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MATERIAL SAFETY DATA SHEET
VET KEM® OVITROL PLUS FLEA & TICK SHAMPOO FOR DOGS & CATS

Manufacturer: Wellmark International

Address: 1100 East Woodfield Road, Suite 500 Schaumburg, IL 60173

Emergency Phone: 1-800-766-7661

Transportation Emergency Phone: CHEMTREC: 1-800-424-9300

1. CHEMICAL PRODUCT INFORMATION

Product Name: Vet Kem® Ovitrol Plus Flea & Tick Shampoo for Dogs & Cats

Chemical Name/Synonym: (S)-Methoprene; isopropyl (2E,4E,7S)-11-methoxy-3,7,11-trimethyl-2,4-dodecadienoate, Pyrethrins; a mixture of pyrethrin I, pyrethrin II, jasmolin I,jasmolin II, cinerin I, and cinerin II, Piperonyl Butoxide; 5-[2-(2-butoxyethoxy)ethoxymethyl]-6-propyl-1,3-benzodioxole

Chemical Family: Terpenoid, Pyrethroid, Benzodioxole

Formula: C21 H28 O3, C22 H28 O5, C19 H30 05. C19 H34 03

EPA Registration No.: 2724-485

RF Number: 9414

2. COMPOSITION / INFORMATION ON INGREDIENTS

Component (chemical, common name)	CAS Number	Weight	Tolerance
(S)-Methoprene: Isopropyl (2E,4E,7S)-11-methoxy-3,7,11-trimethyl-2,4-dodecadienoate	65733-16-6	0.10%	
Pyrethrins	8003-34-7	0.15%	5 mg/m3 (OSHA & ACGIH)
Piperonyl butoxide: 5-[2-(2-butoxyethoxy)ethoxymethyl]-6-propyl-1,3-benzodioxole	51-03-6	1.50%	
Inert ingredients		98.25%	

3. HAZARD INFORMATION

PRECAUTIONARY STATEMENT

CAUTION: Keep out of the reach of children

Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Usual signs of overexposure are those associated with allergies, i.e., sneezing, runny nose, stuffiness, watery eyes, in rare cases asthma-like symptoms.

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

ACUTE TOXICITY

Oral: LD50 (rat): >34,000 mg/Kg (HDT) Based on (S)-Methoprene

Dermal: LD50 (rabbit): >2000 mg/kg (HDT) Based on (S)-Methoprene

Inhalation: Not known

OTHER TOXICOLOGICAL INFORMATION

Skin Irritation: Moderately Irritating

Eye Irritation: Mildly Irritating

Sensitizer: Not a dermal sensitizer

4. FIRST AID MEASURES

Eye: 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. Call a poison control center or doctor for treatment advice.

Skin: Take off contaminated clothing. Rinse skin immediately with soap and water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Ingestion: Drink promptly a large quantity of milk, egg, whites, gelatin solution, or if these are not available, drink large quantities of water. Avoid alcohol.

Inhalation: Remove to clear air area.

Note to Physician: Treat symptomatically

5. FIRE FIGHTING MEASURES

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

Flammability Class: Non-Flammable

Flash Point: N/A

Explosive Limits (% of Volume): N/A

Extinguishing Media: CO2, foam, dry chemical

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: None known

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 spill with absorbent material and place in container for disposal.

Absorbents: Clay granules, sawdust, dirt or equivalent.

Incompatibles: Strong oxidizers, strong acids

7. HANDLING AND STORAGE

Handling: Avoid contact with eyes and skin. Wash thoroughly with soap and water after handling.

