

MATERIAL SAFETY DATA SHEET

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

Manufacturer: Wellmark International
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Emergency Phone: 1-888-914-2082
Transportation Emergency Phone: CHEMTREC: 1-800-424-9300

1. CHEMICAL PRODUCT INFORMATION

Product Name: Vet-Kem[®] Ovitrol[®] X-Tend[™] Flea & Tick Spot On[®] for Cats
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
Chemical Family: Terpenoid, Pyrethroid
Formula: C₁₉ H₃₄ O₃, C₃₅ H₂₈ O₃
EPA Registration No.: 2724-813
RF Number: RF2170 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%	Not Established
Etofenprox: 2-(4-ethoxyphenyl)-2-methylpropyl-3-phenoxybenzyl ether	80844-07-01	40.00%	Not Established
Inert ingredients (non hazardous and/or trade secret)		56.40%	Not Established

3. HAZARD INFORMATION

PRECAUTIONARY STATEMENT
KEEP OUT OF THE REACH OF CHILDREN.
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
REPEATED EXPOSURE TO ETOFENPROX CAN CAUSE SKIN IRRITATION.

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

ACUTE TOXICITY Oral: No specific hazard identified
 Dermal: No specific hazard identified
 Inhalation: No specific hazard identified

OTHER TOXICOLOGICAL INFORMATION

Skin Irritation: Mild irritation
Eye Irritation: Minimal irritation
Sensitizer: Not a sensitizer.

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4. FIRST AID MEASURES

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**
Flash Point: 112°C.
Explosive Limits (% of Volume): N/A.
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 waterways 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 waterways inhabited by aquatic organisms. 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 eyes, skin or clothing. Wash hands after handling.
Storage: Keep out of the reach of children. Do not store near food or food stuff.

8. EXPOSURE CONTROL / PERSONAL MEASURES

Exposure Limits: Not Established.
Ventilation: General ventilation is sufficient under normal use conditions.
Personal Protective Equipment: Not needed if product is used according to label. If prolonged exposure is anticipated, it is recommended to wear impervious gloves and safety glasses.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Pale yellow liquid with pleasant, weak fruit-like odor.
Boiling Point: Not determined.
Melting Point: Not determined.
Vapor Pressure (mm Hg): Not determined.
Vapor Density (Air = 1): Not determined.
Specific Gravity: 0.9931.
Bulk Density: Not determined.
Solubility: Not soluble in water.
Evaporation Rate: Not determined.
pH: Not determined.

10. STABILITY AND REACTIVITY

Stability:	Stable.
Reactivity:	Not determined.
Incompatibility w/ Other Materials:	Strong oxidizing agents.
Decomposition Products:	Carbon monoxide and Carbon dioxide.
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
Acute inhalation: LC50 >5.19 mg/L
Skin irritation: Mild irritant
Eye irritation: Mild irritant
Not a dermal sensitizer

CHRONIC TOXICITY

Methoprene [Based on (RS) Methoprene Tech] is not a carcinogen.

The NOEL for non-carcinogenic effects in an 18 month mouse study was 250 ppm.

Etofenprox is not a human carcinogen (EPA Category C). It 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.

SUBCHRONIC TOXICITY

Etofenprox is a mild skin irritant after 4-weeks of treatment. No systemic toxicity from dermal exposure was observed at doses up to 1000 mg/kg/day.

DEVELOPMENTAL/REPRODUCTIVE TOXICITY

Methoprene [Based on (RS) Methoprene Tech] 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 2,500 ppm.

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

MUTAGENICITY

Methoprene [Based on (S) Methoprene Tech] is not a mutagen.

Etofenprox is not a mutagen.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE

	(RS) Methoprene	Etofenprox
Hydrolysis:	T1/2 > 4 week	N/A
Photolysis:	T1/2 < 6 hours	N/A
Soil half life:	~ 10 days	N/A
Water solubility:	< 0.52 ppm	N/A

ECOTOXICITY

Acute Toxicity: **(S) Methoprene Technical:** LC50 (trout): 760ppb, LC50 (Bluegill): >370ppb; aquatic invertebrates: LC50 (Daphnia): 360 ppb.
Etofenprox Technical: extremely toxic to fish and aquatic invertebrates. LC50 (trout) 3.3 ppb and LC50 (bluegill) 8.5 ppb.

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 listed.

RCRA: Not regulated.

SARA 311/312 HAZARD CATEGORIES

Immediate Health: No.

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.