1. Product and Company Identification

Product Code: 1210.2
Product Name: Kerosene
Reference #: GL42

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
CKE83, CKE83M, E08331, GKE83, GKE83BLK, GKP85, GKKEDP

2. Hazards Identification

Caution! Combustible! Keep away from heat, sparks, flame and all other sources of ignition. Vapors may cause fire. 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 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.

Health Hazards (Acute and Chronic)

Inhalation Acute Exposure Effects:
Vapor concentration may cause headache, dizziness, irritation of the respiratory tract, eye irritation, stupor, depression of the central nervous system, watering of the eyes, weakness, nausea, muscle twitches, and kidney effects. Aspiration into lungs may cause pneumonia or death. Severe overexposure may cause convulsions, unconsciousness, and death.

Skin Contact Acute Exposure Effects:
May cause irritation.

Eye Contact Acute Exposure Effects:
Liquid contact may cause irritation.

Ingestion Acute Exposure Effects:
Causes irritation of the stomach and intestines, resulting in nausea and vomiting.

Chronic Exposure Effects:
Reports have associated repeated and prolonged overexposure to solvents with neurological and other physiological damage. Repeated or prolonged skin contact may cause redness, irritation, and scaling of the skin.
May cause skin irritation, anemia, bone marrow damage, liver damage, and jaundice.

Target Organs: liver, skin, nervous system, kidneys, respiratory system

Signs and Symptoms Of Exposure
See Potential Health Effects.

Medical Conditions Generally Aggravated By Exposure
None known.

3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Hazardous Components (Chemical Name)</th>
<th>CAS #</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stoddard solvent {Mineral spirits; Aliphatic Petroleum Distillates; White spirits}</td>
<td>8052-41-3</td>
<td>95.0 -100.0 %</td>
</tr>
</tbody>
</table>

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 large quantities of water for at least 15 minutes. Seek medical attention if irritation from contact persists.

Eye contact:
Immediately flush eyes with water, remove any contact lens, continue flushing with water for at least 15 minutes. Get medical attention.

Ingestion:
Do not induce vomiting. Call your poison control center, hospital emergency room, or physician immediately.

Note to Physician

Call your local poison control center for further instructions.

5. Fire Fighting Measures

Flammability Classification: II
Flash Pt: > 101.00 F (38.3 C) Method Used: Setaflash Closed Cup (Rapid Setaflash)
Explosive Limits: LEL: 0.5 UEL: 6
Autoignition Pt: 446.00 F (230.0 C)

Special Fire Fighting Procedures

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 spray to prevent pressure build-up. Stay away from heads of containers that have been exposed to intense heat or flame.

Unusual Fire and Explosion Hazards

Vapors can be heavier than air and may travel along the ground or be moved by ventilation and ignited by heat, sparks, flame, and other ignition sources distant from material handling point. Never use welding or cutting torch on or near container (even empty) because product (even residue) can ignite.

Hazardous Combustion Products
Carbon monoxide, carbon dioxide, and various hydrocarbons

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

Do not use a solid water stream, as this may spread the fire.

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled

Isolate the immediate area. Prevent unauthorized entry. Eliminate all sources of ignition in area and downwind of the spill area. Stay upwind, out of low areas, and ventilate closed spaces before entering. All equipment used when handling this product must be grounded or non-sparking. Do not touch or walk through spilled material. Stop leak if you can do so without risk. Prevent entry into waterways, sewers, or confined areas. A vapor suppressing foam may be used to reduce vapors. Absorb or cover with dry earth, sand, or other non-combustible material and transfer to compatible containers. For large spills, dike ahead of the spill.

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

<table>
<thead>
<tr>
<th>Hazardous Components (Chemical Name)</th>
<th>CAS #</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>Other Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Stoddard solvent (Mineral spirits; Aliphatic Petroleum Distillates; White spirits)</td>
<td>8052-41-3</td>
<td>500 ppm</td>
<td>100 ppm</td>
<td>No data.</td>
</tr>
</tbody>
</table>

Respiratory Equipment (Specify Type)

When refueling, if possible, use outdoors in an open air area. If refueling 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. Always follow appliance manufacturer's directions for fueling, ignition, and all other activities associated with use of the appliance.

