1. IDENTIFICATION

Product Name
Preventic® Tick Collar for Dogs

Recommended use of the chemical and restrictions on use

Identified uses
Tick collar for dogs

Restrictions on Use
Available through licensed veterinarians only. It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Company Identification
Virbac AH, Inc.
P.O. Box 162059
Fort Worth, Texas 76161

Customer Information Number
(800) 338-3659

Emergency Telephone Number
Chemtrec Number: (800) 424-9300
Other Emergency Number:
Poison Control Center: 1-800-222-1222 (human)
HOT LINE NUMBER: 1-800-345-4735 (human and pet)

Issue Date
September 28, 2015

Supersedes Date
October 9, 2014

Safety Data Sheet prepared in accordance with OSHA's Hazard Communication Standard (29 CFR 1910.1200) and the Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

2. HAZARD IDENTIFICATION

Hazard Classification
Toxic to Reproduction - Category 2
Acute hazard to the aquatic environment - Category 2 (This classification not adopted by OSHA)

Label Elements
Hazard Symbols

Signal Word: Warning

Hazard Statements
Suspected of damaging fertility or the unborn child.
Toxic to aquatic life.

Precautionary Statements
Prevention
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear eye protection, face protection, protective clothing and protective gloves.
Avoid release to the environment.
2. HAZARD IDENTIFICATION

Response
If exposed or concerned: Get medical advice/attention.

Storage
Store locked up.

Disposal
Dispose of contents/container in accordance with local regulation.

Other Hazards
See Section 15 for FIFRA label elements.

Specific Concentration Limits
The values listed below represent the percentages of ingredients of unknown toxicity.

<table>
<thead>
<tr>
<th>Toxicity</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute oral toxicity</td>
<td>70 - 80%</td>
</tr>
<tr>
<td>Acute dermal toxicity</td>
<td>70 - 80%</td>
</tr>
<tr>
<td>Acute inhalation toxicity</td>
<td>75 - 85%</td>
</tr>
<tr>
<td>Acute aquatic toxicity</td>
<td>80 - 90%</td>
</tr>
</tbody>
</table>

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms:
This product is a mixture.

<table>
<thead>
<tr>
<th>Component Name</th>
<th>CAS Number</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amitraz</td>
<td>33089-61-1</td>
<td>9%</td>
</tr>
<tr>
<td>Calcium Carbonate</td>
<td>471-34-1</td>
<td>5 - 15%</td>
</tr>
<tr>
<td>Calcium Stearate</td>
<td>1592-23-0</td>
<td>1 - 10%</td>
</tr>
<tr>
<td>Titanium Dioxide</td>
<td>13463-67-7</td>
<td>0.1 - &lt;1.0%</td>
</tr>
</tbody>
</table>

4. FIRST-AID MEASURES

Description of necessary first-aid measures

**Eyes**
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 the eye. Call a poison control center or doctor for treatment advice.

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

**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.

Most important symptoms/effects, acute and delayed
Aside from the information found under Description of necessary first aid measures (above) and Indication of immediate medical attention and special treatment needed, no additional symptoms and effects are anticipated.
4. FIRST-AID MEASURES

Indication of immediate medical attention and special treatment needed

Notes to Physicians
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Extinguishing Media
Water spray, carbon dioxide and dry chemical. 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

Personal precautions, protective equipment and emergency procedures
Wear appropriate protective clothing.

Environmental Precautions
Prevent the material from entering drains or watercourses.

Methods and materials for containment and cleaning up
Contain and transfer into suitable containers for recovery or disposal.

7. HANDLING AND STORAGE

Precautions for safe handling
Avoid contact with skin, eyes or clothing. Wash hands thoroughly after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

Conditions for safe storage
Do not contaminate water, food, or feed by storage. Store in tightly closed original container in a cool, dry, locked place. Keep away from children and pets.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters
Exposure limits are listed below, if they exist.

