Section 1. Chemical Product and Company Identification

Product name: ZEP 40
Product use: Aerosol Cleaner
Product code: 0144
Date of issue: 07/21/08
Supersedes: 06/28/05

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

WARNING !
CAUSES EYE 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 Routes of Entry

- **Eyes**: Causes eye irritation. Inflammation of the eye is characterized by redness, watering and itching.
- **Skin**: May cause skin irritation. Product may be dermal absorbed. Skin inflammation is characterized by itching, scaling, or reddening.
- **Inhalation**: Avoid breathing vapors, spray or mists. Over-exposure by inhalation may cause respiratory irritation.
- **Ingestion**: May be harmful if swallowed. Aspiration hazard if swallowed. Can enter lungs and cause damage.

Chronic effects

- Prolonged or repeated contact may dry skin and cause irritation. Overexposure of this product by inhalation or absorption can produce central nervous system depression resulting in headache, nausea and/or dizziness. Contains material which may cause damage to the following organs: blood, kidneys, liver, upper respiratory tract, skin, eyes, central nervous system (CNS), ears.

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

Section 3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Hazard Determination System (HDS): Health, Flammability, Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHANOL; ethyl alcohol; grain alcohol</td>
<td>64-17-5 10 - 20</td>
</tr>
<tr>
<td>HYDROCARBON PROPELLANT; blend of propane &amp; isobutane</td>
<td>75-28-5; 74-98-6 5 - 15</td>
</tr>
<tr>
<td>ETHYLENE GLYCOL MONOBUTYL ETHER; 2-butoxyethanol; butyl cellosolve</td>
<td>111-76-2 1 - 5</td>
</tr>
<tr>
<td>ISOPROPYL ALCOHOL; isopropanol; 2-propanol</td>
<td>67-63-0 &lt;3</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. Get medical attention if irritation develops.
- **Inhalation**: Move exposed person to fresh air. If irritation persists, get medical attention.
- **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.
Material Safety Data Sheet

**Product Name:** ZEP 40

**Product Code:** 0144

**Flash Point:**
Closed cup: 28.3°C (82.9°F)

**Flammable Limits:**
Not available.

**Flammability:**
Non-flammable. (CSMA Method)

**Fire hazard:**
In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent 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 5. Fire Fighting Measures**

**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. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. 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. 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**

- ETHANOL; ethyl alcohol; grain alcohol
- HYDROCARBON PROPELLANT; blend of propane & isobutane
- ETHYLENE GLYCOL MONOBUTYL ETHER; 2-butoxyethanol; butyl cellosolve
- ISOPROPYL ALCOHOL; isopropanol; 2-propanol

**Exposure limits**

- ACGIH TLV / OSHA PEL (United States).
- TWA: 1000 ppm 8 hour(s).
- ACGIH TLV (United States). Notes: Propane
- TWA: 1000 ppm 8 hour(s).
- ACGIH TLV (United States).
- TWA: 20 ppm 8 hour(s).
- ACGIH TLV (United States).
- TWA: 15 ppm 8 hour(s).
- OSHA PEL (United States). Skin
- TWA: 50 ppm 8 hour(s). Form:
- ACGIH TLV (United States).
- TWA: 400 ppm 8 hour(s).
- OSHA PEL (United States).
- TWA: 400 ppm 8 hour(s).
- ACGIH/OSHA (United States).
- STEL: 400 ppm 15 minute(s).

**Personal Protective Equipment (PPE)**

- **Eyes:** Safety glasses.
- **Body:** For prolonged or repeated handling, use gloves. Recommended: Neoprene gloves. Nitrile gloves. Rubber gloves.
- **Respiratory:** Use with adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits.

**Section 9. Physical and Chemical Properties**

**Physical State:**
Liquid. [Aerosol.]

**pH:**
Not applicable

**Boiling Point:**
93°C (199.4°F)

**Specific Gravity:**
1.1

**Solubility:**
Easily soluble in the following materials: cold water and hot water.

**Color:**
Clear. Colorless.

**Odor:**
Alcohol-like. [Slight]

**Vapor Pressure:**
Not determined.

**Vapor Density:**
Not determined.

**Evaporation Rate:**
1 (Water = 1)

**VOC (Consumer):**
300.11 (g/l). 2.50 lbs/gal (27.33%)

**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></td>
<td>LC50 Inhalation Vapor</td>
<td>Rat</td>
<td>20000 mg/m³</td>
<td>4 hours</td>
</tr>
<tr>
<td>Ethylene Glycol Monobutyl Ether</td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>680 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>1746 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LC50 Inhalation Vapor</td>
<td>Rat</td>
<td>450 ppm</td>
<td>4 hours</td>
</tr>
<tr>
<td>Isopropyl Alcohol</td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>13000 mg/kg</td>
<td>-</td>
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<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>22500 ppm</td>
<td>8 hours</td>
</tr>
<tr>
<td></td>
<td>LC50 Inhalation Vapor</td>
<td>Rat</td>
<td>19000 ppm</td>
<td>8 hours</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**

Non-hazardous 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>
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<tr>
<td>IMDG Class</td>
<td>Not determined.</td>
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<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.

**Section 15. Regulatory Information**

**U.S. Federal Regulations**

- **SARA 313 toxic chemical notification and release reporting:**
  - **Product name**
    - Ethylene Glycol Monobutyl Ether
  - **Clean Water Act (CWA) 307:** No products were found.
  - **Clean Water Act (CWA) 311:** No products were found.
  - **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**
  - No products were found.

**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.*