

## MATERIAL SAFETY DATA SHEET

### BIO SPOT ACTIVE CARE FLEA & TICK SPRAY FOR DOGS & PUPPIES

**Manufacturer:** Central Garden & Pet Company  
**Address:** 1501 East Woodfield Road, Suite 200 West, Schaumburg, IL 60173  
**Emergency Phone:** 1-888-914-2082  
**Transportation Emergency Phone:** CHEMTREC: 1-800-424-9300

#### 1. CHEMICAL PRODUCT INFORMATION

**Product Name:** Bio Spot Active Care Flea & Tick Spray for Dogs & Puppies  
**Chemical Name/Synonym:** Etofenprox: 2-(4-ethoxyphenyl)-2-methylpropyl-3-phenoxybenzyl ether, (S)-Methoprene; isopropyl (2E,4E,7S)-11-methoxy-3,7,11-trimethyl-2,4-Dodecadienoate, Piperonyl Butoxide; 5-[2-(2-butoxyethoxy)ethoxymethyl]-6-propyl-1,3-benzodioxole  
**Chemical Family:** Pyrethroid, Terpenoid, Benzodioxole  
**Formula:** C<sub>25</sub>H<sub>28</sub>O<sub>3</sub>, C<sub>19</sub>H<sub>34</sub>O<sub>3</sub>, C<sub>19</sub>H<sub>30</sub>O<sub>5</sub>  
**EPA Registration No.:** 2724-797-89459  
**RF Number:** RF2063

#### 2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component (chemical, common name)</u>	<u>CAS Number</u>	<u>Weight</u>	<u>Tolerance</u>
Etofenprox: 2-(4-ethoxyphenyl)-2-methylpropyl-3-phenoxybenzyl ether	80844-07-1	0.5%	Not established
(S)-Methoprene; isopropyl (2E,4E,7S)-11-methoxy-3,7,11-trimethyl-2,4-Dodecadienoate	65733-16-6	0.27%	Not Established
Piperonyl Butoxide; 5-[2-(2-butoxyethoxy)ethoxymethyl]-6-propyl-1,3-benzodioxole	51-03-6	1.75%	Not Established
Inert ingredients: (nonhazardous and/or trade secret)		97.48%	

#### 3. HAZARD INFORMATION

**PRECAUTIONARY STATEMENTS**  
**KEEP OUT OF REACH OF CHILDREN**  
**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**  
**CAUTION**  
**CAUSES MODERATE EYE IRRITATION. AVOID CONTACT WITH EYES OR CLOTHING. WASH THOROUGHLY WITH SOAP AND WATER AFTER HANDLING AND BEFORE EATING, DRINKING, CHEWING GUM, USING TOBACCO, OR USING THE TOILET. REPEATED EXPOSURE TO ETOFENPROX CAN CAUSE SKIN IRRITATION.**

**PRIMARY ROUTE OF ENTRY**     Dermal/Eye: Yes                     Oral: No                     Inhalation: Yes

**ACUTE TOXICITY**

Oral:     No specific hazard identified

Dermal:     No specific hazard identified

Inhalation:     No specific hazard identified

Bio Spot Active Care Flea & Tick Spray for Dogs & Puppies

## OTHER TOXICOLOGICAL INFORMATION

**Skin Irritation:** Slight skin irritant  
**Eye Irritation:** Moderate eye irritant  
**Sensitizer:** Not a skin sensitizer

## 4. FIRST AID MEASURES

- If in eyes:**
- Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes.
  - Call a poison control center or doctor for treatment advice.

## 5. FIRE FIGHTING MEASURES

**NFPA Rating:**    **Health: 1**                      **Fire: 2**                      **Reactivity: 0**  
**Flammability Class:** Combustible Liquid  
**Flash Point:** 41.8 °C (107.24°F)  
**Explosive Limits (% of Volume):** UEL: 3 ; LEL:12 (Based on 1-methoxy – 2 –propanol)  
**Extinguishing Media:** Dry chemical, CO2, Alcohol foam, or water spray  
**Special Protective Equipment:** Firefighters should wear full protective clothing including self-contained breathing apparatus.  
**Fire Fighting Procedures:** Normal procedures. Do not allow fire fighting water to escape into water-ways or sewers.  
**Combustion Products:** Incomplete combustion may produce carbon monoxide  
**Unusual Fire/Explosion Hazards:** None known

## 6. ACCIDENTAL RELEASE MEASURES

**Steps to be taken:** Do not allow spill to enter waterways inhabited by aquatic organisms. Soak up with absorbent material and place in container for disposal.  
**Absorbents:** Clay granules, sawdust, dirt or equivalent.  
**Incompatibles:** Strong oxidizers

## 7. HANDLING AND STORAGE

**Handling:** Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling.  
**Storage:** Do not store near heat or open flame. Store away from children and animals.

