### 1. CORRECTIVE RESPONSE ACTIONS

**Stop discharge if possible.**

- **CALL FIRE DEPARTMENT.**
- **Avoid contact with liquid.**
- **Isolate and remove discharged material.**
- **Notify local health and pollution control agencies.**

**Water Pollution**

- **Effect of low concentrations on aquatic life is unknown.**
- **FOULING TO SHORELINE.**
- **May be dangerous if it enters water intakes.**
- **Notify operators of nearby water intakes.**

**Exposure**

- **Liquid; will burn skin and eyes, harmful if swallowed.**
- **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.**
- **DO NOT INDUCE VOMITING.**

**Fire**

- **Combustible.**
- **Extinguish with water, dry chemical, or carbon dioxide.**
- **Cool exposed containers with water.**

### 2. CHEMICAL DESIGNATIONS

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<th>2.1 CG Compatibility Group:</th>
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<tr>
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<td>2.7 Standard Industrial Trade Classification:</td>
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### 3. HEALTH HAZARDS

**3.1 Personal Protective Equipment:**

- **Protective clothing; face and eye protection.**

**3.2 Symptoms Following Exposure:**

- **Inhalation:**
  - **Irritation of nasal and upper respiratory tract passages.**
  - **Aspiration causes slow onset and low degree of chemical pneumonitis with clinical symptoms of lower respiratory tract irritation.**
- **Ingestion:**
  - **Causes smarting of the skin and first-degree burns on short exposure; may cause secondary burns on long exposure.**

**3.3 Treatment of Exposure:**

- **INHALATION OR ASPIRATION:**
  - **Treatment usually unnecessary.**
- **INGESTION:**
  - **DO NOT induce vomiting; do NOT lavage; administer 2-4 oz of olive oil and 1-2 oz of activated charcoal.**
  - **EYES: wash with plenty of water.**
  - **SKIN: wipe off material and 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 g/kg**

**3.8 Toxicity by Inhalation:**

- **Currently not available.**

**3.9 Chronic Toxicity:**

- **None observed.**

**3.10 Vapor (Gas) Irritant Characteristics:**

- **Vapors cause irritation of eyes or respiratory system if present in high concentrations.**
- **The effect is temporary.**

**3.11 Liquid or Solid Characteristics:**

- **Causes smarting of the skin and first-degree burns on short exposure; may cause secondary burns on long exposure.**

**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 AELG:**

- **Not listed.**

### 4. FIRE HAZARDS

**4.1 Flash Point:**

- **200-550°F C.C.**

**4.2 Flammable Limits in Air:**

- **Not pertinent.**

**4.3 Fire Extinguishing Agents:**

- **Water, foam, dry chemical or carbon dioxide.**

**4.4 Fire Extinguishing Agents Not to Be Used:**

- **Water or foam may cause fothing.**

**4.5 Special Hazards of Combustion Products:**

- **Not pertinent.**

**4.6 Behavior in Fire:**

- **Not pertinent.**

**4.7 Auto-Ignition Temperature:**

- **400-700°F**

**4.8 Electrical Hazards:**

- **Not pertinent.**

**4.9 Burning Rate:**

- **Currently not available.**

**4.10 Adiabatic Flame Temperature:**

- **Currently not available.**

**4.11 Radiochemical Air to Fuel Ratio:**

- **Currently not available.**

**4.12 Flame Temperature:**

- **Currently not available.**

**4.13 Combustion Molar Ratio (Reactant to Product):**

- **Currently not available.**

**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 Causics:**

- **Not pertinent.**

**5.5 Polymerization:**

- **Not pertinent.**

**5.6 Inhibitor of Polymerization:**

- **Not pertinent.**

### 6. WATER POLLUTION

**6.1 Aquatic Toxocity:**

- **Currently not available.**

**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:**

- **Currently not available.**

**7.2 Storage Temperature:**

- **Elevated.**

**7.3 Inert Atmosphere:**

- **Not required.**

**7.4 Venting:**

- **Open (flame arrester).**

**7.5 IMO Pollution Category:**

- **Currently not available.**

**7.6 Ship Type:**

- **Currently not available.**

**7.7 Barge Hull Type:**

- **Currently not available.**

### 8. HAZARD CLASSIFICATIONS

**8.1 40 CFR Category:**

- **Flammable liquid.**

**8.2 49 CFR Class:**

- **3.**

**8.3 49 CFR Package Group:**

- **II.**

**8.4 Marine Pollutant:**

- **No.**

**8.5 NPFA Hazard Classification:**

- **Category Classification**
  - **Health Hazard (Blue):**
  - **Flammability (Red):**
  - **Instability (Yellow):**

**8.6 EPA Reportable Quantity:**

- **Not listed.**

**8.7 EPA Pollution Category:**

- **Not listed.**

**8.8 RORA Waste Number:**

- **Not listed.**

**8.9 EPA FWPCA List:**

- **Not listed.**

**8.10 Vapor (Gas) Specific Gravity:**

- **Not pertinent.**

**8.11 Ratio of Specific Heats of Vapor (Gas):**

- **Not pertinent.**

**8.12 Latent Heat of Vaporization:**

- **Not pertinent.**

**8.13 Heat of Combustion:**

- **Currently not available.**

**8.14 Heat of Decomposition:**

- **Not pertinent.**

**8.15 Heat of Solution:**

- **Currently not available.**

**8.16 Heat of Polymerization:**

- **Currently not available.**

**8.17 Heat of Fusion:**

- **Currently not available.**

**8.18 Limiting Value:**

- **Currently not available.**

**8.19 Reid Vapor Pressure:**

- **Currently not available.**

### 9. PHYSICAL & CHEMICAL PROPERTIES

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

**9.2 Molecular Weight:**

- **Not pertinent.**

**9.3 Boiling Point at 1 atm:**

- **Not pertinent.**

**9.4 Freezing Point:**

- **20 to 110°F = -7 to 43°C = 266 to 316K.**

**9.5 Critical Temperature:**

- **Currently not available.**

**9.6 Critical Pressure:**

- **Not pertinent.**

**9.7 Specific Gravity (est.): 1.11 at 50°C (liquid).**

**9.8 Liquid Surface Tension:**

- **Currently not available.**

**9.9 Liquid Water Interfacial Tension:**

- **Currently not available.**

**9.10 Vapor (Gas) Specific Gravity:**

- **Not pertinent.**

**9.11 Ratio of Specific Heats of Vapor (Gas):**

- **Not pertinent.**

**9.12 Latent Heat of Vaporization:**

- **Not pertinent.**

**9.13 Heat of Combustion:**

- **Currently not available.**

**9.14 Heat of Decomposition:**

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**9.15 Heat of Solution:**

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**9.17 Heat of Fusion:**

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**9.18 Limiting Value:**

- **Currently not available.**

**9.19 Reid Vapor Pressure:**

- **Currently not available.**

### NOTES

**JUNE 1999**
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9.24 SOLUBILITY IN WATER

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9.25 SATURATED VAPOR PRESSURE

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9.26 SATURATED VAPOR DENSITY

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9.27 IDEAL GAS HEAT CAPACITY

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