

# Safety Data Sheet



Zep, Inc.  
1310 Seaboard Industrial Blvd.  
Atlanta, GA 30318  
1-877-I-BUY-ZEP (428-9937)  
www.zep.com

## Section 1. Chemical Product and Company Identification

**Product name** ZEP 40  
**Product use** Aerosol Cleaner  
**Product code** 0144  
**Date of issue** 01/24/12 **Supersedes** 07/21/08

### Emergency Telephone Numbers

#### For MSDS Information:

Compliance Services 1-877-I-BUY-ZEP (428-9937)

#### For Medical Emergency

(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

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## 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.

\*Hazard Determination System (HDS): Health, Flammability, Reactivity



### Acute Effects

#### Routes of Entry

Dermal contact. Inhalation.

#### 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.

### Carcinogenicity

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

### Product/ingredient name

ACGIH

IARC

EPA

NIOSH

NTP

OSHA

None.

Additional Information: See Toxicological Information (Section 11)

## Section 3. Composition/Information on Ingredients

### Name of Hazardous Ingredients

| Name of Hazardous Ingredients                                      | CAS number        | % by Weight |
|--|-------------------|-------------|
| ETHANOL; ethyl alcohol; grain alcohol                              | 64-17-5           | 10 - 20     |
| HYDROCARBON PROPELLANT; blend of propane and n-butane              | 74-98-6; 106-97-8 | 5 - 15      |
| ETHYLENE GLYCOL MONOBUTYL ETHER; 2-butoxyethanol; butyl cellosolve | 111-76-2          | 1 - 5       |
| ISOPROPYL ALCOHOL; ipa; dimethylcarbinol; 2-propanol               | 67-63-0           | <3          |

## 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 affected skin with plenty of water. Get medical attention if irritation develops.

### Inhalation

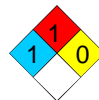
Move exposed person to fresh air. If irritation persists, get medical attention.

### 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.

**Section 5. Fire Fighting Measures**

National Fire Protection Association (U.S.A.)



|                                 |  |
|---------------------------------|--|
| <b>Flash Point</b>              | Closed cup: 28.3°C (83°F)  |
| <b>Flammable Limits</b>         | Not available.   |
| <b>Flammability</b>             | Non-flammable. (CSMA Method)   |
| <b>Fire hazard</b>              | 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. |
| <b>Fire-Fighting Procedures</b> | 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**

|                 |   |
|-----------------|---|
| <b>Handling</b> | 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. |
| <b>Storage</b>  | 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

**Exposure limits****NIOSH REL (United States, 6/2009).**

TWA: 1000 ppm 10 hour(s).

TWA: 1900 mg/m<sup>3</sup> 10 hour(s).**OSHA PEL (United States, 6/2010).**

TWA: 1000 ppm 8 hour(s).

TWA: 1900 mg/m<sup>3</sup> 8 hour(s).**ACGIH TLV (United States, 2/2010).**

STEL: 1000 ppm 15 minute(s).

**OSHA PEL 1989 (United States, 3/1989).**

TWA: 1000 ppm 8 hour(s).

TWA: 1900 mg/m<sup>3</sup> 8 hour(s).

HYDROCARBON PROPELLANT; blend of propane and n-butane

**ACGIH TLV / OSHA PEL (United States). Notes: Propane**

TWA: 1000 ppm 8 hour(s).

**NIOSH REL (United States, 6/2009).**

TWA: 800 ppm 10 hour(s).

TWA: 1900 mg/m<sup>3</sup> 10 hour(s).**ACGIH TLV (United States, 2/2010).**

TWA: 1000 ppm 8 hour(s).

ETHYLENE GLYCOL MONOBUTYL ETHER; 2-butoxyethanol; butyl cellosolve

**NIOSH REL (United States, 6/2009). Absorbed through skin.**

TWA: 5 ppm 10 hour(s).

TWA: 24 mg/m<sup>3</sup> 10 hour(s).**ACGIH TLV (United States, 2/2010).**

TWA: 20 ppm 8 hour(s).

**OSHA PEL (United States, 6/2010). Absorbed through skin.**

TWA: 50 ppm 8 hour(s).

TWA: 240 mg/m<sup>3</sup> 8 hour(s).**OSHA PEL 1989 (United States, 3/1989). Absorbed through skin.**

TWA: 25 ppm 8 hour(s).

TWA: 120 mg/m<sup>3</sup> 8 hour(s).

ISOPROPYL ALCOHOL; ipa; dimethylcarbinol; 2-propanol

**ACGIH TLV (United States, 2/2010).**

TWA: 200 ppm 8 hour(s).

STEL: 400 ppm 15 minute(s).

**OSHA PEL 1989 (United States, 3/1989).**

TWA: 400 ppm 8 hour(s).

TWA: 980 mg/m<sup>3</sup> 8 hour(s).

STEL: 500 ppm 15 minute(s).

STEL: 1225 mg/m<sup>3</sup> 15 minute(s).**NIOSH REL (United States, 6/2009).**

TWA: 400 ppm 10 hour(s).

TWA: 980 mg/m<sup>3</sup> 10 hour(s).

STEL: 500 ppm 15 minute(s).

STEL: 1225 mg/m<sup>3</sup> 15 minute(s).**OSHA PEL (United States, 6/2010).**

TWA: 400 ppm 8 hour(s).

