Section 1. Chemical Product and Company Identification

<table>
<thead>
<tr>
<th>Product name</th>
<th>ZEP 45 NC AEROSOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product use</td>
<td>Aerosol Lubricant &amp; Penetrant</td>
</tr>
<tr>
<td>Product code</td>
<td>0149</td>
</tr>
<tr>
<td>Date of issue</td>
<td>07/17/08</td>
</tr>
<tr>
<td>Supersedes</td>
<td>02/15/06</td>
</tr>
</tbody>
</table>

Emergency Telephone Numbers

For MSDS Information:
Compliance Services 1-877-I-BUY-ZEP (428-9937)

For Medical Emergency
INFOTRAC: (877) 541-2016 Toll Free - All Calls Recorded

For Transportation Emergency
CHEMTREC: (800) 424-9300 - All Calls Recorded
In the District of Columbia (202) 483-7616

Prepared By
Compliance Services
1420 Seaboard Industrial Blvd.
Atlanta, GA  30318

Section 2. Hazards Identification

Emergency overview

DANGER!
FLAMMABLE. VAPOR HARMFUL. CAUSES EYE AND SKIN IRRITATION.

CONTENTS UNDER PRESSURE.

NOTE: MSDS data pertains to the product as delivered in the original shipping container(s). Risk of adverse effects are lessened by following all prescribed safety precautions, including the use of proper personal protective equipment.

Acute Effects

<table>
<thead>
<tr>
<th>Routes of Entry</th>
<th>Dermal contact. Eye contact. Inhalation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyes</td>
<td>Causes eye irritation. Inflammation of the eye is characterized by redness, watering and itching.</td>
</tr>
<tr>
<td>Skin</td>
<td>May cause skin irritation. May be harmful if absorbed through the skin. Skin inflammation is characterized by itching, scaling, or reddening.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Avoid breathing vapors, spray or mists. Over-exposure by inhalation may cause respiratory irritation. Can cause central nervous system (CNS) depression.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Harmful if swallowed. Aspiration hazard if swallowed. Can enter lungs and cause damage.</td>
</tr>
</tbody>
</table>

Chronic effects

Prolonged or repeated contact may dry skin and cause irritation. Repeated or prolonged exposure to the substance can produce target organs damage. Contains material which may cause damage to the following organs: blood, kidneys, lungs, the nervous system, liver, heart, spleen, central nervous system (CNS), ears, eye, lens or cornea, testes.

Ingredients: Not listed as carcinogen by OSHA, NTP or IARC.

Additional Information: See Toxicological Information (Section 11)

Section 3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIGHT AROMATIC NAPHTHA; aromatic hydrocarbon solvent; solvent naphtha (petroleum)</td>
<td>64742-95-6</td>
</tr>
<tr>
<td>LIGHT ALIPHATIC NAPHTHA; solvent naphtha (petroleum), medium aliphatics; formerly: light aromatic naphtha</td>
<td>64742-88-7</td>
</tr>
<tr>
<td>PARAFFIN OIL; blend of heavy and light naphthenic petroleum distillate</td>
<td>64742-52-5</td>
</tr>
<tr>
<td>Proprietary Blended Salts of Oxygenated and Sulfonated Hydrocarbons</td>
<td>Proprietary</td>
</tr>
<tr>
<td>ETHANOL; ethyl alcohol; grain alcohol</td>
<td>64-17-5</td>
</tr>
<tr>
<td>1,2,4-TRIMETHYLBENZENE</td>
<td>95-63-6</td>
</tr>
<tr>
<td>MINERAL SEAL OIL; mineral oil; petrolatum</td>
<td>64741-77-1</td>
</tr>
<tr>
<td>BLEND OF AMYL ACETATE; 3-METHYL BUTYL ACETATE; 2-METHYL BUTYL ACETATE</td>
<td>628-63-7; 123-92-2; 624-41-9</td>
</tr>
<tr>
<td>DIETHYLENE GLYCOL MONOBUTYL ETHER; 2-(2-butoxyethoxy)-ethanol; butyl carbitol</td>
<td>112-34-5</td>
</tr>
<tr>
<td>CARBON DIOXIDE</td>
<td>124-38-9</td>
</tr>
</tbody>
</table>
Section 4. First Aid Measures

**Eye Contact**
Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention immediately.

**Skin Contact**
Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if irritation develops.

**Inhalation**
Move exposed person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

**Ingestion**
Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. If affected person is conscious, give plenty of water to drink. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Section 5. Fire Fighting Measures

**Flash Point**
Not available.

**Flammable Limits**
Not available.

**Flammability**
FLAMMABLE. (CSMA Method)

**Fire hazard**
Flammable aerosol. Flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed.

**Fire-Fighting Procedures**
Use an extinguishing agent suitable for the surrounding fire. Cool closed containers exposed to fire with water. Fire-fighters should wear appropriate protective equipment.

Section 6. Accidental Release Measures

**Spill Clean up**
Large spills are unlikely due to packaging.

Section 7. Handling and Storage

**Handling**
Put on appropriate personal protective equipment (see section 8). Store and use away from heat, sparks, open flame or any other ignition source. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Observe label precautions. Wash contaminated clothing before reusing. Wash thoroughly after handling.

**Storage**
CONTENTS UNDER PRESSURE. Eliminate all ignition sources. Do not puncture, incinerate or store the container at temperatures above 49°C (120°F) or in direct sunlight. Keep out of the reach of children.

