

Safety Data Sheet



Zep, Inc.
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Atlanta, GA 30318
1-877-I-BUY-ZEP (428-9937)
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Section 1. Chemical Product and Company Identification

Product name I.D. RED
Product use Industrial Degreaser Aerosol.
Product code 0096
Date of issue 09/27/13 **Supersedes** 10/19/10

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

Section 2. Hazards Identification

Emergency overview

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

DANGER



EXTREMELY FLAMMABLE LIQUID AND VAPOR. VAPOR MAY CAUSE FLASH FIRE. Keep away from sources of ignition - No smoking. CAUSES EYE, SKIN AND RESPIRATORY TRACT IRRITATION. HARMFUL OR FATAL IF SWALLOWED. 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. Eye contact. Inhalation.

- Eyes** Causes eye irritation. Inflammation of the eye is characterized by redness, watering and itching.
- Skin** Direct contact may cause irritation and redness. Skin inflammation is characterized by itching, scaling, or reddening. Product may be dermal absorbed. Defatting properties, may aggravate an existing dermatitis
- Inhalation** Avoid breathing vapors, spray or mists. Over-exposure by inhalation may cause respiratory irritation. Can cause central nervous system (CNS) depression. High vapor concentrations can cause headaches, dizziness, drowsiness and nausea and may lead to unconsciousness.
- Ingestion** Harmful if swallowed. Aspiration hazard if swallowed. Can enter lungs and cause damage. Vomiting increases risk of chemical pneumonia or pulmonary edema caused by aspiration of hydrocarbon solvents.

Chronic effects

May cause damage to the following organs: peripheral nervous system.
Contains material which may cause damage to the following organs: blood, kidneys, lungs, the reproductive system, liver, spleen, gastrointestinal tract, cardiovascular system, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea. Skin which is repeatedly defatted by contact with this product may be more susceptible to irritation, infection or dermatitis.
Repeated eye exposure may produce chronic inflammation of the eye or corneal damage.
Overexposure of this product by inhalation or absorption can produce central nervous system depression resulting in headache, nausea and/or dizziness.

Carcinogenicity

No known significant effects or critical hazards.

Product/ingredient name

Not available.

Additional Information: See Toxicological Information (Section 11)

Section 3. Composition/Information on Ingredients

<u>Name of Hazardous Ingredients</u>	<u>CAS number</u>	<u>% by Weight</u>
Heptane, branched, cyclic and linear Possible mixture with heptane	426260-76-6 142-82-5	75 - 85 < 40
Ethanol; Ethyl Alcohol	64-17-5	1 - 10
Carbon dioxide	124-38-9	1 - 10
methanol	67-56-1	1 - 5
toluene	108-88-3	1 - 5
Isopropyl alcohol	67-63-0	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 immediately.
Skin Contact	Immediately wash with water and soap and rinse thoroughly. 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.
Ingestion	Aspiration hazard 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.)



Flash Point	Closed cup: <-18°C (<0°F) (Tagliabue.)
Flammable Limits	Lower: 1.2% Upper: 6.7%
Flammability	Extremely flammable. (CSMA) Aerosol that may flash back.
Fire hazard	FLAMMABLE LIQUID AND VAPOR. Vapor may cause flash fire. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Bursting aerosol containers may be propelled from a fire at high speed.
Fire-Fighting Procedures	Use dry chemical or CO ₂ . Fire-fighters should wear appropriate protective equipment. Cool containers with water jet in order to prevent pressure build-up, auto-ignition or explosion.

Section 6. Accidental Release Measures

Spill Clean up Large spills are unlikely due to packaging.

Section 7. Handling and Storage

Handling	Extremely flammable liquid and vapor. Store and use away from heat, sparks, open flame or any other ignition source. 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. Do not ingest. Wash thoroughly after handling. Wash contaminated clothing before reusing. Observe label precautions.
Storage	CONTENTS UNDER PRESSURE. Do not puncture or incinerate. 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. Eliminate all ignition sources. Keep out of the reach of children.

Section 8. Exposure Controls/Personal Protection

<u>Product name</u>	<u>Exposure limits</u>
Heptane, branched, cyclic and linear	ACGIH TLV (United States, 3/2012). TWA: 400 ppm 8 hours. TWA: 1640 mg/m ³ 8 hours. STEL: 500 ppm 15 minutes. STEL: 2050 mg/m ³ 15 minutes.
heptane	ACGIH TLV (United States, 3/2012). TWA: 400 ppm 8 hours. TWA: 1640 mg/m ³ 8 hours. STEL: 500 ppm 15 minutes. STEL: 2050 mg/m ³ 15 minutes. OSHA PEL 1989 (United States, 3/1989). TWA: 400 ppm 8 hours. TWA: 1600 mg/m ³ 8 hours. STEL: 500 ppm 15 minutes. STEL: 2000 mg/m ³ 15 minutes.

