MATERIAL SAFETY DATA SHEET
VET KEM SIPHOTROL® YARD SPRAY page 1 of 4

Manufacturer: Wellmark International
Address: 1100 East Woodfield Road, Suite 500 Schaumburg, IL 60173
Emergency Phone: 1-800-950-4783
Transportation Emergency Phone: CHEMTREC: 1-800-424-9300

1. CHEMICAL PRODUCT INFORMATION

Product Name: Vet Kem Siphotrol® Yard Spray
Chemical Name/Synonym: Permethrin: [(3-phenoxyphenyl)methyl(+/-) cis-trans-3-(2,2-dichloroethenyl)-2,2-dimethyl cyclopropanecarboxylate
Chemical Family: Pyrethroid
Formula: C_{19} H_{34} O_{3}
EPA Registration No.: 28293-271-2724
RF Number: N/A

2. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS Number</th>
<th>Weight</th>
<th>Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permethrin: (3-phenoxyphenyl)methyl(+/-) cis-trans-3-(2,2-dichloroethenyl)-2,2-dimethyl cyclopropanecarboxylate</td>
<td>52645-53-1</td>
<td>2.50%</td>
<td>Not Established</td>
</tr>
<tr>
<td>Other Ingredients</td>
<td></td>
<td>97.50%</td>
<td></td>
</tr>
</tbody>
</table>

3. HAZARD INFORMATION

PRECAUTIONARY STATEMENT
KEEP OUT OF THE REACH OF CHILDREN. CAUTION: May be harmful if swallowed or absorbed through skin. Avoid breathing spray mist. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.

SIGNS AND SYMPTOMS OF OVEREXPOSURE
Symptoms of intoxication to permethrin are hypersensitivity, tremors, diarrhea. Intoxication to solvents may cause dizziness, headache, nausea, narcosis, eye irritation, G.I. tract irritation, and cardiac arrhythmia in certain cases.

PRIMARY ROUTE OF ENTRY

Dermal/Eye: Yes  Oral: No  Inhalation: Yes

ACUTE TOXICITY

Oral: LD50 (rat): 1,500 mg/kg body weight (based on technical active ingredient)
Dermal: LD50 (rabbit): >2,000 mg/kg (based on technical active ingredient)
Inhalation: N/E
OTHER TOXICOLOGICAL INFORMATION

Skin Irritation: Mild irritant (based on technical active ingredient)
Eye Irritation: Mild to moderate irritant (based on technical active ingredient)
Sensitizer: Sensitization not expected

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: Call a physician or Poison Control immediately for treatment advice. 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: Move individual to fresh air. If not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.

Note to Physician: Treat symptomatically
Information: Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

5. FIRE FIGHTING MEASURES

NFPA Rating: Health: 1 Fire: 1 Reactivity: 0
Flammability Class: Class IIIA Combustible Liquid
Flash Point: >195°F (TCC)
Explosive Limits (% of Volume): N/E
Extinguishing Media: Water, CO2, dry chemical, or foam
Special Protective Equipment: Firefighters should wear full protective clothing including self-contained breathing apparatus.
Fire Fighting Procedures: Cool fire exposed area and equipment. Do not allow run-off waters to enter water ways or sewer
Combustion Products: Oxides of carbon from incomplete combustion
Unusual Fire/Explosion Hazards: None known

6. ACCIDENTAL RELEASE MEASURES

Steps to be taken: Absorb spills with an inert material and put in container for disposal.
Absorbents: Clay granules, sawdust, dirt or equivalent.
Incompatibles: None known

7. HANDLING AND STORAGE

Handling: Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling.
Storage: Store in a cool, dry area away from heat or flame. Do not contaminate water, food, or feed by storage.
8. EXPOSURE CONTROL / PERSONAL MEASURES

<table>
<thead>
<tr>
<th>Exposure Limits:</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ventilation:</td>
<td>Use in a well ventilated area.</td>
</tr>
<tr>
<td>Personal Protective Equipment:</td>
<td>Suitable protective clothing should be worn in confined or overhead areas to prevent exposure to eyes and skin. The use of gloves and footwear, a long-sleeved shirt and long pants or coveralls are recommended. Respiratory protection not likely to be needed, however, if prolonged exposure is anticipated, it is recommended for handlers to wear a NIOSH approved organic vapor/pesticide respirator.</td>
</tr>
</tbody>
</table>

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Appearance and Odor:</th>
<th>Off white Liquid. Mild odor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point:</td>
<td>N/E</td>
</tr>
<tr>
<td>Melting Point:</td>
<td>N/E</td>
</tr>
<tr>
<td>Vapor Pressure (mm Hg):</td>
<td>N/E</td>
</tr>
<tr>
<td>Vapor Density (Air = 1):</td>
<td>N/E</td>
</tr>
<tr>
<td>Specific Gravity:</td>
<td>1.008</td>
</tr>
<tr>
<td>Bulk Density:</td>
<td>N/A</td>
</tr>
<tr>
<td>Solubility:</td>
<td>Soluble</td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td>N/E</td>
</tr>
<tr>
<td>pH:</td>
<td>7.3</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

| Stability:       | Stable                      |
| Reactivity:      | Not reactive                |
| Incompatibility w/ Other Materials: | None known |
| Decomposition Products: | No unusual decomposition products |
| Hazardous Polymerization: | Will not occur |

11. TOXICOLOGICAL INFORMATION

**CHRONIC TOXICITY [Specific to Active Ingredient(s)]**
Permethrin showed no evidence of oncogenicity. A NOEL of 100 mg/kg was based on decreased body weight gain in the oncogenicity study.

**DEVELOPMENTAL/REPRODUCTIVE TOXICITY [Specific to Active Ingredient(s)]**
Permethrin showed no evidence of developmental or reproductive toxicity. A NOEL of >180 mg/kg/day was reported in a 3-generation reproduction toxicity study.

**MUTAGENICITY [Specific to Active Ingredient(s)]**
Permethrin was determined to be non-mutagenic in the following studies: Ames Test (in vitro), chromosomal aberration, and host-mediated assay.
12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE [Active Ingredients Only]
- Hydrolysis: N/E
- Photolysis: N/E
- Soil half life: N/E
- Water solubility: N/E

ECOTOXICITY [Active Ingredients Only]
- Acute Toxicity: This pesticide is extremely toxic to fish. Do not apply directly to water. Drifts and runoff from treated areas may be hazardous to aquatic organisms in treated areas. Do not contaminate water when disposing of equipment washwaters. This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area.

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
- **Freight Classification:** Insecticides NOI Other than poison NMFC 102120 CLASS 60

15. REGULATORY INFORMATION

- **CERCLA (Superfund):** Not regulated
- **RCRA:** Not regulated

SARA 311/312 HAZARD CATEGORIES
Sara Title, Section313:
- Cas number: 52645-53-1
- Ingredient Name: Permethrin
- Percent by weight: Min: 2.375% Max: 2.625%

- **Immediate Health:** Yes
- **Delayed Health:** No
- **Fire:** Yes
- **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.

23-12-022