Ethyl Hexyl Phthalate

3. HEALTH HAZARDS

3.1 Personal Protective Equipment: Safety goggles or full face shield; approved organic vapor respirator; chemical resistant gloves.

3.2 Symptoms Following Exposure: Inhalation can cause nausea and irritation of nose and throat. Contact of liquid with eyes or skin causes irritation. Ingestion can cause abdominal cramps, nausea, and diarrhea.

3.3 Treatment of Exposure: Get medical attention. INHALATION: Remove to fresh air. EYES: Flush with water for at least 15 min. SKIN: Wash with soap and water.

3.4 TLV-TWA: 5 mg/m³

3.5 TLV-STEL: Not listed.

3.6 TLV-Ceiling: Not listed.

3.7 Toxicity by Ingestion: Grade 1; oral rat LD₅₀ 30.6 g/kg

3.8 Toxicity by Inhalation: Currently not available.

3.9 Chronic Toxicity: Listed as a potential carcinogen based upon increased incidence of liver cancers in female rats and mice; and an increased incidence of liver cancers or neoplasms in male rats.

3.10 Vapor (Gas) Irritant Characteristics: Vapors can cause a slight smarting of the eyes or respiratory system if present in high concentrations. The effect is temporary.

3.11 Liquid or Solid Characteristics: Minimum hazard. If spilled on clothing and allowed to remain, may cause smarting and reddening of the skin.

3.12 Odor Threshold: Currently not available.

3.13 IDLH Value: 5,000 mg/m³

3.14 OSHA PEI-TWA: 5 mg/m³

3.15 OSHA PEI-STEL: Not listed.

3.16 OSHA PEL-Ceiling: Not listed.

3.17 EPA AEGL: Not listed

4. FIRE HAZARDS

4.1 Flash Point: 425°F O.C.

4.2 Flammable Limits in Air: LEL: 0.31% @ 493°F, 0.29% @ 507°F

4.3 Fire Extinguishing Agents: Carbon dioxide, dry chemical, alcohol foam, or water spray.

4.4 Fire Extinguishing Agents Not to Be Used: Water.

4.5 Special Hazards of Combustion: Products: Irritating vapors and toxic gases, such as carbon dioxide and carbon monoxide, may form when involved in fire.

4.6 Behavior in Fire: Overheating of containers during fire can result in rupture.

4.7 Auto-Ignition Temperature: Currently not available.

4.8 Electrical Hazards: Not listed.

4.9 Burning Rate: Currently not available.

4.10 Adiabatic Flame Temperature: Currently not available.

4.11 Stoichiometric Air to Fuel Ratio: 149.9 (calc.)

4.12 Flame Temperature: Currently not available.

4.13 Combustion Molar Ratio (Reactant to Product): 48.3 (calc.)

4.14 Minimum Oxygen Concentration for Combustion (MOC): Not listed

5. CHEMICAL REACTIVITY

5.1 Reactivity with Water: No reaction.

5.2 Reactivity with Common Materials: Oxidizing materials can cause a vigorous reaction.

5.3 Stability During Transport: Stable.

5.4 Neutralizing Agents for Acids and Bases: Not pertinent.

5.5 Polymerization: Will not polymerize.

5.6 Inhibitor of Polymerization: Not pertinent.

6. WATER POLLUTION

6.1 Aquatic Toxicity: LC₅₀ al/24 hr/sheephead minnow/LC₅₀ 11 mg/l/48 hr/water flea/LC₅₀ 45 mg/l/48 hr/3rd instar mosquitofish/LC₅₀ 500 mg/l.

6.2 Waterfowl Toxicity: Currently not available.

6.3 Biological Oxygen Demand (BOD): Currently not available.

6.4 Food Chain Concentration Potential: Currently not available.

6.5 GESAMP Hazard Profile: Not listed

7. SHIPPING INFORMATION

7.1 Grades of Purity: 99%

7.2 Storage Temperature: Ambient.

7.3 Inert Atmosphere: No requirement.

7.4 Venting: Open.

7.5 IMO Pollution Category: C

7.6 Ship Type: 3

7.7 Barge Hull Type: Currently not available

8. HAZARD CLASSIFICATIONS

8.1 49 CFR Category: Not listed.

