1. Product and Company Identification

Product Code: A224.2
Product Name: Klean Strip Aircraft Decal & Adhesive Remover

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
EAD908

2. Hazards Identification

GHS Classification
No data available.

GHS Hazard Phrases
No data available.

GHS Precaution Phrases
No data available.

GHS Response Phrases
No data available.

GHS Storage and Disposal Phrases
No data available.

Emergency Overview
Danger! Poison. Extremely Flammable. May be fatal or cause blindness if swallowed. Vapor harmful. Skin and eye irritant.

Keep away from heat, sparks, flame and all other sources of ignition. Vapors may cause flash fire or ignite explosively.

Only use with adequate ventilation to prevent buildup of vapors.

Potential Health Effects (Acute and Chronic)
This product has not been tested as a whole to determine health effects. The health effects listed below are associated with the individual ingredients listed in Section 3.

EYES: Causes eye irritation. May cause pain, a burning sensation, watering, redness, change in vision, and eye damage.

SKIN: Causes skin irritation. May cause redness, itching, and drying and cracking of the skin. Prolonged or repeated skin contact may cause drying and cracking of the skin and possible skin burns. May be absorbed through the skin with possible systemic effects.
INHALATION: May cause irritation to the nose, throat, and respiratory tract. Concentrations above the TLV may cause headache, dizziness, nausea, shortness of breath, and vomiting. Higher concentrations may cause central nervous system depression and unconsciousness, nasal discharge, hoarseness, coughing, chest pain, and breathing difficulty.

Reports have associated repeated and prolonged overexposure to solvents with neurological and other physiological damage. Intentional misuse by deliberately concentrating and inhaling solvents may be harmful or fatal.

Methanol has caused birth defects in laboratory animals, but only when inhaled at extremely high vapor concentrations. The relevance of this finding to humans is uncertain.

INGESTION: May cause nausea, vomiting, loss of appetite, gastrointestinal irritation, diarrhea, central nervous system depression, and headache. Aspiration into lungs can cause severe lung damage, which can be fatal. May cause leg pain, pain in the abdomen and lower back, visual impairment, including blindness, coma, and death.

TARGET ORGANS: eyes, central nervous system, skin, respiratory tract, gastrointestinal system

PRIMARY ROUTES OF ENTRY: skin, eyes, inhalation, ingestion

Medical Conditions Generally Aggravated By Exposure
Diseases of the skin, eyes, and respiratory system.

OSHA Regulatory Status:
This material is classified as hazardous under OSHA regulations.

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>1. Methyl ethyl ketone (MEK; 2-Butanone)</td>
<td>78-93-3</td>
<td>55.0 -65.0 %</td>
</tr>
<tr>
<td>2. Petroleum Hydrocarbons</td>
<td>64742-95-6</td>
<td>10.0 -15.0 %</td>
</tr>
<tr>
<td>3. Methanol (Methyl alcohol; Carbinol; Wood alcohol)</td>
<td>67-56-1</td>
<td>15.0 -20.0 %</td>
</tr>
<tr>
<td>4. Liquified petroleum gas, sweetened (propane, isobutane, n-butane)</td>
<td>68476-86-8</td>
<td>~14.0 %</td>
</tr>
</tbody>
</table>

Additional Chemical Information
The concentration range values for the liquid ingredients do not reflect the dilution of the propellant in the container. The concentration values are for the liquid concentrate only.

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 develops or persists.

Eyes:
Immediately begin to flush eyes with water, remove any contact lens. Continue to flush the eyes for at least 15 minutes. Seek 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.

**Note to Physician**
This product contains methanol which can cause intoxication and central nervous system depression. Methanol is metabolized to formic acid and formaldehyde. These metabolites can 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 to prevent methanol metabolism. Ethanol administration is indicated in symptomatic patients or at blood methanol concentrations above 20 ug/dl. Methanol is effectively removed by hemodialysis.

**Signs and Symptoms Of Exposure**
See Potential Health Effects.

### 5. Fire Fighting Measures

**Flammability Classification:** Level 3 Aerosol

**Flash Pt:** No data.

**Explosive Limits:**
- LEL: No data.
- UEL: No data.

**Autoignition Pt:** No data available.

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

**Flammable Properties and Hazards**
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 may be generated by synthetic clothing and other sources. Contents under pressure. Do not puncture, incinerate or store above 120 degrees F. Exposure to heat or prolonged exposure to sun may cause bursting.

FLASHPOINT OF LIQUID CONCENTRATE: 20 degrees Fahrenheit

FLASHPOINT OF PROPELLANT: -142 degrees Fahrenheit

**Hazardous Combustion Products**
carbon monoxide, carbon dioxide

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

**Unsuitable Extinguishing Media**
None known.

### 6. Accidental Release Measures

**Steps To Be Taken In Case Material Is Released Or Spilled**
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. Use proper bonding and grounding methods for all equipment and processes. 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 this product near any source of heat or open flame, furnace areas, pilot lights, stoves, etc.

