1. IDENTIFICATION OF THE SUBSTANCE/PREPARATIONS AND OF THE COMPANY UNDERTAKING

Product Name: OTOMITE PLUS® Ear Miticide
Product Description: Ear mite treatment for dogs, cats, puppies and kittens
Manufacturer/Supplier: Virbac AH, Inc.
Address: P.O. Box 162059
Fort Worth, Texas 76161
Phone Number: (800) 338-3659 for Technical Support
Chemtrec Number (24 hour): (800) 424-9300
Emergency Number: (800) 338-3659 for Human and Animal Medical Emergencies
MSDS Revision Date: March 2, 2011
Supersedes MSDS Dated: September 24, 2010

Material Safety Data Sheet in compliance with OSHA’s Hazcom Standard (29 CFR 1910.1200)

2. HAZARDS IDENTIFICATION

Emergency Overview
CAUTION!
Avoid contact with eyes and skin.
Ingestion may cause adverse gastrointestinal effects.
Keep out of reach of children.
Read entire label before each use.

Routes of Entry
Eye contact - Skin contact - Ingestion - Inhalation

Carcinogenic Status
Not considered carcinogenic by NTP, IARC, and OSHA.

Target Organs
Eyes - Skin - Respiratory System

Health Effects - Eyes
Contact with eyes may cause slight irritation.

Health Effects - Skin
Repeated, prolonged contact with skin may cause irritation and skin sensitization.

Health Effects - Ingestion
Ingestion of this material may cause gastrointestinal effects such as nausea, vomiting, diarrhea, abdominal cramps and constipation.

Health Effects - Inhalation
No adverse effects are expected during normal conditions of use. Prolonged, repeated inhalation may cause adverse health effects.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component Name</th>
<th>CAS Number</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pyrethrins</td>
<td>8003-34-7</td>
<td>0.15%</td>
</tr>
<tr>
<td>Piperonyl Butoxide</td>
<td>51-03-6</td>
<td>1.50%</td>
</tr>
<tr>
<td>N-octyl bicycloheptene dicarboximide</td>
<td>113-48-4</td>
<td>0.50%</td>
</tr>
</tbody>
</table>
4. FIRST AID MEASURES

   Eyes
   Immediately flood the eye with plenty of water for at least 15-20 minutes, holding the eye open. Obtain medical attention if soreness or redness persists.

   Skin
   If irritation develops wash skin thoroughly with soap and water. Obtain medical attention if redness or soreness persists.

   Ingestion
   Call a poison control center or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

   Inhalation
   Remove person to fresh air. Seek medical attention if symptoms persist.

   Advice to Physicians
   Treat symptomatically.

5. FIRE - FIGHTING MEASURES

   Extinguishing Media
   Use extinguishing media appropriate for surrounding materials.

   Unusual Fire and Explosion Hazards
   Can release hazardous vapors during a fire.

   Protective Equipment for Fire-Fighting
   Wear full protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

   Wear appropriate protective equipment. Wipe up and transfer into suitable containers for recovery or disposal. Prevent the material from entering drains or watercourses.

7. HANDLING AND STORAGE

   Store in original container in a cool, dry place. Store away from children and pets. Do not store near foodstuffs. Do not contaminate water, food or feed by storage. Wear appropriate protective clothing. Avoid contact with skin, eyes and clothing. Wash and remove contaminated clothing before reuse. Avoid breathing vapors. Wash hands thoroughly after handling and before eating, drinking or smoking.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

   Occupational Exposure Standards
   Exposure limits are listed below, if they exist.

   Pyrethins
   ACGIH: TLV 5 mg/m³ 8h TWA
   OSHA: PEL 5 mg/m³ 8h TWA

   Piperonyl Butoxide
   None established

   N-octyl bicycloheptene dicarboximide
   None established

   Engineering Control Measures
   No specific measures necessary. Good general room ventilation is expected to be adequate to control airborne levels.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Respiratory Protection**
Not required under normal conditions of use. Professional groomers and those with repeated and extended exposures should consider the use of respiratory protection if there is a risk of exposure to high vapor concentrations or aerosols. The specific respirator selected must be based on the airborne concentration found in the workplace and must not exceed the working limits of the respirator.

**Hand Protection**
Chemical resistant gloves.

**Eye Protection**
Safety glasses or goggles.

**Body Protection**
Apron.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Yellow</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.86 - 0.87</td>
</tr>
<tr>
<td>Boiling Range/Point (°C/F)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting Point (°C/F)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash Point (PMCC) (°C/F)</td>
<td>Not flammable</td>
</tr>
<tr>
<td>Explosion Limits (%)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Vapor Density (Air = 1)</td>
<td>No data available</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

**Stability**
Stable under normal conditions.

**Conditions to Avoid**
Heat - high temperatures

**Materials to Avoid**
Strong oxidizers

**Hazardous Polymerization**
Will not occur.

**Hazardous Decomposition Products**
Oxides of carbon - hydrocarbons

11. TOXICOLOGICAL INFORMATION

See product insert and/or packaging for additional information.

