

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 45
Product use Aerosol Lubricant
Product code 0174
Date of issue 09/16/11 **Supersedes** 03/19/09

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

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

WARNING!



VAPOR HARMFUL. CAUSES EYE, SKIN AND RESPIRATORY TRACT IRRITATION. 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. 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 inhalation of vapor, spray or mist. 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 damage to central nervous system, peripheral nervous system, kidneys, liver and heart. May cause hearing impairment or change. Prolonged skin contact may cause dermatitis with drying and cracking of skin.

Carcinogenicity

Trichloroethylene: Classified + (Proven) by OSHA. Classified Group 2A (Probable for Human) by IARC. Group 2 (Reasonably Anticipated To Be Human Carcinogen) by NTP.

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Trichloroethylene	-	2A	-	-	Possible	+
Tetrachloroethylene	-	2A	-	-	Possible	-

Additional Information: See Toxicological Information (Section 11)

Section 3. Composition/Information on Ingredients

Name of Hazardous Ingredients	CAS number	% by Weight
TRICHLOROETHYLENE; acetylene trichloride; 1-chloro-2,2-dichloroethylene	79-01-6	40 - 50
PARAFFIN OIL; blend of heavy and light naphthenic petroleum distillate	64742-52-5	15 - 25
MINERAL SEAL OIL; mineral oil; petrolatum	64741-44-2	5 - 15
TETRACHLOROETHYLENE; perchloroethylene; perc; carbon bichloride	127-18-4	1 - 10
Calcium alkyl-naphthalenesulfonate	Proprietary	1 - 10
DIETHYLENE GLYCOL MONOBUTYL ETHER; 2-(2-butoxyethoxy)-ethanol; butyl carbitol	112-34-5	1 - 10
PRIMARY AMYL ACETATE, MIXED ISOMERS: 3-METHYL BUTYL ACETATE; 2-METHYL BUTYL ACETATE	123-92-2: 628-63-7 & 624-41-9	<5
CARBON DIOXIDE	124-38-9	<5

Section 4. First Aid Measures

Eye Contact	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention immediately.
Skin Contact	Wash affected area with soap or mild detergent and 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 not breathing, give artificial respiration. If breathing is difficult, give oxygen. 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	Not applicable.
Flammable Limits	Not applicable.
Flammability	Non-flammable. (CSMA)
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 CO ₂ . 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). Avoid contact with eyes, skin and clothing. Do not breathe vapor or mist. Use only with adequate ventilation. Watch for accumulation in low confined areas.
Storage	Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep away from heat, sparks and flame. Do not puncture or incinerate container. Do not store above the following temperature: 49°C (120.2°F). Keep out of the reach of children.

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

TRICHLOROETHYLENE; acetylene trichloride; 1-chloro-2,2-dichloroethylene

Exposure limits**ACGIH TLV (United States).**

TWA: 10 ppm 8 hour(s).
STEL: 25 ppm 15 minute(s).

OSHA PEL (United States).

TWA: 50 ppm 8 hour(s).
STEL: 200 ppm 15 minute(s).

PARAFFIN OIL; blend of heavy and light naphthenic petroleum distillate

OSHA PEL (United States).

TWA: 5 mg/m³ 8 hour(s). Form: Mist

ACGIH TLV (United States).

TWA: 5 mg/m³ 8 hour(s). Form: Mist

NIOSH REL (United States, 6/2009).

TWA: 5 mg/m³ 10 hour(s). Form: Mist
STEL: 10 mg/m³ 15 minute(s). Form: Mist

MINERAL SEAL OIL; mineral oil; petrolatum

OSHA PEL (United States).

: 5 mg/m³ 8 hour(s). Form: Mist

ACGIH TLV (United States).

: 5 ppm 8 hour(s). Form: Mist

TETRACHLOROETHYLENE; perchloroethylene; perc; carbon bichloride

ACGIH TLV (United States).

TWA: 25 ppm 8 hour(s).
STEL: 100 ppm 15 minute(s).

PRIMARY AMYL ACETATE, MIXED ISOMERS: 3-METHYL BUTYL ACETATE; 2-METHYL BUTYL ACETATE

OSHA PEL (United States).

TWA: 100 ppm 8 hour(s).

ACGIH TLV (United States).

TWA: 50 ppm 8 hour(s).
STEL: 100 ppm 15 minute(s).

CARBON DIOXIDE

ACGIH TLV (United States).

TWA: 5000 ppm 8 hour(s).
STEL: 30000 ppm 15 minute(s).

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. [Aerosol.]	Color	Brown. Oily liquid.
pH	Not available.	Odor	Sweet. [Strong]
Boiling Point	87.22°C (189°F)	Vapor Pressure	Not available.
Specific Gravity	1.137	Vapor Density	Not available.
Solubility	Insoluble in the following materials: cold water and hot water.	Evaporation Rate	<1 (Carbon tetrachloride = 1)
		VOC (Consumer)	50.0% or 568.5 g/l [ISO 11890-1]

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Incompatibility	Reactive or incompatible with the following materials: oxidizing materials, metals and alkalis.
Hazardous Polymerization	Under normal conditions of storage and use, hazardous polymerization will not occur.
Hazardous Decomposition Products	Carbon dioxide, carbon monoxide, Hydrogen chloride (HCl), Chlorine and Phosgene gas.

Section 11. Toxicological Information

Acute Toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Trichloroethylene	LD50 Dermal	Rabbit	10000 mg/kg	-
	LD50 Oral	Mouse	2402 mg/kg	-
	LD50 Oral	Rat	4920 mg/kg	-
Distillates (petroleum), straight-run middle	LC50 Inhalation Vapor	Rat	1700 mg/m3	4 hours
Tetrachloroethylene	LD50 Dermal	Rabbit	10000 mg/kg	-
	LD50 Oral	Rat	2629 mg/kg	-
Diethylene glycol monobutyl ether	LD50 Dermal	Rabbit	2700 mg/kg	-
	LD50 Dermal	Rabbit	2700 mg/kg	-
	LD50 Oral	Mouse	2400 mg/kg	-
	LD50 Oral	Rat	4500 mg/kg	-
	LD50 Oral	Rat	5660 mg/kg	-

Section 12. Ecological Information

Environmental Effects Not available.

Aquatic Ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
Diethylene glycol monobutyl ether	-	Acute LC50 2000000 ug/L Marine water	Fish - Inland silverside - Menidia beryllina - 40 to 100 mm	96 hours
	-	Acute LC50 1300000 ug/L Fresh water	Fish - Bluegill - Lepomis macrochirus - 33 to 75 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 Code: D040
Classification: - [Hazardous waste.]
Origin: - [RCRA waste.]

Section 14. Transport Information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label
DOT Classification	None.	Consumer commodity ORM-D	ORM-D	-	
IMDG Class	Not determined.	Not available.	Not available.	-	

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

Trichloroethylene
Tetrachloroethylene
Diethylene glycol monobutyl ether

Clean Water Act (CWA) 307: Trichloroethylene (RQ 100 lbs.)

Clean Water Act (CWA) 311: Trichloroethylene (RQ 100 lbs.)

Clean Air Act (CAA) 112 regulated toxic substances: Trichloroethylene; Tetrachloroethylene;

Diethylene glycol monobutyl ether

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

TSCA 8(a) IUR: Distillates (petroleum), hydrotreated heavy naphthenic; Distillates (petroleum), straight-run middle

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

State Regulations**California Prop 65**

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

Trichloroethylene; Tetrachloroethylene

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.