE</td>
<td>100-41-4</td>
<td>1.00% - 5.00%</td>
</tr>
<tr>
<td>Naphtha, petroleum, hydrodesulfurized heavy</td>
<td>64742-82-1</td>
<td>0.10% - 1.00%</td>
</tr>
</tbody>
</table>

### Section 4 - First Aid Measures

**INHALATION** - If product solids are inhaled either as dust or in the form of a spray mist, remove the person from exposure immediately. If breathing is difficult, irregular, or has stopped, start resuscitation; call a physician. Administer oxygen if a qualified operator is available.

**EYE CONTACT** - In case of eye contact, flush the eyes with water for fifteen (15) minutes. If contact lenses are worn, quickly remove them, then flush the eyes with water. Have a physician examine the eyes.

**SKIN CONTACT** - In case of skin contact, remove contaminated clothing. Flush the skin with large amounts of water, then wash the skin with soap and water.

**INGESTION** - If material is ingested, seek immediate medical attention. If vomiting occurs spontaneously, keep the head below the hips to prevent aspiration of liquid into the lungs.

Notes to Physician: No data found

### Section 5 - Fire Fighting Measures

Flash Point: 27 C (80 F)
LEL: 1.00  UEL: 9.00
Flammable Product

**EXTINGUISHING MEDIA:** Use carbon dioxide (CO2), "alcohol" foam, dry chemical systems, water fog, water spray.

**UNUSUAL FIRE OR EXPLOSION HAZARDS:** Under normal storage conditions this product is stable.

**HAZARDOUS COMBUSTION PRODUCTS:** Oxides of carbon and hydrocarbons
**FIRE FIGHTING:** If evacuation of personnel is necessary, evacuate to an upwind area. Decontaminate personnel and equipment with a water wash-down after fire and smoke exposure. Use water spray to cool unopened containers.

**FIRE FIGHTING:** If evacuation of personnel is necessary, evacuate to an upwind area. Decontaminate personnel and equipment with a water wash-down after fire and smoke exposure.

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**Section 6 - Accidental Release Measures**

**SPILL AND LEAK PROCEDURES:** Spill supervisor - Ensure cleanup personnel wear all appropriate Personal Protective Equipment (PPE), including respiratory protection. Remove all ignition sources. Keep nonessential personnel away from the contaminated area.

**SMALL SPILLS:** Ventilate the contaminated area. Using nonsparking tools, mix the appropriate sorbent into the spilled material. Use an absorbent like sawdust for aqueous, waterborne, and solvent-borne coatings.

Collect the saturated sorbent and transfer it into a covered container. Steel containers are acceptable for all wastes except wastes which contain acid. Use suitable plastic containers for acid-bearing wastes. Wet absorbent materials with water to prevent spontaneous combustion with alkyd type formulas.

Dispose of the waste in compliance with all Federal, state, regional, and local regulations.

**LARGE SPILLS:** Prevent this material from entering sewers and watercourses by diking or impounding the spilled material. Advise authorities if the product has entered or may enter, sewers, watercourses, or extensive land areas.

Ventilate the contaminated area. Using nonsparking tools, mix the appropriate sorbent into the spilled material. Use an absorbent like sawdust for aqueous, waterborne, and solvent-borne coatings.

Collect the saturated sorbent and transfer it into a covered container. Steel containers are acceptable for all wastes except wastes which contain acid. Use suitable plastic containers for acid-bearing wastes. Wet absorbent with water for alkyd type spills.

---

**Section 7 - Handling and Storage**

**HANDLING PRECAUTIONS:** Wear all appropriate Personal Protective Equipment (PPE). Wear respiratory protection or ensure adequate ventilation at all times as vapors can accumulate in confined or poorly ventilated areas. Use the product in a manner which minimizes splashes and/or the creation of dust. Keep containers closed when not in use. Do not handle or store material near heat, sparks, open flames, or other sources of ignition. Store at room temperatures, i.e., 40 to 95°F (4 to 35°C).

**STORAGE:** Prevent from freezing. Do not store above 120°F (49°C).

Store only in original containers.

