SAFETY DATA SHEET
Klean Strip Kerosene Additive

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Klean Strip Kerosene Additive
Company Name: W. M. Barr
2105 Channel Avenue
Memphis, TN 38113
Phone Number: (901)775-0100

Web site address: www.wmbarr.com
Emergency Contact: 3E 24 Hour Emergency Contact (800)451-8346
Information: W.M. Barr Customer Service (800)398-3892

Intended Use: Extend wick life, reduce kerosene odors and smoke — and lower tar and carbon build-up

Synonyms: WKPAP55001, WKAU5000, 3000

Additional Information: This product is regulated by the United States Consumer Product Safety Commission and is subject to certain labeling requirements under the Federal Hazardous Substances Act. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS). The product label also includes other important information, including directions for use, and should always be read in its entirety prior to using the product.

2. HAZARDS IDENTIFICATION

Flammable Liquids, Category 2
Acute Toxicity: Inhalation, Category 3
Acute Toxicity: Oral, Category 3
Acute Toxicity: Skin, Category 3
Specific Target Organ Toxicity (single exposure), Category 1

GHS Signal Word: Danger
GHS Hazard Phrases: H225: Highly flammable liquid and vapor.
H301: Toxic if swallowed.
H311: Toxic in contact with skin.
H331: Toxic if inhaled.
H370: Causes damage to organs.

GHS Precaution Phrases: P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P233: Keep container tightly closed.
P240: Ground/bond container and receiving equipment.
P241: Use explosion-proof electrical/ventilating/lighting equipment.
P242: Use only non-sparking tools.
P243: Take precautionary measures against static discharge.
P260: Do not breathe gas/mist/vapors/spray.
P264: Wash hands thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P271: Use only outdoors or in a well-ventilated area.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P235: Keep cool.

GHS Response Phrases: P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302+352: IF ON SKIN: Wash with plenty of soap and water.
P303+361+353: IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position...

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comfortable for breathing.
P307+311: IF exposed: Call a POISON CENTER or doctor/physician.
P311: Call a POISON CENTER or doctor/physician.
P321: Specific treatment see label.
P330: Rinse mouth.
P361: Remove/Take off immediately all contaminated clothing.
P363: Wash contaminated clothing before reuse.
P370+378: In case of fire, use dry chemical powder to extinguish.
P403+233: Store container tightly closed in well-ventilated place.
P405: Store locked up.
P501: Dispose of contents/container according to local, state and federal regulations.

GHS Storage and Disposal Phrases:

Hazard Rating System:

Hazard Classification:

Health 2
Flammability 3
Physical 0

NFPA:

Health 1
Special Hazard

OSHA Regulatory Status:

This material is classified as hazardous under OSHA regulations.

Potential Health Effects (Acute and Chronic):

Inhalation Acute Exposure Effects:

Breathing small amounts of this material during normal handling is not likely to cause harmful effects

Skin Contact Acute Exposure Effects:

May cause irritation, drying of skin, redness, drying and cracking of skin, and skin burns.
May be absorbed through skin and cause harmful effects.

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 central nervous system damage, blindness, pancreatic damage, and death.

Target Organs:

Liver, kidneys, pancreas, heart, lungs, brain, central nervous system, eyes

Diseases of the liver, skin, lung, kidney, central nervous system, pancreas, and heart; asthma; inflammatory or fibrotic pulmonary disease; any preexisting condition sensitive to a decrease in available oxygen, such as chronic lung disease, coronary artery disease, or anemias.
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Hazardous Components (Chemical Name)</th>
<th>Concentration</th>
<th>RTECS #</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-56-1</td>
<td>Methanol  {Methyl alcohol; Carbinol; Wood alcohol}</td>
<td>&lt;=100.0 %</td>
<td>PC1400000</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

Emergency and First Aid Procedures:

Skin:
Immediately begin washing the skin thoroughly with large amounts of water and mild soap, if available, while removing contaminated clothing. Seek medical attention if irritation persists.

Eyes:
Immediately begin to flush eyes with water, remove any contact lens. Continue to flush the eyes for at least 15 minutes, then seek immediate medical attention.

Inhalation:
Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

Ingestion:
If swallowed, do NOT induce vomiting. Seek immediate medical attention. Call a physician, hospital emergency room, or poison control center immediately. Never give anything by mouth to an unconscious person.

