SAFETY DATA SHEETS

This SDS packet was issued with item: 078551780

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

078013332 078013340 078013357 078013365 078013373 078013381 078400346 078400353 078413162 078413170 078413188 078422294 078422567 078422666 078551772 078551798 078551814 078551822 078551830



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

Product Name IVERHART PLUS® (ivermectin/pyrantel pamoate) Flavored Chewable Tablets for Worm Control in Dogs Product Description 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 1, 2011 Supersedes MSDS Dated: January 25, 2010

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

2. HAZARDS IDENTIFICATION

Emergency Overview WARNING!

Hazardous to humans. May cause adverse gastrointestinal, liver and central nervous system effects. Wash thoroughly with soap and water after handling. Keep out of reach of children.

Routes of Entry Ingestion

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

Target Organs

Liver - Gastrointestinal Tract - Central Nervous System

Health Effects - Eyes

Not an expected route of entry during normal handling and use.

Health Effects - Skin

Contact with skin is not expected to cause adverse effects.

Health Effects - Ingestion

Ingestion of this material may cause central nervous system and gastrointestinal effects such as headache, dizziness, nausea, vomiting, diarrhea, abdominal cramps and constipation. Chronic exposure can result in adverse liver effects.

Health Effects - Inhalation

Not an expected route of entry during normal handling and use.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component Name Pyrantel as pamoate salt Ivermectin CAS Number 22204-24-6 70288-86-7 **Concentration** 48.32% 0.021%

Revision Date: March 1, 2011

Page 1 of 6



3. COMPOSITION/INFORMATION ON INGREDIENTS

Each tablet contains:

57, 114 or 227 mg of Pyrantel as pamoate salt 68, 136, or 272 mcg of Ivermectin

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

Contact a physician immediately if ingested. Physician may call a poison control center for advice concerning human ingestion.

Inhalation

Not applicable

Advice to Physicians

Federal (U.S.A.) law restricts this drug to use by or on the order of a licensed veterinarian.

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

Sweep and dispose of small amounts in trash. Large amounts should be disposed of in a sanitary landfill.

7. HANDLING AND STORAGE

Store in original container at temperatures between 59°F and 86°F (15°C - 30° C). Keep out of sunlight. Keep away from children. Wash hands after dispensing to dog before eating, drinking or smoking. Use product on or before expiration date. Discard or return unused tablets.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Standards Exposure limits are listed below, if they exist. Pyrantel as Pamoate Salt None established Ivermectin None established

Revision Date: March 1, 2011

Page 2 of 6



EXPOSURE CONTROLS/PERSONAL PROTECTION 8.

Engineering Control Measures

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

Respiratory Protection

Not required under normal conditions of use.

Hand Protection

Not required under normal conditions of use. Workers should wash hands before eating, drinking or smoking.

Eye Protection

Not required under normal conditions of use. Body Protection

Normal work wear.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid (tablet)
Color	Tan
Odor	None
pH	Not applicable
Specific Gravity	No data available
Boiling Range/Point (°C/F)	Not applicable
Melting Point (°C/F)	Not applicable
Flash Point (PMCC) (°C/F)	Not flammable
Explosion Limits (%)	No data available
Vapor Pressure	Not applicable
Density	No data available
Solubility in Water	Soluble
Vapor Density (Air = 1)	Not applicable

STABILITY AND REACTIVITY 10.

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-nitrogen oxides - sulfur oxides

Revision Date: March 1, 2011



11. TOXICOLOGICAL INFORMATION

See product insert and/or packaging for additional information. **Acute Toxicity** Pyrantel as pamoate salt: Oral LD50 (rat) >4000 mg/kg Ivermectin: Oral LD50 (rat) 10 - 50 mg/kg Specific Target Organ Systemic Toxicity (single and repeat) Pyrantel as pamoate salt: May cause adverse effects to the liver, gastrointestinal tract and central nervous system. Serious Eye damage/Eye Irritation Not expected to cause adverse effects. Skin Corrosion/Irritation Not expected to cause adverse effects. **Respiratory or Skin Sensitization** This product may cause a reaction in individuals with pork allergies. Carcinogenicity Not expected to cause long term adverse health effects. Germ Cell Mutagenicity This product is not expected to cause any mutagenic effects. **Toxicity to Reproduction** This product is not expected to cause adverse reproductive effects.

12. ECOLOGICAL INFORMATION

Mobility

No relevant studies identified. Persistence/Degradability No relevant studies identified. Bio-accumulation No relevant studies identified. Ecotoxicity No relevant studies identified.

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with all applicable local and national regulations.

14. TRANSPORT INFORMATION

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

Revision Date: March 1, 2011

Page 4 of 6



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

This product contains ingredients that are not listed 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: Cellulose (9004-34-6)

PA Right To Know Law

This product contains the following chemicals on the Pennsylvania Hazardous Substance List: Cellulose (9004-34-6)

NJ Right To Know Law

This product contains the following chemicals on the New Jersey Workplace Hazardous Substance List: None

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) Delayed (chronic)

SARA Title III Sect. 313

This product contains the following chemicals that are listed in Section 313 at or above de minimis concentrations: None

16. OTHER INFORMATION

NFPA Ratings

NFPA Code for Flammability - 0 NFPA Code for Health - 0 NFPA Code for Reactivity - 0 NFPA Code for Special Hazards – 0

HMIS Ratings

HMIS Code for Flammability - 0 HMIS Code for Health - 0 HMIS Code for Reactivity - 0 HMIS Code for Personal Protection - See Section 8

Revision Date: March 1, 2011



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

16. OTHER INFORMATION

For further Information call:

Prepared By:

EnviroNet LLC

(800) 338-3659

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Revision Date: March 1, 2011



1. IDENTIFICATION

Product Name

Recommended use of the chemical and restrictions on use Identified uses Restrictions on Use

Company Identification

Customer Information Number Emergency Telephone Number Chemtrec Number Other Emergency Number:

Issue Date Supersedes Date IVERHART™ PLUS (ivermectin/pyrantel) Flavored Chewables

Chewable for worm control in dogs Federal law restricts this drug to use by or on the order of a licensed veterinarian. Virbac AH, Inc. P.O. Box 162059 Fort Worth, Texas 76161 (800) 338-3659

(800) 424-9300 Poison Control Center: 1-800-222-1222 (human) HOT LINE NUMBER: 1-800-345-4735 (human and pet) February 13, 2017 March 1, 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 and national regulations.