**REGULATORY REQUIREMENTS:** No data found.

---

**Section 8 - Exposure Controls / Personal Protection**

<table>
<thead>
<tr>
<th>Chemical Name / CAS No.</th>
<th>OSHA Exposure Limits</th>
<th>ACGIH Exposure Limits</th>
<th>Other Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHYLENE GLYCOL</td>
<td>Not Established</td>
<td>20 ppm TWA</td>
<td>NIOSH: 5 ppm TWA; 33 mg/m³ TWA</td>
</tr>
<tr>
<td>MONOBUTYL ETHER ACETATE 112-07-2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mixed Xylenes 1330-20-7</td>
<td>100 ppm TWA; 435 mg/m³ TWA</td>
<td>150 ppm STEL 100 ppm TWA</td>
<td>Not Established</td>
</tr>
<tr>
<td>Naphtha(Pet), light arom. 64742-95-6</td>
<td>Not Established</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
<tr>
<td>n-BUTYL ACETATE 123-86-4</td>
<td>150 ppm TWA; 710 mg/m³ TWA</td>
<td>200 ppm STEL 150 ppm TWA</td>
<td>NIOSH: 150 ppm TWA; 710 mg/m³ TWA 200 ppm STEL; 950 mg/m³ STEL</td>
</tr>
</tbody>
</table>

SDS for: D4-1031

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Printed: 10/4/2016 at 10:41:06AM
**DIISOBUTYL KETONE**

<table>
<thead>
<tr>
<th></th>
<th>50 ppm TWA; 290 mg/m3 TWA</th>
<th>25 ppm TWA</th>
<th>NIOSH: 25 ppm TWA; 150 mg/m3 TWA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Ethyl Benzene 100-41-4</td>
<td>100 ppm TWA; 435 mg/m3 TWA</td>
<td>20 ppm TWA</td>
<td>NIOSH: 100 ppm TWA; 435 mg/m3 TWA 125 ppm STEL; 545 mg/m3 STEL</td>
</tr>
</tbody>
</table>

Naphtha, petroleum, hydrodesulfurized heavy 64742-82-1

**ENGINEERING:** Ensure processing (curing) ovens are properly vented to prevent the introduction of processing fumes into the workplace. Use explosion-proof equipment and good manufacturing practice.

**VENTILATION:** Use only with adequate ventilation, i.e., ventilation in compliance with occupational exposure limits.

**ADMINISTRATIVE CONTROLS:** No data found.

**PROTECTIVE EQUIPMENT:** Wear splash goggles. If extra protection is required, wear a face shield over the splash goggles. Face shields are effective only if worn in addition to splash goggles.

Wear a chemical-resistant, butyl-rubber apron and other protective clothing, as deemed appropriate, to avoid skin contact with material.

Wear chemical-resistant gloves (butyl rubber or neoprene). Protective gloves should be inspected frequently and discarded when they exhibit cuts, tears, pinholes, or signs of excessive wear.

**CONTAMINATED EQUIPMENT:** Dispose of the waste in compliance with all Federal, state, regional, and local regulations.

### Section 9 - Physical and Chemical Properties

This mixture typically exhibits the following properties under normal circumstances:

- **Viscosity:** N/A
- **Appearance:** N/A
- **Vapor Pressure:** 2.5 mmHg
- **Vapor Density:** 5.0
- **DENSITY:** 8.25
- **Freezing point:** N/A
- **Boiling range:** 126°C
- **Evaporation rate:** N/A
- **Explosive Limits:** N/A
- **Autoignition temperature:** N/A

- **Coating VOC Lb/Gal:** 4.33
- **Odor:** N/A
- **Odor threshold:** N/A
- **pH:** N/A
- **Melting point:** N/A
- **Solubility:** N/A
- **Flash point:** 80 F, 27 C
- **Flammability:** N/A
- **Partition coefficient (n-octanol/water):**
- **Decomposition temperature:** N/A

### Section 10 - Stability and Reactivity

**Stability:** This product is stable under normal storage conditions.

**STABLE**

Avoid strong oxidizing agents.

