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1-877-I-BUY-ZEP (428-9937)  
Superior Solutions www.zep.com

# Material Safety Data Sheet and Safe Handling and Disposal Information

## Section 1. Chemical Product and Company Identification

**Product name** ZEP 50  
**Product use** Aerosol Engine Degreaser  
**Product code** 0150  
**Date of issue** 03/14/06 **Supersedes** 09/28/00

**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

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**Prepared By**  
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## Section 2. Composition, Information on Ingredients

Name of hazardous ingredients	CAS #	% by Weight	Exposure Limits
D-LIMONENE; orange distillate; citrus terpene; cyclohexene, 1-methyl-4-(1-methylethenyl)-, (R)-	5989-27-5	5 - 15	Not established
HEAVY AROMATIC NAPHTHA; solvent naphtha (petroleum); heavy aromatics	64742-94-5	5 - 15	<b>OSHA PEL / VPEL / ACGIH TLV (United States).</b> TWA: 10 ppm 8 hour(s). <b>OSHA VPEL / ACGIH TLV (United States).</b> STEL: 15 ppm 15 minute(s).
DIETHYLENE GLYCOL MONOBUTYL ETHER; 2-(2-butoxyethoxy)-ethanol; butyl carbitol	112-34-5	<5	<b>Manufacturer (United States).</b> TWA: 35 ppm 8 hour(s).
MONOETHANOLAMINE; 2-aminoethanol; MEA	141-43-5	<5	<b>OSHA PEL / ACGIH TLV (United States).</b> TWA: 3 ppm 8 hour(s). <b>OSHA /ACGIH (United States).</b> STEL: 6 ppm 15 minute(s).
BLEND OF ISOBUTANE & PROPANE	74-98-6; 75-28-5	5 - 15	<b>ACGIH TLV (United States).</b> TWA: 800 ppm 8 hour(s). <b>OSHA PEL (United States).</b> TWA: 1000 ppm 8 hour(s).

## Section 3. Hazards Identification

**Acute Effects** **Routes of Entry** Dermal contact. Eye contact.

**Skin** Causes skin irritation. May be harmful if absorbed through skin. Skin inflammation is characterized by itching, scaling, reddening or, occasionally, blistering. May cause allergic reactions in certain individuals.

**Eyes** Causes eye irritation. Inflammation of the eye is characterized by redness, watering and itching.

**Inhalation** May cause irritation of upper respiratory tract, shortness of breath, headache, nausea, vomiting, dizziness, and unconsciousness.

**Ingestion** Unlikely in this form. Aspiration hazard if swallowed. Can enter lungs and cause damage.

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

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

**Chronic Effects** Repeated or prolonged exposure to the substance can produce damage to blood, kidneys, liver, central nervous system (CNS), lungs, nose/sinuses. Repeated or prolonged exposure to the substance can produce target organs damage. Prolonged or repeated contact may dry skin and cause irritation.

See Toxicological Information (section 11)

### HMIS

Health	2
Fire Hazard	1
Reactivity	0
Personal Protection	B

## Section 4. First Aid Measures

**Eye Contact** Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Get medical attention.

**Skin Contact** Wash affected area with soap or mild detergent and water. Remove contaminated clothing and shoes. Get medical attention if irritation develops.

**Inhalation** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Ingestion** Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, keep head lower than hips to help prevent aspiration. 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** Non-flammable. (CSMA)

**Fire hazard** Cool closed containers exposed to fire with water.

**Fire-fighting procedures** Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam. Wear special protective clothing and positive pressure, self-contained breathing apparatus.



### Section 6. Accidental Release Measures

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

### Section 7. Handling and Storage

**Handling** Avoid contact with eyes, skin and clothing. Avoid breathing vapors, spray or mists. Wash thoroughly after handling. Wash contaminated clothing before reusing.

**Storage** Keep away from heat and direct sunlight. Keep container in a cool, well-ventilated area. Do not store above the following temperature: 49°C (120.2°F). Keep away from food, drink and animal feeding stuffs. Do not puncture or incinerate. Keep out of the reach of children.

### Section 8. Exposure Controls, Personal Protection

#### Personal Protection

#### Protective Clothing (Pictograms)

**Eyes** Safety glasses.

**Body** 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 threshold limit value.



### Section 9. Physical and Chemical Properties

**Physical State** Thin liquid (Aerosol.) **Color** Milky-white

**pH** Not available. **Odor** Citrus

**Boiling Point** 100°C (212°F) **Vapor Pressure** Not available.

**Specific Gravity** 0.996 (Water = 1) **Vapor Density** Not available.

**Solubility** Partially soluble in the following materials: water **Evaporation Rate** Not available.

**VOC (Consumer)** 24.4% 2.0 (lb/gal) 244 (g/l)

### Section 10. Stability and Reactivity

**Stability and Reactivity** The product is stable.

**Incompatibility** Avoid contact with strong oxidizers, excessive heat, sparks or open flame.

**Hazardous Polymerization** Will not occur.

**Hazardous Decomposition Products** Carbon dioxide., Carbon monoxide. and other organic materials.

### Section 11. Toxicological Information

**Toxicity to Animals**

**d-Limonene:**^[25,45,50,70  
 ORAL (LD50): □ Acute: >5000 mg/kg [Rat].  
 DERMAL (LD50): □ Acute: >5000 mg/kg [Rabbit].

**Diethylene Glycol Monobutyl Ether:**^[25,45,50,70  
 ORAL (LD50): □ Acute: 5660 mg/kg [Rat]. 2400 mg/kg [Mouse].  
 DERMAL (LD50): □ Acute: 2700 mg/kg [Rabbit].

**Monoethanolamine:**^[25,45,50,70  
 ORAL (LD50): □ Acute: 1720 mg/kg [Rat].  
 DERMAL (LD50): □ Acute: >1000 mg/kg [Rabbit].

### Section 12. Ecological Information

**Ecotoxicity** Not available.

**Biodegradable/OECD** Not available.

### Section 13. Disposal Considerations

**Waste Information** Waste must be disposed of in accordance with federal, state and local environmental control regulations. **Waste Stream** Code: - (Not applicable.)  
 Classification: - (Non-hazardous waste)

Consult your local or regional authorities.

### Section 14. Transport Information

**Proper shipping name** Consumer commodity

**DOT Classification** ORM-D **UN number** Not regulated.

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.

**TDG Classification** ORM-D

**Section 15. Regulatory Information****U.S. Federal Regulations**

SARA 313 toxic chemical notification and release reporting:

Diethylene Glycol Monobutyl Ether (Glycol Ethers)

Clean Water Act (CWA) 311: No products were found.

Clean Air Act (CAA) 112 regulated toxic substances: Diethylene Glycol Monobutyl Ether (Glycol Ethers)

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

**State Regulations**

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

**WHMIS (Canada)**

Class A: Compressed gas.

Class D-2B: Material causing other toxic effects (Toxic).

**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.*