

# Material Safety Data Sheet

**ENFORCER**

Zep Commercial Sales & Service  
A unit of Zep Inc.  
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Atlanta, GA 30318  
1-888-805-HELP (4357)  
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## Section 1. Chemical Product and Company Identification

**Product name** Instant Knockdown Wasp & Hornet Killer

**Product code** EWHIK / M173

**Date of issue** 09/25/09 **Supersedes** 09/20/04

This product is a registered pesticide. EPA ID No. 40849-77

### Emergency Telephone Numbers

#### For MSDS Information:

Compliance Services 404-352-1680

#### 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

CAUTION

1 4 0

CAUSES EYE IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. HARMFUL IF SWALLOWED. FLAMMABLE. 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

May cause skin irritation. May cause allergic reactions in certain individuals. Skin inflammation is characterized by itching, scaling, or reddening.

#### Inhalation

Over-exposure by inhalation may cause respiratory irritation. Can cause central nervous system (CNS) depression.

#### Ingestion

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

### Chronic effects

Prolonged or repeated contact may dry skin and cause irritation. Contains material which may cause damage to the following organs: central nervous system (CNS).

**Carcinogenicity** EPA Group C: Possible human carcinogen.

### Product/ingredient name

**ACGIH**

**IARC**

**EPA**

**NIOSH**

**NTP**

**OSHA**

Piperonyl Butoxide

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**Additional Information:** See Toxicological Information (Section 11)

## Section 3. Composition/Information on Ingredients

### Name of Hazardous Ingredients

### CAS number

### % by Weight

HYDROTREATED LIGHT PETROLEUM DISTILLATES; paraffinic, naphthenic solvent	64742-47-8	50 - 60
LIGHT ALIPHATIC NAPHTHA; solvent naphtha (petroleum), medium aliphatics	64742-88-7	35 - 45
CARBON DIOXIDE	124-38-9	1 - 5
PIPERONYL BUTOXIDE; alpha-(2-(2-butoxyethoxy)ethoxy)-4,5-(methylenedioxy)-2-propyl-toluene	51-03-6	0.50
PERMETHRIN; (3-phenoxyphenyl) methyl-cis, trans-3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropanecarboxylate)	52645-53-1	0.25
TETRAMETHRIN	7696-12-0	0.10

**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 not breathing, give artificial respiration. If breathing is difficult, give oxygen. 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. Get medical attention immediately.

**Section 5. Fire Fighting Measures**

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



- Flash Point** Not available.
- Flammable Limits** Not available.
- Flammability** FLAMMABLE. Aerosol that may flash back. (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. CONTENTS UNDER PRESSURE.
- Fire-Fighting Procedures** Use an extinguishing agent suitable for the surrounding fire. Do not release runoff from fire to drains or watercourses.

**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). 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. Apply this product only as specified on the label. Empty containers retain product residue and can be hazardous. Wash thoroughly after handling.
- Storage** CONTENTS UNDER PRESSURE. Do not puncture or incinerate container. 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**

HYDROTREATED LIGHT PETROLEUM DISTILLATES;  
paraffinic, naphthenic solvent  
LIGHT ALIPHATIC NAPHTHA; solvent naphtha (petroleum),  
medium aliphatics

CARBON DIOXIDE

TETRAMETHRIN

**Exposure limits****Supplier Suggested (United States).**

TWA: 100 ppm 8 hour(s).

**ACGIH TLV (United States).**

TWA: 100 ppm 8 hour(s).

**Supplier Suggested TLV (United States).**


TWA: 100 ppm 8 hour(s).

**ACGIH TLV (United States).**

TWA: 5000 ppm 8 hour(s).

STEL: 30000 ppm 15 minute(s).

**ACGIH TLV (United States).**TWA: 10 mg/m<sup>3</sup> 8 hour(s). Form: Dust**Personal Protective Equipment (PPE)**

- Eyes** Safety glasses. 
- Body** Wear appropriate protective clothing to prevent skin contact. Recommended: Neoprene gloves. Nitrile 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.

**Section 9. Physical and Chemical Properties**

<b>Physical State</b>	Liquid. [Aerosol.]	<b>Color</b>	Colorless to light yellow.
<b>pH</b>	Not applicable.	<b>Odor</b>	Characteristic.
<b>Boiling Point</b>	>217.77°C (>424°F)	<b>Vapor Pressure</b>	0.0093 kPa (0.07 mm Hg)
<b>Specific Gravity</b>	0.8	<b>Vapor Density</b>	Not determined.
<b>Solubility</b>	Insoluble in the following materials: cold water and hot water.	<b>Evaporation Rate</b>	<1 (butyl acetate = 1)
		<b>VOC (Consumer)</b>	319.4 g/l

**Section 10. Stability and Reactivity**

<b>Stability and Reactivity</b>	The product is stable.
<b>Incompatibility</b>	Keep away from heat, sparks and flame. Reactive or incompatible with the following materials: oxidizing materials, acids and alkalis.
<b>Hazardous Polymerization</b>	Will not occur.
<b>Hazardous Decomposition Products</b>	carbon oxides (CO, CO <sub>2</sub> ), nitrogen oxides (NO, NO <sub>2</sub> etc.)