This mixture is likely to exhibit the following combustion products: Carbon oxides.

**Hazardous polymerization will not occur.**

### Section 11 - Toxicological Information

**Mixture Toxicity**
Inhalation Toxicity LC50: 175mg/L

Routes of Entry:
Ingestion

Exposure to this material may affect the following organs:
<table>
<thead>
<tr>
<th>Blood</th>
<th>Eyes</th>
<th>Kidneys</th>
<th>Liver</th>
<th>Central Nervous System</th>
<th>Skin</th>
<th>Respiratory</th>
</tr>
</thead>
</table>

Effects of Overexposure

Carcinogenicity: The following chemicals comprise 0.1% or more of this mixture and are listed and/or classified as carcinogens or potential carcinogens by NTP, IARC, OSHA (mandatory listing), or ACGIH (optional listing).

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Description</th>
<th>% Weight</th>
<th>Carcinogen Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>64742-82-1</td>
<td>Naphtha, petroleum, hydrodesulfurized heavy</td>
<td>0.1 - 1.0%</td>
<td>Naphtha, petroleum, hydrodesulfurized heavy: EU REACH: Present (P)</td>
</tr>
<tr>
<td>64742-95-6</td>
<td>Naptha(Pet), light arom.</td>
<td>5 - 10%</td>
<td>Naptha(Pet), light arom.: EU REACH: Present (P)</td>
</tr>
<tr>
<td>100-41-4</td>
<td>2-ETHYL BENZENE</td>
<td>1 - 5%</td>
<td>2-ETHYL BENZENE: IARC: Possible human carcinogen OSHA: listed</td>
</tr>
</tbody>
</table>

Section 12 - Ecological Information

Ecological information: No data found.

Component Ecotoxicity

ETHYLENE GLYCOL
48 Hr EC50 Daphnia magna: 37 mg/L
72 Hr EC50 Desmodesmus subspicatus: >500 mg/L

MONOButYL ETHER ACETATE
48 Hr EC50 Water flea: 3.82 mg/L; 48 Hr LC50 Gammarus lacustris: 0.6 mg/L

Mixed Xylenes
96 Hr LC50 Pimephales promelas: 13.4 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 2.661 - 4.093 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 13.5 - 17.3 mg/L; 96 Hr LC50 Lepomis macrochirus: 13.1 - 16.5 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 19 mg/L; 96 Hr LC50 Lepomis macrochirus: 7.711 - 9.591 mg/L [static]; 96 Hr LC50 Pimephales promelas: 23.53 - 29.97 mg/L [static]; 96 Hr LC50 Cyprinus carpio: 780 mg/L [semi-static]; 96 Hr LC50 Cyprinus carpio: >780 mg/L; 96 Hr LC50 Poecilia reticulata: 30.26 - 40.75 mg/L [static]
48 Hr EC50 Water flea: 3.82 mg/L; 48 Hr LC50 Gammarus lacustris: 0.6 mg/L

Naptha(Pet), light arom.
96 Hr LC50 Oncorhynchus mykiss: 9.22 mg/L
48 Hr EC50 Daphnia magna: 6.14 mg/L

n-BUTYL ACETATE
96 Hr LC50 Lepomis macrochirus: 100 mg/L [static]; 96 Hr LC50 Pimephales promelas: 17 - 19 mg/L [flow-through]
72 Hr EC50 Desmodesmus subspicatus: 674.7 mg/L

DIISOBUTYL KETONE
96 Hr LC50 Oncorhynchus mykiss: 140 mg/L [semi-static]
96 Hr EC50 Pseudokirchneriella subcapitata: 100 mg/L
Section 13 - Disposal Considerations

As the US EPA, state, regional, and other regulatory agencies may have jurisdiction over the disposal of your facility's hazardous waste, it is incumbent upon you, the hazardous waste generator, to learn of and satisfy all the requirements which affect you. Dispose of the hazardous waste at a properly licensed and permitted disposal site or facility. Ensure conformity to all applicable hazardous waste disposal regulations.

