Klean Strip Methyl Ethyl Ketone

1. Product and Company Identification

Product Code: 1635.2
Product Name: Klean Strip Methyl Ethyl Ketone

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 Department (901)775-0100

Synonyms

CME71, GME71, QME71

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>Methyl ethyl ketone (MEK; 2-Butanone)</td>
<td>78-93-3</td>
<td>99.0 -100.0 %</td>
<td>200 ppm</td>
<td>200 ppm</td>
<td>300 ppm</td>
</tr>
</tbody>
</table>

3. Hazards Identification

Emergency Overview

Danger! Flammable. Keep away from heat, sparks, flame and all other sources of ignition. Vapors may cause flash fire or ignite explosively. Vapors may travel long distances to other areas and rooms away from work site. Do not smoke. Extinguish all flames and pilot lights, and turn off stoves, heaters, electric motors and all other sources of ignition anywhere in the structure, dwelling or building during use and until all vapors are gone from the work site and all areas away from the work site. Keep away from electrical outlets and switches. Beware of static electricity that may 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, drowsiness, nausea, and numbness in fingers, arms, and legs.

Skin Contact Acute Exposure Effects:

May cause drying of skin, and numbness in fingers and arms. Liquid is absorbed readily.

Eye Contact Acute Exposure Effects:

This material is an eye irritant. May cause irritation and pain, conjunctivitis of eyes, burns, corneal ulcerations of the eye, stinging, redness, and tearing. Vapors or mist can irritate eyes.

Ingestion Acute Exposure Effects:

Harmful if swallowed. May cause dizziness, headache, nausea, and irritation of mouth, throat, and stomach.

Chronic Exposure Effects:

Reports have associated repeated and prolonged overexposure to solvents with neurological and other
Physiological damage. May cause weakness, fatigue, skin irritation, and numbness in hands and feet.

**Signs and Symptoms Of Exposure**
No data available.

**Medical Conditions Generally Aggravated By Exposure**
None known.

### 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:**
Irritation may result. Immediately wash with soap and water.

**Eye Contact:**
Immediately flush with water, remove any contact lenses, continue flushing with water for at least 15 minutes, then get medical attention.

**Ingestion:**
Call your local poison control center, hospital emergency room, or physician immediately for instructions.

**Note to Physician**
Call your local poison control center for further information.

### 5. Fire Fighting Measures

**Flammability Classification:** OSHA Class IB

**Flash Pt:** 25.00 F  Method Used: Setaflash Closed Cup (Rapid Setaflash)

**Explosive Limits:**
- LEL: 1.8 % at 77.0 F
- UEL: 11.5 % at 77.0 F

**Autoignition Pt:** 759.00 F

**Fire Fighting Instructions**
Self-contained respiratory protection should be provided for fire fighters fighting fires in buildings or confined areas. Storage containers exposed to fire should be kept cool with water spay 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.

**Hazardous Combustion Products**
Carbon monoxide

**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**

**Cleanup:**
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 gloves resistant to MEK. Consult with your safety supplier for the proper glove material depending on your specific use and conditions. 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. 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 process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

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. Whenever possible, use outdoors in an open air area. If using indoors open all windows and doors and maintain 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 and move to fresh air.

Work/Hygienic/Maintenance Practices
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.
9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value or Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical States</td>
<td>[ ] Gas</td>
</tr>
<tr>
<td></td>
<td>[ X ] Liquid</td>
</tr>
<tr>
<td></td>
<td>[ ] Solid</td>
</tr>
<tr>
<td>Melting Point</td>
<td>No data.</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>175.00 F</td>
</tr>
<tr>
<td>Autoignition Pt</td>
<td>759.00 F</td>
</tr>
<tr>
<td>Flash Pt</td>
<td>25.00 F</td>
</tr>
<tr>
<td>Method Used</td>
<td>Setaflash Closed Cup (Rapid Setaflash)</td>
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<tr>
<td>Explosive Limits</td>
<td>LEL: 1.8 % at 77.0 F UEL: 11.5 % at 77.0 F</td>
</tr>
<tr>
<td>Specific Gravity (Water = 1)</td>
<td>0.8</td>
</tr>
<tr>
<td>Density</td>
<td>6.689 LB/GL at 77.0 F</td>
</tr>
<tr>
<td>Bulk density</td>
<td>No data.</td>
</tr>
<tr>
<td>Vapor Pressure (vs. Air or mm Hg)</td>
<td>83 MM Hg at 75.0 F</td>
</tr>
<tr>
<td>Vapor Density (vs. Air = 1)</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Evaporation Rate (vs Butyl Acetate=1):</td>
<td>&gt; 1</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Partially</td>
</tr>
<tr>
<td>Percent Volatile</td>
<td>99.999 % by weight.</td>
</tr>
<tr>
<td>VOC / Volume</td>
<td>825,0000 G/L</td>
</tr>
<tr>
<td>Heat Value</td>
<td>No data.</td>
</tr>
<tr>
<td>Particle Size</td>
<td>No data.</td>
</tr>
<tr>
<td>Corrosion Rate</td>
<td>No data.</td>
</tr>
<tr>
<td>pH</td>
<td>No data.</td>
</tr>
<tr>
<td>Appearance and Odor</td>
<td>Characteristic ketone odor.</td>
</tr>
</tbody>
</table>

