1. Product and Company Identification

Product Code: 1625.6
Product Name: Denatured Alcohol

Manufacturer Information

Company Name: W. M. Barr
2105 Channel Avenue
Memphis, TN  38113

Phone Number: (901)775-0100
Emergency Contact: 3E  24 Hour Emergency Contact    (800)451-8346
Information: W.M. Barr Customer Service    (800)398-3892
Web site address: www.wmbarr.com
Preparer Name: W.M. Barr EHS Dept    (901)775-0100

Synonyms
QSL26, QSL26L

2. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Hazardous Components (Chemical Name)</th>
<th>CAS #</th>
<th>Concentration</th>
<th>OSHA PEL</th>
<th>ACGIH TWA</th>
<th>ACGIH STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ethyl alcohol (Ethanol)</td>
<td>64-17-5</td>
<td>45.0 -50.0 %</td>
<td>1000 ppm</td>
<td>1000 ppm</td>
<td>No data.</td>
</tr>
<tr>
<td>2. Methanol (Methyl alcohol; Carbinol; Wood alcohol)</td>
<td>67-56-1</td>
<td>50.0 -55.0 %</td>
<td>200 ppm</td>
<td>200 ppm</td>
<td>250 ppm</td>
</tr>
<tr>
<td>3. Methyl isobutyl ketone (Hexone; Isopropylacetone; MIBK; 4-Methyl-2-pentanone)</td>
<td>108-10-1</td>
<td>1.0 -4.0 %</td>
<td>100 ppm</td>
<td>50 ppm</td>
<td>75 ppm</td>
</tr>
</tbody>
</table>

3. Hazards Identification

Emergency Overview

Danger! Flammable!  Keep away from heat, sparks, flame, and all other sources of ignition.  Do not smoke.
Extinguish all flames and pilot lights, and turn off stoves, heaters, electric motors and all other sources of ignition during use and until all vapors are gone.  Beware of static electricity that mat be generated by synthetic clothing and other sources.

OSHA Regulatory Status:

This material is classified as hazardous under OSHA regulations.

Potential Health Effects (Acute and Chronic)

Inhalation Acute Exposure Effects:
Vapor harmful.  May cause dizziness, headache, watering of eyes, irritation of respiratory tract, irritation to the eyes, drowsiness, nausea, other central nervous system effects, spotted vision, dilation of pupils, and convulsions.

Skin Contact Acute Exposure Effects:
May cause irritation, drying of skin, redness, and dermatitis. May cause symptoms listed under inhalation.  May be absorbed through damaged skin.

Eye Contact Acute Exposure Effects:
May cause irritation.

Ingestion Acute Exposure Effects:
Poison.  Cannot be made non-poisonous.  May be fatal or cause blindness.  May produce fluid in the lungs and pulmonary edema.  May cause dizziness, headache, nausea, drowsiness, loss of coordination, stupor, reddening of
face and or neck, liver, kidney and heart damage, coma, and death. May produce symptoms listed under inhalation.

Chronic Exposure Effects:
May cause symptoms listed under inhalation, dizziness, fatigue, tremors, permanent central nervous system changes, blindness, pancreatic damage, and death.

Signs and Symptoms Of Exposure
No data available.
Medical Conditions Generally Aggravated By Exposure
Diseases of the liver.

4. First Aid Measures

Emergency and First Aid Procedures

Inhalation:
If user experiences breathing difficulty, move to air free of vapors. Administer oxygen or artificial respiration until medical assistance can be rendered.

Skin Contact:
Wash with soap and water.

Eye Contact:
Flush with large quantities of water for at least 15 minutes. If irritation from contact persists, get medical attention.

Ingestion:
Call your poison control center, hospital emergency room or physician immediately for instructions to induce vomiting.

Note to Physician
Poison. This product contains methanol. Methanol is metabolized to formaldehyde and formic acid. These metabolites may cause metabolic acidosis, visual disturbances and blindness. Since metabolism is required for these toxic symptoms, their onset may be delayed from 6 to 30 hours following ingestion. Ethanol competes for the same metabolic pathway and has been used as an antidote. Methanol is effectively removed by hemodialysis. Call your local poison control center for further instructions.

