1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Jasco VM&P Naphtha
Company Name: W. M. Barr
2105 Channel Avenue
Memphis, TN 38113
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
Product Code: GJVM46, CJVM46, GJVM190

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: Oral, Category 4
Acinar Toxicity, Category 1
Skin Corrosion/Irritation, Category 2
Serious Eye Damage/Eye Irritation, Category 2B
Specific Target Organ Toxicity (single exposure), Category 3

GHS Signal Word: Danger
GHS Hazard Phrases:
H225: Highly flammable liquid and vapor.
H302: Harmful if swallowed.
H304: May be fatal if swallowed and enters airways.
H315: Causes skin irritation.
H320: Causes eye irritation.
H336: May cause drowsiness or dizziness.

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.
P261: Avoid breathing 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.
P312: Call a POISON CENTER or doctor/physician if you feel unwell.
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.
Jasco VM&P Naphtha
SAFETY DATA SHEET

P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321: Specific treatment see label.
P330: Rinse mouth.
P331: Do NOT induce vomiting.
P332+313: If skin irritation occurs, get medical advice/attention.
P337+313: If eye irritation persists, get medical advice/attention.
P362: Take off contaminated clothing and wash before re-use.
P370+378: In case of fire, use dry chemical powder to extinguish.

GHS Storage and Disposal Phrases:
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.

Hazard Rating System:

Hazardous Components (Chemical Name) | Concentration | RTECS # |
-------------------------------------|--------------|---------|
Hydrotreated light naphtha          | 95.0 - 100.0 % | NA      |

This material is classified as hazardous under OSHA regulations.

Potential Health Effects (Acute and Chronic):

Causes serious eye irritation.
Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness.
Causes skin irritation.
Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach.

Routes of entry anticipated: Oral, Dermal, Inhalation

Medical Conditions Generally Aggravated By Exposure:
Diseases of the skin, respiratory system, liver, central nervous system and kidneys.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Licensed to W.M. Barr and Company: MIRS MSDS, (c) A V Systems, Inc. GHS format
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:
Do not induce vomiting. Call your local poison control center, hospital emergency room, or physician immediately for instructions.

Signs and Symptoms Of Exposure:

Adverse symptoms may include the following:

Eye contact: pain or irritation, watering, redness

Inhalation: nausea or vomiting, headache, drowsiness/fatiguedizziness/vertigo, unconsciousness

Skin contact: irritation, redness

Ingestion: nausea or vomiting

Note to Physician:
If ingested, this material presents a significant aspiration and chemical pneumonitis hazard. Induction of emesis is not recommended. Consider activated charcoal and/or gastric lavage. If patient is obtunded, protect the airway by cuffed endotracheal intubation or by placement of the body in a Trendelenburg and left lateral decubitus position.

5. FIRE FIGHTING MEASURES

OSHA Class IB

Flash Pt: 69.00°F Method Used: TAG Closed Cup

Explosive Limits:

LEL: 0.9 UEL: 6.7

Autoignition Pt: 475.00°F

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

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 heads of containers that have been exposed to intense heat or flame.

Flammable Properties and Hazards:
No data available.
6. ACCIDENTAL RELEASE MEASURES

<table>
<thead>
<tr>
<th>Steps To Be Taken In Case Material Is Released Or Spilled:</th>
<th>Cleanup:</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>Small Spills:</td>
<td></td>
</tr>
<tr>
<td>Take up liquid with sand, earth or other noncombustible absorbent material and place in a plastic container where applicable.</td>
<td></td>
</tr>
<tr>
<td>Large Spills:</td>
<td></td>
</tr>
<tr>
<td>Dike far ahead of spill for later disposal.</td>
<td></td>
</tr>
</tbody>
</table>

7. HANDLING AND STORAGE

<table>
<thead>
<tr>
<th>Precautions To Be Taken in Handling:</th>
<th>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.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precautions To Be Taken in Storing:</td>
<td>Keep container tightly closed when not in use. Store in a cool, dry place. Do not store near flames or at elevated temperatures.</td>
</tr>
</tbody>
</table>

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>64742-49-0</td>
<td>Hydrotreated light naphtha</td>
<td>No data.</td>
<td>No data.</td>
<td>No data.</td>
</tr>
</tbody>
</table>

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 provided 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.

