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MATERIAL SAFETY DATA SHEET

PRODUCT AND COMPANY IDENTIFICATION

Product Name: Cydectin® Pour-On Product No.: RM1000373 GHS Product Identifier: Not applicable Synonyms: Moxidectin Pour-On

Molecular Formula: Mixture, not applicable Molecular Weight: Mixture, not applicable CAS Number: Mixture, not applicable Chemical Family: Antiparasitic

Manufacturer: Boehringer Ingelheim Vetmedica, Inc. 800 5th Street NW PO Box 518 Fort Dodge, IA 50501 Telephone: (515) 955-4600 Transporation Emergency: For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night

Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

Medical Emergency (24HR): (866) 638-2226 Non-emergency Telephone: (800) 821-7467

Intended Use: For the treatment of infections and infestations due to internal and external parasites of beef and dairy cattle.

HAZARDS IDENTIFICATION

Emergency Overview

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Physical State: Oily liquid Color: Dark violet Odor: Characteristic aromatic



WARNING! Combustible liquid. May be harmful if swallowed. Very toxic to aquatic life.

For bovine use only. Not for human use.

Precautionary Statements:

Keep away from flames and hot surfaces. – No smoking.

Keep only in original container.

Store in a well-ventilated place. Keep cool.

Store at or below room temperature. Avoid prolonged exposure above 25° C (77°F).

Store out of direct sunlight.

Protect from freezing.

Keep container closed.

In case of fire: Use water spray, dry chemical, carbon dioxide, foam

Avoid contact with eyes, skin and clothing.

Wear suitable gloves and eye/face protection.

Spills: Use non-sparking equipment when picking up combustible liquid spill. Remove ignition sources.

In case of accident/exposure or if you feel unwell, seek medical advice immediately (show the label where possible).

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

If swallowed, seek medical advice immediately and show this container or label.

In case of contact with eyes, directly, flush with gently flowing fresh water thoroughly.

Wash thoroughly with soap and water after handling.

Avoid release to the environment. Collect spillage.

Dispose of contents and container in accordance with applicable local authority requirements. Keep out of reach of children.

Keep away from food, drink, and animal feedstuffs.

Potential Health Effects

Inhalation: Not expected to be an inhalation hazard with prescribed use.

Eye Contact: May cause slight eye irritation if exposed. Exposure may cause eye tearing, redness, and discomfort.

Skin Contact: May cause slight skin irritation. Prolonged or repeated contact may cause itching, redness, and rash in some individuals or animals.

Ingestion: May be harmful if swallowed. Exposure may cause vomiting, nausea, diarrhea or other systemic effects.

Chronic Health Effects: May cause skin or membrane irritation in sensitive individuals or animals. Prolonged and repeated exposure may cause central nervous system depression.

Target Organ(s): Skin, eyes, gastrointestinal tract

OSHA Regulatory Status: Hazardous (exempt)

Environment: Very toxic to aquatic organisms.

3 COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	EC No.	CAS-No.	Concentration	Classification	Notes
Aromatic 100 Solvent	265-199-0	64742-95-6	15%	T; R45 R46	
				R65	
Moxidectin	Not	113507-06-5	<1%	T, N; R20 R25	
	assigned			R50/53	

Components not listed are not hazardous or are below reportable limits.

The full texts for all R-Phrases are displayed in Section 16.

4 FIRST AID MEASURES

General: Animals or persons developing anaphylactic (life-threatening) reactions, such as difficulty in breathing or unconsciousness, must receive immediate medical attention.

Inhalation: Move to fresh air. Treat symptomatically. Get medical attention if symptoms persist.

Eye Contact: Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. Get medical attention.

Skin Contact: Wash with soap and water. If skin irritation or rash occurs, get medical attention. Wash contaminated clothing before reuse.

Ingestion: Call a physician or poison control center immediately. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person.

Note to Physician: For bovine (cattle) use only. Not for human use.

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FIRE-FIGHTING MEASURES

Extinguishing Media: Extinguish with water spray, dry chemical, carbon dioxide, foam

Unsuitable Extinguishing Media: None known

Special Fire Fighting Procedures: Wear self-contained breathing apparatus and protective clothing. Use water spray to keep fire-exposed containers cool.

Unusual Fire & Explosion Hazards: Combustible liquid and vapor.

Hazardous Combustion Products: Carbon monoxide, carbon dioxide, nitrogen oxides

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate personal protective equipment (See Section 8).

Spill Cleanup Methods: STEPS TO BE TAKEN IF SIGNIFICANT QUANTITIES OF LIQUID IS SPILLED: Eliminate all ignition sources. Wear an approved respirator, eye protection, personal protective coverings and gloves. Use a non-combustible material like vermiculite, earth or sand to soak up the product and place into container for later disposal. Wash contaminated clothing before use.

