SECTION 1) Chemical Product and Supplier’s Identification

Product ID : 574047
Product Name : HEAVY DUTY ROCKDRILL 46 BLEND
Revision Date : 10/06/2014
Manufacturer’s Name : Martin Lubricants
Address : 484 East 6th Street Smackover, AR, US, 71762
Emergency Phone : CHEMTREC: 1-800-424-9300
Information Phone : 1-870-881-8700
Date Printed : 10/06/2014

Product/Recommended Uses: Lubricating Oil

SECTION 2) Hazards Identification

Classification:
Carcinogenicity - Category 1

Pictograms:

Signal Word:
Danger.

Hazard Statements:
May cause cancer.

Precautionary Statements - General:
Read label before use.
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.

Precautionary Statements - Prevention:
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements - Response:
If exposed or concerned: Get medical advice/attention.

Precautionary Statements - Storage:
Store locked up.

Precautionary Statements - Disposal:
Dispose of contents/container to disposal recycling center.
Under RCRA it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state and local laws.
### SECTION 3) Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>CAS</th>
<th>Chemical Name</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>0064742-52-5</td>
<td>HYDROTREATED (MILD) HEAVY NAPHTHENIC</td>
<td>53% - 72%</td>
</tr>
<tr>
<td>0064742-53-6</td>
<td>HYDROTREATED LIGHT NAPHTENIC DISTILLATE</td>
<td>30% - 41%</td>
</tr>
<tr>
<td>0068937-96-2</td>
<td>DI-TERT-BUTYL POLYSULFIDE</td>
<td>0.1% - 2.1%</td>
</tr>
</tbody>
</table>

### SECTION 4) First-aid Measures

**Inhalation:**
Remove source of exposure or move person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. IF exposed or concerned: Get medical advice/attention.

**Eye Contact:**
If irritation occurs, cautiously rinse eyes with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelids open. If eye irritation persists: Get medical advice/attention.

**Skin Contact:**
Rinse/wash with lukewarm, gently flowing water and mild soap for 5 minutes or until product is removed. If skin irritation occurs or you feel unwell: Get medical advice/attention.

If exposed or concerned: Get medical advice/attention.

**Ingestion:**
Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. If vomiting occurs naturally, lie on your side, in the recovery position.

If exposed or concerned: Get medical advice/attention.

### SECTION 5) Fire-fighting Measures

**Suitable Extinguishing Media:**
- Dry chemical, foam, carbon dioxide water spray or fog is recommended. Water spray is recommended to cool or protect exposed materials or structures. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces.
- Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam. Sand or earth may be used for small fires only.

**Unsuitable Extinguishing Media:**
- Do not use water in a jet.

**Specific Hazards in Case of Fire:**
- Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke), carbon monoxide, unidentified organic and inorganic compounds.
- Oxides of C, S and N. Additional byproducts include hydrogen sulfide, alkyl mercaptan and other sulfides.
- Dense smoke may be generated while burning. Toxic fumes, gases or vapors may evolve on burning. Heavy flammable vapors may settle along ground level and low spots to create an invisible fire hazard. The vapors may extend to sources of ignition and flash back.

**Fire-fighting Procedures:**
- Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water spray may be useful in minimizing or dispersing vapors and to protect personnel.

**Special protective actions:**
- Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.

### SECTION 6) Accidental Release Measures

**Emergency Procedure:**
Immediately turn off or isolate any source of ignition. Keep unnecessary people away; isolate hazard area and deny entry. Do not touch or walk through spilled material. Clean up immediately. Prevent from spreading by making a barrier with sand, earth or other containment material. Collect with absorbent, non-combustible material into suitable containers. Transfer to a container for disposal. Local authorities should be advised if significant spillages cannot be contained.

**Recommended equipment:**
- Positive pressure, full-facepiece self-contained breathing apparatus (SCBA), or positive pressure supplied air respirator with escape SCBA (NIOSH approved).
Personal Precautions:
Avoid breathing vapor. Avoid contact with skin, eye or clothing. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

Environmental Precautions:
Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.

SECTION 7) Handling and Storage

General:
Wash hands after use.
Do not get in eyes, on skin or on clothing.
Do not breathe vapors or mists.
Use good personal hygiene practices.
Eating, drinking and smoking in work areas is prohibited.
Remove contaminated clothing and protective equipment before entering eating areas.
Properly dispose of any contaminated rags or cleaning materials in order to prevent fires.

Ventilation Requirements:
Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source.

Storage Room Requirements:
Keep container(s) tightly closed and properly labeled. Store in cool, dry, well-ventilated areas away from heat, direct sunlight and strong oxidizers. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty container retain residue and may be dangerous.

SECTION 8) Exposure Controls/Personal Protection

Eye protection:
Chemical goggles, safety glasses with side shields or vented/splash proof goggles. Contact lenses may absorb irritants. Particles may adhere to lenses and cause corneal damage.