Signs and Symptoms Of Exposure:
See Potential Health Affects

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

OSHA Class IB

Flash Pt: 54.00 F  Method Used: TAG Closed Cup

Explosive Limits: LEL: 6 %  UEL: 36 %

Autoignition Pt: 725.00 F

Suitable Extinguishing Media: Use carbon dioxide, dry powder, or alcohol resistant foam.

Unsuitable Extinguishing Media: Water may be ineffective. Solid streams of water will likely spread the fire.

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:
Vapors are heavier than air. Vapor may travel considerable distance to source of ignition and flash back.
6. ACCIDENTAL RELEASE MEASURES

Steps To Be Taken In Case Material Is Released Or Spilled:

Vapors are heavier than air. Vapors may cause flash fire or ignite explosively.

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. Use non-sparking tools. Keep out of waterways and bodies of water. Be cautious of vapors collecting in small enclosed spaces, sewers, low lying areas, confined spaces, etc.

Small spills: Take up 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.

Waste Disposal: Dispose in accordance with applicable local, state and federal regulations.

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.

Do not use in small enclosed spaces, such as basements and bathrooms where vapors can accumulate. Vapors can accumulate and explode if ignited.

Precautions To Be Taken in Storing:

Keep container tightly closed when not in use. Store in a cool, dry place. Do not store near any source of heat or open flame, furnace areas, pilot lights, stoves, etc.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Partial Chemical Name</th>
<th>OSHA TWA</th>
<th>ACGIH TWA</th>
<th>Other Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-56-1</td>
<td>Methanol (Methyl alcohol; Carbinol; Wood alcohol)</td>
<td>PEL: 200 ppm</td>
<td>TLV: 200 ppm</td>
<td>STEL: 250 ppm</td>
</tr>
</tbody>
</table>

Respiratory Equipment (Specify Type):

Use only with adequate ventilation.

Eye Protection:

Safety glasses should be worn to prevent eye contact.

Protective Gloves:

Wear gloves with as much resistance to the chemical ingredients as possible. Glove materials such as nitrile, natural rubber, and neoprene will provide protection.

Other Protective Clothing:

No data available.

Engineering Controls (Ventilation etc.):

Use only with adequate ventilation to prevent buildup of vapors. Do not use in areas where vapors can accumulate and concentrate, such as basements, bathrooms or small enclosed areas. If strong odor is noticed or you experience slight dizziness, headache, nausea or eye-watering -- STOP -- ventilation is inadequate. Leave area immediately and move to fresh air.

Work/Hygienic/Maintenance

Wash hands thoroughly after use and before eating, drinking, smoking, or using the

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9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical States:</td>
<td>[ ] Gas  [ X ] Liquid  [ ] Solid</td>
</tr>
<tr>
<td>Appearance and Odor:</td>
<td>Water white, alcohol odor</td>
</tr>
<tr>
<td></td>
<td>Unscented and Pine Scented</td>
</tr>
<tr>
<td>Melting Point:</td>
<td>No data.</td>
</tr>
<tr>
<td>Boiling Point:</td>
<td>No data.</td>
</tr>
<tr>
<td>Autoignition Pt:</td>
<td>725.00 F</td>
</tr>
<tr>
<td>Flash Pt:</td>
<td>54.00 F  Method Used: TAG Closed Cup</td>
</tr>
<tr>
<td>Explosive Limits:</td>
<td>LEL: 6 %  UEL: 36 %</td>
</tr>
<tr>
<td>Specific Gravity (Water = 1):</td>
<td>.795</td>
</tr>
<tr>
<td>Density:</td>
<td>6.63 LB/GL</td>
</tr>
<tr>
<td>Vapor Pressure (vs. Air or mm Hg):</td>
<td>7697.68 MM HG  at 68.0 F</td>
</tr>
<tr>
<td>Vapor Density (vs. Air = 1):</td>
<td>1.11 Air = 1</td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td>2.1 (BuAC=1)</td>
</tr>
<tr>
<td>Solubility in Water:</td>
<td>complete</td>
</tr>
<tr>
<td>Viscosity:</td>
<td>.6 CPS</td>
</tr>
<tr>
<td>Percent Volatile:</td>
<td>100.0 % by weight.</td>
</tr>
<tr>
<td>VOC / Volume:</td>
<td>100.000 % WT</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability:</td>
<td>Unstable [ ]  Stable [ X ]</td>
</tr>
<tr>
<td>Conditions To Avoid - Instability:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Incompatibility - Materials To Avoid:</td>
<td>Incompatible with strong oxidizing agents, strong acids, reactive metals.</td>
</tr>
<tr>
<td>Hazardous Decomposition Or Byproducts:</td>
<td>Decomposition may produce carbon monoxide and carbon dioxide.</td>
</tr>
<tr>
<td>Possibility of Hazardous Reactions:</td>
<td>Will occur [ ]  Will not occur [ X ]</td>
</tr>
<tr>
<td>Conditions To Avoid - Hazardous Reactions:</td>
<td>No data available.</td>
</tr>
</tbody>
</table>
11. TOXICOLOGICAL INFORMATION

