

Ivermectin Pour-On

Contains 5 mg ivermectin per mL

Indications:

Ivermectin Pour-On for cattle is indicated for the treatment and control of gastrointestinal roundworms (including inhibited *Ostertagia ostertagi*), lungworms, grubs, horn flies, sucking and biting lice, and sarcoptic mange mites in cattle.

See package insert for complete indications and use directions.

Approved For Use On:

Cattle

Active Ingredient:

5 mg of ivermectin per mL

Product Advantages:

- FDA approved and equivalent to the pioneer product.
- Proven performance.
- Broad-spectrum control of costly internal and external parasites.
- Low volume application.
- Up to 28 days of horn fly control.
- Provides a wide margin of safety with minimal animal stress.

Packaging:

5 Liter, 2/case UPC# 7-45801-11045-8



Ivermectin Pour-On

ANADA 200-340,
Approved by FDA
Ivermectin Pour-On for
Cattle Contains
5 mg ivermectin/mL

Parasiticide

Consult your veterinarian for assistance in the diagnosis, treatment and control of parasitism.

Introduction

Ivermectin Pour-On for Cattle delivers internal and external parasite control in one convenient low-volume application. Ivermectin is a potent anti-parasitic agent whose chemical structure is different from those of other anti-parasitic agents.

Indications

Ivermectin Pour-On for Cattle applied at the recommended dose level of 500 mcg/kg is indicated for the effective control of these parasites.

Gastrointestinal Roundworms

Ostertagia ostertagi (adults and L₄)
(including inhibited stage)
Haemonchus placei (adults and L₄)
Trichostrongylus axei (adults and L₄)
T. colubriformis (adults and L₄)
Cooperia oncophora (adults and L₄)
Cooperia punctata (adults and L₄)
Cooperia surmabada (adults and L₄)
Strongyloides papillosus (adults)
Oesophagostomum radiatum (adults and L₄)
Trichuris spp (adults)

Lungworms

Dictyocephalus viviparus (adults and L₄)

Cattle Grubs

Hypoderma bovis
H. lineatum

Mites

Sarcoptes scabiei var. *Bovis*

Lice

Linognathus vituli

Haematopinus eurysternus

Damalinia bovis

Solenopotes capillatus

Horn Flies

Haematobia irritans

Treatment for Cattle for Horn Flies

Ivermectin Pour-On for Cattle controls horn flies (*Haematobia irritans*) for up to 28 days after dosing. For best results Ivermectin Pour-On for Cattle should be part of a parasite control program for both internal and external parasites based on the epidemiology of these parasites. Consult your veterinarian or an entomologist for the most effective timing of applications.

Dosage

The dose rate is 1 mL for each 22 lb of body weight. The formulation should be applied along the topline in a narrow strip extending from the withers to the tailhead.

Administration

Measuring Cup (250 mL, 1 L and 1 gallon bottles).

The enclosed measuring cup is graduated in 5 mL increments. Each 5 mL will treat 110 lbs body weight. When body weight is between markings, use the next higher increment.

Applicator Gun*

(2.5 L, 5 L and 5 gallon bottles)

Because of the solvents used in Ivermectin Pour-On for Cattle, the applicator gun from Genesis Instruments (EZ Doser™ or Power Doser™) or equivalent is recommended. Other applicators may exhibit compatibility problems, resulting in locking, incorrect dosage or leakage.

EZ Doser™ Operation:

1. Set the recommended dosage by turning the dose adjuster.
2. To prime the system, squeeze the handles repeatedly. This draws the fluid out of the container and into the EZ Doser™ barrel.
3. To expel air out of the system, hold the EZ Doser™ in a vertical position and gently squeeze the handles until the air is purged.
4. EZ Doser™ is activated by squeezing the handles. The pre-set dose will be given each time. The EZ Doser™ will automatically refill after each use.

Power Doser™ Operation:

1. Set the recommended dosage by turning the dose adjuster.
2. Bleed the line with rapid actuation of the Power Doser™.
3. Empty the air in the barrel by actuating the system so that the barrel fills 100% with product.
4. Power Doser™ is activated by squeezing the knob. Power Doser™ will automatically refill after each use.

Follow the applicator gun manufacturer's directions for priming the gun, adjusting the dose, and care of the applicator gun following use.

Weight	Dose
220 lb (100 kg)	10 mL
330 lb (150 kg)	15 mL
440 lb (200 kg)	20 mL
550 lb (250 kg)	25 mL
660 lb (300 kg)	30 mL
770 lb (350 kg)	35 mL
880 lb (400 kg)	40 mL
990 lb (450 kg)	45 mL
1100 lb (500 kg)	50 mL

*Additional applicator guns can be purchased from Genesis Instruments, Elmwood, Wisconsin.

Mode of Action

Ivermectin as a member of the avermectin family kills certain parasitic roundworms and ectoparasites, such as mites, lice, horn flies and other insects. Its action is unique to the avermectin class of antiparasitic agents. This action involves a chemical that serves as a signal from one nerve cell to another, or from a nerve cell to a muscle cell. This chemical, a neurotransmitter, is called gamma-aminobutyric acid or GABA.

