MATERIAL SAFETY DATA SHEET
ZODIAC® FLEA & TICK SPONGE ON FOR DOGS & CATS

Manufacturer: Wellmark International
Address: 1501 E. Woodfield Rd., Suite 200-West, Schaumburg, IL 60173
Emergency Phone: 1-800-950-4783
Transportation Emergency Phone: CHEMTREC: 1-800-424-9300

1. CHEMICAL PRODUCT INFORMATION

Product Name: Zodiac® Flea & Tick Sponge On for Dogs and 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.: 73049-300-2724
RF Number: 382

2. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component (chemical, common name)</th>
<th>CAS Number</th>
<th>Weight</th>
<th>Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pyrethrins</td>
<td>8003-34-7</td>
<td>0.30%</td>
<td>5 mg/m3 (OSHA &amp; ACGIH)</td>
</tr>
<tr>
<td>Piperonyl butoxide : 5-[2-(2-butoxyethoxy) ethoxymethyl]-6-propyl-1,3-benzodioxole</td>
<td>51-03-6</td>
<td>3.00%</td>
<td>Not established</td>
</tr>
<tr>
<td>Inert ingredients (non-hazardous/trade secret):</td>
<td></td>
<td>96.70</td>
<td>Not established</td>
</tr>
</tbody>
</table>

3. HAZARD INFORMATION

PRECAUTIONARY STATEMENT
KEEP OUT OF THE REACH OF CHILDREN
CAUTION: HARMFUL IF SWALLOWED. AVOID CONTACT WITH EYES. DO NOT CONTAMINATE FOOD OR FEEDSTUFFS WITH THIS CONCENTRATE OR DILUTED SOLUTION.

SINGNS AND SYMPTOMS OF OVEREXPOSURE
If taken orally, may cause nausea, vomiting, diarrhea, cramps. Persons having allergies may show hay fever symptoms to large exposures of pyrethrins. Large suicidal doses may cause central nervous system convulsions, salivation, tremors.

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

(Based on a similar product with a higher concentration of active ingredient (EPA MRID#:243385)

ACUTE TOXICITY
Oral: LD50 (rat): >5,000 mg/kg
Dermal: LD50 (rabbit): >2,000 mg/kg
Inhalation: LC50 (rat): >2mg/L 4 Hr. Test
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 with soap and water. If irritation persists, get medical attention.
Ingestion: Call a physician or poison control center for treatment advice. Have person sip a glass of able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.
Inhalation: Remove 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: >200F
Explosive Limits (% of Volume): N/A
Extinguishing Media: Foam, CO2, 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: Carbon dioxide, carbon monoxide, nitrogen oxides, ammonia, sulfur oxides
Unusual Fire/Explosion Hazards: None known

6. ACCIDENTAL RELEASE MEASURES

Steps to be taken: Wear proper protective equipment and cover spill with absorbent material. Place absorbed material in container for disposal.
Absorbents: Clay granules, sawdust, dirt or equivalent.
Incompatibles: Strong oxidizers

7. HANDLING AND STORAGE

Handling: Wash hands, arms and face thoroughly with soap and water after handling product. Avoid breathing vapors and avoid contact with skin, eyes, or clothing.
Storage: Store in original container in a cool dry place inaccessible to children.
8. EXPOSURE CONTROL / PERSONAL MEASURES

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Milky white liquid with mild petroleum solvent odor.
Boiling Point: >200°F
Melting Point: Not applicable
Vapor Pressure (mm Hg): N/A
Vapor Density (Air = 1): Not known
Specific Gravity: 0.999 (H2O=1)
Bulk Density: 8.3 lbs/gal
Solubility: Emulsifies
Evaporation Rate: Not known
pH: Not known

10. STABILITY AND REACTIVITY

Stability: Stable
Reactivity: Non-reactive
Incompatibility w/ Other Materials: Strong oxidizers
Decomposition Products: Carbon dioxide, carbon monoxide, nitrogen oxides, ammonia, sulfur oxides
Hazardous Polymerization: Will not occur

11. TOXICOLOGICAL INFORMATION

CHRONIC TOXICITY [Speciﬁc to Active Ingredient(s)]
Pyrethrins are not considered to be carcinogenic. Piperonyl Butoxide is not considered to be carcinogenic.

DEVELOPMENTAL/REPRODUCTIVE TOXICITY [Speciﬁc to Active Ingredient(s)]
Pyrethrins are not considered to be a teratogenic. Piperonyl Butoxide is not considered to be teratogenic.

MUTAGENICITY [Speciﬁc to Active Ingredient(s)]
Pyrethrins are not considered to be a mutagenic. Piperonyl Butoxide is not considered to be a mutagenic.
12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE [Active Ingredients Only]
Hydrolysis: Not known
Photolysis: Not known
Soil half life: Not known
Water solubility: Emulsifies

ECOTOXICITY [Active Ingredients Only]
Acute Toxicity: Pyrethrins: Toxic to fish Piperonyl Butoxide: Toxic to fish
Keep out of water

13. DISPOSAL CONSIDERATIONS

Do not contaminate water or food by disposal. Disposal: Do not reuse empty container. Wrap in several layers of newspapers and discard in trash. 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: Animal insecticides, N.O.I. other than poison

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 (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.

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