The US EPA Hazardous Waste Numbers which follow are applicable to this unadulterated product if the product enters the "waste stream." Refer to Title 40 of the Code of Federal Regulations, Part 261 (40 CFR 261). This part of the Code identifies solid wastes which are subject to regulation under various sections of the Code and which are subject to the notification requirements of Section 3010 of the Resource Conservation and Recovery Act (RCRA).

Section 14 - Transport Information

<table>
<thead>
<tr>
<th>Agency</th>
<th>Proper Shipping Name</th>
<th>UN Number</th>
<th>Packing Group</th>
<th>Hazard Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT</td>
<td>PAINT</td>
<td>1263</td>
<td>III</td>
<td>3</td>
</tr>
<tr>
<td>IATA</td>
<td>PAINT</td>
<td>1263</td>
<td>III</td>
<td>3</td>
</tr>
</tbody>
</table>

15: Regulatory Information

State of California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): WARNING! This product contains the following chemicals which are listed by the State of California as carcinogenic or a reproductive toxin:

100-41-4  2-ETHYL BENZENE  1 to 5 %

HAZARDOUS AIR POLLUTANTS

100-41-4  2-ETHYL BENZENE
1330-20-7  Mixed Xylenes

MASSACHUSETTS RIGHT TO KNOW

100-41-4  2-ETHYL BENZENE  1 to 5 %
108-83-8  DIISOBUTYL KETONE  1 to 5 %
123-86-4  n-BUTYL ACETATE  5 to 10 %
1330-20-7  Mixed Xylenes  5 to 10 %

NEW JERSEY RIGHT TO KNOW

100-41-4  2-ETHYL BENZENE  1 to 5 %
108-83-8  DIISOBUTYL KETONE  1 to 5 %
123-86-4  n-BUTYL ACETATE  5 to 10 %
1330-20-7  Mixed Xylenes  5 to 10 %
112-07-2  ETHYLENE GLYCOL MONOBUTYL ETHER ACETATE  20 to 30 %

PENNSYLVANIA RIGHT TO KNOW

100-41-4  2-ETHYL BENZENE  1 to 5 %
108-83-8  DIISOBUTYL KETONE  1 to 5 %
CHEMICAL LIST FOR SARA 311
1330-20-7  Mixed Xylenes

CHEMICAL LIST FOR SARA 311/312
1330-20-7  Mixed Xylenes
112-07-2  ETHYLENE GLYCOL MONOBUTYL ETHER ACETATE

CHEMICAL LIST FOR SARA 313
100-41-4  2-ETHYL BENZENE
1330-20-7  Mixed Xylenes

Country  Regulation  All Components Listed

EU Risk Phrases

Safety Phrase

- None

16: OTHER INFORMATION

Hazardous Material Information System (HMIS)

<table>
<thead>
<tr>
<th>HEALTH</th>
<th>FLAMMABILITY</th>
<th>PHYSICAL HAZARD</th>
<th>PERSONAL PROTECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>3</td>
<td>0</td>
<td>H</td>
</tr>
</tbody>
</table>

HMIS & NFPA Hazard Rating
Legend
* = Chronic Health Hazard
0 = INSIGNIFICANT
1 = SLIGHT
2 = MODERATE
3 = HIGH

National Fire Protection Association (NFPA)

Flammability
Health
Instability
Special

Reviewer Revision

Date Prepared: 10/4/2016
SAFETY DATA SHEET

SECTION 1- MANUFACTURER'S IDENTIFICATION

Product Name: INDURETHANE 5000 CLEAR COAT ACTIVATOR    Product Code: Q4-1030
Manufacturer's Name: Induron Protective Coatings, LLC
Address: 3333 Richard Arrington Blvd. N.
    Birmingham, Alabama 35234
Emergency Phone: 1-800-424-9300
Information Phone: (205)324-9584