Ethanol; Ethyl Alcohol	<p>NIOSH REL (United States, 1/2013). TWA: 85 ppm 10 hours. TWA: 350 mg/m³ 10 hours. CEIL: 440 ppm 15 minutes. CEIL: 1800 mg/m³ 15 minutes. OSHA PEL (United States, 6/2010). TWA: 500 ppm 8 hours. TWA: 2000 mg/m³ 8 hours.</p>
Carbon dioxide	<p>ACGIH TLV (United States, 3/2012). STEL: 1000 ppm 15 minutes. OSHA PEL 1989 (United States, 3/1989). TWA: 1000 ppm 8 hours. TWA: 1900 mg/m³ 8 hours. NIOSH REL (United States, 1/2013). TWA: 1000 ppm 10 hours. TWA: 1900 mg/m³ 10 hours. OSHA PEL (United States, 6/2010). TWA: 1000 ppm 8 hours. TWA: 1900 mg/m³ 8 hours. ACGIH TLV (United States, 3/2012). Oxygen Depletion [Asphyxiant]. TWA: 5000 ppm 8 hours. TWA: 9000 mg/m³ 8 hours. STEL: 30000 ppm 15 minutes. STEL: 54000 mg/m³ 15 minutes. OSHA PEL 1989 (United States, 3/1989). TWA: 10000 ppm 8 hours. TWA: 18000 mg/m³ 8 hours. STEL: 30000 ppm 15 minutes. STEL: 54000 mg/m³ 15 minutes. NIOSH REL (United States, 1/2013). TWA: 5000 ppm 10 hours. TWA: 9000 mg/m³ 10 hours. STEL: 30000 ppm 15 minutes. STEL: 54000 mg/m³ 15 minutes. OSHA PEL (United States, 6/2010). TWA: 5000 ppm 8 hours. TWA: 9000 mg/m³ 8 hours.</p>
methanol	<p>ACGIH TLV (United States, 3/2012). Absorbed through skin. TWA: 200 ppm 8 hours. TWA: 262 mg/m³ 8 hours. STEL: 250 ppm 15 minutes. STEL: 328 mg/m³ 15 minutes. OSHA PEL 1989 (United States, 3/1989). Absorbed through skin. TWA: 200 ppm 8 hours. TWA: 260 mg/m³ 8 hours. STEL: 250 ppm 15 minutes. STEL: 325 mg/m³ 15 minutes. NIOSH REL (United States, 1/2013). Absorbed through skin. TWA: 200 ppm 10 hours. TWA: 260 mg/m³ 10 hours. STEL: 250 ppm 15 minutes. STEL: 325 mg/m³ 15 minutes.</p>
toluene	<p>OSHA PEL (United States, 6/2010). TWA: 200 ppm 8 hours. TWA: 260 mg/m³ 8 hours. OSHA PEL 1989 (United States, 3/1989). TWA: 100 ppm 8 hours. TWA: 375 mg/m³ 8 hours. STEL: 150 ppm 15 minutes. STEL: 560 mg/m³ 15 minutes. OSHA PEL Z2 (United States, 11/2006). TWA: 200 ppm 8 hours. CEIL: 300 ppm AMP: 500 ppm 10 minutes. NIOSH REL (United States, 1/2013). TWA: 100 ppm 10 hours. TWA: 375 mg/m³ 10 hours. STEL: 150 ppm 15 minutes. STEL: 560 mg/m³ 15 minutes.</p>
Isopropyl alcohol	<p>ACGIH TLV (United States, 3/2012). TWA: 20 ppm 8 hours. ACGIH TLV (United States, 3/2012). TWA: 200 ppm 8 hours. STEL: 400 ppm 15 minutes. OSHA PEL 1989 (United States, 3/1989). TWA: 400 ppm 8 hours. TWA: 980 mg/m³ 8 hours. STEL: 500 ppm 15 minutes. STEL: 1225 mg/m³ 15 minutes. NIOSH REL (United States, 1/2013). TWA: 400 ppm 10 hours. TWA: 980 mg/m³ 10 hours. STEL: 500 ppm 15 minutes. STEL: 1225 mg/m³ 15 minutes. OSHA PEL (United States, 6/2010).</p>

TWA: 400 ppm 8 hours.
TWA: 980 mg/m³ 8 hours.

