

Material Safety Data Sheet



Zep Inc.
1310 Seaboard Industrial Blvd.
Atlanta, GA 30318
1-877-793-7776

Section 1. Chemical Product and Company Identification

Product name Z-WORKS CHLORINATED LUBRICANT
Product use Aerosol Lubricant
Product code R220
Date of issue 01/26/10 **Supersedes** 08/04/09

Emergency Telephone Numbers

For MSDS Information:
Compliance Services 1-877-793-7776

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

Section 2. Hazards Identification

Emergency overview

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

WARNING !



CAUSES EYE, SKIN AND RESPIRATORY TRACT IRRITATION.
VAPOR HARMFUL. 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. 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 Contains material which can cause cancer. Risk of cancer depends on duration and level of exposure.

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Trichloroethylene	-	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	64742-30-9	5 - 15
DIETHYLENE GLYCOL MONOBUTYL ETHER; 2-(2-butoxyethoxy)-ethanol; butyl carbitol	112-34-5	1 - 5
CARBON DIOXIDE	124-38-9	1 - 5

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 if irritation occurs.
- 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** If inhaled, remove 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 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). 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. Do not store above the following temperature: 49°C (120.2°F). Do not puncture or incinerate container. Keep out of the reach of children.

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

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

PARAFFIN OIL; blend of heavy and light naphthenic petroleum distillate

MINERAL SEAL OIL; mineral oil; petrolatum

DIETHYLENE GLYCOL MONOBUTYL ETHER; 2-(2-butoxyethoxy)-ethanol; butyl carbitol

CARBON DIOXIDE



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).**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**OSHA PEL (United States).**: 5 mg/m³ 8 hour(s). Form: Mist
ACGIH TLV (United States).

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

Manufacturer (United States).

TWA: 35 ppm 8 hour(s).

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 applicable.	Odor	Sweet. [Strong]
Boiling Point	87.22°C (189°F)	Vapor Pressure	Not available.
Specific Gravity	1.095	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% 4.60 (lb/gal) 551 (g/l).

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	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	Rat	4920 mg/kg	-
	LD50 Oral	Mouse	2402 mg/kg	-
Diethylene Glycol Monobutyl Ether	LD50 Dermal	Rabbit	2700 mg/kg	-
	LD50 Oral	Rat	5660 mg/kg	-
	LD50 Oral	Mouse	2400 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	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			
IMDG Class	Not determined.				

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
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; Diethylene Glycol
Monobutyl Ether

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

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

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.