

Section 1 - Identification of the Substance/Mixture and Supplier

Zoetis Australia Pty Ltd

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Product Identifier:	Cattleguard® Pour-on for Cattle and Red Deer
APVMA Approval No:	66931
Other names:	None
Chemical family:	Macrocyclic lactone
Recommended Use:	Treatment & control of internal and external parasites of cattle and internal parasites of deer by topical application.
Restrictions on use	For veterinary use only.
Emergency Phone:	1800 814 883 (all hours)

Section 2 - Hazards Identification

Classification of the Hazardous Chemical

GHS - Classification:

- Acute aquatic toxicity: Category 1
- Chronic aquatic toxicity: Category 1

GHS Label Elements:



GHS Signal word: WARNING

Hazard statements

H410 - Very toxic to aquatic life with long lasting effects

Precautionary Statements:

P273 - Avoid release to the environment

P391 - Collect spillage

P501 - Dispose of contents/container in accordance with all local and national regulations

Other Hazards

Short Term: May be harmful if swallowed. May cause slight skin irritation. (based on components)**Known Clinical Effects:** Adverse effects associated with therapeutic use include : clumsy motion of limbs/trunk (ataxia), drowsiness, depression, salivation.

Section 3 - Composition/Information on Ingredients

Hazardous

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Poisons Information Centre: 13 1126 from anywhere in Australia

Ingredients	CAS No	Conc,	TWA (mg/m ³)	STEL (mg/m ³)
Citric acid	77-92-9	1%	not set	not set
Moxidectin	113507-06-5	0.5%	not set	not set
Butylated hydroxyanisole	25013-16-5	<0.1	not set	not set

Non Hazardous

Propylene glycol	57-55-6	*	not set	not set
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Additional information:

* Proprietary

Ingredient(s) indicated as hazardous have been assessed under standards for workplace safety.

Section 4 - First Aid Measures

Description of First Aid Measures

Eye Contact: Flush with water while holding eyelids open for at least 15 minutes. Seek medical attention immediately.

Skin Contact: Remove contaminated clothing. Flush area with large amounts of water. Use soap. Seek medical attention.

Ingestion: Never give anything by mouth to an unconscious person. Wash out mouth with water. Do not induce vomiting unless directed by medical personnel. Seek medical attention immediately.

Inhalation: Remove to fresh air and keep patient at rest. Seek medical attention immediately.

Most Important Symptoms and Effects, Both Acute and Delayed**Symptoms and Effects of**

Exposure: For information on potential signs and symptoms of exposure, See Section 2 - Hazards Identification and/or Section 11 - Toxicological Information.

Medical Conditions Aggravated by Exposure: None known

Indication of the Immediate Medical Attention and Special Treatment Needed

Notes to Physician: None

Section 5 - Fire Fighting Measures

Extinguishing Media: Extinguish fires with CO₂, extinguishing powder, foam, or water.

Special Hazards Arising from the Substance or Mixture

Hazardous Combustion Products: Formation of toxic gases is possible during heating or fire.

Fire / Explosion Hazards: Fine particles (such as dust and mists) may fuel fires/explosions.

Advice for Fire-Fighters

During all fire fighting activities, wear appropriate protective equipment, including self-contained breathing apparatus.

Section 6 - Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures**SAFETY DATA SHEET**

Personnel involved in clean-up should wear appropriate personal protective equipment (see Section 8). Minimize exposure.

Environmental Precautions

Place waste in an appropriately labeled, sealed container for disposal. Care should be taken to avoid environmental release.

Methods and Material for Containment and Cleaning Up

Measures for Cleaning /Collecting: Contain the source of spill if it is safe to do so. Collect spill with absorbent material. Clean spill area thoroughly.

Additional Consideration for

Large Spills: Non-essential personnel should be evacuated from affected area. Report emergency situations immediately. Clean up operations should only be undertaken by trained personnel.

Section 7 - Handling and Storage

Precautions for Safe Handling

When handling, use appropriate personal protective equipment (see Section 8). Use with adequate ventilation. Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. Wash hands and any exposed skin after removal of PPE. Refer to Section 12 - Ecological Information, for information on potential effects on the environment. Releases to the environment should be avoided. Review and implement appropriate technical and procedural waste water and waste disposal measures to prevent occupational exposure or environmental releases. Potential points of process emissions of this material to the atmosphere should be controlled with dust collectors, HEPA filtration systems or other equivalent controls.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions: Store as directed by product packaging.

Specific end use(s): No data available

Section 8 - Exposure Controls and Personal Protection

Control Parameters

Moxidectin

Zoetis OEL TWA 8-hr 70 µg/m³

Propylene glycol

150 ppm

Australia TWA

474 mg/m³

10 mg/m³

Exposure Controls

Engineering Controls: Engineering controls should be used as the primary means to control exposures. Keep airborne contamination levels below the exposure limits listed above in this section.

Personal Protective

Equipment: Refer to applicable national standards and regulations in the selection and use of personal protective equipment (PPE).