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<thead>
<tr>
<th>Property</th>
<th>Code</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammable liquid</td>
<td>3</td>
<td>Flash point &gt;= 23°C and &lt;= 60°C (140°F)</td>
</tr>
<tr>
<td>Oral Toxicity</td>
<td>Acute Tox. 4</td>
<td>Oral&gt;300+&lt;=2000mg/kg</td>
</tr>
<tr>
<td>Eye corrosive</td>
<td>2A</td>
<td>Eye irritant: Subcategory 2A, Reversible in 21 days</td>
</tr>
<tr>
<td>Respiratory sensitizer</td>
<td>1</td>
<td>Respiratory sensitizer</td>
</tr>
<tr>
<td>Skin sensitizer</td>
<td>1</td>
<td>Skin sensitizer</td>
</tr>
<tr>
<td>Carcinogen</td>
<td>2</td>
<td>Limited evidence of human or animal carcinogenicity</td>
</tr>
</tbody>
</table>

GHS Hazards

- H226 Flammable liquid and vapour.
- H304 May be fatal if swallowed and enters airways
- H315 Causes skin irritation
- H317 May cause an allergic skin reaction
- H319 Causes serious eye irritation
- H332 Harmful if inhaled
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
- H335 May cause respiratory irritation
- H351 Suspected of causing cancer
- H373 May cause damage to organs through prolonged or repeated exposure

GHS Precautions

- P201 Obtain special instructions before use
- P202 Do not handle until all safety precautions have been read and understood
- P210 Keep away from heat/sparks/open flames/hot surfaces - No smoking.
- P240 Ground/bond container and receiving equipment.
- P241 Use explosion-proof electrical equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P264 Wash equipment and contaminated skin thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P284 Wear respiratory protection
- P312 Call a POISON CENTER or doctor/physician if you feel unwell
- P321 Wash contaminated skin, follow Physician's instructions for treatment.
- P331 Do NOT induce vomiting
- P363 Wash contaminated clothing before reuse
- P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
- P302+P352 IF ON SKIN: Wash with soap and water
- P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.
    Rinse skin with water/shower
Preexisting skin, eye, and respiratory disorders may be aggravated by exposure to this product. Impaired kidney and liver functions from preexisting disorders may be aggravated by exposure to this product.

Kidney damage may be evidenced by changes in urine output, urine appearance, or edema (swelling from fluid retention). Liver damage may be evidenced by loss of appetite, jaundice and sometimes pain in the upper abdomen on the right side.

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<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS number</th>
<th>Weight Concentration %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homopolymer of Hexamethylene Diisocyanate</td>
<td>28182-81-2</td>
<td>70.00% - 80.00%</td>
</tr>
<tr>
<td>Mixed Xylenes</td>
<td>1330-20-7</td>
<td>10.00% - 20.00%</td>
</tr>
<tr>
<td>PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE</td>
<td>108-65-6</td>
<td>10.00% - 20.00%</td>
</tr>
<tr>
<td>2-ETHYL BENZENE</td>
<td>100-41-4</td>
<td>1.00% - 5.00%</td>
</tr>
</tbody>
</table>

### Section 4 - First Aid Measures

**INHALATION** - If product solids are inhaled either as dust or in the form of a spray mist, remove the person from exposure immediately. If breathing is difficult, irregular, or has stopped, start resuscitation; call a physician. Administer oxygen if a qualified operator is available.

**EYE CONTACT** - In case of eye contact, flush the eyes with water for fifteen (15) minutes. If contact lenses are worn, quickly remove them, then flush the eyes with water. Have a physician examine the eyes.

**SKIN CONTACT** - In case of skin contact, remove contaminated clothing. Flush the skin with large amounts of water, then wash the skin with soap and water.

**INGESTION** - If material is ingested, seek immediate medical attention. If vomiting occurs spontaneously, keep the head below the hips to prevent aspiration of liquid into the lungs. Notes to Physician: No data found.

### Section 5 - Fire Fighting Measures

Flash Point: 29 C (85 F)
LEL: 1.00  UEL: 7.00
Flammable Product

**EXTINGUISHING MEDIA:** Use carbon dioxide (CO2), "alcohol" foam, dry chemical systems. Direct water application may cause violent frothing.