Section 8. Exposure Controls/Personal Protection

**Product name**
- LIGHT ALIPHATIC NAPHTHA; solvent naphtha (petroleum), medium aliphatics, formerly: light aromatic naphtha
- PARAFFIN OIL; blend of heavy and light naphthenic petroleum distillate
- Proprietary Blended Salts of Oxygenated and Sulfonated Hydrocarbons
- ETHANOL; ethyl alcohol; grain alcohol
- 1,2,4-TRIMETHYLBENZENE
- MINERAL SEAL OIL; mineral oil; petrolatum
- BLEND OF AMYL ACETATE; 3-METHYL BUTYL ACETATE; 2-METHYL BUTYL ACETATE
- DIETHYLENE GLYCOL MONOBUTYL ETHER; 2-(2-butoxyethoxy)-ethanol, butyl carbitol
- CARBON DIOXIDE

**Exposure limits**
- ACGIH TLV (United States).
- STEL: 200 ppm 8 hour(s).
- OSHA PEL (United States).
- TWA: 500 ppm 8 hour(s).
- ACGIH TLV (United States).
- TWA: 100 ppm 8 hour(s).
- OSHA PEL (United States).
- TWA: 5 mg/m³ 8 hour(s). Form: Mist
- ACGIH TLV (United States).
- TWA: 100 ppm 8 hour(s).
- OSHA PEL (United States).
- TWA: 5 mg/m³ 8 hour(s). Form: Mist
- ACGIH TLV (United States).
- TWA: 1000 ppm 8 hour(s).
- ACGIH TLV (United States).
- TWA: 25 ppm 8 hour(s).
- OSHA PEL (United States).
- TWA: 25 ppm 8 hour(s).
- OSHA PEL (United States).
- TWA: 5 mg/m³ 8 hour(s). Form: Mist
- ACGIH TLV (United States).
- TWA: 5 ppm 8 hour(s). Form: Mist
- ACGIH TLV (United States).
- TWA: 500 ppm 8 hour(s).
- STEL: 100 ppm 15 minute(s).
- ACGIH TLV (United States).
- TWA: 35 ppm 8 hour(s).
- Manufacturer (United States).
- TWA: 5000 ppm 8 hour(s).
- STEL: 30000 ppm 15 minute(s).
**Section 9. Physical and Chemical Properties**

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Liquid. [Aerosol.]</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>179.44°C (355°F)</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.86</td>
</tr>
<tr>
<td>Solubility</td>
<td>Insoluble in the following materials: cold water and hot water.</td>
</tr>
<tr>
<td>Color</td>
<td>Amber.</td>
</tr>
<tr>
<td>Odor</td>
<td>Sweetish. Solvent-like.</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>&lt;1 (water = 1)</td>
</tr>
<tr>
<td>VOC (Consumer)</td>
<td>429 (g/l). 3.58 lbs/gal (49.9%)</td>
</tr>
</tbody>
</table>

**Section 10. Stability and Reactivity**

Stability and Reactivity: The product is stable.

Incompatibility: Keep away from heat, sparks and flame. Reactive or incompatible with the following materials: oxidizing materials.

Hazardous Polymerization: Will not occur.

Hazardous Decomposition Products: carbon oxides (CO, CO₂)

**Section 11. Toxicological Information**

**Acute Toxicity**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>LD₅₀ Oral</td>
<td>Rat</td>
<td>7060 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Light Aromatic Naphtha</td>
<td>LC₅₀ Inhalation Vapor</td>
<td>Rat</td>
<td>20000 mg/m³</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LD₅₀ Oral</td>
<td>Rat</td>
<td>4700 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LC₅₀ Inhalation Vapor</td>
<td>Rat</td>
<td>3670 ppm</td>
<td>8 hours</td>
</tr>
<tr>
<td>1,2,4-Trimethylbenzene</td>
<td>LD₅₀ Oral</td>
<td>Rat</td>
<td>5000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Diethylene Glycol Monobutyl Ether</td>
<td>LD₅₀ Dermal</td>
<td>Rabbit</td>
<td>2700 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD₅₀ Oral</td>
<td>Rat</td>
<td>5660 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD₅₀ Oral</td>
<td>Mouse</td>
<td>2400 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

**Section 12. Ecological Information**

Environmental Effects: No known significant effects or critical hazards.

Aquatic Ecotoxicity: Not available.

**Section 13. Disposal Considerations**

Waste Information: Waste must be disposed of in accordance with federal, state and local environmental control regulations. Consult your local or regional authorities for additional information.

Waste Stream: Code: D001
Classification: - [Hazardous waste]
Origin: - [RCRA waste.]

**Section 14. Transport Information**

<table>
<thead>
<tr>
<th>Regulatory information</th>
<th>UN number</th>
<th>Proper shipping name</th>
<th>Classes</th>
<th>PG*</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT Classification</td>
<td>Not regulated.</td>
<td>Consumer commodity ORM-D</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMDG Class</td>
<td>Not determined.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE: DOT classification applies to most package sizes. For specific container size classifications or for size exceptions, refer to the Bill of Lading with your shipment.

PG*: Packing group
Section 15. Regulatory Information

U.S. Federal Regulations

SARA 313 toxic chemical notification and release reporting:

Product name
1,2,4-Trimethylbenzene
Diethylene Glycol Monobutyl Ether

Clean Water Act (CWA) 307: No products were found.
Clean Water Act (CWA) 311: Benzene
Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

All Components of this product are listed or exempt from listing on TSCA Inventory.

State Regulations

California Prop 65 WARNING: This product contains a chemical or chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.
Toluene, Benzene, Naphthalene

Section 16. Other Information

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

*NOTE: Hazard Determination System (HDS) ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although these ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HDS ratings are to be used with a fully implemented program to relay the meanings of this scale.