5. Fire Fighting Measures

Flammability Classification: OSHA Class IB
Flash Pt: 45.00 F Method Used: Setaflash Closed Cup (Rapid Setaflash)
Explosive Limits: LEL: 1.00 UEL: No data.

Fire Fighting Instructions
Self-contained respiratory protection should be provided for fire fighters fighting fires in buildings or confined area. Storage containers exposed to fire should be kept cool with water spray to prevent pressure build-up. Stay away from heads of containers that have been exposed to intense heat or flame.

Flammable Properties and Hazards
No data available.

Extinguishing Media
Use carbon dioxide, dry powder, or foam.

Unsuitable Extinguishing Media
No data available.
6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled

Clean-up:
Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind, out of low areas, and ventilate closed spaces before entering. Shut off ignition sources, keep flares, smoking or flames out of hazard area.

Small spills:
Take up liquid with sand, earth or other noncombustible absorbent material and place in a plastic container where applicable.

Large spills:
Dike far ahead of spill for later disposal.

7. Handling and Storage

Precautions To Be Taken in Handling
Read carefully all cautions and directions on product label before use. Since empty container retains residue, follow all label warnings even after container is empty. Dispose of empty container according to all regulations. Do not reuse this container.

Precautions To Be Taken in Storing
Keep container tightly closed when not in use. Store in a cool, dry place. Do not store near flames or at elevated temperatures.

8. Exposure Controls/Personal Protection

Respiratory Equipment (Specify Type)
For OSHA controlled work place and other regular users. Use only with adequate ventilation under engineered air control systems designed to prevent exceeding appropriate TLV. For occasional use, where engineered air control is not feasible, use properly maintained and properly fitted NIOSH approved respirator for organic solvent vapors. A dust mask does not provide protection against vapors.

Eye Protection
Safety glasses, chemical goggles or face shields are recommended to safeguard against potential eye contact, irritation, or injury. Contact lenses should not be worn while working with chemicals.

Protective Gloves
Wear impermeable gloves. Gloves contaminated with product should be discarded. Promptly remove clothing that becomes soiled with product.

Other Protective Clothing
Various application methods can dictate the use of additional protective safety equipment, such as impermeable aprons, etc., to minimize exposure. A source of clean water should be available in the work area for flushing eyes and skin. Do not eat, drink, or smoke in the work area. Wash hands thoroughly after use. Before reuse, thoroughly clean any clothing or protective equipment that has been contaminated by prior use. Discard any clothing or other protective equipment that cannot be decontaminated, such as gloves or shoes.

Engineering Controls (Ventilation etc.)
Use only with adequate ventilation to prevent build-up of vapors. Open all windows and doors. Use only with a cross ventilation of moving fresh air across the work area. If strong odor is noticed or you experience slight dizziness, headache, nausea, or eye-watering -- Stop -- ventilation is inadequate. Leave area immediately.

9. Physical and Chemical Properties

Physical States: [ ] Gas [X] Liquid [ ] Solid
Melting Point: No data.
Boiling Point: 147.00 F
Autoignition Pt: No data.
Flash Pt: 45.00 F  Method Used: Setaflash Closed Cup (Rapid Setaflash)
Explosive Limits: LEL: 1.00 UEL: No data.
Specific Gravity (Water = 1): No data.
Bulk density: 6.61 LB/GA
Vapor Pressure (vs. Air or mm Hg): No data.
Vapor Density (vs. Air = 1): No data.
Evaporation Rate (vs Butyl Acetate=1): No data.
Solubility in Water: No data.
Percent Volatile: 100.0 % by weight.
VOC / Volume: 792.0000 G/L
Heat Value: No data.
Particle Size: No data.
Corrosion Rate: No data.
pH: No data.

Appearance and Odor
No data available.

10. Stability and Reactivity
Stability: Unstable [ ] Stable [X]
Conditions To Avoid - Instability
No data available.
Incompatibility - Materials To Avoid
Incompatible with strong oxidizing agents.
Hazardous Decomposition Or Byproducts
Decomposition may produce carbon monoxide and carbon dioxide.
Hazardous Polymerization:
Will occur [ ] Will not occur [X]
Conditions To Avoid - Hazardous Polymerization
No data available.

