MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME   Marvel Mystery Oil


CHEMICAL FAMILY   Petroleum Distillates

CHEMICAL NAME   Complex Mixture of Hydrocarbons

FORMULA   Mixture

MANUFACTURER   EMERGENCY TELEPHONE NUMBERS

Marvel Oil Company, Inc    Transportation: CHEMTREC: 800-424-9300
625 Willowbrook Centre Parkway   Medical: ROCKY MTN POISON CTR: 800-332-3073
Willowbrook, IL 60527    Phone: 630-455-3866    Fax: 630-455-3868

2. POSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>CAS NUMBER</th>
<th>CONCENTRATION (wt %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphthenic Hydrocarbons</td>
<td>64742-52-5</td>
<td>70 – 80</td>
</tr>
<tr>
<td>Mineral Spirits</td>
<td>08052-41-3</td>
<td>20 – 30</td>
</tr>
<tr>
<td>Chlorinated Hydrocarbons</td>
<td>00095-50-1</td>
<td>0 – 1</td>
</tr>
</tbody>
</table>

EXPOSURE LIMITS 8 hrs. TWA(ppm)

<table>
<thead>
<tr>
<th></th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphthenic Hydrocarbons</td>
<td>5 as oil mist</td>
<td>5 as oil mist</td>
</tr>
<tr>
<td>Mineral Spirits</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Chlorinated Hydrocarbons</td>
<td>25</td>
<td>25</td>
</tr>
</tbody>
</table>

3. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

INHALATION: Can cause nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness and even asphyxiation.

INGESTION: Can cause gastrointestinal irritation, nausea, vomiting and diarrhea. Aspiration into lungs can cause pneumonitis which can be fatal.

SKIN CONTACT: Prolonged or repeated contact can cause moderated irritation, defatting or dermatitis.
4. **FIRST AID MEASURES**

**EYE:** Flush with large amounts of water, lifting upper and lower eyelids occasionally. Get medical attention.

**SKIN:** Thoroughly wash exposed area with soap and water. Remove contaminated clothing. Launder before re-use.

**INHALATION:** Remove person to fresh air. If breathing difficult, administer oxygen. If breathing has stopped, give artificial respiration. Keep person warm and quiet. Call a physician.

**INGESTION:** Do not induce vomiting. Keep person quiet and warm. Get medical attention. Aspiration of material into lungs can cause chemical pneumonitis which can be fatal.

5. **FIRE FIGHTING MEASURES**

**FLASH POINT:** 128 ° F (53 ° C) TCC

**EXTINGUISHING MEDIA:** Carbon dioxide, dry chemical, foam.

**SPECIAL FIRE FIGHTING PROCEDURES:** Wear self-contained breathing apparatus with full facepiece operated with positive pressure-demand when fighting large fires.

6. **ACCIDENTIAL RELEASE MEASURES**

**SPILL OR LEAK PROCEDURES:** Ventilate area. Remove sources of ignition. Prevent entry into sewers and waterways. Pick up free liquid for recycle and/or disposal. Absorb small amounts on inert material for disposal.

7. **HANDLING AND STORAGE**

**STORAGE TEMPERATURE (MIN./MAX.):** -40 ° F (-40 ° C)/ 120 ° F (49 C)

**SHELF LIFE:** 3 years minimum when the original container is kept tightly closed and properly stored.

**SPECIAL SENSITIVITY:** None.

**HANDLING AND STORAGE PRECAUTIONS:** Empty containers may be dangerous since fumes may still exist. Observe precautions given for this product as stated in this document.

8. **EXPOSURE CONTROLS/PERSONAL PROTECTION**

**EYE PROTECTION REQUIREMENTS:** Splash goggles.

**SKIN PROTECTION REQUIREMENTS:** Wear chemically resistant gloves.

**RESPIRATOR/VENTILATION REQUIREMENTS:** Provide sufficient ventilation to avoid exposure levels above the established TLV’s.

