I. Basic Information:

Manufacturer: RADIATOR SPECIALTY COMPANY
Address: 600 RADIATOR ROAD
City, ST, Zip: INDIAN TRAIL, NC 28079
Country:

Product Name: HYDRAULIC JACK OIL
MSDS No.: M3332

Issue Date: 04/23/2008
Supersedes Date: 11/01/2005

Contact: Robert Geer
Information Telephone Number: 704-684-1811
Emergency Contact: Rocky Mountain Poison Control Center
Emergency Telephone Number: 303-623-5716
Emergency Restrictions:

II. Hazards Identification:

Emergency Overview
Harmful if Swallowed. Eye and Skin irritant

OSHA Regulatory Status
While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product.

Potential Health Effects

Route(s) of Entry:
Absorption, Inhalation, and Ingestion.

Health Hazards (Acute and Chronic):
See signs and symptoms below

Signs and Symptoms:
Eye Contact: May cause slight irritation
Skin Contact: May cause slight irritation
Inhalation: If oil mist is inhaled for prolonged periods, may cause irritation.
Ingestion: Can be Harmful or fatal if swallowed.

Medical Conditions Generally Aggravated by Exposure:
None known

Other Health Warnings:
Vomiting and subsequent aspiration into the lungs may lead to chemical pneumonia and pulmonary edema which is a potentially fatal condition.

Potential Environmental Effects
Not Available

III. Composition/Information on Ingredients:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>% Range</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphthenic Petroleum</td>
<td>64742-52-5</td>
<td>60.0 - 100.0</td>
<td>Proprietary</td>
</tr>
<tr>
<td>Distillate</td>
<td></td>
<td></td>
<td>&lt;0.3</td>
</tr>
</tbody>
</table>

Zinc Compounds

IV. First Aid Measures:

Emergency and First Aid Procedures:

Eye Contact: Flush eyes with clean water for 15 minutes while lifting eyelids and get prompt medical attention.
Skin Contact: Wash with soap and water thoroughly. If adverse effects persist, get prompt medical attention. Launder contaminated clothing before reuse.
Inhalation: Remove to fresh air. If breathing becomes difficult get prompt medical attention.
Ingestion: DO NOT INDUCE VOMITING! Call Poison Control Center, physician, or hospital emergency room immediately.
**Product Name:** HYDRAULIC JACK OIL  
**MSDS No.:** M3332

**Note to Physicians:**
N/D

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**V. Fire Fighting Measures:**

**Suitable Extinguishing Media:**
Water Fog, Foam, Carbon Dioxide, Dry Chemical

**Unsuitable Extinguishing Media:**
Do not use forced water stream as this could cause the fire to spread.

**Products of Combustion:**
Normal products of combustion, smoke, carbon dioxide, carbon monoxide, phosphorus, nitrogen and sulfur oxides.

**Protection of Firefighters:**
Wear self-contained positive pressure breathing apparatus and protective clothes. Use shield to protect from rupturing and venting containers. At elevated temperatures containers may vent, rupture or burst, even violently

**VI. Accidental Release Measures:**

**Personal Precautions:**
Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.

**Environmental Precautions:**
Prevent run-off to sewers, streams, or other bodies of water. If run-off occurs, notify proper authorities as required that a spill has occurred. Run off to sewer may create fire or explosion hazard.

**Methods for Containment:**
Dike or contain spill and absorb with inert materials (sand, sawdust, absorbent sweeping compounds, rags, etc).

**Methods for Cleanup:**
Using a non-metallic scoop, place contaminated material into an approved chemical waste container. Where possible, vacuum spilled liquid using an vacuum to recover material.

**Other Information:**
Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Dike or contain spill and absorb with inert materials (sand, sawdust, absorbent sweeping compounds, rags, etc). Place contaminated material into an approved chemical waste container. Where possible, vacuum spilled liquid using an explosion proof vacuum to recover material. Prevent run-off to sewers, streams, or other bodies of water. If run-off occurs, notify proper authorities as required that a spill has occured.

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**VII. Handling and Storage:**

**Handling Precautions:**
Handling: Use with adequate ventilation and proper protective equipment. Do not use or store near fire, sparks, or flame. Store containers below 120°F.

**Storage Precautions:**
Keep container closed tightly when not in use. Store in a cool place away from oxidizing agents.

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**VIII. Exposure Controls/Personal Protection:**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>Other Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc Compounds</td>
<td>N/E</td>
<td>N/E</td>
<td>Not Available</td>
</tr>
<tr>
<td>Naphthenic Petroleum Distillate</td>
<td>5 mg/m3</td>
<td>5 mg/m3</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

**Engineering Controls:**
See above applicable exposure limits. Maintain adequate ventilation. Avoid breathing mist. In restricted areas, use approved chemical filters designed to remove mist. In confined areas, use approved air line type respirator or hood. A self-contained breathing apparatus is required for vapor or mist concentrations above TLV limit.