**UNUSUAL FIRE OR EXPLOSION HAZARDS:** Moisture can cause significant pressure increases in the packaging, leading to pressure caused leaks or even explosions.

**HAZARDOUS COMBUSTION PRODUCTS:** Oxides of carbon, hydrocarbons, hydrogen cyanide, oxides of sulfur and/or zinc.

**FIRE FIGHTING:** If evacuation of personnel is necessary, evacuate to an upwind area. Decontaminate personnel and equipment with a water wash-down after fire and smoke exposure. Use water spray to cool unopened containers.

Section 6 - Accidental Release Measures

**SPILL AND LEAK PROCEDURES:** Spill supervisor - Ensure cleanup personnel wear all appropriate Personal Protective Equipment (PPE), including respiratory protection. Remove all ignition sources. Keep nonessential personnel away from the contaminated area.

**SMALL SPILLS:** Ventilate the contaminated area. Using nonsparking tools, mix the appropriate sorbent into the spilled material. Use an absorbent like sawdust for aqueous, waterborne, and solvent-borne coatings.

Collect the saturated sorbent and transfer it into a covered container. Steel containers are acceptable for all wastes except wastes which contain acid. Use suitable plastic containers for acid-bearing wastes. Wet absorbent materials with water to prevent spontaneous combustion with alkyd type formulas.

Dispose of the waste in compliance with all Federal, state, regional, and local regulations.

**LARGE SPILLS:** Prevent this material from entering sewers and watercourses by diking or impounding the spilled material. Advise authorities if the product has entered or may enter, sewers, watercourses, or extensive land areas.

Ventilate the contaminated area. Using nonsparking tools, mix the appropriate sorbent into the spilled material. Use an absorbent like sawdust for aqueous, waterborne, and solvent-borne coatings.

Collect the saturated sorbent and transfer it into a covered container. Steel containers are acceptable for all wastes except wastes which contain acid. Use suitable plastic containers for acid-bearing wastes. Wet absorbent with water for alkyd type spills.

Section 7 - Handling and Storage

**HANDLING PRECAUTIONS:** Wear all appropriate Personal Protective Equipment (PPE). Wear respiratory protection or ensure adequate ventilation at all times as vapors can accumulate in confined or poorly ventilated areas. Use the product in a manner which minimizes splashes and/or the creation of dust. Keep containers closed when not in use. Do not handle or store material near heat, sparks, open flames, or other sources of ignition. Store at room temperatures, i.e., 40 to 95 F (4 to 35 C).

**STORAGE:** Prevent from freezing. Do not store above 120 F (49 C). Keep in dry areas.

Store only in original containers.

**REGULATORY REQUIREMENTS:** No data found.

Section 8 - Exposure Controls / Personal Protection

<table>
<thead>
<tr>
<th>Chemical Name / CAS No.</th>
<th>OSHA Exposure Limits</th>
<th>ACGIH Exposure Limits</th>
<th>Other Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homopolymer of Hexamethylene Diisocyanate. 28182-81-2</td>
<td>Not Established</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
<tr>
<td>Mixed Xylenes 1330-20-7</td>
<td>100 ppm TWA; 435 mg/m3 TWA</td>
<td>150 ppm STEL 100 ppm TWA</td>
<td>Not Established</td>
</tr>
</tbody>
</table>
ENGINEERING: Ensure processing (curing) ovens are properly vented to prevent the introduction of processing fumes into the workplace. Use explosion-proof equipment and good manufacturing practice.

VENTILATION: Use only with adequate ventilation, i.e., ventilation in compliance with occupational exposure limits.

ADMINISTRATIVE CONTROLS: No data found.

PROTECTIVE EQUIPMENT: Wear splash goggles. If extra protection is required, wear a face shield over the splash goggles. Face shields are effective only if worn in addition to splash goggles.

Wear a chemical-resistant, butyl-rubber apron and other protective clothing, as deemed appropriate, to avoid skin contact with material.