Hands: Impervious gloves are recommended if skin contact with drug product is possible and for bulk processing operations.

Eyes: Wear safety glasses or goggles if eye contact is possible.

Skin: Impervious protective clothing is recommended if skin contact with drug product is possible and for bulk processing operations.

Respiratory protection: If the applicable Occupational Exposure Limit (OEL) is exceeded, wear an appropriate respirator with a protection factor sufficient to control exposures to below the OEL.

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Section 9 - Physical and Chemical Properties:

Physical State:	Liquid
Colour:	Clear amber
Odor:	No data available
Odor Threshold:	No data available
Molecular Formula:	Mixture
Molecular Weight:	Mixture
Solvent Solubility:	No data available
Water Solubility:	No data available
pH:	No data available
Melting/Freezing Point (°C):	No data available
Boiling Point (°C):	No data available
Partition Coefficient: (Method, pH, Endpoint, Value):	No data available

Moxidectin

Predicted 7 Log D 8.74

Decomposition Temperature (°C)	No data available
Evaporation Rate (Gram/s):	No data available
Vapor Pressure (kPa):	No data available
Vapor Density (g/ml):	No data available
Relative Density:	No data available
Viscosity:	No data available

Flammability:

Autoignition Temperature (Solid) (°C):	No data available
Flammability (Solids):	No data available
Flash Point (Liquid) (°C):	No data available
Upper Explosive Limits (Liquid) (% by Vol.):	No data available
Lower Explosive Limits (Liquid) (% by Vol.):	No data available

Section 10 - Stability and Reactivity

Reactivity: No data available

Chemical Stability: Stable under normal conditions of use.

Possibility of Hazardous Reactions

Oxidizing Properties: Non-oxidizing

Conditions to Avoid: Fine particles (such as mists) may fuel fires/explosions.

Incompatible Materials: As a precautionary measure, keep away from strong oxidizers

Hazardous Decomposition

Products: No data available

Section 11 - Toxicological Information

Information on Toxicological Effects

General Information: Toxicological properties of the formulation have not been investigated. The information in this section describes the potential hazards of the individual ingredients and the formulation.

Routes of exposure: skin contact , eye contact , inhalation

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Acute Toxicity: (Species, Route, End Point, Dose)**Moxidectin**

Rat Oral LD50 106 mg/kg
 Rat Dermal LD50 > 2000mg/kg

Propylene glycol

Rat Oral LD 50 22,000 mg/kg
 Mouse Oral LD 50 24,900mg/kg
 Rabbit Dermal LD 50 20,800mg/kg

Butylated hydroxyanisole

Rat Oral LD 50 2,000 mg/kg
 Mouse Oral LD 50 1100mg/kg
 Rat Intraperitoneal LD 50 881mg/kg

Acute Toxicity Comments: A greater than symbol (>) indicates that the toxicity endpoint being tested was not achievable at the highest dose used in the test.

Irritation / Sensitization: (Study Type, Species, Severity)**Moxidectin**

Eye Irritation Rabbit Moderate
 Skin Irritation Rabbit Mild
 Skin Sensitization - Beuhler Guinea Pig Negative

Propylene glycol

Skin Irritation Rabbit Mild
 Eye Irritation Rabbit Mild

Citric Acid

Eye Irritation Rabbit Irritant
 Skin Irritation Rabbit Non-irritating

Repeated Dose Toxicity: (Duration, Species, Route, Dose, End Point, Target Organ)**Moxidectin**

28 Day(s)	Mouse	Oral 75 mg/kg/day	NOEL	Central nervous system
28 Day(s)	Rat	Oral 100 mg/kg/day	LOEL	Central Nervous System
13 Week(s)	Rat	Oral 50 mg/kg/day	NOEL	Central Nervous System
90 Day(s)	Dog	Oral 10 mg/kg/day	NOEL	Central Nervous System

Butylated hydroxyanisole

12 Day(s)	Rat	Oral 3300 mg/kg	LOAEL	Liver, Blood
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Reproduction & Developmental Toxicity: (Study Type, Species, Route, Dose, End Point, Effect(s))**Moxidectin**

Embryo / Fetal Development	Rabbit	Oral 1 mg/kg bw/day	NOEL	Maternal toxicity, Not teratogenic
Embryo / Fetal Development	Rat	Oral 5 mg/kg/day	NOEL	Negative
Embryo / Fetal Development Toxicity	Rat	Oral 5 mg/kg bw/day	NOEL	Not Teratogenic, Embryotoxicity, Maternal

Butylated hydroxyanisole

Embryo / Fetal Development	Rat	Oral 30 g/kg	LOEL	Teratogenic
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Genetic Toxicity: (Study Type, Cell Type/Organism, Result)**SAFETY DATA SHEET**

Moxidectin

In Vitro Bacterial Mutagenicity (Ames) Salmonella, E. coli Negative
In Vitro HGPRT Forward Gene Mutation Assay Chinese Hamster Ovary (CHO) cells Negative
In Vivo Cytogenetics Rat Bone Marrow Negative
In Vivo Unscheduled DNA Synthesis Rat Hepatocyte Negative