Personal Protective Equipment (PPE)

- Eyes** Safety glasses.
- Body** Wear appropriate protective clothing to prevent skin contact.
Recommended Viton gloves. Nitrile gloves. Neoprene 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	Clear
pH	Not applicable.	Odor	Hydrocarbon. [Slight]
Boiling Point	Not available.	Vapor Pressure	5.9 kPa (44 mm Hg) [20°C]
Specific Gravity	0.69 (Water = 1)	Vapor Density	>1 [Air = 1]
Solubility	Insoluble in the following materials: cold water and hot water.	Evaporation Rate	>1 (butyl acetate = 1)
		VOC (Consumer)	95.2 % (w/w) 5.45 lbs/gal (652.8 g/l)

Section 10. Stability and Reactivity

- Stability and Reactivity** The product is stable.
- Incompatibility** Avoid contact with strong oxidizers, excessive heat, sparks or open flame.
- Hazardous Polymerization** Under normal conditions of storage and use, hazardous polymerization will not occur.
- Hazardous Decomposition Products** carbon oxides (CO, CO₂)

Section 11. Toxicological Information

Acute Toxicity

Product/ingredient name	Result	Species	Dose	Exposure
heptane	LC50 Inhalation Gas.	Rat	48000 ppm	4 hours
	LC50 Inhalation Vapor	Rat	103 g/m ³	4 hours
methanol	LC50 Inhalation Gas.	Rat	145000 ppm	1 hours
	LC50 Inhalation Gas.	Rat	64000 ppm	4 hours
	LD50 Dermal	Rabbit	15800 mg/kg	-
	LD50 Oral	Rat	5600 mg/kg	-
ethanol	LC50 Inhalation Vapor	Rat	124700 mg/m ³	4 hours
	LD50 Oral	Rat	7 g/kg	-
toluene	LC50 Inhalation Vapor	Rat	49 g/m ³	4 hours
	LD50 Oral	Rat	636 mg/kg	-
Isopropyl alcohol	LD50 Dermal	Rabbit	12800 mg/kg	-
	LD50 Oral	Rat	5000 mg/kg	-

Section 12. Ecological Information

Environmental Effects Not available.

Aquatic Ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
heptane	-	Acute LC50 375000 µg/l Fresh water	Fish - Mozambique tilapia - Oreochromis mossambicus	96 hours
methanol	-	Acute EC50 16.912 mg/l Marine water	Algae - Green algae - Ulva pertusa	96 hours
	-	Acute LC50 2500000 µg/l Marine water	Crustaceans - Common shrimp, sand shrimp - Crangon crangon - Adult	48 hours
	-	Acute LC50 3289 mg/l Fresh water	Daphnia - Water flea - Daphnia magna - Neonate	48 hours
	-	Acute LC50 100 mg/l Fresh water	Fish - Fathead minnow - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
ethanol	-	Chronic NOEC 9.96 mg/l Marine water	Algae - Green algae - Ulva pertusa	96 hours
	-	Acute LC50 25500 µg/l Marine water	Crustaceans - San Francisco Brine Shrimp - Artemia franciscana - Larvae	48 hours
	-	Chronic NOEC 4.995 mg/l Marine water	Algae - Green algae - Ulva pertusa	96 hours
	-	Chronic NOEC 0.375 uL/L Fresh water	Fish - Eastern mosquitofish - Gambusia holbrooki - Larvae	12 weeks
toluene	-	Acute EC50 433 ppm Marine water	Algae - Diatom - Skeletonema costatum	96 hours
	-	Acute EC50 12500 µg/l Fresh water	Algae - Green algae - Pseudokirchneriella subcapitata	72 hours
	-	Acute EC50 11600 µg/l Fresh water	Crustaceans - Scud - Gammarus pseudolimnaeus - Adult	48 hours
	-	Acute EC50 6000 µg/l Fresh water	Daphnia - Water flea - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	-	Acute LC50 5500 µg/l Fresh water	Fish - Coho salmon, silver salmon -	96 hours

Isopropyl alcohol	-	Chronic NOEC 500000 µg/l Fresh water	Oncorhynchus kisutch - Fry	96 hours
	-	Chronic NOEC 1000 µg/l Fresh water	Algae - Green algae - Pseudokirchneriella subcapitata	21 days
	-	Acute LC50 1400000 µg/l Marine water	Daphnia - Water flea - Daphnia magna	48 hours
	-	Acute LC50 1400000 µg/l	Crustaceans - Common shrimp, sand shrimp - Crangon crangon	96 hours
			Fish - Western mosquitofish - Gambusia affinis	

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

Classification: Ignitable hazardous waste.

Origin: RCRA waste.

Section 14. Transport Information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label
DOT Classification	-	Consumer commodity or Limited quantity	ORM-D -	-	
IMDG Class	UN1950	AEROSOLS, flammable (Heptanes) 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:

[Product name](#)

Clean Water Act (CWA) 307: toluene

Clean Water Act (CWA) 311: toluene

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.

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

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.