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

A source of clean water should be available in the work area for flushing eyes and skin.

Precautions To Be Taken in Storing

STORAGE
Store as a Level 3 Aerosol (NFPA 30B)

Replace overcap on container after each use. Store in a cool, dry place. Do not store near flames or at elevated temperatures. Do not expose to temperatures above 120 degrees Fahrenheit. Exposure to heat or prolonged exposure to sun can cause bursting.

8. Exposure Controls/Personal Protection

Hazardous Components (Chemical Name)

<table>
<thead>
<tr>
<th>#</th>
<th>CAS #</th>
<th>OSHA PEL</th>
<th>ACGIH TWA</th>
<th>Other Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Methyl ethyl ketone (MEK; 2-Butanone)</td>
<td>78-93-3</td>
<td>PEL: 200 ppm</td>
<td>TLV: 200 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>STEL: 300 ppm</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Petroleum Hydrocarbons</td>
<td>64742-95-6</td>
<td>No data.</td>
<td>No data.</td>
</tr>
<tr>
<td>3</td>
<td>Methanol (Methyl alcohol; Carbinol; Wood alcohol)</td>
<td>67-56-1</td>
<td>PEL: 200 ppm</td>
<td>TLV: 200 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>STEL: 250 ppm</td>
<td>No data.</td>
</tr>
<tr>
<td>4</td>
<td>Liquified petroleum gas, sweetened (propane, isobutane, n-butane)</td>
<td>68476-86-8</td>
<td>No data.</td>
<td>No data.</td>
</tr>
</tbody>
</table>

Respiratory Equipment (Specify Type)

For use in areas with inadequate ventilation or fresh air, wear a properly maintained and properly fitted NIOSH approved respirator for organic solvent vapors.

For OSHA controlled work places and other regular users - Use only with adequate ventilation under engineered air control systems designed to prevent exceeding the appropriate TLV.

A dust mask does not provide protection against vapors.

Eye Protection

Chemical splash goggles, or face shields are recommended to safeguard against potential eye contact, irritation, or injury. Chemical goggles or face shields are recommended when splashing or spraying of chemical is possible. A faceshield provides more protection to help reduce chemical contact to the face and eyes.
Protective Gloves
Wear gloves with as much resistance to the chemical ingredients as possible. Glove materials such as nitrile and natural rubber provide protection. Glove selection should be based on chemicals being used and conditions of use. Consult your glove supplier for additional information. Gloves contaminated with product should be discarded and not reused.

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

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

Do not eat, drink, or smoke in the work area.

Discard any clothing or other protective equipment that cannot be decontaminated.

Facilities storing or handling this material should be equipped with an emergency eyewash and safety shower.

9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical States:</th>
<th>[ X ] 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>150 F - 480 F</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autoignition Pt:</td>
<td>No data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flash Pt:</td>
<td>No data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific Gravity (Water = 1):</td>
<td>0.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Density:</td>
<td>6.79 LB/GL at 75 F</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure (vs. Air or mm Hg):</td>
<td>No data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor Density (vs. Air = 1):</td>
<td>&gt; 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td>&lt; 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solubility in Water:</td>
<td>No data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent Volatile:</td>
<td>&gt;= 98 % by weight.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VOC / Volume:</td>
<td>99 % WT</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

Oxidizing materials, caustics, amines, ammonia, strong bases, chloroform, chlorosulfonic acid, oleum, hydrogen peroxide, nitric acid, sulfuric acid, strong inorganic acids, and reactive metals.

Hazardous Decomposition Or Byproducts

Thermal Decomposition may produce carbon monoxide, carbon dioxide, and unidentified organic compounds in black smoke.

Possibility of Hazardous Reactions:  Will occur [ ]  Will not occur [ X ]

Conditions To Avoid - Hazardous Reactions

No data available.

11. Toxicological Information

This product has not been tested as a whole. Information below will be for individual ingredients.

Methyl Ethyl Ketone:

ACUTE TOXICITY:
LD50, rat, 2.7-5.6 g/kg
LC50 Rat inhalation >5000 ppm/6 hr
SKIN CORROSION / IRRITATION:  Can cause mild to moderate skin irritation and dermatitis.
SERIOUS EYE DAMAGE / IRRITATION:  Liquid and vapor can cause severe eye irritation.
RESPIRATORY OR SKIN SENSITIZATION:  Not a sensitizer.
ASPIRATION HAZARD:  No data.
MUTAGENIC DATA:  Does not show mutagenic potential in Ames test or in most in vitro tests.
IMMUNOTOXICITY:  No data.
NEUROTOXICITY:  Excessive exposure leads to depression of the CNS, shown by loss of coordination, reflexes, and consciousness. Not neurotoxic.
DEVELOPMENTAL/REPRODUCTIVE:  No evidence of birth defects
CARCINOGEN STATUS:  Not classifiable as to human carcinogenicity.