**Personal Protective Equipment:**
For prolonged exposure wear protective safety glasses, gloves, and apron.
**MSDS - Material Safety Data Sheet**

**Product Name:** HYDRAULIC JACK OIL

**MSDS No.:** M3332

### IX. Physical and Chemical Properties:

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point</td>
<td>465°F</td>
</tr>
<tr>
<td>Boiling Range</td>
<td>Not Available</td>
</tr>
<tr>
<td>Solubility In Water</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Flash Point</td>
<td>320°F</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not Available</td>
</tr>
<tr>
<td>Vapor Density (AIR = 1)</td>
<td>4.3</td>
</tr>
<tr>
<td>pH Range</td>
<td>N/A</td>
</tr>
<tr>
<td>Decomposition Temp</td>
<td>Not Available</td>
</tr>
<tr>
<td>Lower Explosive Limit</td>
<td>N/D</td>
</tr>
<tr>
<td>Specific Gravity (H2O = 1)</td>
<td>0.90</td>
</tr>
<tr>
<td>Melting Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>Not Available</td>
</tr>
<tr>
<td>Evaporation Rate (Butyl Acetate = 1)</td>
<td>Slow</td>
</tr>
<tr>
<td>Flash Point Method</td>
<td>COC</td>
</tr>
<tr>
<td>Appearance and Odor</td>
<td>Clear amber oil with petroleum odor</td>
</tr>
<tr>
<td>Vapor Pressure (mm Hg.)</td>
<td>0.008</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not Available</td>
</tr>
<tr>
<td>Auto-Ignition Temp</td>
<td>Not Available</td>
</tr>
<tr>
<td>Upper Explosive Limit</td>
<td>N/D</td>
</tr>
<tr>
<td>Stability</td>
<td>Stable</td>
</tr>
<tr>
<td>Conditions to Avoid</td>
<td>See incompatible materials below</td>
</tr>
</tbody>
</table>

#### Incompatible Materials:

Avoid contact with strong oxidizing agents

#### Hazardous Decomposition Products:

Normal products of combustion, smoke, carbon dioxide, carbon monoxide, phosphorus, nitrogen and sulfur oxides.

#### Possibility of Hazardous Reactions:

Will not occur

### X. Stability and Reactivity:

**Stability:**

Stable

**Conditions to Avoid:**

See incompatible materials below

### XI. Toxicological Information:

N/D

### XII. Ecological Information:

N/D

### XIII. Disposal Considerations:

DISPOSAL: This container may be recycled in a recycling centers when empty. Before offering for recycling, empty the can or bottle by using the product according to the label. If recycling is not available, wrap the container and discard in the trash. Dispose of unused product in accordance with all local, state government and federal laws and regulations

### XIV. Transport Information:

**Shipping Name:** Not Available

**DOT Hazard Class:** Not Available

**UN/NA#:** Not Available

**DOT Subsidiary Hazard Class:** Not Available

**Packing Group:** Not Available

**Transportation Information:**
Product Name: HYDRAULIC JACK OIL  

MSDS No.: M3332  
DOT Shipping Name: Not DOT regulated.  
DOT Hazard Class: None  

The DOT description is provided to assist in the proper shipping classification of this product and may not be suitable for international and air shipping purposes.  

ICAO/IATA (US)  
Not regulated  

International:  
ICAO/IATA  
Not regulated  

IMDG  
Not regulated  

XV. Regulatory Information:  

See Section 2 for SARA Reportable Chemicals.  

USA TSCA: All components of this material are listed on the US TSCA Inventory.  

XVI. Other Information:  

<table>
<thead>
<tr>
<th>Chemical State:</th>
<th>Liquid</th>
<th>Gas</th>
<th>Solid</th>
<th>Chemical Type:</th>
<th>Pure</th>
<th>Mixture</th>
<th>X</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard Category:</td>
<td>Acute</td>
<td>Chronic</td>
<td>Pressure</td>
<td>Fire</td>
<td>Reactive</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Additional Manufacturer Warnings:  

Do not used in confined area without proper ventilation. Contact lenses may cause further damage in case of splash into eye. KEEP AWAY FROM CHILDREN AND ANIMALS!  

N/E: Not Established  
N/D: Not Determined  
N/A: Not Applicable  
N/AV: Not Available  

Additional Product Information:  

While Radiator Specialty Company believes this data is accurate as of the revision date, we make no warranty with respect to the data and we expressly disclaim all liability for reliance thereon. The data is offered solely for information, investigation, and verification. Various government agencies may have specific regulations regarding the transportation, handling, storage, use, or disposal of this product which may not be covered by this MSDS. The user is responsible for full compliance.