**EXPOSURE LIMITS:** Not established for product as whole.

<table>
<thead>
<tr>
<th>Substance</th>
<th>NIOSH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral Spirits</td>
<td>100 ppm TWA</td>
<td>5 mg/m3</td>
</tr>
<tr>
<td>Oil Mist</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
9. **PHYSICAL AND CHEMICAL PROPERTIES**

- **PHYSICAL FORM:** Thin liquid
- **COLOR:** Red
- **ODOR:** Wintergreen
- **BOILING POINT:** Not determined
- **MELT / FREEZE POINT:** -60 °F (-51 °C)
- **PH:** Not applicable
- **SOLUBILITY IN WATER:** Insoluble
- **SPECIFIC GRAVITY:** 0.876 @ 60 °F (15.6 °C)
- **% VOLATILE BY WEIGHT:** 25%
- **VAPOR PRESSURE:** Not determined
- **VAPOR DENSITY:** Not determined

10. **REACTIVITY**

- **STABILITY:** Stable
- **HAZARDOUS POLYMERIZATION:** Will not occur.
- **INCOMPATIBILITIES:** Strong oxidizing agents.
- **DECOMPOSITION PRODUCTS:** Carbon monoxide, carbon dioxide and hydrocarbons.

11. **TOXICOLOGICAL INFORMATION**

- **ACUTE INHALATION:** Aspiration into lungs can cause pneumonitis which can be fatal.
- **CHRONIC INHALATION:** Not determined.
- **ACUTE SKIN CONTACT:** Prolonged or repeated contact can cause moderate irritation, defatting or dermatitis.
- **CHRONIC SKIN CONTACT:** Not determined.
- **ACUTE EYE CONTACT:** Can cause severe irritation, redness, tearing or blurred vision.

12. **ECOLOGICAL INFORMATION**

No data available.

13. **DISPOSAL CONSIDERATIONS**

Ignitable hazardous waste, EPA Hazardous Waste Number D001

- **WASTE DISPOSAL METHOD:** Dispose of product in accordance with all local, state and federal laws and regulations.
14. TRANSPORT INFORMATION

DOT INFORMATION:

PROPER SHIPPING NAME: Non Bulk Not regulated
Bulk Petroleum distillates, n.o.s.

TECHNICAL SHIPPING NAME: Fuel and oil additive

HAZARD CLASS: Non Bulk ORM-D
Bulk Class 3

UN NUMBER: UN 1268

PRODUCT RQ (lbs): None

LABEL: Non Bulk ORM-D
Bulk Flammable Liquid

PLACARD: Non Bulk None
Bulk Flammable Liquid

FREIGHT CLASS BULK: PG III

FREIGHT CLASS PACKAGE: None

PRODUCT LABEL: None

15. REGULATORY INFORMATION

TSCA STATUS: All ingredients listed.

CERCLA REPORTABLE QUANTITY: None

SARA TITLE III:

SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES: None

SECTION 311/312 HAZARD CATEGORIES

Acute Health Yes

Chronic Health Yes

Fire Yes

Reactive No

Sudden Release of Pressure No

SECTION 313

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CAS NUMBER</th>
<th>CONCENTRATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ortho-dichlorobenzene</td>
<td>00095-50-1</td>
<td>0 – 0.25 %</td>
</tr>
</tbody>
</table>

RCRA STATUS: If discarded in its purchased form, this product would be an ignitable waste with an EPA Hazardous Waste Number of D001. However, under RCRA, it is the responsibility of the product
user to determine at the time of disposal, whether a material containing the product should be classified as a hazardous waste. (40CFR261.20-24)

**CANADIAN STATUS:** All materials contained in this product are listed on the Canadian Domestic Substances List.

**EUROPEAN UNION:** All materials contained in this product are listed on EINECS.

**STATE REGULATORY INFORMATION**

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

<table>
<thead>
<tr>
<th>COMPONENT/ CAS NUMBER</th>
<th>CONCENTRATION</th>
<th>STATE CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>p-dichlorobenzene</td>
<td>less than 150 ppm</td>
<td>CA</td>
</tr>
</tbody>
</table>

CA = Material known to the state of California to cause cancer and/or birth defects. (California Proposition 65).

16. **OTHER INFORMATION**

**HMIS CLASSIFICATION**

<table>
<thead>
<tr>
<th>Health</th>
<th>2</th>
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</thead>
<tbody>
<tr>
<td>Flammability</td>
<td>2</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
</tr>
<tr>
<td>PPI</td>
<td>B</td>
</tr>
</tbody>
</table>

**NFPA RATING**

<table>
<thead>
<tr>
<th>Health</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire</td>
<td>2</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
</tr>
<tr>
<td>Special</td>
<td>None</td>
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</tbody>
</table>

**REASON FOR ISSUE**

Revise address, phone and fax numbers

**PREPARED BY**

Richard P. Kelly

**TITLE**

Technical Manager

**APPROVAL DATE**

June 29, 2006

**SUPERCEDES DATE**

September 1, 2005

**REVISION NUMBER**

#07

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