Calcium Carbonate
OSHA: PEL 15 mg/m³ 8h TWA, total dust
5 mg/m³ 8h TWA, respirable fraction
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Titanium Dioxide  
ACGIH TLV: 10 mg/m$^3$ TWA  
OSHA PEL: 15 mg/m$^3$ TWA (Total dust)

Calcium Stearate  
ACGIH TLV: 10 mg/m$^3$ TWA

Appropriate engineering controls  
No specific measures necessary. Good general room ventilation is expected to be adequate to control airborne levels.

Individual protection measures  
Respiratory Protection  
Not required under normal conditions of use.

Skin Protection  
Chemical resistant gloves.

Eye/Face Protection  
Safety glasses or goggles.

Body Protection  
Normal work wear.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Solid</td>
</tr>
<tr>
<td>Physical State</td>
<td>Solid</td>
</tr>
<tr>
<td>Color</td>
<td>Beige</td>
</tr>
<tr>
<td>Odor</td>
<td>Mild insecticide</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling Range/Point (°C/F)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Melting Point (°C/F)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flash Point (PMCC) (°C/F)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Evaporation Rate (BuAc=1)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Vapor Density (Air = 1)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>VOC</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper explosive limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Lower explosive limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
</tbody>
</table>
10. STABILITY AND REACTIVITY

Reactivity
Data is not available

Chemical Stability
Stable under normal conditions.

Possibility of hazardous reactions
Hazardous polymerization will not occur.

Conditions to Avoid
Heat - high temperatures

Incompatible Materials
None known.

Hazardous Decomposition Products
Oxides of carbon – nitrogen oxides – hydrogen chloride gas

11. TOXICOLOGICAL INFORMATION

See product insert and/or packaging for additional information.

Acute Toxicity
Amitraz:
LD50 Oral (rat) 531 mg/kg (M), 515 mg/kg (F)
LD50 Dermal (rabbit) > 200 mg/kg
LC50 Inhalation (rat) 2.4 mg/L

Specific Target Organ Toxicity (STOT) – single exposure
Amitraz: In human and animal studies reversible central nervous system effects (sedation, disorientation, and hypothermia) were observed.

Specific Target Organ Toxicity (STOT) – repeat exposure
No relevant studies identified.

Serious Eye damage/Irritation
Amitraz: Eye Irritation (rabbit): Non-irritating

Skin Corrosion/Irritation
Amitraz: Dermal Irritation (rabbit): Non-irritating

Respiratory or Skin Sensitization
Amitraz: Dermal Sensitization (guinea pig): Negative

Carcinogenicity
Amitraz: Amitraz is classified as “Suggestive Evidence of Carcinogenicity” based on the 2005 Office of Pesticide Programs cancer guidelines.
11. TOXICOLOGICAL INFORMATION

Carcinogenicity
Titanium Dioxide: IARC Overall Evaluation is 2B (Possibly carcinogenic to humans) IARC evaluation guidelines consider the generation of tumors, in 2 different studies within the same animal species, to be adequate criteria for an assessment of sufficient evidence. The conclusions of several epidemiology studies on more than 20000 TiO\(_2\) industry workers in Europe and the USA did not suggest a carcinogenic effect of TiO\(_2\) dust on the human lung. Mortality from other chronic diseases, including other respiratory diseases, was also not associated with exposure to TiO\(_2\) dust. Based upon these studies, titanium dioxide is not expected to cause lung cancer or chronic respiratory diseases in humans at concentrations experienced in the workplace.

Germ Cell Mutagenicity
Amitraz: Results of several mutagenic studies indicate that Amitraz is not mutagenic.

Reproductive Toxicity
Amitraz: Adverse effects have been seen in animal reproductive studies.

Aspiration Hazard
Not an aspiration hazard.