Respiratory protection:
If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for combined particulate/organic gases and vapours.

Skin protection:
Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber is recommended to avoid skin sensitization. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>OSHA TWA (ppm)</th>
<th>OSHA TWA (mg/m3)</th>
<th>OSHA STEL (ppm)</th>
<th>OSHA STEL (mg/m3)</th>
<th>OSHA-Tables-Z1,2,3</th>
<th>OSHA Carcinogen</th>
<th>OSHA Skin designation</th>
<th>NIOSH TWA (ppm)</th>
<th>NIOSH TWA (mg/m3)</th>
<th>NIOSH STEL (ppm)</th>
<th>NIOSH STEL (mg/m3)</th>
<th>NIOSH Carcinogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>HYDROTREATED HEAVY NAPHTHENIC DISTILLATE</td>
<td>500</td>
<td>2000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HYDROTREATED LIGHT NAPHTHENIC DISTILLATE</td>
<td>500</td>
<td>2000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TWA (ppm)</th>
<th>ACGIH TWA (mg/m3)</th>
<th>ACGIH STEL (ppm)</th>
<th>ACGIH STEL (mg/m3)</th>
<th>ACGIH Carcinogen</th>
<th>ACGIH Notations</th>
<th>ACGIH TLV Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>HYDROTREATED HEAVY NAPHTHENIC DISTILLATE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HYDROTREATED LIGHT NAPHTHENIC DISTILLATE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SECTION 9) Physical and Chemical Properties

Physical Properties

- **Density [lb/gal]**: 7.648
- **% Solids By Weight**: 28.977%
- **Density VOC**: 7.496
- **% VOC**: 98.008%
- **VOC Actual [lb/gal]**: 7.496
- **VOC Actual [gal]**: 898.246
- **Specific Gravity**: 0.916
- **VOC Regulatory [lb/gal]**: 7.496
- **VOC Regulatory [gal]**: 898.255

- **Appearance**: Amber, clear fluid
- **Odor Threshold**: N.A.
- **Odor Description**: Mild petroleum hydrocarbon
- **pH**: N.A.
- **Water Solubility**: Negligible
- **Flammability**: Flash Point at or above 200 °F
- **Flash Point Symbol**: N.A.
- **Flash Point**: 184°C (363°F)
- **Viscosity**: 48.36 cSt at 40°C (104°F) or 6.25 cSt at 100°C (212°F)
- **Lower Explosion Level**: N.A.
- **Upper Explosion Level**: N.A.
- **Vapor Pressure**: Negligible at STP
- **Vapor Density**: >1 at STP
- **Freezing Point**: N.A.
- **Melting Point**: N.A.
- **Low Boiling Point**: Not determined. Expected to be >260°C (500°F)
- **High Boiling Point**: N.A.
- **Auto Ignition Temp**: N.A.
- **Decomposition Pt**: N.A.
- **Evaporation Rate**: Negligible at STP
- **Coefficient Water/Oil**: N.A.

SECTION 10) Stability and Reactivity

- **Stability**: Stable
- **Hazardous Polymerization**: Will not occur.
- **Conditions to Avoid**: Avoid direct sunlight, extremes of temperatures and contact with incompatible materials. Avoid high temperatures and product contamination.
- **Incompatible Materials**: Strong oxidizing agents.
- **Hazardous Decomposition Products**: Smoke, carbon monoxide and dioxide and other aldehydes of incomplete combustion. Oxides of C, N and S. Hydrogen sulfide and alkyl mercaptans and other sulfides may be released.

SECTION 11) Toxicological Information

- **Skin Corrosion/Irritation**: No data available.
Serious Eye Damage/Irritation:
Avoid prolonged contact with the eyes, which may cause mild eye discomfort, tearing, or blurring of vision.

Respiratory or Skin Sensitization:
Prolonged or repeated contact may lead to an allergic skin sensitzation in some people and dematitis (dryness, chapping and reddening of skin).

Germ Cell Mutagenicity:
No data available.

Carcinogenicity:
May cause cancer.

Reproductive Toxicity:
No data available.

Specific Target Organ Toxicity - Single Exposure:
No data available.

Specific Target Organ Toxicity - Repeated Exposure:
No data available.

Aspiration Hazard:
Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.

Acute Toxicity:
If inhalation: Overexposure by inhalation of hot material may cause nonspecific discomfort, such as nausea, headache or weakness. Caution should be taken to prevent forming aerosol or misting of this product without proper respiratory protection.

0064742-52-5 HYDROTREATED (MILD) HEAVY NAPHTHENIC

LD50 (Rodent - rat, Oral): >5000 mg/kg, Toxic effects: Details of toxic effects not reported other than lethal dose value.
LD50 (Rodent - rabbit, Administration onto the skin): >2000 mg/kg, Toxic effects: Details of toxic effects not reported other than lethal dose value.