11. Toxicological Information
Carcinogenicity/Other Information
No data available.

<table>
<thead>
<tr>
<th>Hazardous Components (Chemical Name)</th>
<th>CAS #</th>
<th>NTP</th>
<th>IARC</th>
<th>ACGIH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ethyl alcohol (Ethanol)</td>
<td>64-17-5</td>
<td>n.a.</td>
<td>n.a.</td>
<td>A4</td>
<td>n.a.</td>
</tr>
<tr>
<td>2. Methanol (Methyl alcohol; Carbinol; Wood alcohol)</td>
<td>67-56-1</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>3. Methyl isobutyl ketone (Hexone; Isopropylacetone; MIBK; 4-Methyl-2-pentanone)</td>
<td>108-10-1</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

12. Ecological Information
No data available.

13. Disposal Considerations
Waste Disposal Method
Dispose in accordance with applicable local, state, and federal regulations.
14. Transport Information

LAND TRANSPORT (US DOT)

DOT Proper Shipping Name: Alcohols, n.o.s. (Ethyl Alcohol, Methanol)
DOT Hazard Class: 3
DOT Hazard Label: FLAMMABLE LIQUID
UN/NA Number: UN1987
Packing Group: II

Additional Transport Information

The transportation information listed above is suitable for all modes of transportation. IMO/IMDG, ICAO/IATA, 49 CFR

For D.O.T. information, contact W.M. Barr Technical Services at 1-800-398-3892.

The supplier may apply one of the following exceptions: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to ensure that subsequent shipments comply with these exceptions.

15. Regulatory Information

US EPA SARA Title III

Hazardous Components (Chemical Name) | CAS # | Sec.302 (EHS) | Sec.304 RQ | Sec.313 (TRI) | Sec.110
--- | --- | --- | --- | --- | ---
1. Ethyl alcohol (Ethanol) | 64-17-5 | No | No | No | No
2. Methanol (Methyl alcohol; Carbinol; Wood alcohol) | 67-56-1 | No | Yes 5000 LB | Yes | No
3. Methyl isobutyl ketone {Hexone; Isopropylacetone; MIBK; 4-Methyl-2-pentanone} | 108-10-1 | No | Yes 5000 LB | Yes | Yes

US EPA CAA, CWA, TSCA

Hazardous Components (Chemical Name) | CAS # | EPA CAA | EPA CWA NPDES | EPA TSCA | CA PROP 65
--- | --- | --- | --- | --- | ---
1. Ethyl alcohol (Ethanol) | 64-17-5 | No | | Inventory | 
2. Methanol (Methyl alcohol; Carbinol; Wood alcohol) | 67-56-1 | HAP | | Inventory | 
3. Methyl isobutyl ketone {Hexone; Isopropylacetone; MIBK; 4-Methyl-2-pentanone} | 108-10-1 | HAP | | Inventory | 

SARA (Superfund Amendments and Reauthorization Act of 1986) Lists:

- **Sec.302:** EPA SARA Title III Section 302 Extremely Hazardous Chemical with TPQ. * indicates 10000 LB TPQ if not volatile.
- **Sec.304:** EPA SARA Title III Section 304: CERCLA Reportable + Sec.302 with Reportable Quantity. ** indicates statutory RQ.
- **Sec.313:** EPA SARA Title III Section 313 Toxic Release Inventory. Note: -Cat indicates a member of a chemical category.
- **Sec.110:** EPA SARA 110 Superfund Site Priority Contaminant List

TSCA (Toxic Substances Control Act) Lists:

- **Inventory:** Chemical Listed in the TSCA Inventory.
- **5A(2):** Chemical Subject to Significant New Rules (SNURS)
- **6A:** Commercial Chemical Control Rules
- **8A:** Toxic Substances Subject To Information Rules on Production
16. Other Information

The information contained herein is presented in good faith and believed to be accurate as of the effective date shown above. This information is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. Any use of this data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.