**Acute Toxicity**
Pyrethrins: Oral LD50 (rat, male) 470 mg/kg, LD50 (rabbit) >5000 mg/kg
Piperonyl Butoxide: Oral LD50 (rat, male) 4570 mg/kg Dermal LD50 (rabbit)>2000 mg/kg
Inhalation LC50 (rat) >5.9 mg/l
N-octyl bicycloheptene dicarboximide: Oral LD50 (rat) 5000 mg/kg Dermal LD50 (rabbit) >2000 mg/kg
11. **TOXICOLOGICAL INFORMATION**

**Specific Target Organ Systemic Toxicity (single and repeat)**

Pyrethrins: In laboratory animal studies has shown adverse nervous system, thyroid and liver effects. Following inhalation exposure, neurobehavioral effects were observed initially and respiratory tract lesions were observed at all dose levels.
Piperonyl Butoxide: In subchronic inhalation toxicity studies in rats adverse effects to the respiratory system were observed.
N-octyl bicycloheptene dicarboximide: In inhalation exposure in laboratory animals adverse effects to the respiratory tract have been observed.

**Serious Eye damage/Eye Irritation**
Piperonyl Butoxide: Minimally irritating.

**Skin Corrosion/Irritation**
Pyrethrins: Mild skin irritant.

**Respiratory or Skin Sensitization**
N-octyl bicycloheptene dicarboximide: Positive results for dermal sensitization in guinea pigs.
Pyrethrins: Not a dermal sensitizer (EPA report).

**Carcinogenicity**
Piperonyl Butoxide: EPA Classification: Group C—possible human carcinogen with no cancer quantification

**Germ Cell Mutagenicity**
N-octyl bicycloheptene dicarboximide: Negative in the CHO chromosome aberration

**Toxicity to Reproduction**
No relevant studies identified.

12. **ECOLOGICAL INFORMATION**

This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water. Do not contaminate water when disposing of equipment washwaters or rinsate.

**Mobility**
No relevant studies identified.

**Persistence/Degradability**
No relevant studies identified.

**Bio-accumulation**
No relevant studies identified.

**Ecotoxicity**
Pyrethrins: LC50 Bluegill 58 ug/l 96 h
Piperonyl Butoxide: LC50 Rainbow trout 3.4 ug/l 96 h

13. **DISPOSAL CONSIDERATIONS**

**Product Disposal:**
Do not contaminate water, food or feed by disposal. Never place any unused product down an indoor or outdoor drain. Call your local solid waste agency or 1-800-CLEANUP for disposal instructions

**Container Disposal:**
Dispose of empty container in a sanitary landfill. Place in trash or offer for recycling, if available. Do not reuse container.
14. TRANSPORT INFORMATION

- DOT CFR 172.101 Data: Not Regulated
- UN Proper Shipping Name: Not Regulated
- UN Class: None.
- UN Number: None.
- UN Packaging Group: None.
- Classification for AIR Transportation (IATA): Consult current IATA Regulations prior to shipping by air.

15. REGULATORY INFORMATION

**US REGULATIONS (Federal, State) and INTERNATIONAL CHEMICAL REGISTRATION LAWS**

**TSCA Listing**
This product contains ingredients that are listed on or exempt from listing on the EPA Toxic Substance Control Act Chemical Substance (TSCA) Inventory.

**DSL (Canadian) Listing**
All ingredients in this product have been verified for listing on the Domestic Substance List (DSL).

**WHMIS Classification**
D.2.B
This product was classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations and the MSDS contains all the information required by these regulations.

**MA Right To Know Law**
This product contains the following chemicals on the Massachusetts Right to Know Law: Ethyl Alcohol (64-17-5) - Pyrethrins (8003-34-7) - Piperonyl Butoxide (51-03-6)

**PA Right To Know Law**
This product contains the following chemicals on the Pennsylvania Hazardous Substance List: Pyrethrins (8003-34-7)

**NJ Right To Know Law**
This product contains the following chemicals on the New Jersey Workplace Hazardous Substance List: Pyrethrins (8003-34-7) - Piperonyl Butoxide (51-03-6)

**California Proposition 65**
This product contains the following materials which the State of California has found to cause cancer, birth defects or other reproductive harm: None

**SARA Title III Sect. 311/312 Categorization**
Immediate (acute)

**SARA Title III Sect. 313**
This product contains the following chemicals that are listed in Section 313 at or above de minimis concentrations: Piperonyl Butoxide (51-03-6)

16. OTHER INFORMATION

**NFPA Ratings**
- NFPA Code for Flammability - 0
- NFPA Code for Health - 1
- NFPA Code for Reactivity - 0
- NFPA Code for Special Hazards – 0

**HMIS Ratings**
- HMIS Code for Flammability - 0
- HMIS Code for Health - 2
- HMIS Code for Reactivity - 0
- HMIS Code for Personal Protection - See Section 8
16. OTHER INFORMATION

Abbreviations
ACGIH: American Conference of Governmental Industrial Hygienists
BOD: Biological Oxygen Demand
CAS#: Chemical Abstracts Service Number
FIFRA: Federal Insecticide, Fungicide and Rodenticide Act
IARC: International Agency for Research on Cancer
LC50: Lethal Concentration 50%
LD50: Lethal Dose 50%
N/A: Denotes no applicable information found or available
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration
PEL: Permissible Exposure Limit
STEL: Short Term Exposure Limit
TLV: Threshold Limit Value
TSCA: Toxic Substance Control Act

For further Information call: (800) 338-3659

Prepared By: EnviroNet LLC

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