

Material Safety Data Sheet



Zep Inc.
1310 Seaboard Industrial Blvd.
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1-877-793-7776

Section 1. Chemical Product and Company Identification

Product name Z-WORKS MULTI PURPOSE GREASE (AEROSOL)
Product use Aerosol Lubricant
Product code R224
Date of issue 08/05/09 **Supersedes**

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

DANGER !



FLAMMABLE LIQUID AND VAPOR. Vapor may cause flash fire. Do not smoke. VAPOR HARMFUL. CAUSES EYE, SKIN AND RESPIRATORY TRACT 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.

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. Product may be dermal absorbed. Skin inflammation is characterized by itching, scaling, or reddening.

Inhalation Over-exposure by inhalation may cause respiratory irritation. Inhalation causes headaches, dizziness, drowsiness and nausea and may lead to unconsciousness. Can cause central nervous system (CNS) depression.

Ingestion Harmful if swallowed. Aspiration hazard if swallowed. Can enter lungs and cause damage.

Chronic effects

Overexposure of this product by inhalation or absorption can produce central nervous system depression resulting in headache, nausea and/or dizziness. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Contains material which may cause damage to the following organs: kidneys, liver, peripheral nervous system, gastrointestinal tract, central nervous system (CNS).

| 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

| | CAS number | |
|---|------------------|---------|
| TRICHLOROETHYLENE; acetylene trichloride; 1-chloro-2,2-dichloroethylene | 79-01-6 | 30 - 40 |
| TETRACHLOROETHYLENE; perchloroethylene; perc; carbon bichloride | 127-18-4 | 10 - 20 |
| BLEND OF ISOBUTANE & PROPANE | 74-98-6; 75-28-5 | 10 - 20 |

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 breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately.
- 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. 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 determined.
- Flammable Limits** Not determined.
- Flammability** FLAMMABLE. (CSMA)
- Fire hazard** In a fire or if heated, a pressure increase will occur and the container may burst. Bursting aerosol containers may be propelled from a fire at high speed. May emit toxic fumes under fire conditions.
- Fire-Fighting Procedures** Use an extinguishing agent suitable for the surrounding fire.

Section 6. Accidental Release Measures

- Spill Clean up** Eliminate all ignition sources. Put on appropriate personal protective equipment (see section 8). Stop leak if without risk. Move containers from spill area. 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

- Handling** Put on appropriate personal protective equipment (see section 8). Store and use away from heat, sparks, open flame or any other ignition source. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Empty containers retain product residue and can be hazardous. Wash thoroughly after handling. Observe label precautions.
- Storage** CONTENTS UNDER PRESSURE. Do not puncture or incinerate container. Do not store above the following temperature: 49°C (120.2°F). 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 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).

TETRACHLOROETHYLENE; perchloroethylene; perc; carbon bichloride

ACGIH TLV (United States).TWA: 25 ppm 8 hour(s).
STEL: 100 ppm 15 minute(s).

BLEND OF ISOBUTANE & PROPANE

ACGIH TLV (United States).TWA: 800 ppm 8 hour(s).
OSHA PEL (United States).
TWA: 1000 ppm 8 hour(s).**Personal Protective Equipment (PPE)**

- Eyes** Safety glasses. 
- Body** Wear appropriate protective clothing to prevent skin contact. Recommended: Viton 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. Wear appropriate respirator when ventilation is inadequate.

Section 9. Physical and Chemical Properties

| | | | |
|-------------------------|---|-------------------------|---------------------|
| Physical State | Liquid. [Aerosol.] | Color | Opaque. White. |
| pH | Not applicable | Odor | Mild. Solvent-like. |
| Boiling Point | 87.2°C (189°F) | Vapor Pressure | 8 kPa (60 mm Hg) |
| Specific Gravity | 1.19 | Vapor Density | Not determined. |
| Solubility | Insoluble in the following materials: cold water and hot water. | Evaporation Rate | Not applicable. |
| | | VOC (Consumer) | 49.9% 593 (g/l). |

Section 10. Stability and Reactivity

| | |
|---|---|
| Stability and Reactivity | The product is stable. |
| Incompatibility | Reactive or incompatible with the following materials: oxidizing materials and alkalis. |
| Hazardous Polymerization | Will not occur. |
| Hazardous Decomposition Products | carbon oxides (CO, CO ₂), Phosgene gas. Hydrogen chloride (HCl). |

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 | - |
| Tetrachloroethylene | LD50 Dermal | Rabbit | 10000 mg/kg | - |
| | LD50 Oral | Rat | 2629 mg/kg | - |

Section 12. Ecological Information**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: D001, D039, D040
Classification: - [Hazardous waste.]
Origin: - [RCRA waste.]

Section 14. Transport Information

| Regulatory information | UN number | Proper shipping name | Classes | PG* | Label |
|---------------------------|----------------|----------------------|---------|-----|-------|
| DOT Classification | Not regulated. | Consumer commodity | ORM-D | - | |
| IMDG Class | | | | | |

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

Clean Water Act (CWA) 307: Trichloroethylene

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

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

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; 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.