Safety Data Sheet IVERHART™ PLUS (ivermectin/pyrantel) Flavored Chewables

2. HAZARDS IDENTIFICATION

Other Hazards

This product may cause a reaction in individuals with pork allergies.

Specific Concentration Limits

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

Acute oral toxicity	10 - 20%
Acute dermal toxicity	50 - 60%
Acute inhalation toxicity	70 - 80%
Acute aquatic toxicity	>90%

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms:

This product is a mixture.

Component Name	CAS Number	Concentration
Pyrantel Pamoate	22204-24-6	45 - 55 %
Pork Liver Powder	NA	10 - 20%
Ivermectin	70288-86-7	<0.1%

4. FIRST AID MEASURES

Description of necessary first-aid measures

Eyes

Not an expected route of entry. If tablet contacts eye, flush thoroughly with water. If pain or irritation persists contact a physician.

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.

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

No specific measures recommended.

Environmental Precautions

Prevent the material from entering drains or watercourses.

Methods and materials for containment and cleaning up

Pick up and dispose of in accordance with all applicable local and national regulations. Prevent the material from entering drains or watercourses.

7. HANDLING AND STORAGE

Precautions for safe handling

Wear appropriate protective clothing.

Conditions for safe storage

Store in original container at temperatures between 59°F and 86°F (15°C - 30°C). Store away from children and pets.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits are listed below, if they exist.

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 Not required under normal conditions of use. Eye/Face Protection Not required under normal conditions of use. Body Protection Normal work wear



Safety Data Sheet IVERHART™ PLUS (ivermectin/pyrantel) Flavored Chewables

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

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Physical State	Solid
Color	Tan
Odor	None
Odor Threshold	No data available
рН	No data available
Relative Density	No data available
Boiling Range/Point (°C/F)	No data available
Melting Point (°C/F)	No data available
Flash Point (PMCC) (°C/F)	Not flammable
Vapor Pressure	No data available
Evaporation Rate (BuAc=1)	No data available
Solubility in Water	No data available
Vapor Density (Air = 1)	No data available
VOC	No data available
Partition coefficient (n-	Not applicable
octanol/water)	
Viscosity	Not applicable
Auto-ignition Temperature	No data available
Decomposition Temperature	No data available
Upper explosive limit	No data available
Lower explosive limit	No data available
Flammability (solid, gas)	No data available

10. STABILITY AND REACTIVITY

Reactivity

Data is not available.

Chemical Stability

Stable under normal conditions.

Possibility of hazardous reactions

Hazardous reactions will not occur.

Conditions to Avoid

Heat - high temperatures

Incompatible Materials

None known.

Hazardous Decomposition Products

Oxides of carbon - nitrogen oxides - sulfur oxides

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

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



11. TOXICOLOGICAL INFORMATION

Acute Toxicity

<u>Pyrantel Pamoate</u> Oral 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.

Specific Target Organ Toxicity (STOT) - repeat exposure

No relevant studies identified.

Serious Eye damage/Irritation

Ivermectin: Slightly irritating to eyes in rabbit tests.

Skin Corrosion/Irritation

Ivermectin: Non-irritating in animal studies.

Respiratory or Skin Sensitization

This product may cause a reaction in individuals with pork allergies. Ivermectin: Hypersensitivity reactions have been reported in humans.

Carcinogenicity

Not considered carcinogenic by NTP, IARC, and OSHA.

Germ Cell Mutagenicity

<u>Pyrantel Pamoate</u>: Ames test in S. typhimurium Result: Negative. Murine Sperm-head abnormality test Result: Positive.

<u>Ivermectin</u>: 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.

Reproductive Toxicity

<u>Pyrantel Pamoate</u>: No evidence of adverse effects on fertility, reproduction or lactation was observed in rats at oral doses of 250 mg/kg/day. No maternal toxicity, embryo or fetotoxicity were observed in perinatal and postnatal toxicity study.

<u>Ivermectin:</u> Teratogenic in rats, rabbit and mice at or near materno-toxic dose levels. The abnormalities are limited mainly to cleft palate.

Aspiration Hazard

Not an aspiration hazard.

12. ECOLOGICAL INFORMATION

Ecotoxicity

<u>Ivermectin</u> 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.



Safety Data Sheet IVERHART™ PLUS (ivermectin/pyrantel) **Flavored Chewables**

12. **ECOLOGICAL INFORMATION**

Persistence/Degradability

Ivermectin: Slow biodegradation. Photodegrades rapidly.

Bioaccumulative Potential

No relevant studies identified.

Other adverse effects

No relevant studies identified.

13. **DISPOSAL CONSIDERATIONS**

Disposal Methods

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 the US EPA Toxic Substance Control Act and is regulated under the Food, Drug and Cosmetic Act.

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 None

SARA Title III Sect. 313

The following chemicals are listed in Section 313 at or above de minimis concentrations: None

16. OTHER INFORMATION

Legend

ACGIH: American Conference of Governmental Industrial Hygienists 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



16. OTHER INFORMATION

Revision Date: February 13, 2017 Replaces: March 1, 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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