1. CORRECTIVE RESPONSE ACTIONS

1.1 Personal Protective Equipment: Protective gloves; goggles or face shield
1.2 Symptoms Following Exposure: No inhalation hazard expected. Aspiration hazard if ingested. Minor skin and eye irritation.
1.3 Treatment of Exposure: INHALATION: remove victim to fresh air. INGESTION: do NOT induce vomiting. Do NOT give water. Give vegetable oil and demulcents; call physician. EYE CONTACT: flush with water for 15 min. SKIN CONTACT: wash with soap and water.
1.4 TLV-TWA: Not listed.
1.5 TLV-STEL: Not listed.
1.6 TLV-CEiling: Not listed.
1.7 Toxicity by Ingestion: Currently not available.
1.8 Toxicity by Inhalation: Currently not available.
1.9 Chronic Toxicity: Currently not available.
1.10 Vapor (Gas) Irritant Characteristics: Slight smarting of eyes and respiratory system at high concentrations. The effect is temporary.
1.11 Liquid or Solid Characteristics: Minimum hazard. If spilled on clothing and allowed to remain, may cause smarting and reddening of skin.
1.12 Odor Threshold: Currently not available.
1.13 DLH Value: Not listed.
1.14 OSHA PEL-TWA: Not listed.
1.15 OSHA PEL-STEL: Not listed.
1.16 OSHA PEL-Ceiling: Not listed.
1.17 EPA AEG: Not listed.

2. CHEMICAL DESIGNATIONS

2.1 CAS Compatibility Group: 30; Olefine
2.2 Formula: C12H24
2.3 MSDS Designation: Not listed
2.4 DOT ID No.: Not listed
2.5 CAS Registry No.: 6842-15-5
2.6 NAERO Guide No.: Not listed
2.7 Standard Industrial Trade Classification: 51119

3. HEALTH HAZARDS

3.1 Personal Protective Equipment: Protective gloves; goggles or face shield
3.2 Symptoms Following Exposure: No inhalation hazard expected. Aspiration hazard if ingested. Minor skin and eye irritation.
3.3 Treatment of Exposure: INHALATION: remove victim to fresh air. INGESTION: do NOT induce vomiting. Do NOT give water. Give vegetable oil and demulcents; call physician. EYE CONTACT: flush with water for 15 min. SKIN CONTACT: wash with soap and water.
3.4 TLV-TWA: Not listed.
3.5 TLV-STEL: Not listed.
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3.7 Toxicity by Ingestion: Currently not available.
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3.13 DLH 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 AEG: Not listed.

4. FIRE HAZARDS

4.1 Flash Point: 212°F C.C.
4.2 Flammable Limits in Air: Currently not available
4.3 Fire Extinguishing Agents: Foam, dry chemical, carbon dioxide
4.4 Fire Extinguishing Agents Not to Be Used: Not pertinent
4.5 Special Hazards of Combustion Products: Not pertinent
4.6 Behavior in Fire: Not pertinent
4.7 Auto Ignition Temperature: 451°F
4.8 Electrical Hazards: Not pertinent
4.9 Burning Rate: 5.8 mm/min.
4.10 Flash Temperature: Currently not available
4.11 Stechiometric Air to Fuel Ratio: 85.7 (calc.)
4.12 Flame Temperature: Currently not available
4.13 Combustion Molar Ratio (Reactant to Product): 24.0 (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: 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: 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: None
6.5 GESAMP Hazard Profile: Not listed

7. SHIPPING INFORMATION

7.1 Grades of Purity: 93-98% normal alpha olefins
7.2 Storage Temperature: Ambient
7.3 Inert Atmosphere: No requirement
7.4 Venting: Open (flame arrester)
7.5 IMO Pollution Category: B
7.6 Ship Type: 3
7.7 Barge Hull Type: Currently not available

8. HAZARD CLASSIFICATIONS

8.1 40 CFR CFC: Not listed
8.2 40 CFR Class: Not pertinent
8.3 40 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 RCD 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: 166.31
9.3 Boiling Point at 1 atm: 415°F = 213°C = 486°K
9.4 Freezing Point: −31°F = −35°C = 238°K
9.5 Critical Temperature: Not pertinent
9.6 Critical Pressure: Not pertinent
9.7 Specific Gravity: 0.758 at 20°C (liquid)
9.8 Liquid Surface Tension: 25.6 dynes/cm = 0.2596 N/m at 28°C
9.9 Liquid Surface Interfacial Tension: Currently not available
9.10 Vapor (Gas) Specific Gravity: Currently not available
9.11 Ratio of Specific Heats of Vapor (Gas): Currently not available
9.12 Latent Heat of Vaporization: 110 Btu/lb = 81.0 cal/g = 2.55 X 10⁵ J/kg
9.13 Heat of Combustion: -18.911 Btu/lb = -10.505 cal/g = -439.87 X 10⁵ J/kg
9.14 Heat of Decomposition: Not pertinent
9.15 Heat of Solution: Not pertinent
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: 0.01 psia

NOTES
### 1-DODECENE

#### 9.20 SATURATED LIQUID DENSITY

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<th>Temperature (degrees F)</th>
<th>Pounds per cubic foot</th>
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#### 9.21 LIQUID HEAT CAPACITY

#### 9.22 LIQUID THERMAL CONDUCTIVITY

#### 9.23 LIQUID VISCOSITY

#### 9.24 SOLUBILITY IN WATER

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#### 9.25 SATURATED VAPOR PRESSURE

#### 9.26 SATURATED VAPOR DENSITY

#### 9.27 IDEAL GAS HEAT CAPACITY

**JUNE 1999**