TWA: 980 mg/m<sup>3</sup> 8 hour(s).**Personal Protective Equipment (PPE)**

|             |  |
|-------------|--|
| <b>Eyes</b> | Safety glasses.  |
| <b>Body</b> | 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

|                         |  |                         |                        |
|-------------------------|--|-------------------------|------------------------|
| <b>Physical State</b>   | Liquid. [Aerosol.]   | <b>Color</b>            | Clear. Colorless.      |
| <b>pH</b>               | 10.5 - 11.0  | <b>Odor</b>             | Alcohol-like. [Slight] |
| <b>Boiling Point</b>    | 93°C (199.4°F)   | <b>Vapor Pressure</b>   | Not determined.        |
| <b>Specific Gravity</b> | 1.1  | <b>Vapor Density</b>    | Not determined.        |
| <b>Solubility</b>       | Easily soluble in the following materials: cold water and hot water. | <b>Evaporation Rate</b> | 1 (Water = 1)          |
|                         |  | <b>VOC (Consumer)</b>   | 300 g/l (27.33%)       |

### Section 10. Stability and Reactivity

|   |  |
|---|--|
| <b>Stability and Reactivity</b>         | The product is stable.   |
| <b>Incompatibility</b>                  | Keep away from heat, sparks and flame. Reactive or incompatible with the following materials: oxidizing materials. |
| <b>Hazardous Polymerization</b>         | Will not occur.  |
| <b>Hazardous Decomposition Products</b> | carbon oxides (CO, CO <sub>2</sub> )   |

### Section 11. Toxicological Information

#### Acute Toxicity

| Product/ingredient name                               | Result                | Species    | Dose                     | Exposure |
|---|-----------------------|------------|--------------------------|----------|
| ethanol   | LC50 Inhalation Vapor | Rat        | 20000 mg/m <sup>3</sup>  | 4 hours  |
|   | LD50 Oral             | Rat        | 7 g/kg                   | -        |
| HYDROCARBON PROPELLANT; blend of propane and n-butane | LC50 Inhalation Vapor | Rat        | 658000 mg/m <sup>3</sup> | 4 hours  |
| 2-butoxyethanol                                       | LC50 Inhalation Gas.  | Rat        | 450 ppm                  | 4 hours  |
|   | LC50 Inhalation Vapor | Guinea pig | >633 ppm                 | 1 hours  |
|   | LD50 Dermal           | Guinea pig | >2000 mg/kg              | -        |
|   | LD50 Dermal           | Rabbit     | 220 mg/kg                | -        |
|   | LD50 Oral             | Guinea pig | 1200 mg/kg               | -        |
| propan-2-ol   | LD50 Oral             | Rat        | 250 mg/kg                | -        |
|   | LC50 Inhalation Vapor | Rat        | 16000 ppm                | 4 hours  |
|   | LD50 Dermal           | Rabbit     | 5030 mg/kg               | -        |
|   | LD50 Oral             | Rat        | 5000 mg/kg               | -        |
|   | LD50 Oral             | Rat        | 5045 mg/kg               | -        |

### Section 12. Ecological Information

**Environmental Effects** Not available.

#### Aquatic Ecotoxicity

|             |                 |                                      |  |  |
|-------------|-----------------|--------------------------------------|--|--|
| ethanol     | -               | Acute EC50 17.921 mg/L Marine water  | Algae - Green algae - Ulva pertusa                                 | 96 hours   |
|             | -               | Acute EC50 2000 ug/L Fresh water     | Daphnia - Water flea - Daphnia magna                               | 48 hours   |
|             | -               | Acute LC50 25500 ug/L Marine water   | Crustaceans - Brine shrimp - Artemia franchiscana - Larvae         | 48 hours   |
|             | -               | Acute LC50 42000 ug/L Fresh water    | Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss         | 4 days   |
|             | -               | Chronic NOEC 0.375 ul/L Fresh water  | Fish - Eastern mosquitofish - Gambusia holbrooki - Larvae - 3 days | 12 weeks   |
|             | 2-butoxyethanol | -                                    | Acute EC50 >1000 mg/L Fresh water                                  | Daphnia - Water flea - Daphnia magna - <24 hours |
| -           |                 | Acute LC50 800000 ug/L Marine water  | Crustaceans - Common shrimp, sand shrimp - Crangon crangon         | 48 hours   |
| -           |                 | Acute LC50 1250000 ug/L Marine water | Fish - Inland silverside - Menidia beryllina - 40 to 100 mm        | 96 hours   |
| propan-2-ol | -               | Acute LC50 1400000 ug/L Marine water | Crustaceans - Common shrimp, sand shrimp - Crangon crangon         | 48 hours   |

-

Acute LC50 >1400000  
ug/LFish - Western  
mosquitofish -  
Gambusia affinis - 20 to  
30 mm


96 hours

**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**

| Regulatory information    | UN number | Proper shipping name   | Classes | PG* | Label   |
|---------------------------|-----------|--|---------|-----|---|
| <b>DOT Classification</b> |           | Consumer commodity   | ORM-D   |     |   |
| <b>IMDG Class</b>         | 1950      | Aerosols, non-flammable<br>(Propellant; Blend of<br>Isobutane, Propane and n-<br>Butane) | 2.2     | -   |  |

**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**

No products were found.

**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.**

**United States inventory (TSCA 8b):** Not determined.

**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.