

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 METER MIST INSECT KILLER S
Product use Insecticide.
Product code 0188
Date of issue 06/17/11 **Supersedes** 04/14/04

This product is a registered pesticide. EPA Registration Number: 9444-158-1270

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

CAUTION

MAY CAUSE EYE IRRITATION.
CONTENTS UNDER PRESSURE.

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



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 Direct contact may cause irritation and redness. Inflammation of the eye is characterized by redness, watering and itching.
Skin May cause skin irritation. Skin inflammation is characterized by itching, scaling, or reddening.
Inhalation Avoid direct inhalation of spray. Over-exposure by inhalation may cause respiratory irritation.
Ingestion Unlikely in this form. Vomiting increases risk of chemical pneumonia or pulmonary edema caused by aspiration of hydrocarbon solvents.

Chronic effects

No known chronic effects from exposure.

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

Name of Hazardous Ingredients	CAS number	% by Weight
HYDROCARBON PROPELLENT; Blend of Propane & iso-Butane	74-98-6;75-28-5	30 - 40
HYDROTREATED LIGHT PETROLEUM DISTILLATES	64742-47-8	25 - 35
1,1-Difluoroethane	75-37-6	15 - 25
n-Octyl Bicycloheptene Dicarboximide	113-48-4	1 - 5
PIPERONYL BUTOXIDE; alpha-(2-(2-butoxyethoxy)ethoxy)-4,5-(methylenedioxy)-2-propyl-toluene	51-03-6	1.95
PYRETHRINS; pyrethrum extract	8003-34-7	0.975

Section 4. First Aid Measures

Eye Contact Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

Skin Contact Wash with soap and water. Get medical attention if irritation develops.

Inhalation If inhaled, remove to fresh air. If irritation persists, get medical attention.

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. If affected person is conscious, give plenty of water to drink. Get medical attention immediately.

Section 5. Fire Fighting Measures

National Fire Protection Association (U.S.A.)

**Flash Point** Closed cup: <-18°C (<-0.4°F)
(Liquid).**Flammable Limits** Lower: 1.8% Upper: 17.1%
(Liquid).**Flammability** Highly flammable in the presence of open flames and sparks.**Fire hazard** CONTENTS UNDER PRESSURE. In a fire or if heated, a pressure increase will occur and the container may burst or explode. Bursting aerosol containers may be propelled from a fire at high speed.**Fire-Fighting Procedures** Use an extinguishing agent suitable for the surrounding fire. Cool closed containers exposed to fire with water. Fire-fighters should wear appropriate protective equipment.**Section 6. Accidental Release Measures****Spill Clean up** Spills are unlikely due to packaging.**Section 7. Handling and Storage****Handling** Put on appropriate personal protective equipment (see section 8). Keep away from heat, sparks and flame. Avoid breathing vapors, spray or mists. Avoid contact with eyes. Use only with adequate ventilation. Observe label precautions. Wash thoroughly after handling.**Storage** CONTENTS UNDER PRESSURE. Do not puncture, incinerate or store the container at temperatures above 120°F or in direct sunlight. Keep away from food, drink and animal feeding stuffs. Keep out of the reach of children.**Section 8. Exposure Controls/Personal Protection****Product name**HYDROCARBON PROPELLENT; Blend of Propane & iso-
Butane

HYDROTREATED LIGHT PETROLEUM DISTILLATES

1,1-Difluoroethane

PYRETHRINS; pyrethrum extract

Exposure limitsOSHA PEL (United States).
TWA: 800 ppm 8 hour(s).ACGIH TLV (United States). Notes: Supplier Recommended:
TWA: 100 ppm 8 hour(s).ACGIH TLV (United States, 2/2010). Absorbed through skin.
TWA: 200 mg/m³ 8 hour(s).ACGIH TLV (United States).
TWA: 1000 ppm 8 hour(s).AIHA WEEL (United States, 1/2009).
TWA: 1000 ppm 8 hour(s).ACGIH TLV (United States).
TWA: 5 mg/m³ 8 hour(s).OSHA PEL (United States).
TWA: 5 mg/m³ 8 hour(s).**Personal Protective Equipment (PPE)****Eyes** Recommended: Safety glasses.**Body** No special protective clothing is required.**Respiratory** Avoid direct inhalation of spray. Use with adequate ventilation.**Section 9. Physical and Chemical Properties****Physical State** Liquid. [Aerosol. dry]**Color** Clear. Colorless.**pH** Not available.**Odor** Mild. Pleasant.**Boiling Point** Not determined.**Vapor Pressure** 510.2 kPa (3827 mm Hg)**Specific Gravity** 0.84**Vapor Density** Not determined.**Solubility** Insoluble in the following materials: cold water and hot water.**Evaporation Rate** Not determined.**VOC (Consumer)** 278 (g/l). (33.1%, 2.32 lbs/gal)**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: acids and alkalis.**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**

Propellant; Blend of Propane and iso-Butane	LC50 Inhalation Gas.	Rat	658000 ppm	4 hours
1,1-difluoroethane	LC50 Inhalation Gas.	Mouse	977000 ppm	2 hours
N-(2-ethylhexyl)-8,9,10-trinorborn-5-ene-2,3-dicarboximide	LD50 Dermal	Rabbit	470 mg/kg	-
	LD50 Dermal	Rabbit	2000 mg/kg	-
	LD50 Dermal	Rat	470 mg/kg	-
	LD50 Oral	Rat	2800 mg/kg	-
	LD50 Oral	Rat	4980 mg/kg	-
PYRETHRINS; pyrethrum extract	LD50 Oral	Rat	1500 mg/kg	-
	LDLo Oral	Rat	200 mg/kg	-

Section 12. Ecological Information**Environmental Effects** Not available.**Aquatic Ecotoxicity**

Product/ingredient name	Test	Result	Species	Exposure
Distillates (petroleum), hydrotreated light	-	Acute LC50 5900 ug/L Fresh water	Fish - Bluegill - Lepomis macrochirus - 35 to 75 mm	4 days
	-	Acute LC50 2900 ug/L Fresh water	Fish - Rainbow trout, donaldson trout - Oncorhynchus mykiss - 35 to 75 mm	96 hours
	-	Acute LC50 2600 ug/L Fresh water	Fish - Rainbow trout, donaldson trout - Oncorhynchus mykiss - 35 to 75 mm	4 days
	-	Acute LC50 2400 ug/L Fresh water	Fish - Rainbow trout, donaldson trout - Oncorhynchus mykiss - 35 to 75 mm	4 days
	-	Acute LC50 2200 ug/L Fresh water	Fish - Bluegill - Lepomis macrochirus - 35 to 75 mm	4 days
N-(2-ethylhexyl)-8,9,10-trinorborn-5-ene-2,3-dicarboximide	-	Acute EC50 2.3 ppm Fresh water	Daphnia - Water flea - Daphnia magna - 24 hours	48 hours
	-	Acute LC50 2.4 ppm Fresh water	Fish - Bluegill - Lepomis macrochirus	96 hours
	-	Acute LC50 1.4 ppm Fresh water	Fish - Rainbow trout, donaldson trout - Oncorhynchus mykiss	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: - (None.)

Classification: - (Non-hazardous waste)

Section 14. Transport Information

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

2-(2-butoxyethoxy)ethyl 6-propylpiperonyl ether

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: No products were found.

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

TSCA 8(a) IUR: Distillates (petroleum), hydrotreated light

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

State Regulations

California Prop 65 No products were found.

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.*