

Material Safety Data Sheet



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

Product name I.D. RED (LIQUID)
Product use Industrial Solvent Degreaser
Product code 0570
Date of issue 03/09/11 **Supersedes** 03/20/08

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.
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Printing date: 03/10/11

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 IRRITATION. HARMFUL OR FATAL IF SWALLOWED. DO NOT breathe vapors or spray mist.

Extremely flammable liquid. Keep away from heat, sparks and flame. Avoid breathing vapor or mist. Avoid contact with skin and clothing. May cause target organ damage, based on animal data. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use.

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

Contact may cause 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

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. May cause damage to the following organs: peripheral nervous system.
Contains material which may cause damage to the following organs: kidneys, lungs, liver, heart, brain, eyes, central nervous system (CNS), ears, pancreas.

Carcinogenicity

No known significant effects or critical hazards.

Product/ingredient name

ACGIH

IARC

EPA

NIOSH

NTP

OSHA

Isopropyl alcohol

A4

3

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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; n-heptane	142-82-5	80 - 90
ISOPROPYL ALCOHOL; ipa; dimethylcarbinol; 2-propanol	67-63-0	5 - 15
METHANOL; methyl alcohol; wood alcohol; columbia spirits	67-56-1	<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. 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: 11.6%	
Flammability	EXTREMELY FLAMMABLE LIQUID AND VAPOR.	
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.	
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. Do not release runoff from fire to drains or watercourses.	

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. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.
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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. Do not reuse container. Observe label precautions. Wash contaminated clothing before reusing.
Storage	Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame). Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Store between the following temperatures: 40°F - 120°F (4.4°C - 49°C). Keep out of the reach of children.

Section 8. Exposure Controls/Personal ProtectionProduct name

HEPTANE; n-heptane

Exposure limits**ACGIH TLV (United States, 2/2010).**

TWA: 400 ppm 8 hour(s).

TWA: 1640 mg/m³ 8 hour(s).

STEL: 500 ppm 15 minute(s).

STEL: 2050 mg/m³ 15 minute(s).**OSHA PEL 1989 (United States, 3/1989).**

TWA: 400 ppm 8 hour(s).

TWA: 1600 mg/m³ 8 hour(s).

STEL: 500 ppm 15 minute(s).

STEL: 2000 mg/m³ 15 minute(s).**NIOSH REL (United States, 6/2009).**

TWA: 85 ppm 10 hour(s).

TWA: 350 mg/m³ 10 hour(s).

CEIL: 440 ppm 15 minute(s).

CEIL: 1800 mg/m³ 15 minute(s).**OSHA PEL (United States, 11/2006).**

TWA: 500 ppm 8 hour(s).

TWA: 2000 mg/m³ 8 hour(s).

ISOPROPYL ALCOHOL; ipa; dimethylcarbinol; 2-propanol

ACGIH TLV (United States, 1/2009).

TWA: 200 ppm 8 hour(s).

STEL: 400 ppm 15 minute(s).

OSHA PEL 1989 (United States, 3/1989).

TWA: 400 ppm 8 hour(s).

TWA: 980 mg/m³ 8 hour(s).

STEL: 500 ppm 15 minute(s).

STEL: 1225 mg/m³ 15 minute(s).**NIOSH REL (United States, 6/2009).**

TWA: 400 ppm 10 hour(s).

TWA: 980 mg/m³ 10 hour(s).

STEL: 500 ppm 15 minute(s).

STEL: 1225 mg/m³ 15 minute(s).**OSHA PEL (United States, 11/2006).**

TWA: 400 ppm 8 hour(s).

TWA: 980 mg/m³ 8 hour(s).

METHANOL; methyl alcohol; wood alcohol; columbia spirits

OSHA/ACGIH (United States).

TWA: 200 ppm 8 hour(s).

OSHA /ACGIH (United States).

STEL: 250 ppm 15 minute(s).

Personal Protective Equipment (PPE)**Eyes**

Splash goggles.

Body

Wear appropriate protective clothing to prevent skin contact.
 Recommended Viton gloves. Nitrile gloves. Neoprene gloves.
 Synthetic apron.

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.

pH

Not applicable

Boiling Point

64°C (147.2°F)

Specific Gravity

0.7

Solubility

insoluble in water.

Color Clear**Odor** Hydrocarbon. [Slight]**Vapor Pressure** 5.9 kPa (44 mm Hg)**Vapor Density** >1 [Air = 1]**Evaporation Rate** Not determined.**VOC (Consumer)** 748 g/l [ISO 11890-1]**Section 10. Stability and Reactivity****Stability and Reactivity**

The product is stable.

Incompatibility

Keep away from heat, sparks and flame. Reactive or incompatible with the following materials:
 oxidizing materials.

Hazardous Polymerization

Will not occur.

Hazardous Decomposition Products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological Information**Acute Toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
n-Heptane	LC50 Inhalation Gas.	Mouse	18295 ppm	2 hours
	LC50 Inhalation Vapor	Rat	103 g/m ³	4 hours
	LD50 Oral	Mouse	15000 mg/kg	-
Isopropyl alcohol	LC50 Inhalation Vapor	Rat	16000 ppm	4 hours
	LD50 Dermal	Rabbit	5030 mg/kg	-
	LD50 Oral	Rat	5000 mg/kg	-
	LD50 Oral	Rat	5045 mg/kg	-
Methanol	LC50 Inhalation Vapor	Rat	64000 ppm	4 hours
	LD50 Dermal	Rabbit	15800 mg/kg	-
	LD50 Oral	Rat	5628 mg/kg	-

Section 12. Ecological Information**Environmental Effects**

Not available.

Aquatic Ecotoxicity


Product/ingredient name	Test	Result	Species	Exposure
n-Heptane	-	Acute LC50 4924000 ug/L Fresh water	Fish - Western mosquitofish - Gambusia affinis - Adult	96 hours
	-	Acute LC50 375000 ug/L Fresh water	Fish - Mozambique tilapia - Tilapia mossambica - 99 mm - 10 g	96 hours
Isopropyl alcohol	-	Acute LC50 11130000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) - 4 to 8 weeks - 1.1 to 3.1 cm	96 hours
	-	Acute LC50 10400000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 29 days - 20 mm - 0.103 g	96 hours
	-	Acute LC50 9640000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 31 days - 20.6 mm - 0.117 g	96 hours
	-	Acute LC50 6550000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 31 days - 17.4 mm - 0.082 g	96 hours
	-	Acute LC50 4200000 ug/L Fresh water	Fish - Harlequinfish, red rasbora - Rasbora heteromorpha - 1 to 3 cm	96 hours
	-	Acute LC50 1400000 ug/L Marine water	Crustaceans - Common shrimp, sand shrimp - Crangon crangon	48 hours
	-	Acute LC50 >1400000 ug/L	Fish - Western mosquitofish - Gambusia affinis - 20 to 30 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: D001
Classification: - [Hazardous waste.]
Origin: - [RCRA waste.]

Section 14. Transport Information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label
DOT Classification	1993	FLAMMABLE LIQUIDS, N.O.S. (Heptane, Isopropyl Alcohol)	3	II	
IMDG Class	Not determined.			I	

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: No products were found.

Clean Water Act (CWA) 311: No products were found.

Clean Air Act (CAA) 112 regulated toxic substances: Methanol

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

TSCA 4(a) final test rules: n-Heptane

TSCA 8(a) PAIR: n-Heptane

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

TSCA 12(b) one-time export: n-Heptane

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.: n-Heptane

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.