0064742-53-6 HYDROTREATED LIGHT NAPHTHENIC DISTILLATE

LD50 (Rodent - rat, Oral): >5000 mg/kg, Toxic effects: Behavioral - somnolence (general depressed activity).
LD50 (Rodent - rabbit, Administration onto the skin): >2000 mg/kg, Toxic effects: Skin and Appendages - primary irritation (after topical exposure)

SECTION 12) Ecological Information

Toxicity:
No data available.

Persistence and Degradability:
No data available.

Other Adverse Effects:
No data available.

Bio-accumulative Potential
0064742-52-5 MINERAL OIL, PETROLEUM DISTILLATES, HYDROTREATED (MILD) HEAVY NAPHTHENIC
Contains constituents with the potential to bioaccumulate.

Mobility in Soil
0064742-52-5 MINERAL OIL, PETROLEUM DISTILLATES, HYDROTREATED (MILD) HEAVY NAPHTHENIC
Liquid under most environmental conditions. Floats on water. If it enters soil, it will adsorb to soil particles and will not be mobile.

SECTION 13) Disposal Considerations

Waste Disposal:
Under RCRA it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state and local laws.
Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.
SECTION 14) Transport Information

U.S. DOT Information:
- Bulk Shipping Description: Does not apply to bulk oil shipping.
- Non-Bulk Shipping Description: Does not apply to non-bulk oil shipping.
- Identification Number: Not applicable.
- Hazard Classification: Not applicable.
- Other: See 49 CFR for additional requirements for descriptions, allowed modes of transport and packaging. For more information concerning spills during transport, consult latest DOT Emergency Response Guidebook for Hazardous Materials Incidents, DOT P 5800.3.

IMDG Information:
- This material is not classified as dangerous under IMDG regulations.

IATA Information:
- This material is not classified as dangerous under IATA regulations.

SECTION 15) Regulatory Information

<table>
<thead>
<tr>
<th>CAS</th>
<th>Chemical Name</th>
<th>% By Weight</th>
<th>Regulation List</th>
</tr>
</thead>
<tbody>
<tr>
<td>0064742-52-5</td>
<td>HYDROTREATED HEAVY NAPHTHENIC DISTILLATE</td>
<td>53% - 72%</td>
<td>SARA312,TSCA,OSHA</td>
</tr>
<tr>
<td>0064742-53-6</td>
<td>HYDROTREATED LIGHT NAPHTHENIC DISTILLATE</td>
<td>30% - 41%</td>
<td>SARA312,TSCA,OSHA</td>
</tr>
<tr>
<td>0068937-96-2</td>
<td>Polysulfides, di-tert-Bu</td>
<td>0.1% - 2.1%</td>
<td>SARA312,TSCA</td>
</tr>
</tbody>
</table>

SECTION 16) Other Information Including Information on Preparation and Revision of the SDS

Glossary:
ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian TDG- Canadian Transportation of Dangerous Goods; CAS- Chemical Abstract Service; Chemtrec- Chemical Transportation Emergency Center (US); CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration; EH40 (UK)- HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA- Emergency Planning and Community Right-To-Know Act; ESL- Effects screening levels; HMIS- Hazardous Material Information Service; LC- Lethal Concentration; LD- Lethal Dose; NFPA- National Fire Protection Association; OEL- Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration; US Department of Labor; PEL- Permissible Exposure Limit; SARA (Title III)- Superfund Amendments and Reauthorization Act; SARA 313- Superfund Amendments and Reauthorization Act, Section 313; SCBA- Self-Contained Breathing Apparatus; STEL- Short Term Exposure Limit; TCEQ- Texas Commission on Environmental Quality; TLV- Threshold Limit Value; TSCA- Toxic Substances Control Act Public Law 94-469; TWA- Time Weighted Value; US DOT- US Department of Transportation; WHMIS- Workplace Hazardous Materials Information System.

HMIS

HMIS

CHRONIC

DISCLAIMER
Information provided in this Safety Data Sheet is considered accurate and reliable based on information issued from internal and outside sources to the best of Martin Operating Partnership's knowledge; however, Martin Operating Partnership makes no representations, guarantees or warranties, expressed or implied, of merchantability or fitness for the particular purpose, regarding the accuracy of such information or the result to be obtained from the use thereof or as to the sufficiency of information herein presented. Martin Operating Partnership assumes no responsibility for injury to recipient or to third persons or for any damage to any property and recipient assumes all such risks.

This product may be formulated in part with components purchased from other companies. In many instances, especially when proprietary or trade secret materials are used, Martin Resources; A Division of Martin Operating Partnership L.P., must rely upon information provided by the material manufacturers or distributors.