

# Material Safety Data Sheet



Superior Solutions

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

## Section 1. Chemical Product and Company Identification

**Product name** BIG ORANGE-E  
**Product use** Industrial Solvent Degreaser  
**Product code** 0485  
**Date of issue** 09/02/09 **Supersedes** 05/18/07

## 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.  
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## Section 2. Hazards Identification

### Emergency overview

**WARNING !**

COMBUSTIBLE LIQUID AND VAPOR. CAUSES EYE IRRITATION.  
MAY CAUSE ALLERGIC SKIN REACTION.

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



**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

Dermal contact. Eye contact. Inhalation.

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

**Skin** May cause skin irritation. May cause skin sensitization. May cause allergic reactions in certain individuals. 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.

### 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                                                                           | CAS number  | % by Weight |
|---------------------------------------------------------------------------------------------------------|-------------|-------------|
| PROPRIETARY, BIODEGRADABLE, HIGH-FLASH SOLVENT                                                          | Proprietary | 40 - 50     |
| D-LIMONENE; orange distillate; citrus terpene; cyclohexene, 1-methyl-4-(1-methylethenyl)-, (R)-         | 5989-27-5   | 30 - 40     |
| NONYLPHENOXY POLY(ETHYLENEOXY) ETHANOL - npe; poly(oxy-1,2-ethanediy) alpha-(nonylphenyl)-omega-hydroxy | 9016-45-9   | 1 - 10      |

## 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.

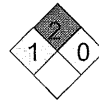
**Skin Contact** Flush affected skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Wash clothing before reuse. Get medical attention if irritation develops.

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

**Ingestion** If swallowed, 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. 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: 64.4°C (148°F)<br>[Tagliabue.]                                                                                                                                                                                                                                              |
| <b>Flammable Limits</b>         | Not determined.                                                                                                                                                                                                                                                                         |
| <b>Flammability</b>             | COMBUSTIBLE.                                                                                                                                                                                                                                                                            |
| <b>Fire hazard</b>              | COMBUSTIBLE LIQUID AND VAPOR. Keep away from heat, sparks and flame. Rags, steel wool or other wastes soaked with product may spontaneously catch fire if improperly discarded. Immediately after use, place rags, steel wool or other waste in a sealed, water-filled metal container. |
| <b>Fire-Fighting Procedures</b> | Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam. Fire-fighters should wear appropriate protective equipment. Do not release runoff from fire to sewers or waterways.                                                                                                      |

**Section 6. Accidental Release Measures**

|                       |                                                                                                                                                                                                                                                                                                 |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Spill Clean up</b> | Eliminate all ignition sources. Put on appropriate personal protective equipment (see section 8). Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



**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, skin and clothing. Avoid breathing vapors, spray or mists. Use only with adequate ventilation. Do not ingest. Observe label precautions. Wash thoroughly after handling. Empty containers retain product residue and can be hazardous. Do not reuse container. |
| <b>Storage</b>  | Keep away from heat and direct sunlight. Avoid all possible sources of ignition (spark or flame). Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Keep away from food, drink and animal feeding stuffs. Keep out of the reach of children.                                                                                                                                 |

**Section 8. Exposure Controls/Personal Protection**

| <u>Product name</u>            | <u>Exposure limits</u> |
|--------------------------------|------------------------|
| No exposure limit value known. |                        |

**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.                                                                                |  |
| <b>Respiratory</b> | 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.              | <b>Color</b>            | Clear. Orange.                 |
| <b>pH</b>               | 7.0 - 8.0            | <b>Odor</b>             | Citrus [Strong]                |
| <b>Boiling Point</b>    | 170°C (338°F)        | <b>Vapor Pressure</b>   | 0.13 kPa (1 mm Hg)             |
| <b>Specific Gravity</b> | 0.81                 | <b>Vapor Density</b>    | Not available.                 |
| <b>Solubility</b>       | Emulsifies in water. | <b>Evaporation Rate</b> | Not available.                 |
|                         |                      | <b>VOC (Consumer)</b>   | 36.9% 2.48 (lb/gal) 298 (g/l). |

**Section 10. Stability and Reactivity**

|                                         |                                                                                                                                                                                            |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Stability and Reactivity</b>         | The product is stable.                                                                                                                                                                     |
| <b>Incompatibility</b>                  | Combustible materials should be stored away from extreme heat and away from strong oxidizing agents. Incompatible with some strong acids. Reactive with acidic clay (i.e. clay absorbent). |
| <b>Hazardous Polymerization</b>         | Will not occur.                                                                                                                                                                            |
| <b>Hazardous Decomposition Products</b> | carbon oxides                                                                                                                                                                              |

**Section 11. Toxicological Information****Acute Toxicity**

| Product/ingredient name             | Result      | Species | Dose       | Exposure |
|-------------------------------------|-------------|---------|------------|----------|
| Nonylphenoxypoly(Ethyleneoxy)Ethano | LD50 Dermal | Rabbit  | 2000 mg/kg | -        |
|                                     | LD50 Oral   | Rat     | 3310 mg/kg | -        |

**Section 12. Ecological Information**

**Environmental Effects** Not available.

**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** Classification: - [Non-hazardous waste]

**Section 14. Transport Information**

| Regulatory information | UN number       | Proper shipping name                           | Classes | PG* | Label |
|------------------------|-----------------|------------------------------------------------|---------|-----|-------|
| DOT Classification     | Not applicable. | Not a DOT controlled material (United States). |         |     |       |

**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:

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.

**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.