**TETRAHYDRONAPHTHALENE**

### CAUTIOUS RESPONSE INFORMATION

<table>
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<tr>
<th>Common Synonyms</th>
<th>Water</th>
<th>Colorless</th>
<th>Malty, turpentine odor</th>
<th>Floats on water.</th>
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</table>

**Fire**
- Combustible. 
- Extinguishment with foam, dry chemical, or carbon dioxide. 
- Water may be ineffective on fire. 
- Cool exposed containers with water.

**Exposure**
- CALL FOR MEDICAL AID. 
- LIQUID: Irritating to skin and eyes. Harmful if swallowed. 
- Remove contaminated clothing and shoes. 
- Flush affected areas with plenty of water. 
- If IN EYES, hold eyelids open and flush with plenty of water. 
- IF SWALLOWED and victim is CONSCIOUS, have victim drink water or milk.

**Water Pollution**
- Effect of low concentrations on aquatic life is unknown. 
- Fouling to shoreline. 
- Effect of low concentrations on aquatic life is unknown. 
- Notify local health and wildlife officials. 

### 1. CORRECTIVE RESPONSE ACTIONS

- Stop discharge 
- Contain 
- Collection Systems: Slim 
- Chemical and Physical Treatment: Absorb 
- Clean shore line 
- Salvage wastewater

### 2. CHEMICAL DESIGNATIONS

- CG Compatibility Group: 32; Aromatic Hydrocarbon
- Formula: 
- CAS Registry No.: 119-64-2
- NAERG Guide No.: Not listed
- Standard Industrial Trade Classification: 51129

### 3. HEALTH HAZARDS

- **3.1 Personal Protective Equipment:** Air-supplied mask in closed tanks; goggles or face shield; rubber gloves.
- **3.2 Symptoms Following Exposure:** Liquid may cause nervous disturbance, green coloration of urine, and skin and eye irritation.
- **3.3 Treatment of Exposure:** INGESTION: induce vomiting; call a doctor; medical treatment should be aimed at conservation of liver and kidney function. EYES: flush with water for at least 15 min; call a doctor. SKIN: wipe off, wash with soap and water.
- **3.4 TLV-TWA:** Not listed.
- **3.5 TLV-STEL:** Not listed.
- **3.6 TLV-Ceiling:** Not listed.
- **3.7 Toxicity by Ingestion:** Grade 2; LD₅₀: 0.5 to 5 kg/kg
- **3.8 Toxicity by Inhalation:** Currently not available.
- **3.9 Chronic Toxicity:** Liver and kidney damage from high dose.
- **3.10 Vapor (Gas) Irritant Characteristics:** Vapors 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:** Not listed.
- **3.14 OSHA PEL-TWA:** Not listed.
- **3.15 OSHA PEL-STEL:** Not listed.
- **3.16 OSHA PEL-Ceiling:** Not listed.
- **3.17 EPA AEGL:** Not listed

### 4. FIRE HAZARDS

- **4.1 Flash Point:** 190°F O.C. 176°F C.C.
- **4.2 Flammable Limits in Air:** 0.8%-5%
- **4.3 Fire Extinguishing Agents:** Foam, dry chemical, or carbon dioxide.
- **4.4 Fire Extinguishing Agents Not to Be Used:** Avoid water.
- **4.5 Special Hazards of Combustion:** Products: Not pertinent
- **4.6 Behavior in Fire:** Not pertinent
- **4.7 Auto Ignition Temperature:** 725°F
- **4.8 Electrical Hazards:** Not pertinent
- **4.9 Burning Rate:** Not available
- **4.10 Explosive Limits:** Currently not available
- **4.11 Stoichiometric Air to Fuel Ratio:** 69.1 (calc.)
- **4.12 Flame Temperature:** Currently not available
- **4.13 Combustion Molar Ratio (Reactant to Product):** 16.0 (calc.)
- **4.14 Minimum Oxygen Concentration for Combustion (MOCC):** Not listed

### 5. CHEMICAL REACTIVITY

- **5.1 Reactivity with Water:** No reaction
- **5.2 Reactivity with Common Materials:** No reaction
- **5.3 Stability During Transport:** Stable
- **5.4 Neutralizing Agents for Acids and Caustics:** Not pertinent
- **5.5 Polymerization:** Not pertinent
- **5.6 Inhibitor of Polymerization:** Not pertinent

### 6. WATER POLLUTION

- **6.1 Aquatic Toxicity:** 75 ppm/24 hr/bioassay/larvae/TL
- **6.2 Water/Land Toxicity:** Currently not available
- **6.3 Biological Oxygen Demand (BOD):** 0 lb/b, 5 days
- **6.4 Food Chain Concentration Potential:** None
- **6.5 GESAMP Hazard Profile:** Bioaccumulation: 0
- **6.6 Human Oral Hazard:** Not available
- **6.7 Heat of Solution:** Not available
- **6.8 Heat of Hydrolysis:** Not available
- **6.9 Heat of Vaporization:** Currently not available
- **6.10 Vapor Pressure:** Not available

### NOTES

- **7. SHIPPING INFORMATION**
  - Grades of Purity: 90+%
  - Storage Temperature: Ambient
  - Inert Atmosphere: Not available
  - Ventings: Open (flame arrester)
  - IMO Pollution Category: C
  - Ship Type: 3
  - 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 NFA Hazard Classification:** Not pertinent

### 9. PHYSICAL & CHEMICAL PROPERTIES

- **9.1 Physical State:** Solid
- **9.2 Molecular Weight:** Not available
- **9.3 Boiling Point at 1 atm:** 406°F = 208°C = 481°F
- **9.4 Freezing Point:** –23.1 °F = –30.0°C = 242.6°F
- **9.5 Critical Temperature:** Not pertinent
- **9.6 Critical Pressure:** Not pertinent
- **9.7 Specific Gravity:** 0.974 at 20°C (liquid)
- **9.8 Liquid Surface Tension:** 35.5 dynes/cm
- **9.9 Liquid Water Interfacial Tension:** Currently not available
- **9.10 Vapor (Gas) Specific Gravity:** Currently not available
- **9.11 Ratio of Specific Heats of Vapor (Gas):** Not pertinent
- **9.12 Latent Heat of Vaporization:** 138 Btu/lb = 76.5 cal/g = 3.20 X 10⁻⁸ J/g
- **9.13 Heat of Combustion:** –19.400 Btu/lb = –10,000 cal/g = –429 X 10⁻⁸ J/g
- **9.14 Heat of Decomposition:** Not pertinent
- **9.15 Heat of Solution:** Not pertinent
- **9.16 Heat of Polymerization:** Currently not available
- **9.17 Heat of Fusion:** Currently not available
- **9.18 Limiting Values:** Currently not available
- **9.19 Reid Vapor Pressure:** 0.02 psi

**JUNE 1999**
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<th>Temperature (degrees F)</th>
<th>Saturated Liquid Density (pounds per cubic foot)</th>
<th>Liquid Heat Capacity (British thermal unit per pound-F)</th>
<th>Liquid Thermal Conductivity (British thermal unit inch per hour-square foot-F)</th>
<th>Liquid Viscosity (centipoise)</th>
<th>Temperature (degrees F)</th>
<th>Solubility in Water (pounds per 100 pounds of water)</th>
<th>Saturated Vapor Pressure (pounds per square inch)</th>
<th>Saturated Vapor Density (pounds per cubic foot)</th>
<th>Ideal Gas Heat Capacity (British thermal unit per pound-F)</th>
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