## 8. EXPOSURE CONTROL/PERSONAL MEASURES

**Exposure Limits:** Solvent (trade secret) = 100ppm (ACGIH TLV)  
**Ventilation:** Use with adequate ventilation.  
**Personal Protective Equipment:** Use appropriate protective equipment to prevent contact with eyes, clothing and skin, including chemical resistant gloves and protective eyewear. If ventilation is inadequate to control airborne vapor concentrations below recommended exposure limits, respiratory protection may be necessary. End users of this product should consult product labeling for personal protective equipment recommendations.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance and Odor:</b>	Clear liquid
<b>Boiling Point:</b>	N/A
<b>Melting Point:</b>	N/A
<b>Vapor Pressure (mm Hg):</b>	N/A
<b>Vapor Density (Air = 1):</b>	N/A
<b>Specific Gravity:</b>	N/A
<b>Bulk Density:</b>	0.9544 g/ml at 20 ° C
<b>Solubility:</b>	Miscible with water
<b>Evaporation Rate:</b>	N/A
<b>pH:</b>	6.38 @25 °C

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable
<b>Reactivity:</b>	N/A
<b>Incompatibility w/ Other Materials:</b>	N/A
<b>Decomposition Products:</b>	N/A
<b>Hazardous Polymerization:</b>	Will not occur

## 11. TOXICOLOGICAL INFORMATION

### ACUTE TOXICITY

Acute oral toxicity: LD50 >5,000 mg/kg  
Acute dermal toxicity: LD50 >5,000 mg/kg  
Skin irritation: Slightly irritating  
Eye irritation: Moderately irritating  
Not a dermal sensitizer

### CHRONIC TOXICITY [Specific to Active Ingredient(s)]

**Methoprene** is not considered a carcinogen. The NOEL for non-carcinogenic effects in an 18 month mouse study was 250 ppm. .

**Etofenprox** is not listed as a carcinogen by NTP or IARC and is not regulated by OSHA.

In rats the target organs are the liver and thyroid. The NOAEL for chronic toxicity is 3.7 mg/kg/day for male rats. The target organ in mice is the kidney. The NOAEL is 3.1 mg/kg/day for mice.

**Piperonyl butoxide:** An increase in the number of benign liver tumors in mice fed piperonyl butoxide technical at doses which far exceeded any anticipated daily human intake. Independent and industry toxicology experts have reviewed the data and agree that the findings of the study do not indicate a health risk to humans.

Carcinogenicity: NTP: No IARC: No OSHA: No

### DEVELOPMENTAL/REPRODUCTIVE TOXICITY [Specific to Active Ingredient(s)]

**Methoprene** is not a teratogen. The NOEL for maternal and embryo toxicity in rabbits was 200 mg/kg/day. The NOEL for reproductive effects in rats was 2500 ppm.

**Etofenprox** is not a teratogen. It does not have adverse effects on reproduction.

**Piperonyl butoxide:** There were no birth defects or adverse effects on reproductive parameters in tests with rats or rabbits. It is not considered to be teratogenic.

### **MUTAGENICITY [Specific to Active Ingredient(s)]**

**Methoprene** is not a mutagen.

**Etofenprox** is not a mutagen.

**Piperonyl butoxide** is not genotoxic in several tests including the Ames mutagenicity assay, chromosome aberrations in Chinese hamster ovary (CHO) cells, CHO/HGPRT assay with S9 activation, and in the unscheduled DNA synthesis (UDS) assay in cultured human liver cells.

## **12. ECOLOGICAL INFORMATION**

### **ECOTOXICITY [Active Ingredients Only]**

#### **Methoprene**

**Acute Toxicity:** **Fish:** LC<sub>50</sub> (trout): 760 ppb, (bluegill): > 370 ppb ((S)-Methoprene);  
**Aquatic invertebrates:** LC<sub>50</sub> (Daphnia): 360 ppb ((S)-Methoprene)

#### **Etofenprox**

**Acute Toxicity:** **Rainbow trout:** LC<sub>50</sub> = 3.3 ppb  
**Bluegill:** LC<sub>50</sub> = 8.5 ppb

#### **Piperonyl butoxide**

**Acute Toxicity:** **Rainbow trout:** LC<sub>50</sub> = 6.12 ppm  
**Bluegill:** LC<sub>50</sub> = 8.5 ppb 5.37 ppm  
**Sheepshead minnow:** LC<sub>50</sub> = 3.94 ppm  
**Mysid shrimp:** LC<sub>50</sub> = 0.32 ppm

## **13. DISPOSAL CONSIDERATIONS**

Wastes resulting from use of this product should be disposed of in accordance with all federal, state and local requirements. For additional regulatory information, see section 15 of this document.

## **14. TRANSPORT INFORMATION**

**DOT49CFR Description:** NOT REGULATED VIA HIGHWAY OR RAIL  
Consumer Commodity ORM-D-AIR Air transport within U.S.

**Freight Classification:** Insecticides Spray

## **15. REGULATORY INFORMATION**

**CERCLA (Superfund):** Not regulated  
**RCRA:** Regulated due to ignitability

### **SARA 311/312 HAZARD CATEGORIES**

**Immediate Health:** Yes (irritant)  
**Delayed Health:** No  
**Fire:** Yes  
**Sudden Pressure:** No  
**Reactivity:** No

*The information presented herein, while not guaranteed, was prepared by technically knowledgeable personnel and to the best of our knowledge is true and accurate. It is not intended to be all inclusive and the manner and conditions of use and handling may involve other or additional considerations.*