Storage: Store in a cool place. Do not contaminate water, food or feed by storage

8. EXPOSURE CONTROL / PERSONAL MEASURES

Exposure Limits:	Pyrethrins = 5 mg/m3 (OSHA PEL & ACGIH TLV)
Ventilation:	Natural ventilation will suffice.
Personal Protective Equipment:	If prolonged exposure is anticipated, it is recommended for users and handlers to wear a MSHA/NIOSH approved organic vapor/pesticide respirator, impervious gloves, goggles and other appropriate clothing to prevent skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor:	pale green, pearlescent, viscous liquid with odor similar to baby powder
Boiling Point:	N/A
Melting Point:	Not applicable
Vapor Pressure (mm Hg):	N/A
Vapor Density (Air = 1):	N/A
Specific Gravity:	1.024 @ 20°C / 4°C
Bulk Density:	8.5 lbs./gallon
Solubility:	Miscible in water
Evaporation Rate:	N/A
pH:	5.9

10. STABILITY AND REACTIVITY

Stability:	Stable
Reactivity:	Nonreactive
Incompatibility w/ Other Materials:	Strong oxidizers, strong acids
Decomposition Products:	None known
Hazardous Polymerization:	Will not occur

11. TOXICOLOGICAL INFORMATION

CHRONIC TOXICITY [Specific to Active Ingredient(s)]
[(RS)-Methoprene Technical] Methoprene is not considered as an oncogenic compound. The NOEL for non-carcinogenic effects in an 18 month mouse study was 250 ppm.

[Pyrethrins] In a 2-year feeding study, rats were fed pyrethrum at dietary levels of 10, 50 and 250 mg/kg/day. The highest level had no significant effect on growth or survival. Slight though definite liver damage was observed, especially at higher dosage levels. In a 90-day feeding study, dogs that were fed pyrethrins at a dietary level of 5,000 ppm showed tremors, ataxia, labored respiration and salivation during the first month of exposure.

[**Piperonyl Butoxide]** In rats at a dietary level of 10,000 ppm of Piperonyl Butoxide, (dosage of 650 mg/kg/day), there was a moderate reduction of weight gain, increased relative weight of the kidneys and increased relative weight of the liver. A 2-year bioassay of technical Piperonyl Butoxide for possible carcinogenesis was conducted by administering dietary levels of 5000 and 10,000 ppm to rats and mice. In the female, lymphomas occurred at incidences that were dose related. In the male mice, adenomas of the lacrimal gland occurred at incidences that were dose related but were not significantly higher than that in the control group. Thus, the occurrence of this tumor in the male mice was not clearly related to the administration of Piperonyl Butoxide.

DEVELOPMENTAL/REPRODUCTIVE TOXICITY [Specific to Active Ingredient(s)]
[(RS)-Methoprene Technical] is not a teratogenic compound. The NOEL for maternal and embryotoxicity in rabbits was 200 mg/kg/day. The NOEL for reproductive effects in rats was 500 ppm.

[Pyrethrins] was not found to be genotoxic and did not damage DNA in any study conducted

MUTAGENICITY [Specific to Active Ingredient(s)]
[(RS)-Methoprene Technical] Methoprene is not a mutagenic compound.

[Pyrethrins] was not found to be genotoxic and did not damage DNA in any study conducted.

[**Piperonyl Butoxide]** Piperonyl Butoxide is not considered to be a mutagen.

12. ECOLOGICAL INFORMATION

ECOTOXICITY [Active Ingredients Only]
Acute Toxicity: Pyrethrins and Piperonyl Butoxide are toxic to fish.

13. DISPOSAL CONSIDERATIONS

Do not contaminate water, food or feed by storage or disposal.
Container Disposal: **If empty -** Do not reuse container. Place in trash or offer for recycling if available.
If partly filled - Call your local solid waste agency or 1-800-CLEANUP for disposal instructions. Never place unused product down any indoor or outdoor drain.

14. TRANSPORT INFORMATION

DOT49CFR Description: Not regulated as hazardous by U.S. DOT

Freight Classification: Shampoo, hair, N.O.I. in boxes: NMFC 59320 Sub 2 Cl 65
Protect from freezing.

15. REGULATORY INFORMATION

CERCLA (Superfund): Reportable Quantity (RQ) Pyrethrins = 1 lb

RCRA: Not regulated as hazardous

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.