

# Material Safety Data Sheet

**ENFORCER**

Zep Commercial Sales & Service  
A unit of Zep Inc.  
1310 Seaboard Industrial Blvd.  
Atlanta, GA 30318  
1-888-805-HELP (4357)  
www.enforcer.com

## Section 1. Chemical Product and Company Identification

**Product name** Enforcer Mosquito & Flying Insect Killer II

**Product code** PFI / L835

**Date of issue** 03/10/10 **Supersedes** 05/27/03

This product is a registered pesticide. EPA ID No. 28293-271-40849

### 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

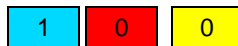
Compliance Services  
1420 Seaboard Industrial Blvd.  
Atlanta, GA 30318

## Section 2. Hazards Identification

### Emergency overview

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

CAUTION



MAY BE HARMFUL IF SWALLOWED.

MAY BE HARMFUL IF ABSORBED THROUGH SKIN.

**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.

**Eyes** Direct contact may cause irritation and redness.

**Skin** May cause skin irritation. May be harmful if absorbed through the skin. Skin inflammation is characterized by itching, scaling, or reddening.

**Inhalation** Avoid breathing vapors, spray or mists. Over-exposure by inhalation may cause respiratory irritation.

**Ingestion** May be harmful if swallowed. Can cause gastrointestinal disturbances.

**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

PERMETHRIN; (3-phenoxyphenyl) methyl-cis, trans-3-(2,2-dichloroethenyl)-2,2 dimethylcyclopropanecarboxylate)

### CAS number

52645-53-1

### % by Weight

2.5

## 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.

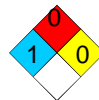
**Skin Contact** Flush affected skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if symptoms occur.

**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. 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.)



<b>Flash Point</b>	None.
<b>Flammable Limits</b>	Not applicable
<b>Flammability</b>	Not applicable
<b>Fire hazard</b>	In a fire or if heated, a pressure increase will occur and the container may burst.
<b>Fire-Fighting Procedures</b>	Use an extinguishing agent suitable for the surrounding fire.

**Section 6. Accidental Release Measures**

**Spill Clean up** 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.

**Section 7. Handling and Storage**

<b>Handling</b>	Put on appropriate personal protective equipment (see section 8). Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Do not ingest. Do not reuse container. Wash thoroughly after handling. Apply this product only as specified on the label.
<b>Storage</b>	Keep container tightly closed and sealed until ready for use. Keep in a cool, well-ventilated place. Keep out of the reach of children.

**Section 8. Exposure Controls/Personal Protection**

**Product name** **Exposure limits**

No exposure limit value known.

**Personal Protective Equipment (PPE)**

<b>Eyes</b>	Safety glasses.
<b>Body</b>	Wear appropriate protective clothing to prevent skin contact. Recommended: Rubber gloves. Nitrile gloves. Neoprene gloves.
<b>Respiratory</b>	No respiratory protection needed under normal use conditions.

**Section 9. Physical and Chemical Properties**

<b>Physical State</b>	Liquid.	<b>Color</b>	Off-white. [Light]
<b>pH</b>	7.0 - 8.0	<b>Odor</b>	Mild. [Slight]
<b>Boiling Point</b>	Not determined.	<b>Vapor Pressure</b>	Not determined.
<b>Specific Gravity</b>	1.008	<b>Vapor Density</b>	Not determined.
<b>Solubility</b>	Insoluble in the following materials: cold water.	<b>Evaporation Rate</b>	Not determined.
		<b>VOC (Consumer)</b>	0 g/l

**Section 10. Stability and Reactivity**

<b>Stability and Reactivity</b>	The product is stable.
<b>Incompatibility</b>	Slightly reactive or incompatible with the following materials: acids and alkalis.
<b>Hazardous Polymerization</b>	Will not occur.
<b>Hazardous Decomposition Products</b>	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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

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**

Toxic to bees. Do not use product when weather conditions are likely to produce drift from areas treated. 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 0.6 ppb Fresh water	Daphnia - Water flea - Daphnia magna - 12 hours	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 1.5 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 0.548 ppb Marine water	Crustaceans - Daggerblade grass shrimp - Palaemonetes pugio	48 hours
	-	Acute LC50 3 ug/L Fresh water	Crustaceans - Crayfish - Orconectes sp.	48 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 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** Classification: - [Non-hazardous waste]

**Section 14. Transport Information**

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label
<b>DOT Classification</b>	Not regulated.	Not a DOT controlled material (United States).			
<b>TDG Classification</b>	Not regulated.	Not a TDG-controlled material.			

**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**

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 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.