

MATERIAL SAFETY DATA SHEET

Vet-Kem[®] Ovitrol[®] X-Tend[™] Flea & Tick Spot On[®] for Dogs

Manufacturer: Wellmark International
Address: 1501 East Woodfield Road, Suite 200 W Schaumburg, IL 60173
Emergency Phone: Prosar 1-800-234-2269
Transportation Emergency Phone: CHEMTREC: 1-800-424-9300

1. CHEMICAL PRODUCT INFORMATION

Product Name: Vet-Kem[®] Ovitrol[®] X-Tend[™] Flea & Tick Spot On[®] for Dogs
Chemical Name/Synonym: (S)-Methoprene; isopropyl (2E,4E,7S)-11-methoxy-3,7,11-trimethyl-2,4-dodecadienoate, Etofenprox: 2-(4-ethoxyphenyl)-2-methylpropyl 3-phenoxybenzyl ether, Piperonyl Butoxide; 5-[2-(2-butoxyethoxy)ethoxymethyl]-6-propyl-1,3-benzodioxole
Chemical Family: Terpenoid, Pyrethroid, Benzodioxole
Formula: C₁₉H₃₄O₃ / C₂₅H₂₈O₃ / C₁₉H₃₀O₅
EPA Registration No.: 2724-811
RF Number: RF2164 A/T COMBO

2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component (chemical, common name)</u>	<u>CAS Number</u>	<u>Weight</u>	<u>Tolerance</u>
(S)-Methoprene: Isopropyl (2E,4E,7S)-11-methoxy-3,7,11-trimethyl-2,4-dodecadienoate	65733-16-6	3.60%	
Etofenprox	80844-07-1	30.00%	
Piperonyl butoxide: 5-[2-(2-butoxyethoxy)ethoxymethyl]-6-propyl-1,3-benzodioxole	51-03-6	5.00%	

3. HAZARD INFORMATION

PRECAUTIONARY STATEMENTS
KEEP OUT OF REACH OF CHILDREN
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION
FOR EXTERNAL USE ONLY. 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:** No.
ACUTE TOXICITY **Oral:** No specific hazard identified.
 Dermal: No specific hazard identified.
 Inhalation: No specific hazard identified.

OTHER TOXICOLOGICAL INFORMATION

Skin Irritation: Repeated exposure to etofenprox can cause skin irritation.

Eye Irritation: Mildly irritating.

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, and then continue rinsing.
 - Call a poison control center or doctor for treatment advice.

Note to Physician: There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition.

5. FIRE FIGHTING MEASURES

NFPA Rating: **Health: 1** **Fire: 1** **Reactivity: 0**

Flammability Class: Class IIIB liquid.

Flash Point: 135.9°C (PMCC).

Explosive Limits (% of Volume): Not available.

Extinguishing Media: Water, CO₂, dry chemicals, foam.

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: Carbon dioxide and carbon monoxide.

Unusual Fire/Explosion Hazards: None known.

6. ACCIDENTAL RELEASE MEASURES

Steps to be taken: Do not allow spill to enter water ways or sewers. Soak up with absorbent material and place in a suitable container for disposal.

Absorbents: Clay granules, sawdust, dirt or equivalent.

Incompatibles: Strong oxidizing agents.

7. HANDLING AND STORAGE

Handling: Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

Storage: Store in a cool area away from heat or open flame. Store away from children and animals.

8. EXPOSURE CONTROL/PERSONAL MEASURES

Exposure Limits: Not available.

Ventilation: Use with adequate ventilation.

Personal Protective Equipment: End users should refer to product labeling for PPE requirements. Avoid contact with skin, eyes or clothing. If contact with liquid is anticipated, impervious gloves and safety glasses are recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor:	Oily, yellowish liquid with weak, neutral, chemical odor.
Boiling Point:	Not available.
Melting Point:	Not available.
Vapor Pressure (mm Hg):	Not available.
Vapor Density (Air = 1):	Not available.
Specific Gravity:	0.994.
Bulk Density:	8.3 lbs/gallon.
Solubility:	Not soluble.
Evaporation Rate:	Not available.
pH:	Not available.

10. STABILITY AND REACTIVITY

Stability:	Stable.
Reactivity:	Not reactive.
Incompatibility w/ Other Materials:	Strong oxidizing agents.
Decomposition Products:	None except oxides of carbon from combustion.
Hazardous Polymerization:	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: mildly 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

ENVIRONMENTAL FATE

Hydrolysis: Not determined.

Photolysis: Not determined.

Soil half life: Not determined.

Water solubility: Not determined.

ECOTOXICITY [Active Ingredients Only]

Methoprene

Acute Toxicity: **fish:** LC₅₀ (trout): 760 ppb, (bluegill): > 370 ppb ((S)-Methoprene);
aquatic invertebrates: LC₅₀ (Daphnia): 360 ppb ((S)-Methoprene).

Etofenprox

Acute Toxicity: **Rainbow trout:** LC₅₀ = 3.3 ppb
Bluegill: LC₅₀ = 8.5 ppb

Piperonyl butoxide

Acute Toxicity: Highly toxic to fish

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

Freight Classification: Insecticide or Repellent NMFC # 155050

15. REGULATORY INFORMATION

CERCLA (Superfund): Not regulated.

RCRA: Not regulated.

SARA 311/312 HAZARD CATEGORIES

Immediate Health: Yes (Irritant).

Delayed Health: No.

Fire: No.

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.