8.2 49 CFR Class: Not pertinent.

8.3 49 CFR Package Group: Not listed.

8.4 Marine Pollutant: No

8.5 NFPA Hazard Classification: Not listed

8.6 EPA Reportable Quantity: Not listed

8.7 EPA Pollution Category: Not listed

8.8 RCRA Waste Number: Not listed

8.9 EPA FWPCA List: Not listed

9. PHYSICAL & CHEMICAL PROPERTIES

9.1 Physical State at 15°C and 1 atm: Liquid

9.2 Molecular Weight: 390.56

9.3 Boiling Point at 1 atm: 724°F = 384°C = 657 K

9.4 Freezing Point: <58°F = -50°C = 232 K

9.5 Critical Temperature: Currently not available.

9.6 Critical Pressure: Currently not available.

9.7 Specific Gravity: 0.98 at 25°C

9.8 Liquid Surface Tension: Currently not available

9.9 Liquid Viscosity: Currently not available

9.10 Vapor (Gas) Specific Gravity: 16

9.11 Ratio of Specific Heats of Vapor (Gas): Currently not available

9.12 Latent Heat of Vaporization: Currently not available

9.13 Heat of Combustion: Currently not available

9.14 Heat of Decomposition: Currently not available

9.15 Heat of Solution: Currently not available

9.16 Heat of Polymerization: Not pertinent.

9.17 Heat of Fusion: Currently not available

9.18 Limiting Value: Currently not available

9.19 Reid Vapor Pressure: Currently not available

NOTES

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## Ethyl Hexyl Phthalate

### 9.20 Saturated Liquid Density

<table>
<thead>
<tr>
<th>Temperature (°F)</th>
<th>Pounds per cubic foot</th>
</tr>
</thead>
<tbody>
<tr>
<td>77</td>
<td>0.180</td>
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</tbody>
</table>

### 9.21 Liquid Heat Capacity

<table>
<thead>
<tr>
<th>Temperature (°F)</th>
<th>British thermal unit per pound °F</th>
</tr>
</thead>
<tbody>
<tr>
<td>77</td>
<td>CURRENTLY NOT AVAILABLE</td>
</tr>
</tbody>
</table>

### 9.22 Liquid Thermal Conductivity

<table>
<thead>
<tr>
<th>Temperature (°F)</th>
<th>British thermal unit inch per hour-square foot °F</th>
</tr>
</thead>
<tbody>
<tr>
<td>77</td>
<td>CURRENTLY NOT AVAILABLE</td>
</tr>
</tbody>
</table>

### 9.23 Liquid Viscosity

<table>
<thead>
<tr>
<th>Temperature (°F)</th>
<th>Centipoise</th>
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</thead>
<tbody>
<tr>
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<td>CURRENTLY NOT AVAILABLE</td>
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### 9.24 Solubility in Water

<table>
<thead>
<tr>
<th>Temperature (°F)</th>
<th>Pounds per 100 pounds of water</th>
</tr>
</thead>
<tbody>
<tr>
<td>68</td>
<td>NEGLIGIBLE</td>
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</table>

### 9.25 Saturated Vapor Pressure

<table>
<thead>
<tr>
<th>Temperature (°F)</th>
<th>Pounds per square inch</th>
</tr>
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<tbody>
<tr>
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<td>0.026</td>
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</table>

### 9.26 Saturated Vapor Density

<table>
<thead>
<tr>
<th>Temperature (°F)</th>
<th>Pounds per cubic foot</th>
</tr>
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<tbody>
<tr>
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<td>0.00176</td>
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### 9.27 Ideal Gas Heat Capacity

<table>
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<th>Temperature (°F)</th>
<th>British thermal unit per pound °F</th>
</tr>
</thead>
<tbody>
<tr>
<td>68</td>
<td>CURRENTLY NOT AVAILABLE</td>
</tr>
</tbody>
</table>

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