10. Stability and Reactivity

<table>
<thead>
<tr>
<th>Property</th>
<th>Value or Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability</td>
<td>Unstable [ ]</td>
</tr>
<tr>
<td></td>
<td>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 caustics, and hydrogen peroxide.</td>
</tr>
<tr>
<td>Hazardous Decomposition Or Byproducts</td>
<td>Decomposition may produce carbon monoxide and oxides of carbon.</td>
</tr>
<tr>
<td>Hazardous Polymerization</td>
<td>Will occur [ ]</td>
</tr>
<tr>
<td></td>
<td>Will not occur [ X ]</td>
</tr>
<tr>
<td>Conditions To Avoid - Hazardous Polymerization</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

11. Toxicological Information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value or Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 Rat inhalation</td>
<td>&gt;5000 ppm/6 hr</td>
</tr>
<tr>
<td>LD50 Rat oral</td>
<td>3400 mg/kg bw</td>
</tr>
<tr>
<td>LD50 Rat oral 2900 (95% C.I. 2300-3500) mg/kg</td>
<td>/From table/</td>
</tr>
<tr>
<td>LD50 Rat (female) oral 5520 (95% C.I. 4500-6800) mg/kg</td>
<td>/From table/</td>
</tr>
<tr>
<td>LD50 Mouse (male) oral 3140 + or - 670 mg/kg</td>
<td>/From table/</td>
</tr>
<tr>
<td>LC50 (45 min) Mouse (male) inhalaion 205,000 + or - 32,500 mg/cu m (69,500 + or - 11,000 ppm)</td>
<td>/From table/</td>
</tr>
<tr>
<td>LC50 (4 hr) Rat (male) inhalation 34,500 mg/cu m (11,700 ppm)</td>
<td>/From table/</td>
</tr>
<tr>
<td>LD50 (24 hr) Mouse (male) ip 1660 + or - 740 mg/kg</td>
<td>/From table/</td>
</tr>
<tr>
<td>LD50 (24 hr) Rat (female) ip 15540 (95% CI 12290-19660) mg/kg</td>
<td>/From table/</td>
</tr>
<tr>
<td>LD50 (14 day) Rat (female) ip 6070 (95% C.I. 4860-7480 g/kg</td>
<td>/From table/</td>
</tr>
<tr>
<td>LD50 (14 days) Rabbit (male) dermal</td>
<td>&gt;8000 mg/kg</td>
</tr>
</tbody>
</table>
Carcinogenicity/Other Information

No data available.

Hazardous Components (Chemical Name)  | CAS #  | NTP | IARC | ACGIH | OSHA
--- | --- | --- | --- | --- | ---
1. Methyl ethyl ketone {MEK; 2-Butanone} | 78-93-3 | n.a. | n.a. | n.a. | n.a.

12. Ecological Information

No data available.

13. Disposal Considerations

Waste Disposal Method

Dispose in accordance with local, state, and federal regulations.

14. Transport Information

LAND TRANSPORT (US DOT)

DOT Proper Shipping Name: Methyl ethyl ketone
DOT Hazard Class: 3
DOT Hazard Label: FLAMMABLE LIQUID
UN/NA Number: UN1193
Packing Group: II

Additional Transport Information

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. Methyl ethyl ketone {MEK; 2-Butanone} | 78-93-3 | No | Yes 5000 LB | No | Yes

US EPA CAA, CWA, TSCA

Hazardous Components (Chemical Name)  | CAS #  | EPA CAA | EPA CWA NPDES | EPA TSCA | CA PROP 65
--- | --- | --- | --- | --- | ---
1. Methyl ethyl ketone {MEK; 2-Butanone} | 78-93-3 | No | | | 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
8A CAIR: Comprehensive Assessment Information Rules - (CAIR)
8A PAIR: Preliminary Assessment Information Rules - (PAIR)
8C: Records of Allegations of Significant Adverse Reactions
8D: Health and Safety Data Reporting Rules
8D TERM: Health and Safety Data Reporting Rule Terminations
12(b): Notice of Export

Other Important Lists:
CWA NPDES: EPA Clean Water Act NPDES Permit Chemical
CAA HAP: EPA Clean Air Act Hazardous Air Pollutant
CAA ODC: EPA Clean Air Act Ozone Depleting Chemical (1=CFC, 2=HCFC)
CA PROP 65: California Proposition 65

International Regulatory Lists:

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

[X] Yes [ ] 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

Regulatory Information
This product has been classified according to the hazard criteria of the Controlled Products Regulations.

16. Other Information

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.