Methanol:

ACUTE TOXICITY:
LD50 Rat oral 5628 mg/kg
LC50 Rat inhalation 64000 ppm/4 hr
LC50 Rat inhalation 87.5 mg/L/6 hr
LD50 Mouse oral 7300 mg/kg
SKIN CORROSION / IRRITATION:  LD50 Rabbit dermal 15,800 mg/kg bw
SERIOUS EYE DAMAGE / IRRITATION:  Methanol is a mild to moderate eye irritant.
RESPIRATORY OR SKIN SENSITIZATION:  Not a respiratory or skin sensitizer.
ASPIRATION HAZARD:  Methanol presents an aspiration hazard.
MUTAGENIC DATA:  No data.
IMMUNOTOXICITY:  No data.
NEUROTOXICITY:  Overexposure to methanol has been suggested as causing central nervous system damage in laboratory animals.
DEVELOPMENTAL/REPRODUCTIVE:  The inhalation of methanol by pregnant rodents throughout the period of embryogenesis induces a wide range of concentration-dependent teratogenic and embryolethal effects. Methanol has caused birth defects in laboratory animals, but only when inhaled at extremely high vapor concentrations. The relevance of this finding to humans is uncertain.
CARCINOGEN STATUS:  There is no evidence from animal studies to suggest methanol is a carcinogen.
**12. Ecological Information**

This product has not been tested as a whole. Information below will be for individual ingredients.

**Methyl Ethyl Ketone:**

Toxicity:

- LC50 Daphnia magna (water flea) <520 mg/L 48-hr
- LC50 Lepomis macrochirus (bluegill) 5,640-1,690 mg/L 24 to 96-hr

Has shown low toxicity to fish and aquatic invertebrates.

Persistence and Degradability: MEK is readily biodegradable.

Bioaccumulative Potential: Data suggests that MEK is unlikely to concentrate in aquatic species.

Mobility in Soil: MEK is expected to have very high mobility based upon Koc values of 29 and 34 obtained in silt loams.

**Methanol:**

TOXICITY: Methanol is of low toxicity to aquatic organisms. LC50 Pimephales promelas (fathead minnows) 29.4 g/L/96 hr, (28-29 days old), confidence limit= 28.5-30.4; Test conditions: Water temp= 25 deg C, dissolved oxygen= 7.3 mg/L, water hardness= 43.5 mg/l calcium carbonate, alkalinity= 46.6 calcium carbonate, tank volume= 6.3 L, additions= 5.71 V/D, pH= 7.66 (0.03).

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**: Aerosols, flammable, LTD. QTY.
- **DOT Hazard Class**: 2.1
- **DOT Hazard Label**: FLAMMABLE GAS
- **UN/NA Number**: UN1950

**Additional Transport Information**

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

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.

## 15. Regulatory Information

### 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>Methyl ethyl ketone (MEK; 2-Butanone)</td>
<td>78-93-3</td>
<td>No</td>
<td>Yes 5000 LB</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Petroleum Hydrocarbons</td>
<td>64742-95-6</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Methanol (Methyl alcohol; Carbinol; Wood alcohol)</td>
<td>67-56-1</td>
<td>No</td>
<td>Yes 5000 LB</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Liquified petroleum gas, sweetened (propane, isobutane, n-butane)</td>
<td>68476-86-8</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>Methyl ethyl ketone (MEK; 2-Butanone)</td>
<td>78-93-3</td>
<td>ODC ()</td>
<td>No</td>
<td>Inventory</td>
<td>No</td>
</tr>
<tr>
<td>Petroleum Hydrocarbons</td>
<td>64742-95-6</td>
<td>HAP, ODC ()</td>
<td>No</td>
<td>Inventory</td>
<td>No</td>
</tr>
<tr>
<td>Methanol (Methyl alcohol; Carbinol; Wood alcohol)</td>
<td>67-56-1</td>
<td>HAP, ODC ()</td>
<td>No</td>
<td>Inventory</td>
<td>No</td>
</tr>
<tr>
<td>Liquified petroleum gas, sweetened (propane, isobutane, n-butane)</td>
<td>68476-86-8</td>
<td>HAP, ODC ()</td>
<td>No</td>
<td>Inventory</td>
<td>No</td>
</tr>
</tbody>
</table>

**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
- [X] Yes  [ ] No  Sudden Release of Pressure Hazard
- [ ] Yes  [X] No  Reactive Hazard

## 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.