SAFETY DATA SHEET
EQUIMAX®
(ivermectin 1.87%/praziquantel 14.03%)
Paste

1. IDENTIFICATION

Product Name
EQUIMAX®
(ivermectin 1.87%/praziquantel 14.03%)
Paste

Recommended use of the chemical and
restrictions on use
Identified uses
Worm control for horses and ponies
Restrictions on Use
Not for human use.

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
December 21, 2015

Supersedes Date
November 9, 2011

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. HAZARDS IDENTIFICATION

Hazard Classification
Acute Hazards to the Aquatic Environment – Category 1 (This classification not adopted by OSHA.)

Label Elements
Hazard Symbols

Signal Word: Warning

Hazard Statements
Very toxic to aquatic life.

Precautionary Statements
Prevention
Avoid release to the environment.
Response
None
Storage
None
Disposal
Dispose of contents/container in accordance with local regulation.
2. HAZARDS IDENTIFICATION

Other Hazards
None

Specific Concentration Limits
The values listed below represent the percentages of ingredients of unknown toxicity.
- Acute oral toxicity: 0%
- Acute dermal toxicity: <10%
- Acute inhalation toxicity: <10%
- Acute aquatic toxicity: 10 - 20%

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>Praziquantel</td>
<td>55268-74-1</td>
<td>14.03%</td>
</tr>
<tr>
<td>Ivermectin</td>
<td>70288-86-7</td>
<td>1.87%</td>
</tr>
<tr>
<td>Titanium Dioxide</td>
<td>13463-67-7</td>
<td>1 - 5%</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

Description of necessary 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
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.

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.

Indication of immediate medical attention and special treatment needed

Notes to Physicians
Treat symptomatically.

5. FIRE - FIGHTING MEASURES

Extinguishing Media
Use extinguishing media appropriate for surrounding materials.
5. **FIRE - FIGHTING MEASURES**

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**
Wipe up and transfer into suitable containers for recovery or disposal.

7. **HANDLING AND STORAGE**

**Precautions for safe handling**
Wear appropriate protective clothing. Wash hands after dispensing to dog and before eating, drinking or smoking.

**Conditions for safe storage**
Store in original container at room temperature 25°C/77°F with excursions permitted between 59°F and 86°F (15°C - 30° C). Keep out of sunlight. Keep away from children.

8. **EXPOSURE CONTROLS/PERSONAL PROTECTION**

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

**Praziquantel**
None established

**Ivermectin**
None established

**Titanium Dioxide**
ACGIH TLV: 10 mg/m³ TWA
OSHA PEL: 15 mg/m³ TWA (Total dust)

**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**
Protective gloves.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye/Face Protection
Not required under normal conditions of use.

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 (paste)</td>
</tr>
<tr>
<td>Physical State</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>White</td>
</tr>
<tr>
<td>Odor</td>
<td>None</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Density</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>
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</tr>
<tr>
<td>Vapor Pressure</td>
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<tr>
<td>Evaporation Rate (BuAc=1)</td>
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<tr>
<td>Solubility in Water</td>
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</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>
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</tr>
<tr>
<td>Viscosity</td>
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</tr>
<tr>
<td>Auto-ignition Temperature</td>
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</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
Strong oxidizers

Hazardous Decomposition Products
Oxides of carbon – organic compounds
11. TOXICOLOGICAL INFORMATION

See product insert and/or packaging for additional information.

**Acute Toxicity**

*Ivermectin:*
- Oral LD50 (rat) 50 mg/kg
- Oral LD50 (human) >15 mg/kg
- Dermal LD50 406 mg/kg (rabbit)

*Praziquantel:*
- Oral LD50 (rat) 2840 mg/kg
- Dermal LD50 (rat) >2000 mg/kg

**Specific Target Organ Toxicity (STOT) – single exposure**

*Ivermectin:* At high doses in humans and animals vomiting, tachycardia, blood pressure fluctuation, CNS effects (somnolence, ataxia) and visual disturbances have been observed. Higher doses may cause death due to respiratory depression.

*Praziquantel:* Acute overexposure (ingestion) may cause dizziness, headache, drowsiness, malaise, abdominal pain.

**Specific Target Organ Toxicity (STOT) – repeat exposure**

*Ivermectin:* No data available

*Praziquantel:* Chronic overexposure may cause nausea, lethargy, diarrhea, itching, fever and rash.

**Serious Eye damage/Irritation**

*Ivermectin:* Slightly irritating to eyes in rabbit tests.

*Praziquantel:* Not irritating to eyes in rabbit studies.

**Skin Corrosion/Irritation**

*Ivermectin:* Non-irritating in animal studies.

*Praziquantel:* Not irritating to skin in rabbit studies.

**Respiratory or Skin Sensitization**

*Ivermectin:* Hypersensitivity reactions have been reported in humans.

*Praziquantel:* Not sensitizing to skin in guinea pig study.

**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 TiO2 industry workers in Europe and the USA did not suggest a carcinogenic effect of TiO2 dust on the human lung. Mortality from other chronic diseases, including other respiratory diseases, was also not associated with exposure to TiO2 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.

*Praziquantel:* Long term studies in rats and golden hamsters did not reveal any carcinogenic effect.

**Germ Cell Mutagenicity**

*Ivermectin:* Negative in the AMES Assay, and in a mouse lymphoma mutation assay. In addition, it did not induce unscheduled DNA synthesis in a human fibroblast cell culture, suggesting that it does not damage DNA.

*Praziquantel:* Negative results for in vivo and in vitro animal studies.
11. TOXICOLOGICAL INFORMATION

Reproductive Toxicity
Ivermectin: Teratogenic in rats, rabbit and mice at or near materno-toxic dose levels. The abnormalities are limited mainly to cleft palate.
Praziquantel: Studies in rats and rabbits have shown no evidence of impaired fertility or harm to the fetus. An increase of the abortion rate was found in rats at three times the single human therapeutic dose.

Aspiration Hazard
Not an aspiration hazard.

12. ECOLOGICAL INFORMATION

Ecotoxicity
Ivermectin:
LC50 (Trout) 0.003mg/l 96hr
LC50 (Daphnia magna) 0.000025mg/l 48hr

Mobility in soil
Ivermectin: Ivermectin is metabolized in the soil. Water solubility is limited and it binds to soil very tightly. It does not bioconcentrate in fish and is not taken up from soil into plants.

Persistence/Degradability
Ivermectin: Slow biodegradation. Photodegrades rapidly.

Bioaccumulative Potential
No relevant studies identified.

Other adverse effects
No relevant studies identified.

13. DISPOSAL CONSIDERATIONS

Dispose of the syringe in an approved landfill or by incineration.

14. TRANSPORT INFORMATION

Contact supplier for transport information.

15. REGULATORY INFORMATION

United States TSCA Inventory
This product is not regulated under the US EPA Toxic Substance Control Act.

Canada DSL Inventory
All ingredients have not been verified for listing on the Domestic Substance List (DSL).
15. REGULATORY INFORMATION

California Proposition 65
This product contains trace amounts of the following chemicals which the State of California has found to cause cancer, birth defects or other reproductive harm: Acetaldehyde

SARA Title III Sect. 311/312 Categorization
None

SARA Title III Sect. 313
This product does not contain any chemicals listed in Section 313 at or above de minimis concentrations.

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
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: December 21, 2015
Replaces: November 9, 2011
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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16. OTHER INFORMATION

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