In roundworms, ivermectin stimulates the release of GABA from nerve endings and enhances binding of GABA to special receptors at nerve junctions, thus interrupting nerve impulses - thereby paralyzing and killing the parasite.

The enhancement of the GABA effect in arthropods such as mites, lice, and horn flies resembles that in roundworms, except that nerve impulses are interrupted between the nerve ending and the muscle cell. Again, this leads to paralysis and death.

Ivermectin has no measurable effect against flukes or tapeworms, presumably because they do not have GABA as a nerve impulse transmitter.

RESIDUE INFORMATION: Cattle must not be treated within 48 days of slaughter for human consumption. Because a withdrawal time in milk has not been established, do not use in female dairy cattle of breeding age. A withdrawal period has not been established for this product in pre-ruminating calves. Do not use in calves to be processed for veal.

The principal peripheral neurotransmitter in mammals, acetylcholine, is unaffected by ivermectin. Ivermectin does not readily penetrate the central nervous system of mammals where GABA functions as a neurotransmitter.

Safety

Studies conducted in the U.S.A. have demonstrated the safety margin for ivermectin. Based on plasma levels, the typically applied formulation is expected to be at least as well tolerated by breeding animals as is the subcutaneous formulation which had no effect on breeding performance.

WARNING! NOT FOR USE IN HUMANS

This product should not be applied to self or others because it may be irritating to human skin and eyes and absorbed through the skin. To minimize accidental skin contact, the user should wear a long-sleeved shirt and rubber gloves. If accidental skin contact occurs, wash immediately with soap and water. If accidental eye exposure occurs, flush eyes immediately with water and seek medical attention.

Keep this and all drugs out of the reach of children.

WARNING! FLAMMABLE! KEEP AWAY FROM HEAT, SPARKS, OPEN FLAME, AND OTHER SOURCES OF IGNITION.

PRECAUTIONS:

Store away from excessive heat (104°F/40°C) and protect from light.

Use only in well-ventilated areas or outdoors. Close container tightly when not in use.

Cattle should not be treated when hair or hide is wet since reduced efficacy may be experienced.

Do not use when rain is expected to wet cattle within six hours after treatment.

This product is for application to skin surface only. Do not give orally or parenterally.

Cloudiness in the formulation may occur when Ivermectin Pour-On for Cattle is stored at temperatures below 32°F. Allowing to warm at room temperature will restore the normal appearance without affecting efficacy.

Antiparasitic activity of ivermectin will be impaired if the formulation is applied to areas of the skin with mange scabs or lesions, or with dermatosis or adherent materials, e.g., caked mud or manure.

Ivermectin has been associated with adverse reactions in sensitive dogs; therefore, Ivermectin Pour-On for Cattle is not recommended for use in species other than cattle.

When to Treat Cattle with Grubs

Ivermectin Pour-On for Cattle effectively controls all stages of cattle grubs. However, proper timing of treatment is important. For the most effective results, cattle should be treated as soon as possible after the end of the heel fly (warble fly) season. While this is not peculiar to ivermectin, destruction of *Hypoderma larvae* (cattle grubs) at the period when these grubs are in vital areas may cause undesirable host-parasite reactions. Killing *Hypoderma lineatum* when it is in the esophageal tissues may cause bloat; killing *H. bovis* when it is in the vertebral canal may cause staggering or paralysis. Cattle should be treated either before or after these stages of grub development.

Cattle treated with Ivermectin Pour-On for Cattle at the end of the fly season may be re-treated with Ivermectin Pour-On for Cattle during the winter without danger of grub-related reactions. For further information and advice on a planned parasite control program, consult your veterinarian.

Environmental Safety

Studies indicate that when ivermectin comes in contact with the soil, it readily and tightly binds to the soil and becomes inactive over time. Free ivermectin may adversely affect fish and certain aquatic organisms. Do not permit cattle to enter lakes, streams or ponds for at least six hours after treatment. Do not contaminate water by direct application or by the improper disposal of drug containers. Dispose of containers in an approved landfill or by incineration. As with other avermectins, ivermectin is excreted in the dung of treated animals and can inhibit the reproduction and growth of pest and beneficial insects that use dung as a source of food and for reproduction. The magnitude and duration of such effects are species and life-cycle specific. When used according to label directions, the product is not expected to have an adverse impact on populations of dung-dependent insects.

For customer service, contact DURVET, INC.
Blue Springs, MO 64014

Rev. 04-07



Ivermectin Pour-On for Cattle

Manufactured For:
DURVET, INC.
Blue Springs, MO 64014

Package Information:

Ivermectin Pour-On for Cattle is available in a 250 mL (8.5 fl oz), a 1 L (33.8 fl oz) and a 1 gallon (3.785 L) bottle for use with the measuring cup provided, a 2.5 L (84.5 fl oz) container, 5 L (169.0 fl oz) container, and a 5 Gallon (639.0 fl oz) container for use with the appropriate automatic dosing applicator.