SECTION I - Distributor's Information

Distributor: Research Solvents and Chemicals, Inc.
Address: 402 Industrial Park Dr. Pelham, AL 35124
Phone: (205) 663-6350 or (615) 793-6737
Emergency Phone: CHEMTREC: (800) 424-9300 RESEARCH: (615) 793-6737
Date Prepared: 07/11/02 Date Revised: 06/14/10

**HMIS Rating    Health -2     Flammability -3      Reactivity -0

SECTION II - Hazardous Components of Mixture

The precise composition of this product is proprietary information. In the event of a medical emergency, a complete disclosure will be provided to medical personnel.

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS#</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methanol</td>
<td>67-56-1</td>
<td>200 ppm</td>
<td>200 ppm</td>
</tr>
</tbody>
</table>

SECTION III - Physical Characteristics

Boiling Point: 64.6°C (148°F)
Vapor Pressure: 96mmHg @ 20°C
Vapor Density: 1.11 (air=1)
Specific Gravity: 0.793
Evaporation Rate: 2.0 (butyl acetate = 1)
Solubility in Water: Complete
Appearance and Odor: Clear, colorless liquid; strong characteristic alcohol odor
%Volatiles (by weight): 100% (6.61#/gal)

SECTION IV - Fire and Explosion Data

Flash Point: 54°F (11°C); TCC
Lower Flammable Level: 5.5%
Upper Flammable Level: 36.5%
Extinguishing Media: Water fog, CO2, dry chemical; Alcohol resistant type foam with 6% foam proportioning equipment.

Special Fire Fighting Procedures: Use self-contained breathing apparatus and full bunker gear in fire areas. Evacuate all unprotected personnel from area. If spill has not ignited, use water to disperse vapors, to flush spill away from exposed areas, and to protect personnel attempting to stop a leak. Keep containers cool with water fog to minimize swelling taking care not to spread flames with water used for cooling.

Unusual Fire Fighting Hazards: Product is extremely flammable and may be ignited by heat, sparks, flames or other sources of ignition (i.e. static electricity, pilot lights, or mechanical/electrical equipment). Vapors may travel considerable distances to a source of ignition where they can ignite, flashback, or explode. May create vapor/air explosion hazard indoors, outdoors, or in sewers. Vapors are heavier than air and can accumulate in low areas. If container is not properly cooled, it can explode in the heat of a fire.

SECTION V - Stability

Stability: Stable
Conditions to Avoid: Extreme heat and ignition sources
Incompatibilities (materials to avoid): Strong oxidizers, bases, and acids. May be corrosive to lead and aluminum.
Hazardous Decomposition or Byproducts: CO and CO2 under fire conditions; formaldehyde may result from decomposition reaction.
Hazardous Polymerization: Will not occur
Polymerization Conditions to Avoid: None
SECTION VI - Health Hazard Data

PEL/TLV: See Section II for components.

Route(s) of Entry: Contact, inhalation, and ingestion

Health Hazards (acute and chronic): EYES: Contact may cause mild eye irritation including stinging, watering and redness. SKIN: Contact may cause mild skin irritation including redness, burning and drying and cracking of the skin. Product can be absorbed through the skin in toxic amounts and will cause nausea, headache and general discomfort. INHALATION: Low to moderate degree of toxicity by inhalation. May cause irritation to upper respiratory tract and CNS depression. Extremely high levels may induce narcosis with giddiness and loss of consciousness. INGESTION: Highly toxic by ingestion. Can cause narcosis, headache, nausea and vomiting leading to severe illness, blindness and even death. Aspiration hazard. Can enter lungs during swallowing or vomiting and cause chemical pneumonia and edema.

Carcinogenicity: Not listed as a carcinogen

Signs and Symptoms of Overexposure: See “Health Hazards” above.

Medical Conditions Aggravated by Exposure: Existing skin, respiratory, and eye conditions.