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

If the work area is not properly ventilated to keep airborne levels below their exposure limits, you must use a properly fitted and maintained NIOSH approved respirator for organic 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.

Protective Gloves

Wear impermeable gloves, such as nitrile or neoprene. Gloves contaminated with product should be discarded. Promptly remove clothing that becomes soiled with product.

Other Protective Clothing

Various application methods can dictate use of additional protective safety equipment, such as impermeable aprons, etc., to minimize exposure.

Ventilation

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.

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.

9. **Physical and Chemical Properties**

<table>
<thead>
<tr>
<th>Physical States:</th>
<th>[ ] Gas</th>
<th>[X] Liquid</th>
<th>[ ] Solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting Point:</td>
<td>No data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boiling Point:</td>
<td>300.00 F (148.9 C) - 425.00 F (218.3 C)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autoignition Pt:</td>
<td>446.00 F (230.0 C)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flash Pt:</td>
<td>&gt; 101.00 F (38.3 C) Method Used: Setaflash Closed Cup (Rapid Setaflash)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explosive Limits:</td>
<td>LEL: 0.5 UEL: 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific Gravity (Water = 1):</td>
<td>0.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulk density:</td>
<td>No data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure (vs. Air or mm Hg):</td>
<td>0.22 MM HG at 68.0 F (20.0 C)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor Density (vs. Air = 1):</td>
<td>4.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate (vs Butyl Acetate=1):</td>
<td>No data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solubility in Water:</td>
<td>No data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solubility Notes:</td>
<td>Slightly soluble in cold water (&lt;0.1% w/w)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent Volatile:</td>
<td>100.0 % by weight.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VOC / Volume:</td>
<td>784.0000 G/L</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heat Value:</td>
<td>No data.</td>
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<td></td>
</tr>
<tr>
<td>Particle Size:</td>
<td>No data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrosion Rate:</td>
<td>No data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pH:</td>
<td>No data.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Appearance and Odor**

Transparent, colorless, solvent odor.  
Color: Saybolt +27

**ADDITIONAL INFORMATION:**

Sulfur content: 10 ppm maximum
10. Stability and Reactivity

Stability:

| Unstable [ ] | Stable [ X ] |

Conditions To Avoid - Instability

No data available.

Incompatibility - Materials To Avoid

Incompatible with strong oxidizing agents, strong acids, and alkalies.

Hazardous Decomposition Or Byproducts

Thermal decomposition may produce carbon monoxide and carbon dioxide.

Possibility of Hazardous Reactions:

| Will occur [ ] | Will not occur [ X ] |

Conditions To Avoid - Hazardous Reactions

No data available.

11. Toxicological Information

Stoddard Solvent:

ACUTE TOXICITY:

| LD50  Rat oral  >34,600 mg/kg  |
| LC50  Rat Inhalation  >21,400 mg/m3 / 4 hrs  |
| LD50  Rabbit skin  15,400 mg/kg  |

SKIN CORROSION / IRRITATION: Primary dermal studies (4 hr exposure) in rabbits utilizing mineral spirits containing less than 2% aromatics resulted in slight to moderate skin irritation.

SERIOUS EYE DAMAGE / IRRITATION: In a 15 minute inhalation period, eye irritation, characterized as a slight dryness, was reported in one of six volunteers (ages 22-61 years) at 150 ppm (860 mg/cu m). At 470 ppm (2700 mg/cu m), ocular irritation was reported by all six volunteers.

RESPIRATORY OR SKIN SENSITIZATION: Skin sensitization was not evident in animal studies.

ASPIRATION HAZARD: This material presents an aspiration hazard.

MUTAGENIC DATA: No data.

IMMUNOTOXICITY: No data.

NEUROTOXICITY: Repeated exposure to elevated concentrations of hydrocarbon solvents can produce a variety of transient CNS effects (e.g., dizziness, headache, narcosis, etc.)

DEVELOPMENTAL/REPRODUCTIVE: There were no treatment-related effects on pregnancy rate, mortality or gross post mortem observations in animal studies utilizing mineral spirits containing less than 2% aromatics. In vivo and in vitro studies on mineral spirits containing up to 22% aromatics indicate that these products are not genotoxic.