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. Whenever possible, use outdoors in an open 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. If the work area is not well ventilated, then do not use this product. A dust mask does not provide protection against vapors.

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>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>Transparent, colorless Hydrocarbon solvent odor</td>
</tr>
<tr>
<td>Melting Point:</td>
<td>No data.</td>
</tr>
<tr>
<td>Boiling Point:</td>
<td>264.00 F - 291.00 F</td>
</tr>
<tr>
<td>Autoignition Pt:</td>
<td>475.00 F</td>
</tr>
<tr>
<td>Flash Pt:</td>
<td>69.00 F Method Used: TAG Closed Cup</td>
</tr>
<tr>
<td>Explosive Limits:</td>
<td>LEL: 0.9 UEL: 6.7</td>
</tr>
<tr>
<td>Specific Gravity (Water = 1):</td>
<td>0.76</td>
</tr>
<tr>
<td>Bulk density:</td>
<td>6.34 LB/GA</td>
</tr>
<tr>
<td>Vapor Pressure (vs. Air or mm Hg):</td>
<td>11 MM HG at 20.0 C</td>
</tr>
<tr>
<td>Vapor Density (vs. Air = 1):</td>
<td>4 Air = 1</td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td>No data.</td>
</tr>
<tr>
<td>Solubility in Water:</td>
<td>&lt; 0.1% w/w</td>
</tr>
<tr>
<td>Percent Volatile:</td>
<td>99.999 % by weight.</td>
</tr>
<tr>
<td>VOC / Volume:</td>
<td>762.0000 G/L</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.</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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicological Information:</td>
<td>Acute Toxicity:</td>
</tr>
<tr>
<td></td>
<td>In animal studies utilizing mineral spirits containing up to 22% aromatics indicated that the acute central nervous system effects are reversible. Based on existing animal studies, the potential for persistent effects is not clear.</td>
</tr>
<tr>
<td>Irritation or Corrosion:</td>
<td>Skin: Primary dermal irritation studies (four hour exposure) in rabbits utilizing mineral spirits containing less than 2% aromatics resulted in slight to moderate skin irritation. In humans, mineral spirits have produced slight to moderate skin irritation particularly with evaporation from the skin is prevented.</td>
</tr>
<tr>
<td></td>
<td>Respiratory: Animal studies have demonstrated that mineral spirits produced mild respiratory tract irritation at elevated concentrations. Also, sensory respiratory tract irritation was evident by reduced breathing rates in the test animals in certain studies.</td>
</tr>
<tr>
<td>Chronic Toxicological Effects:</td>
<td>The National Toxicology Program (NTP) conducted two-year carcinogenicity studies in rats and mice with Stoddard Solvent IIC (less than 2% aromatics). The studies indicated that there was some evidence of carcinogenic activity in male rats (adrenal medulla neoplasms and renal tubule adenoma) but no evidence of carcinogenic activity in female</td>
</tr>
</tbody>
</table>
rats. Further, there was equivocal evidence of carcinogenic activity in female mice (hepatocellular adenoma) but no evidence of carcinogenic activity in male mice. A low carcinogenic potential is suggested by a lack of genotoxic potential identified in in vivo and in vitro genetic toxicity tests (with and without metabolic activation).

<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>64742-49-0</td>
<td>Hydrotreated light naphtha</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 local, state, and federal regulations.

14. TRANSPORT INFORMATION

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Paint related material [including paint thinning, drying, removing, or reducing compound]

DOT Hazard Class: 3 FLAMMABLE LIQUID
UN/NA Number: UN1263 Packing Group: II

Additional Transport Information: 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

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

<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>64742-49-0</td>
<td>Hydrotreated light naphtha</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections:

- Acute (immediate) Health Hazard: Yes
- Chronic (delayed) Health Hazard: Yes
- Fire Hazard: Yes
- Sudden Release of Pressure Hazard: Yes
- Reactive Hazard: Yes

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Hazardous Components (Chemical Name)</th>
<th>Other US EPA or State Lists</th>
</tr>
</thead>
<tbody>
<tr>
<td>64742-49-0</td>
<td>Hydrotreated light naphtha</td>
<td>CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No</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: 01/04/2016
Preparer Name: W.M. Barr EHS Department (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.