

Safety Data Sheet



Superior Solutions

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 45 Dual Force
Product use Aerosol Lubricant and Penetrant
Product code 3743
Date of issue 10/21/13 **Supersedes** Not available.

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
1259 Seaboard Industrial Blvd.
Atlanta, GA 30318

Section 2. Hazards Identification

Emergency overview

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

DANGER!



FLAMMABLE AEROSOL. CAUSES EYE, SKIN AND RESPIRATORY TRACT IRRITATION. VAPOR HARMFUL. HARMFUL IF INHALED OR ABSORBED THROUGH SKIN. 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

Dermal contact, Eye contact and Inhalation

- Eyes** Causes eye irritation. Inflammation of the eye is characterized by redness, watering and itching.
- Skin** Causes skin irritation. Skin inflammation is characterized by itching, scaling, reddening or, occasionally, blistering.
- Inhalation** Avoid direct inhalation of spray. Over-exposure by inhalation may cause respiratory irritation. Can cause central nervous system (CNS) depression. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.
- Ingestion** Aspiration hazard if swallowed. Can enter lungs and cause damage.

Chronic effects

Repeated or prolonged exposure to the substance can produce lung damage. Prolonged skin contact may cause dermatitis with drying and cracking of skin.

Carcinogenicity Classification

Not listed as a carcinogen by OSHA, NTP or IARC.

Additional information: See toxicological information (Section 11)

Section 3. Composition/Information on Ingredients

Name	CAS number	%
Distillates (petroleum), hydrotreated light	64742-47-8	60-80
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	15-25
Carbon dioxide	124-38-9	1-5
Calcium alkylnaphthalenesulfonate	-	1-5

Section 4. First Aid Measures

Eye Contact Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

Skin Contact In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if irritation develops.

- Inhalation** Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
- 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, 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.)



- Flash Point** Closed cup: >93.3°C (>199.9°F)
- Flammable Limits** Not available.
- Flammability** Flammable Aerosol (16 CFR 1500.45)
- Fire hazard** CONTENTS UNDER PRESSURE. Container explosion may occur under fire conditions or when heated. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.
- Fire-Fighting Procedures** Use dry chemical or CO₂. Cool closed containers exposed to fire with water. 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** Put on appropriate personal protective equipment (see Section 8). Keep away from heat, sparks and flame. Avoid contact with eyes, skin and clothing. DO NOT breathe vapors or spray mist. Do not ingest. Use only with adequate ventilation. Observe label precautions. Wash thoroughly after handling.
- Storage** CONTENTS UNDER PRESSURE. Eliminate all ignition sources. Do not puncture or incinerate container. Do not store above the following temperature: 49°C (120.2°F) or in direct sunlight. Keep out of the reach of children.

Section 8. Exposure Controls/Personal Protection

Ingredient	Exposure limits
Distillates (petroleum), hydrotreated light	ACGIH TLV (United States, 3/2012). Absorbed through skin. TWA: 200 mg/m ³ , (as total hydrocarbon vapor) 8 hours.
Distillates (petroleum), hydrotreated heavy naphthenic	ACGIH TLV (United States, 3/2012). TWA: 5 mg/m ³ 8 hours. Form: Inhalable fraction
	NIOSH REL (United States, 1/2013). TWA: 5 mg/m ³ 10 hours. Form: Mist
	STEL: 10 mg/m ³ 15 minutes. Form: Mist
	OSHA PEL (United States, 6/2010). TWA: 5 mg/m ³ 8 hours.
Carbon dioxide	ACGIH TLV (United States, 3/2012). Oxygen Depletion [Asphyxiant]. TWA: 5000 ppm 8 hours.
	TWA: 9000 mg/m ³ 8 hours.
	STEL: 30000 ppm 15 minutes.
	STEL: 54000 mg/m ³ 15 minutes.
	OSHA PEL 1989 (United States, 3/1989). TWA: 10000 ppm 8 hours.
	TWA: 18000 mg/m ³ 8 hours.
	STEL: 30000 ppm 15 minutes.
	STEL: 54000 mg/m ³ 15 minutes.
	NIOSH REL (United States, 1/2013). TWA: 5000 ppm 10 hours.
	TWA: 9000 mg/m ³ 10 hours.
	STEL: 30000 ppm 15 minutes.
	STEL: 54000 mg/m ³ 15 minutes.
	OSHA PEL (United States, 6/2010). TWA: 5000 ppm 8 hours.
	TWA: 9000 mg/m ³ 8 hours.

Personal Protective Equipment (PPE)

- Eyes** Recommended: Safety glasses. 
- Body** Recommended: Chemical-resistant gloves. Viton® 
- 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. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

Section 9. Physical and Chemical Properties

Physical State	Liquid.	Color	Straw.
pH	Not applicable.	Odor	Slight Petroleum-like. and Banana-like.
Boiling Point	>204°C (>399.2°F)	Vapor Pressure	Not available.
Specific Gravity	0.8715	Vapor Density	Not available.
Solubility	Insoluble in the following materials: cold water and hot water.	Evaporation Rate	Not available.
		VOC (Consumer)	0.19 % (w/w) 0.0138 lbs/gal (1.6 g/l)

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Incompatibility	Extremely reactive or incompatible with the following materials: oxidizing materials.
Hazardous Polymerization	Under normal conditions of storage and use, hazardous polymerization will not occur.
Hazardous Decomposition Products	carbon oxides (CO, CO ₂)

Section 11. Toxicological Information

Product/ingredient name	Result	Species	Dose	Exposure
Distillates (petroleum), hydrotreated light	LC50 Inhalation Vapor	Rat	>6.8 mg/l	4 hours
	LD50 Dermal	Rabbit	2000 to 4000 mg/kg	-
Distillates (petroleum), hydrotreated heavy naphthenic	LD50 Oral	Rat	>5000 mg/kg	-
	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-

Section 12. Ecological Information

Environmental Effects Not available.

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
Distillates (petroleum), hydrotreated light	Acute LC50 2200 µg/l Fresh water	Fish - Lepomis macrochirus	4 days

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
Origin: RCRA waste.

Section 14. Transport Information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label
DOT Classification	None	Consumer commodity or Limited quantity			
IMDG Class	UN1950	AEROSOLS, flammable or Limited quantity	2.1	-	

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: naphthalene

Clean Water Act (CWA) 311: naphthalene

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 less than 0.1% of a chemical known to the State of California to cause cancer.

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.