**MINERAL SPIRITS**

**CAUTIONARY RESPONSE INFORMATION**

<table>
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<th>Common Synonyms</th>
<th>Watery liquid</th>
<th>Colorless</th>
<th>Gasoline-like odor</th>
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**Keep people away. Avoid contact with liquid. Shut off ignition sources and call fire department. Notify local health and pollution control agencies.**

**Fire**
- Combustible. Extinguish with water, dry chemical, foam, or carbon dioxide. 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. DO NOT INDUCE VOMITING.

**Water Pollution**
- Effect of low concentrations on aquatic life is unknown. Foul to shoreline, may be dangerous if it enters water intakes. Notify local health and wildlife officials. Notify operators of nearby water intakes.

**1. CORRECTIVE RESPONSE ACTIONS**
- Stop discharge
- Contain
- Collection Systems: Skim
- Chemical and Physical Treatment: Burn
- Clean shore line
- Salvage water/foul

**2. CHEMICAL DESIGNATIONS**
- 2.1 CG Compatibility Group: 33
- 2.2 Formula: Not applicable
- 2.3 IMOG Designation: 3.31.300
- 2.4 DOT ID No.: 1268
- 2.5 CAS Registry No.: Currently not available
- 2.6 NAERG Guide No.: 128
- 2.7 Standard Industrial Trade Classification: 33429

**3. HEALTH HAZARDS**
- 3.1 Personal Protective Equipment: Plastic gloves; goggles or face shield (as for gasoline).
- 3.2 Symptoms Following Exposure: INHALATION: mild irritation of respiratory tract. ASPIRATION: seizing followed by depression. INGESTION: irritation of stomach.
- 3.3 Treatment of Exposure: INHALATION: remove victim to fresh air. ASPIRATION: enforce bed rest; give oxygen; call a doctor. INGESTION: do NOT induce vomiting; guard against aspiration into lungs. EYES: wash with copious amounts of water. SKIN: wipe off and wash with soap and water.
- 3.4 TLV/TWA: Not listed.
- 3.5 TLV-STEL: Not listed.
- 3.6 TLV-Chgs: 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: Currently not available.
- 3.10 Vapor (Gas) Irritant Characteristics: Vapors are nonirritating to the eyes and throat.
- 3.11 Liquid or Solid Characteristics: Minimum hazard. If spilled on clothing and allowed to remain, may cause smearing and reddening of the skin.
- 3.12 Odor Threshold: Currently not available.
- 3.13 DLH Value: 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: 105–140°F C.C., depending on grade
- 4.2 Flammable Limits in Air: 0.8%–5.0%
- 4.3 Fire Extinguishing Agents: Foam, carbon dioxide, dry chemical
- 4.4 Fire Extinguishing Agents Not to Be Used: Do not use straight hose water stream.
- 4.5 Special Hazards of Combustion Products: Not pertinent
- 4.6 Behavior in Fire: Not pertinent
- 4.7 Auto Ignition Temperature: 540°F
- 4.8 Electrical Hazards: Not pertinent
- 4.9 Burning Rate: 4 mm/min.
- 4.10 Abiastolic Flame Temperature: Currently not available
- 4.11 Stoichiometric Air to Fuel Ratio: Not pertinent
- 4.12 Flame Temperature: Currently not available
- 4.13 Combustion Molar Ratio (Reactant to Product): Not pertinent
- 4.14 Minimum Oxygen Concentration for Burning (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: Currently not available
- 6.2 Waterfowl toxicity: Currently not available
- 6.3 Biological Oxygen Demand (BOD): 8%.
- 6.4 Food Chain Concentration Potential: None
- 6.5 GESAMP Hazard Profile: Not listed

**7. SHIPPING INFORMATION**
- 7.1 Grades of Purity: Various grades available.
- 7.2 Storage Temperature: Ambient
- 7.3 Inert Atmosphere: No requirement
- 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 49 CFR Category: Flammable liquid
- 8.2 49 CFR Class: 3
- 8.3 49 CFR Package Group: III
- 8.4 Marine Pollutant: Yes
- 8.5 NFPA Hazard Classification:
  - Category Classification: Health Hazard (Blue)..... 0
  - Flammability (Red)................ 2
  - Instability (Yellow).............. 0
- 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: Not pertinent
- 9.3 Boiling Point at 1 atm: 310–385°F = 154–202°C = 428–475°F
- 9.4 Freezing Point: Not pertinent
- 9.5 Critical Temperature: Not pertinent
- 9.6 Critical Pressure: Not pertinent
- 9.7 Specific Gravity: 0.78 at 20°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):
  - J/mole= 1.030
- 9.12 Latent Heat of Vaporization: Currently not available
- 9.13 Heat of Combustion: Currently not available
- 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 Values: Currently not available
- 9.19 Reid Vapor Pressure: 0.13 psi

**NOTES**

JUNE 1999
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<th>Pounds per cubic foot</th>
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