Environmental Precautions: Prevent runoff from entering drains, sewers or streams. Dike for later disposal.

7 HANDLING AND STORAGE

Handling: HANDLING SIGNIFICANT QUANTITIES OF LIQUID: Avoid breathing vapors. Avoid contact with eyes, skin or clothing. Use adequate ventilation. Wash hands thoroughly after handling.

Storage: Keep only in the original container. Store at or below room temperature. Avoid prolonged exposure above 25°C (77°F). Store out of direct sunlight. Keep from freezing. Store away from foodstuffs.

EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits: None Established.

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Engineering Controls: Not generally required when handling vials or containers. Good ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Respiratory Protection: Not generally required when handling vials or containers. If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA standard 63 FR 1152, January 8, 1998. Respirator type: NIOSH approved organic vapor respirator.

Europe: Wear appropriate personal protective equipment according to the Council Directive 89/686/EEC (4) and the appropriate CEN standards.

PERSONAL PROTECTIVE EQUIPMENT: Not generally required when handling containers. If containers are compromised or exposure to the mixture is likely wear:

Eye Protection: Wear safety glasses with side shields (or goggles).

Hand Protection: Wear suitable gloves.

Skin Protection: Wear lab coat, apron or appropriate clothing to prevent skin contact.

Hygiene Measures: Eye bath, washing facilities

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PHYSICAL AND CHEMICAL PROPERTIES

Color: Dark violet Odor: Characteristic aromatic Odor Threshold: No data available Physical State: Oily liquid pH: No data available Melting Point: -10.4 to -17.9°C (13.3 to -0.22°F) Freezing Point: No data available Boiling Point: No data available Flash Point: 65.5°C (150°F) Flammability Limit – Upper (%): 12.6% (Aromatic 100 Solvent) Flammability Limit – Lower (%): 1.8% (Aromatic 100 Solvent) Evaporation rate: No data available Vapor Pressure: 4 mmHg (at 20°C) (Aromatic 100 Solvent) Vapor Density (Air=1): No data available Viscosity: 26 cps (at 20°C) Specific Gravity: 0.918 Solubility: Not miscible in water Partition Coefficient (n-Octanol/water): No data available Autoignition Temperature: No data available Decomposition Temperature: No data available

10 STABILITY AND REACTIVITY

Stability: Stable.

Conditions to Avoid: High temperatures, freezing

Incompatible Materials: Strong oxidizing agents

Hazardous Decomposition Products: Carbon dioxide, carbon monoxide, nitrogen oxides

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

11 TOXICOLOGICAL INFORMATION

Specified Substances

Acute Toxicity

Acute Toxicity		
Chemical Name	Test Results	
Aromatic 100 Solvent	Eye Irritation (rabbit): 100 uL/24H – mild irritation	
	Skin Irritation (rabbit): Draize 0.98/8 - slightly irritating	
	Oral LD50 (rat): 8400 mg/kg	
	Dermal LD50 (rabbit): > 3160 mg/kg	
	Inhalation LC50 (rat): > 14.4 mg/L 6 hours	

Moxidectin	Oral LD50 (rat): 106 mg/kg
	Dermal LD50 (rabbit): > 2000 mg/kg
	Eye Irritation (rabbit): Moderately irritating
	Skin Irritation (rabbit): Slightly irritating

Listed Carcinogens: None listed.

12 ECOLOGICAL INFORMATION

Ecotoxicity:

Specified Substances

Acute Toxicity

Chemical Name	Test Results	
Moxidectin	LC50 (bluegill sunfish): 0.62 ug/L (96 hours)	
	LC50 (rainbow trout): 0.16 ug/L (96 hours)	
	EC50 (Daphnia magna): 0.3 ug/L	

Persistence and degradability: No data available Mobility in soil: Moxidectin is moderately persistent in soil. Other adverse effects: Very toxic to aquatic organisms.

Germany WGK: Aromatic 100 Solvent: ID No: 775; Class 2: water-endangering.

13 DISPOSAL CONSIDERATIONS

General Information: Dispose of in accordance with local, state, federal, national or international regulations.

Disposal Methods: Incinerate containers and unused contents. Do not empty into drains. Dispose of this material and its container in a safe way. Do not contaminate water, food, or feed by disposal.

