

MATERIAL SAFETY DATA SHEET
ZODIAC® FLEATROL FLEA & TICK SHAMPOO FOR DOGS AND CATS

Manufacturer: Wellmark International
Address: 1501 East Woodfield Road, Suite 200W, Schaumburg, IL 60173
Emergency Phone: 1-800-950-4783
Transportation Emergency Phone: CHEMTREC: 1-800-424-9300

1. CHEMICAL PRODUCT INFORMATION

Product Name: Zodiac® FleaTrol Flea & Tick Shampoo for Dogs & Cats
Chemical Name/Synonym: 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: Pyrethroid
Formula: C₂₁ H₂₈ O₃, C₂₂ H₂₈ O₅, C₂₁ H₃₀ O₃, C₂₂ H₃₀ O₅, C₂₀ H₂₈ O₃ and C₂₁ H₂₈ O₅ respectively, C₁₉ H₃₀ O₅
EPA Registration No.: 29909-2-2724
RF Number: 388

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Component (chemical, common name)</u>	<u>CAS Number</u>	<u>Weight</u>	<u>Tolerance</u>
Piperonyl Butoxide: 5-[2-(2-butoxyethoxy) ethoxymethyl]-6-propyl-1,3-benzodioxole	51-03-6	0.50%	Not established
Pyrethrins	8003-34-7	0.05%	5 mg/m ³ (OSHA &ACGIH)
Inert ingredients (non-hazardous/trade secret):		99.45%	Not established

3. HAZARD INFORMATION

PRECAUTIONARY STATEMENT

Caution: Keep out of reach of children. Harmful if swallowed. Causes 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 and itchy eyes, in rare sensitive individuals, asthma-like attacks may occur.

PRIMARY ROUTE OF ENTRY **Dermal/Eye:** Yes **Oral:** Yes **Inhalation:** Yes

ACUTE TOXICITY

Oral: LD₅₀ (rat): >5,000 mg/kg (highest dose level tested)
Dermal: LD₅₀ (rabbit): >2,000 mg/kg (highest dose level tested)
Inhalation: LC₅₀ (rat): >5.63 mg/L (highest dose level tested)

OTHER TOXICOLOGICAL INFORMATION

Skin Irritation: Mild irritant
Eye Irritation: Mild irritant
Sensitizer: Not available

4. FIRST AID MEASURES

Eye: Flush with gently flowing water to effect. If irritation persists, get medical attention.
Skin: Wash area with soap and water. If irritation persists, get medical attention.
Ingestion: Induce vomiting if person is conscious. Never give anything by mouth or induce vomiting in an unconscious person.
Inhalation: Remove victim to fresh air
Note to Physician: Treat symptomatically

5. FIRE FIGHTING MEASURES

NFPA Rating: Health: 2 Fire: 1 Reactivity: 0
Flammability Class: Combustible liquid
Flash Point: 212F
Explosive Limits (% of Volume): N/A
Extinguishing Media: Water, dry chemical, CO2
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: Oxides of carbon and sulfur
Unusual Fire/Explosion Hazards: None known

6. ACCIDENTAL RELEASE MEASURES

Steps to be taken: Contain spill. Assure good ventilation. Absorb with absorbent material and place in a suitable container for disposal.
Absorbents: Clay granules, sawdust, dirt or equivalent.
Incompatibles: None known

7. HANDLING AND STORAGE

Handling: Wash hands, face and arms thoroughly with soap and water after handling product.
Storage: Store away from feed or foodstuffs. Keep away from heat or open flame.

8. EXPOSURE CONTROL / PERSONAL MEASURES

Exposure Limits: Pyrethrin = 5 mg/m3 (OSHA PEL & ACGIH TLV)
Ventilation: Use with adequate ventilation.
Personal Protective Equipment: If prolonged exposure is anticipated, it is recommended for handlers to wear a NIOSH approved organic vapor/pesticide respirator impervious gloves, safety glasses, and other appropriate clothing to prevent skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Viscous green liquid

Boiling Point: Not known
Melting Point: Not applicable
Vapor Pressure (mm Hg): Not known
Vapor Density (Air = 1): Not known
Specific Gravity: 1.03 (H₂O=1)
Bulk Density: 8.6 lbs/gal
Solubility: Completely miscible
Evaporation Rate: <1 (butyl acetate)
pH: Not known

10. STABILITY AND REACTIVITY

Stability: Stable
Reactivity: Non-reactive
Incompatibility w/ Other Materials: None known
Decomposition Products: Oxides of carbon and sulfur
Hazardous Polymerization: Will not occur

11. TOXICOLOGICAL INFORMATION

CHRONIC TOXICITY [Specific to Active Ingredient(s)]

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. 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 carcinogenicity was conducted by administering dietary levels of 5,000 and 10,000 ppm to rats and mice. In the female rats, 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)]

Rats were given pyrethrins via gavage at doses of 50, 100, and 150 mg/kg. Increased resorptions were found at the 100 and 150 mg dose levels. No significant increase in defect rate was found. Decreased reproduction occurred in rats at dose levels of 650 mg/kg/day of Piperonyl Butoxide. There was a delay of over 23 days to the first litter, reduced average number of litters, reduced average weight of pups at 4 weeks of age, and a trend to smaller litters. In a separate study, Piperonyl Butoxide was administered to rats by gavage at 300 and 1,000 mg/kg. Piperonyl Butoxide was found not to be teratogenic at levels below maternally toxic levels.

MUTAGENICITY [Specific to Active Ingredient(s)]

Piperonyl Butoxide is not considered to be a mutagen.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE [Active Ingredients Only]

Hydrolysis: Not known

Photolysis: Not known
Soil half life: Not known
Water solubility: Completely miscible

ECOTOXICITY [Active Ingredients Only]

Acute Toxicity: **Fish:** :Not known; **Aquatic invertebrates:**:Not known

13. DISPOSAL CONSIDERATIONS

Do not reuse empty container. Wrap container in several layers of newspaper and put in trash.

14. TRANSPORT INFORMATION

DOT49CFR Description: Not regulated as hazardous by U.S. DOT
Freight Classification: Shampoo N.O.I. NMFC I-59320 Sub 2 Cl. 65

15. REGULATORY INFORMATION

CERCLA (Superfund): Reportable Quantity (RQ) - Pyrethrins = 1 lb Contact the National Response Center (800)244-8802 for spills exceeding the RQ.
RCRA: Not regulated as hazardous

SARA 311/312 HAZARD CATEGORIES

Immediate Health: Yes (irritation)
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.