Toxicological Information: Refer to section 2 for acute and chronic effects.

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Hazardous Components (Chemical Name)</th>
<th>NTP</th>
<th>IARC</th>
<th>ACGIH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-56-1</td>
<td>Methanol (Methyl alcohol; Carbinol; Wood alcohol)</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION

General Ecological Information: Methanol is of low toxicity to aquatic organisms.

Persistence and Degradability: If released to the atmosphere, a vapor pressure of 127 mm Hg at 25 deg C indicates that methanol will exist solely in the vapor phase. Vapor phase methanol is degraded in the atmosphere by reaction with photochemically-produced hydroxyl radicals; the half-life for this reaction in air is estimated to be 17 days. Volatilization from moist soil surfaces is expected to be an important fate process based upon a Henry's Law constant of 4.55X10^-6 atm-cu m/mole. Methanol may also volatilize from dry soils based upon its vapor pressure. Biodegradation of methanol in soils is expected to occur rapidly based on half-lives in a sandy silt loam from Texas and a sandy loam from Mississippi of 1 and 3.2 days, respectively. If released into water, methanol is not expected to adsorb to suspended solids and sediment based upon the estimated Koc. Volatilization from water surfaces is expected to be an important fate process based upon this compound's Henry's Law constant. Estimated volatilization half-lives for a model river and model lake are 3 and 35 days, respectively. Biodegradation is expected to occur in natural waters since methanol is degraded quickly in soils and was biodegraded rapidly in various aqueous screening tests using sewage seed or activated sludge. Hydrolysis of methanol and photolysis in sunlit surface waters are not expected since methanol lacks functional groups that are susceptible to hydrolysis or photolysis under environmental conditions.

Bioaccumulative Potential: BCF values of less than 10, measured in fish suggests bioconcentration in aquatic organisms is low.

Mobility in Soil: If released to soil, methanol is expected to have very high mobility based upon an estimated Koc of 1.

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: Methanol
DOT Hazard Class: 3 FLAMMABLE LIQUID
UN/NA Number: UN1230 Packing Group: II

Additional Transport Information: The shipper / 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.
# Klean Strip Kerosene Additive

## SAFETY DATA SHEET

### 15. REGULATORY INFORMATION

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Hazardous Components (Chemical Name)</th>
<th>S. 302 (EHS)</th>
<th>S. 304 RQ</th>
<th>S. 313 (TRI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-56-1</td>
<td>Methanol (Methyl alcohol; Carbinol; Wood alcohol)</td>
<td>No</td>
<td>Yes 5000 LB</td>
<td>Yes</td>
</tr>
</tbody>
</table>

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:

- [ ] Yes [X] No Acute (immediate) Health Hazard
- [X] Yes [ ] No Chronic (delayed) Health Hazard
- [X] Yes [ ] No Fire Hazard
- [ ] Yes [X] No Sudden Release of Pressure Hazard
- [ ] Yes [X] No Reactive Hazard

CAS # | Hazardous Components (Chemical Name) | Other US EPA or State Lists |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>67-56-1</td>
<td>Methanol (Methyl alcohol; Carbinol; Wood alcohol)</td>
<td>CAA HAP,ODC: HAP; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: Yes</td>
</tr>
</tbody>
</table>

Regulatory Information Statement: All components of this material are listed on the TSCA Inventory or are exempt.

### 16. OTHER INFORMATION

Revision Date: 04/17/2015
Preparer Name: W.M. Barr EHS Dept (901)775-0100

Additional Information About This Product: No data available.

Company Policy or Disclaimer: 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.