CARCINOGEN STATUS: There is inadequate evidence for the carcinogenicity of petroleum solvents in humans. Animal studies have indicated that there may be some evidence of carcinogenic activity in male rats but no evidence in female rats. A low carcinogenic potential is suggested by a lack of genotoxic potential identified in in vivo and in vitro genetic toxicity tests.

Chronic Toxicological Effects

Germ Cell Mutagenicity: no data

Reproductive Toxicity: no data

STOT-Single Exposure: no data

STOT-Repeated Exposure: no data

Carcinogenicity/Other Information

No data available.
12. Ecological Information

Stoddard Solvent:

TOXICITY: This mixture contains components that are potentially toxic to freshwater and saltwater ecosystems. This material may be harmful to aquatic organisms and may cause long term adverse effects in the aquatic environment. In stagnant or slow-flowing waterways, a hydrocarbon layer can cover a large surface area. As a result, this covering layer might limit or eliminate natural atmospheric oxygen transport into the water. With time, if not removed, oxygen depletion in the waterway might be enough to cause a fish kill or create an anaerobic environment. This coating can also be harmful or fatal to plankton, algae, aquatic life, and water birds.

PERSISTENCE AND DEGRADABILITY: This material will normally float on water. Components will evaporate rapidly.

BIOACCUMULATIVE POTENTIAL: The octanol-water partition coefficient for this material is expected to be in the range of 2.1 to 5.

MOBILITY IN SOIL: No data.

OTHER ADVERSE EFFECTS: No data.

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: Petroleum Distillates

LAND TRANSPORT (Canadian TDG)

AIR TRANSPORT (ICAO/IATA)

ICAO/IATA Proper Shipping Name: Kerosene

UN Number: 1223
Packing Group: III
IATA Classification: 3

MARINE TRANSPORT (IMDG/IMO)

IMDG/IMO Proper Shipping Name: Kerosene

UN Number: 1223
Packing Group: III
IMDG Classification: 3

Additional Transport Information

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

15. Regulatory Information

Canadian Chemical Lists

Hazardous Components (Chemical Name)  | CAS #  | Canadian NPRI | Canadian IDL
--- | --- | --- | ---
Stoddard solvent {Mineral spirits; Aliphatic Petroleum Distillates; White spirits} | 8052-41-3 | Yes | Yes

Canadian WHMIS Classification

No data available.

US EPA SARA Title III
<table>
<thead>
<tr>
<th>Hazardous Components (Chemical Name)</th>
<th>CAS #</th>
<th>Sec.302 (EHS)</th>
<th>Sec.304 RQ</th>
<th>Sec.313 (TRI)</th>
<th>Sec.110</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Stoddard solvent (Mineral spirits; Aliphatic Petroleum Distillates; White spirits)</td>
<td>8052-41-3</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

**US EPA CAA, CWA, TSCA**

<table>
<thead>
<tr>
<th>Hazardous Components (Chemical Name)</th>
<th>CAS #</th>
<th>EPA CAA</th>
<th>EPA CWA NPDES</th>
<th>EPA TSCA</th>
<th>CA PROP 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Stoddard solvent (Mineral spirits; Aliphatic Petroleum Distillates; White spirits)</td>
<td>8052-41-3</td>
<td>HAP, ODC ()</td>
<td>No</td>
<td>Inventory</td>
<td>No</td>
</tr>
</tbody>
</table>

**Canadian Regulatory Lists:**
- Canadian NPRI: Canadian National Pollutant Release Inventory
- Canadian IDL: Canadian Ingredient Disclosure List

**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**
- Stoddard Solvent  CAS#  8052-41-3
- WHMIS Classification:
  - B3 - Flammable and combustible material - Combustible liquid
  - D2B - Poisonous and infectious material - Other effects - Toxic
- WHMIS Health Effects Criteria Met by this Chemical: D2B - Skin irritation - toxic - other
- WHMIS Ingredient Disclosure List: Included for disclosure at 1% or greater.
This product has been classified according to the hazard criteria of the Controlled Products Regulations.

Concentrations reported in section 2 are weight/weight.

Ingredients disclosed in section 2 are on Canadian DSL.

16. Other Information

--Conforms to 1-K kerosene specifications.

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.