RCRA Information: Not applicable

14 TRANSPORT INFORMATION

<u>Non-Bulk DOT (Receptacles < 119 gallons):</u> Not Regulated

Bulk DOT (Receptacles > 119 gallons): UN-Number: NA1993 Proper Shipping Name: Combustible liquid, n.o.s. (Aromatic 100 Solvent) Class: Combustible liquid Packaging Group: III

<u>TDG</u>: Not Regulated

<u>ADR/RID</u>: This material can be shipped as a limited quantity material if the packaging requirements outlined below are fulfilled.

<u>Limited Quantities Exception</u>: Dangerous Goods in limited quantities of Class 9 PG III. Limited quantities must be packed in combination packaging. The inner packaging limits for substances, materials or articles, which are identified as marine pollutants and which are permitted in limited quantities, shall not exceed 5.0 liters (1.3 gallons) quantity limit as specified in the Dangerous Goods List (DGL) and be packaged in suitable outer packaging. The gross mass of the package must not exceed 30 kg (66 pounds).

For packages that do not meet the limited quantity packaging requirements:

UN-Number: UN3082 Proper Shipping Name: Environmentally Hazardous Substance, Liquid, n.o.s. (Moxidectin) Class: 9 Packaging Group: III

IATA: Not Regulated

<u>IMDG</u>: This material can be shipped as a limited quantity material if the packaging requirements outlined below are fulfilled.

<u>Limited Quantities Exception:</u> Dangerous Goods in limited quantities of Class 9 PG III. Limited quantities must be packed in combination packaging. The inner packaging limits for substances, materials or articles, which are identified as marine pollutants and which are permitted in limited quantities, shall not exceed 5.0 liters (1.3 gallons) quantity limit as specified in the Dangerous Goods List (DGL) and be packaged in suitable outer packaging. The gross mass of the package must not exceed 30 kg (66 pounds).

For packages that do not meet the limited quantity packaging requirements: UN-Number: UN3082 Proper Shipping Name: Environmentally Hazardous Substance, Liquid, n.o.s. (Moxidectin) Class: 9 Packaging Group: III EMS No.: F-A, S-F

15 REGULATORY INFORMATION

Canadian Controlled Products Regulations: This product has been classified according to the hazard criteria of the Canadian Controlled Products Regulations, Section 33, and the MSDS contains all required information.

WHMIS Classification: B3

Inventory Status

This material is not listed on the following inventories: TSCA, DSL, AICS, EINECS, IECSC, ENCS, PICCS, KECI, and NZIOC. Therefore, it can only be used for TSCA exempt purposes such as R&D or veterinary use.

US Regulations

CERCLA Hazardous Substance List (40 CFR 302.4): None listed.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130): None listed.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3): None listed.

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SARA Title III
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Section 302Extremely Hazardous Substance (40 CFR 355, Appendix A): None listed.

Section 311/312 (40 CFR 370):

X Acute (Immediate)	Chronic (Delayed)	X Fire	Reactive	Pressure Generating
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Section 313 Toxic Release Inventory (40 CFR 372): None listed.

State Regulations

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): None listed.

Massachusetts Right-To-Know List: None listed. Minnesota Hazardous Substances List: None listed. New Jersey Right-To-Know List: None listed. Pennsylvania Right-To-Know List: None listed. Rhode Island Right-To-Know List: None listed.

European Regulations

Austria MAK List (Annex I): None listed. Denmark (Annex 3.6, April 2005): None listed. Germany (Dangerous Substances Ordinance 2004, Annex III): None listed. Norway (List of Dangerous Substance): Solvent naphtha (petroleum), light aromatic Sweden (Sensitizers- Annex 3): None listed. Switzerland (Toxins List 1): None listed.

Hazard Ratings

	Health Hazard	Fire Hazard	Reactivity Hazard		
HMIS	2	2	0		

	Health Hazard	Fire Hazard	Reactivity Hazard	Special Hazard
NFPA	2	2	0	N/A

* - Chronic health effect; 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

EU Symbol and R Phrase Definitions

T – Toxic

N – Dangerous for the environment

R20 – Harmful by inhalation.

R25 – Toxic if swallowed.

R45 – May cause cancer.

R46 – May cause heritable genetic damage.

R50/53 – Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R65 – Harmful: may cause lung damage if swallowed.

ABBREVIATIONS:

BIV – Boehringer Ingelheim Vetmedica, Inc. AIHA – American Industrial Hygiene Association mppcf – million particles/cubic foot N/A – Not applicable. N/E – Not established.

References:

- 1. Cydectin® Pour On MSDS, Package Insert and Carton. Fort Dodge Animal Health.
- 2. Ariel WebInsight Regulatory Database. Regulatory Summary for North America, Western Europe, and Global Inventories Database.
- 3. GHS Manual

Revision Information: New MSDS Prepared by: Boehringer Ingelheim Vetmedica, Inc. Issue Date: 02/16/2010

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