Butylated hydroxyanisole

In Vivo Micronucleus Bone Marrow Negative
In Vitro Bacterial Mutagenicity (Ames) Salmonella Negative

Carcinogenicity: (Duration, Species, Route, Dose, End Point, Effect(s))**Moxidectin**

2 Year(s) Mouse Oral 30 mg/kg/day NOEL Not carcinogenic
 2 Year(s) Rat Oral 100 mg/kg/day NOEL Not carcinogenic

Butylated hydroxyanisole

Two Year(s) Rat Oral 728 g/kg/day Gastrointestinal system, Tumors
 Two Year(s) Rat Oral 874 g/kg/day Gastrointestinal system, Endocrine system, Tumors

Carcinogen Status: See below

Butylated hydroxyanisole

IARC: Group 2B (Possibly Carcinogenic to Humans)
NTP: Reasonably Anticipated To Be A Human Carcinogen

Section 12 - Ecological Information

Environmental Overview: Very toxic to aquatic life with long lasting effects. Releases to the environment should be avoided.

Toxicity:**Aquatic Toxicity: (Species, Method, End Point, Duration, Result)****Moxidectin**

Lepomis macrochirus (Bluegill Sunfish) LC50 96 Hours 0.62 ppb
Oncorhynchus mykiss (Rainbow Trout) LC50 96 Hours 0.16 ppb
Daphnia Magna (Water Flea) EC50 48 Hours 30 ppt
Selenastrum capricornutum (Green Alga) EC50 72 Hours > 87 ppb

Aquatic Toxicity Comments: A greater than symbol (>) indicates that aquatic toxicity was not observed at the maximum dose tested.

Persistence and Degradability: No data available

Bio-accumulative Potential:**Moxidectin**

Predicted 7 Log D 8.74

Mobility in Soil: No data available

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Section 13 - Disposal Considerations

Disposal: Special help is available for the disposal of Agricultural Chemicals. The product label will give general advice regarding disposal of small quantities, and how to cleanse containers. However, for help with the collection of unwanted rural chemicals, contact ChemClear 1800 008 182 <http://www.chemclear.com.au/> and for help with the disposal of empty drums, contact DrumMuster <http://www.drummuster.com.au/> where you will find contact details for your area.

Section 14 - Transport Information

Not subject to the ADG Code when transported by Road or Rail in Australia, in packages 500kg(L) or less; or IBCs, but classed as Dangerous Goods by IATA and IMDG when carried by Air or Sea transport (see details below).

UN number: UN 3082

UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (moxidectin)

Transport hazard class(es): 9

Packing group: III

Environmental Hazard(s): Marine Pollutant

This product is classed as environmentally hazardous. Take appropriate precautions when transporting, handling or cleaning up spills.

Special precaution for user: Class 9 Miscellaneous Dangerous Goods shall not be loaded in the same vehicle or packed in the same freight container with Dangerous Goods of Class 1 (Explosives).

Section 15 - Regulatory Information

Poison Schedule: S5

AICS: All of the significant ingredients in this formulation are compliant with NICNAS regulations.

Section 16 - Other Information

This SDS contains only safety-related information. For other data see product literature.

Data Sources: The data contained in this SDS may have been gathered from confidential internal sources, raw material suppliers, or from the published literature.

Acronyms:

ADG Code	Australian Code for the Transport of Dangerous Goods by Road and Rail (7 th edition)
AICS	Australian Inventory of Chemical Substances
SWA	Safe Work Australia, formerly ASCC and NOHSC
CAS number	Chemical Abstracts Service Registry Number
Hazchem Code	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
IARC	International Agency for Research on Cancer
NOS	Not otherwise specified
NTP	National Toxicology Program (USA)
SUSMP	Standard for the Uniform Scheduling of Medicines & Poisons
UN Number	United Nations Number

This version issued: 9 December 2016.

Supersedes: Revision issued 1 Jun 2016

Revision History:

Date of Revision	Reason
17 Nov 2014	Update to GHS
1 Jun 2016	Revision for consistency with Zoetis categorisation
9 Dec 2016	Amended APVMA number. This SDS replaces version issued 1 Jun 2016

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Contact Points:

Zoetis	1800 814 883
Police and Fire Brigade:	Dial 000

If ineffective:

**Dial Poisons Information Centre
(13 1126 from anywhere in Australia)**

THIS SDS SUMMARISES OUR CURRENT AND BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION ABOUT THE PRODUCT DETAILED IN THIS SDS, AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE FOR THE RECOMMENDED USE. EACH USER OF THE PRODUCT MUST REVIEW THIS SDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THEIR OWN WORKPLACE. IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT ZOETIS.

Please read all labels carefully before using product.

This SDS is prepared in accord with the SWA document "Preparation of Safety Data Sheets for Hazardous Chemicals - Code of Practice" (December 2011)

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End of Safety Data Sheet