**Section 11. Toxicological Information****Acute Toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
Hydrotreated Light Petroleum Distillates	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
m-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate	LD50 Dermal	Rabbit	>2 g/kg	-
	LD50 Dermal	Rat	1750 mg/kg	-
	LD50 Oral	Rat	383 mg/kg	-

**Section 12. Ecological Information**

**Environmental Effects** This material is toxic to aquatic organisms. Keep out of waterways.

**Aquatic Ecotoxicity**

Product/ingredient name	Test	Result	Species	Exposure
m-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate	-	Acute EC50 0.76 ppb Fresh water	Daphnia - Water flea - Daphnia magna - 12 hours	48 hours
	-	Acute EC50 0.6 ppb Fresh water	Daphnia - Water flea - Daphnia magna - 12 hours	48 hours
	-	Acute EC50 0.32 ppb Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	-	Acute EC50 0.112 ppb Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	-	Acute IC50 1.09 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - Instar - 4 to 5 days	48 hours
	-	Acute LC50 1.908 ppb Marine water	Crustaceans - Daggerblade grass shrimp - Palaemonetes pugio	48 hours
	-	Acute LC50 1.627 ppb Marine water	Crustaceans - Daggerblade grass shrimp - Palaemonetes pugio	48 hours
	-	Acute LC50 1.5 ppb Fresh water	Fish - Atlantic salmon - Salmo salar	96 hours
	-	Acute LC50 0.79 ppb Fresh water	Fish - Bluegill - Lepomis macrochirus	96 hours
	-	Acute LC50 0.733 ppb Marine water	Crustaceans - Daggerblade grass shrimp - Palaemonetes pugio	48 hours
	-	Acute LC50 0.731 ppb Marine water	Crustaceans - Daggerblade grass shrimp - Palaemonetes pugio	48 hours
	-	Acute LC50 0.604 ppb Marine water	Crustaceans - Daggerblade grass shrimp - Palaemonetes pugio	48 hours
	-	Acute LC50 0.548 ppb Marine water	Crustaceans - Daggerblade grass	48 hours

			shrimp - Palaemonetes pugio	
-	Acute LC50 5 ug/L Fresh water	Crustaceans - Calanoid copepod - Spicodiantomus chilospinus - Adult - 2.2 to 2.8 mm	48 hours	
-	Acute LC50 4 ug/L Fresh water	Crustaceans - Water flea - Alonella sp.	48 hours	
-	Acute LC50 3 ug/L Fresh water	Crustaceans - Crayfish - Orconectes sp.	48 hours	
-	Acute LC50 1.6 ug/L Fresh water	Fish - Lahontan cutthroat trout - Oncorhynchus clarki henshawi - 0.46 g	96 hours	
-	Acute LC50 1.58 ug/L Fresh water	Fish - Lahontan cutthroat trout - Oncorhynchus clarki henshawi	96 hours	
-	Acute LC50 1.25 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - Instar - <=24 hours	48 hours	
-	Acute LC50 1.1 ug/L Fresh water	Fish - Channel catfish - Ictalurus punctatus - 14 to 17 mm - 0.02 g	96 hours	
-	Acute LC50 >1 ug/L Fresh water	Fish - Greenback cutthroat trout - Oncorhynchus clarkii stomias - 0.31 g	96 hours	
-	Acute LC50 0.69 ug/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss - 0.89 g	96 hours	
-	Acute LC50 0.62 ug/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss - 0.89 g	96 hours	
-	Acute LC50 0.6 ug/L Fresh water	Daphnia - Water flea - Ceriodaphnia dubia - <24 hours	48 hours	
-	Acute LC50 0.54 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - Instar - 4 to 5 days	48 hours	
-	Acute LC50 0.2 to 0.6 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling) - 1 to 2 mm	48 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** Non-hazardous waste

### Section 14. Transport Information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label
<b>DOT Classification</b>	Not available.	Consumer commodity	ORM-D	-	
<b>TDG Classification</b>	Not available.	Not available.	Not available.	-	

**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**

Piperonyl Butoxide  
Permethrin

**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.

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

**State Regulations****California Prop 65**

No products were found.

**Canada****WHMIS (Canada)**

Class B-5: Flammable aerosol.

Class D-1B: Material causing immediate and serious toxic effects  
(Toxic).

**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.