Emergency First Aid Procedures:
- EYES: Flush with water for 15 minutes. Seek immediate medical attention.
- SKIN: Wash exposed areas with water and mild soap. Remove contaminated clothing immediately and launder before reuse. If irritations persist, seek medical attention.
- INHALATION: Remove victim to fresh air. Administer oxygen or artificial respiration if breathing is affected or stopped. Seek immediate medical attention.
- INGESTION: Do not induce vomiting unless directed by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Seek immediate medical attention as signs and symptoms of poisoning are not immediately evident.

Notes to Physician: Medical care must emphasize the control of acidosis and the use of intravenous bicarbonate has been lifesaving. Evidence is good that treatment of methanol absorption is enhanced through the administration of ethanol, which should be given to produce a blood level of at least 0.1%. Ethanol diminishes the production of toxic metabolites of methanol. Blood methanol level of 50mg/100ml is an indication for hemodialysis, which has improved the prognosis of methanol intoxication.

SECTION VII - Handling and Storage

Steps to be taken if Material is Released or Spilled: Keep all sources of ignition and hot metal surfaces away from spill/release. Evacuate all unprotected personnel from area. Use foam on spills to minimize vapors. Contain spill if it can be done with minimal risk. Using only non-sparking tools and explosion proof equipment collect spill on absorbent material and put into approved container. Prevent liquid from entering drains, sewers, or waterways. Notify proper authorities. Reportable quantity is 5,000 pounds or 756 gallons.

Waste Disposal Method: Follow Federal, state, and local regulations. If uncontaminated material becomes waste it is regulated under RCRA # D001 and U154.

Precautions to be taken in Handling and Storing: NFPA Class I storage. Avoid prolonged breathing of mist or vapor. Wash thoroughly after handling. Vent container carefully before opening. Bond and ground all equipment when transferring from one vessel to another. The use of explosion-proof equipment is recommended. "Empty" containers retain residue and/or vapor and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flames, sparks, or other sources of ignition. Keep containers tightly closed when not in use.
SECTION VIII - Personal Protection

Respiratory Protection: Use the proper respirator in areas where the chemical exposure is unknown or above the OSHA PEL or ACGIH TLV.

Ventilation: Adequate local or mechanical to reduce mist/vapor to <TLV.

Protective Gloves: Impervious, solvent resistant such as neoprene or nitrile.

Eye Protection: Goggles or approved OSHA device; do not wear contact lens.

Clothing: Impervious apron and work boots recommended where splashing may occur.

Work/Hygienic Practices: Follow accepted work and hygiene practices for handling a flammable material. Do not eat, drink, or smoke in areas where this product is used or stored. Have eye wash stations and safety showers readily available.

SECTION IX - Other Regulatory Information

Sara Title III Section 302/304 Extremely Hazardous Substance

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS#</th>
<th>% by wt.</th>
<th>RQ (lbs)</th>
<th>TPQ (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
<td></td>
<td></td>
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CERCLA Section 102(a) Hazardous Substance

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<th>RQ (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
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<td>67-56-1</td>
<td>100%</td>
<td>5,000</td>
</tr>
</tbody>
</table>

Sara Title III Section 311 Hazard Categorization

| Acute (x) | Chronic (x) | Fire (x) | Pressure ( ) | Reactive ( ) | NA ( ) |

SARA Title III Section 313 Supplier Information

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</thead>
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<td>Methanol</td>
<td>67-56-1</td>
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</table>

**HMIS** ratings involve data and interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this product, all the information contained in this MSDS must be considered.

** Comments**: Health studies have shown that many petroleum hydrocarbons pose potential human health risks that may vary from person to person. As a precaution, exposure to liquids, vapor, mists, or fumes should be minimized.

**Disclaimer**: The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. Research Solvents and Chemicals, Inc., assumes no responsibility for personal injury or property damage to vendees, users, or third parties caused by the material. Such vendees or users assume all risks associated with the use of the material.