Wear chemical-resistant gloves (butyl rubber or neoprene). Protective gloves should be inspected frequently and discarded when they exhibit cuts, tears, pinholes, or signs of excessive wear.

Wear chemical vapor mask or air supplied mask during exposure of vapors.

CONTAMINATED EQUIPMENT: Dispose of the waste in compliance with all Federal, state, regional, and local regulations.

### Section 9 - Physical and Chemical Properties

This mixture typically exhibits the following properties under normal circumstances:

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viscosity</td>
<td>N/A</td>
</tr>
<tr>
<td>Appearance</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>4.5 mmHg</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>4.4</td>
</tr>
<tr>
<td>Density</td>
<td>8.70</td>
</tr>
<tr>
<td>Freezing point</td>
<td>N/A</td>
</tr>
<tr>
<td>Boiling range</td>
<td>136°C</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>N/A</td>
</tr>
<tr>
<td>Explosive Limits</td>
<td>N/A</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>N/A</td>
</tr>
<tr>
<td>Coating VOC Lb/Gal</td>
<td>2.19</td>
</tr>
<tr>
<td>Odor</td>
<td>N/A</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>N/A</td>
</tr>
<tr>
<td>pH</td>
<td>N/A</td>
</tr>
<tr>
<td>Melting point</td>
<td>N/A</td>
</tr>
<tr>
<td>Solubility</td>
<td>N/A</td>
</tr>
<tr>
<td>Flash point</td>
<td>85°F, 29°C</td>
</tr>
<tr>
<td>Flammability</td>
<td>N/A</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>N/A</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### Section 10 - Stability and Reactivity

Stability: The product is stable under normal storage conditions

STABLE

The product is unstable in the presence of water, and active hydrogen containing compounds such as amines, alcohols, and acids.

This mixture is likely to exhibit the following combustion products: Carbon oxides, hydrogen cyanide, aliphahtic compounds, and oxides of sulfur and zinc.

Hazardous polymerization will not occur.
Section 11 - Toxicological Information

**Mixture Toxicity**

Inhalation Toxicity LC50: 22mg/L

**Routes of Entry:** Skin, Eyes, Breathing

**Inhalation**

Exposure to this material may affect the following organs: Skin, lungs, eyes, internal organs.

**Ingestion**

**Exposure to this material may affect the following organs:** Skin, Central Nervous System, Respiratory System, Skin.

**Eyes**

Central Nervous System

**Respiratory System**

**Effects of Overexposure**

**Carcinogenicity:** The following chemicals comprise 0.1% or more of this mixture and are listed and/or classified as carcinogens or potential carcinogens by NTP, IARC, OSHA (mandatory listing), or ACGIH (optional listing).

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Description</th>
<th>% Weight</th>
<th>Carcinogen Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-41-4</td>
<td>2-ETHYL BENZENE</td>
<td>1 to 5%</td>
<td>2-ETHYL BENZENE: IARC: Possible human carcinogen OSHA: listed</td>
</tr>
</tbody>
</table>

Section 12 - Ecological Information

**Component Ecotoxicity**

Mixed Xylenes

96 Hr LC50 Pimephales promelas: 13.4 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 2.661 - 4.093 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 13.5 - 17.3 mg/L; 96 Hr LC50 Lepomis macrochirus: 13.1 - 16.5 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 19 mg/L; 96 Hr LC50 Lepomis macrochirus: 7.711 - 9.591 mg/L [static]; 96 Hr LC50 Pimephales promelas: 23.53 - 29.97 mg/L [static]; 96 Hr LC50 Cyprinus carpio: 780 mg/L [semi-static]; 96 Hr LC50 Cyprinus carpio: >780 mg/L; 96 Hr LC50 Poecilia reticulata: 30.26 - 40.75 mg/L [static]; 48 Hr EC50 water flea: 3.82 mg/L; 48 Hr LC50 Gammarus lacustris: 0.6 mg/L