12. ECOLOGICAL INFORMATION

Ecotoxicity
Amitraz
LC50 Bluegill Sunfish 0.34 ppm, 96-hr LC50

Mobility in soil
No relevant studies identified.

Persistence/Degradability
No relevant studies identified.

Bioaccumulative Potential
No relevant studies identified.

Other adverse effects
No relevant studies identified.

13. DISPOSAL CONSIDERATIONS

Do not contaminate water, food, or feed by disposal. Do not reuse empty box or pouch. Wrap pouch and put in trash collection. When discarding cut off end and used collar, wrap in newspaper and place in trash collection. Dispose of in accordance with all applicable local and national regulations.

14. TRANSPORT INFORMATION

Contact supplier for transport information.
15. REGULATORY INFORMATION

United States TSCA Inventory
This product is excluded from TSCA as it regulated under FIFRA Section 3(2)(B)(ii) when used as a pesticide.

Federal Insecticide, Fungicide, and Rodenticide Act
This is a pesticide product registered by the Environmental Protection Agency and is subject to certain labelling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals.
Following is the hazard information as required on the pesticide label:
Front Panel:
KEEP OUT OF THE REACH OF CHILDREN
CAUTION
SEE BACK PANEL FOR ADDITIONAL
PRECAUTIONARY STATEMENTS AND DIRECTIONS
DO NOT ALLOW CHILDREN TO PLAY WITH THE COLLAR
DO NOT OPEN UNTIL READY TO USE

Side/Back Panel:
READ ENTIRE LABEL BEFORE EACH USE
USE ONLY ON DOGS. DO NOT USE ON CATS
PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION
HAZARDS TO HUMANS: Harmful if absorbed through the skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash hands thoroughly with soap and water before eating, drinking, chewing gum, or using tobacco.
This collar is intended for use as an acaricide generator and is not to be taken internally by man or animal. Not intended for use on humans. Do not allow children to handle or play with this collar. Some humans may develop skin irritation through contact with collared pet. Remove collar, shampoo pet and consult physician if irritation persists.

NOTICE: This product contains an ingredient known to the State of California to cause birth defects or other reproductive harm. Wash hands thoroughly after applying this product. Dispose of as instructed below.

Canada DSL Inventory
This product is excluded from DSL listing as it is regulated under the Pest Control Products Act when used as a pesticide.

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: Amitraz

SARA Title III Sect. 311/312 Categorization
Delayed (Chronic) Health Hazard

SARA Title III Sect. 313
This product contains the following chemicals that are listed in Section 313 at or above de minimis concentrations: Amitraz
16. OTHER INFORMATION

Legend
ACGIH: American Conference of Governmental Industrial Hygienists
BOD: Biological Oxygen Demand
CAS#: Chemical Abstracts Service Number
DSL: Domestic Substances List
ECHA: European Chemicals Agency
EPA: Environmental Protection Agency
FIFRA: Federal Insecticide, Fungicide and Rodenticide Act
HDT: Highest Dose Tested
HMIS: Hazardous Materials Identification System
IARC: International Agency for Research on Cancer
LC50: Lethal Concentration 50%
LD50: Lethal Dose 50%
LOEL: Lowest Observed Effect Level
N/A: Denotes no applicable information found or available
NFPA: National Fire Protection Association
NOEL: No Observed Effect Level
OSHA: Occupational Safety and Health Administration
PEL: Permissible Exposure Limit
TSCA: Toxic Substances Control Act
SARA: Superfund Amendments and Reauthorization Act
SDS: Safety Data Sheet
STEL: Short Term Exposure Limit
WHMIS: Workplace Hazardous Materials Information System
TLV: Threshold Limit Value
TSCA: Toxic Substance Control Act

Revision Date: September 28, 2015
Replaces: October 9, 2014
Changes made: Updated to GHS Classification.

Information Source and References
This SDS is prepared by Hazard Communication Specialists based on information provided by internal company references.

Prepared By: EnviroNet LLC.

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