**PROPYLENE GLYCOL**

96 Hr LC50 Pimephales promelas: 161 mg/L [static]

**MONOMETHYL ETHER ACETATE**

48 Hr EC50 Daphnia magna: >500 mg/L

**2-ETHYL BENZENE**

96 Hr LC50 Oncorhynchus mykiss: 11.0 - 18.0 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 4.2 mg/L [semi-static]; 96 Hr LC50 Pimephales promelas: 7.55 - 11 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 32 mg/L [static]; 96 Hr LC50 Pimephales promelas: 9.1 - 15.6 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 9.6 mg/L [static]; 48 Hr EC50 Daphnia magna: 1.8 - 2.4 mg/L; 72 Hr EC50 Pseudokirchneriella subcapitata: 4.6 mg/L; 96 Hr EC50 Pseudokirchneriella subcapitata: >438 mg/L; 72 Hr EC50 Pseudokirchneriella subcapitata: 2.6 - 11.3 mg/L [static]; 96 Hr EC50 Pseudokirchneriella subcapitata: 1.7 - 7.6 mg/L [static]

Section 13 - Disposal Considerations

As the US EPA, state, regional, and other regulatory agencies may have jurisdiction over the disposal of your facility's hazardous waste, it is incumbent upon you, the hazardous waste generator, to learn of and satisfy all the requirements which affect you. Dispose of the hazardous waste at a properly licensed and permitted disposal site or facility. Ensure conformity to all applicable hazardous waste disposal regulations.

The US EPA Hazardous Waste Numbers which follow are applicable to this unadulterated product if the product enters the "waste stream." Refer to Title 40 of the Code of Federal Regulations, Part 261 (40 CFR 261). This part of the Code identifies solid wastes which are subject to regulation under various sections of the Code and which are subject to the notification requirements of Section 3010 of the Resource Conservation and Recovery Act (RCRA).
Section 14 - Transport Information

<table>
<thead>
<tr>
<th>Agency</th>
<th>Proper Shipping Name</th>
<th>UN Number</th>
<th>Packing Group</th>
<th>Hazard Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT</td>
<td>PAINT</td>
<td>1263</td>
<td>III</td>
<td>3</td>
</tr>
<tr>
<td>IATA</td>
<td>PAINT</td>
<td>1263</td>
<td>III</td>
<td>3</td>
</tr>
</tbody>
</table>

15: Regulatory Information

State of California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): WARNING! This product contains the following chemicals which are listed by the State of California as carcinogenic or a reproductive toxin:

- 100-41-4 2-ETHYL BENZENE 1 to 5%

HAZARDOUS AIR POLLUTANTS
- 100-41-4 2-ETHYL BENZENE
- 1330-20-7 Mixed Xylenes

MASSACHUSETTS RIGHT TO KNOW
- 100-41-4 2-ETHYL BENZENE 1 to 5%
- 1330-20-7 Mixed Xylenes 10 to 20%

NEW JERSEY RIGHT TO KNOW
- 100-41-4 2-ETHYL BENZENE 1 to 5%
- 1330-20-7 Mixed Xylenes 10 to 20%

PENNSYLVANIA RIGHT TO KNOW
- 100-41-4 2-ETHYL BENZENE 1 to 5%
- 1330-20-7 Mixed Xylenes 10 to 20%

CHEMICAL LIST FOR SARA 311
- 1330-20-7 Mixed Xylenes

CHEMICAL LIST FOR SARA 311/312
- 1330-20-7 Mixed Xylenes
- 28182-81-2 Homopolymer of Hexamethylene Diisocyanate.

CHEMICAL LIST FOR SARA 313
- 100-41-4 2-ETHYL BENZENE
- 1330-20-7 Mixed Xylenes

Country     | Regulation | All Components Listed
---          | ---        | ---
EU Risk Phrases

Safety Phrase

- None

16: OTHER INFORMATION
Hazardous Material Information System (HMIS)

HMIS & NFPA Hazard Rating
Legend
* = Chronic Health Hazard
0 = INSIGNIFICANT
1 = SLIGHT
2 = MODERATE
3 = HIGH

National Fire Protection Association (NFPA)

Flammability

Health

Instability

Special

Date Prepared: 10/13/2016

Reviewer Revision