



**POUR-ON** for Beef and Dairy Cattle

Eprizero<sup>®</sup> Pour-On for treatment and control of 39 species and stages of parasites.



Eprizero (eprinomectin) Pour-On contains the same active ingredient as Eprinex (eprinomectin) Pour-On, utilizing identical dosing regimens.

Eprizero Pour-On provides excellent broad-spectrum treatment and control against internal and external parasites, and return on investment, in a convenient pour-on formulation.







## DRIVE RETURN ON INVESTMENT

Research confirms
treatment for parasites with
eprinomectin can increase
milk yield by 2.07 lbs
per cow per day.1

### BROAD-SPECTRUM TREATMENT

99.9% effective against the major species and stages of parasites

### SHORTER CALVING INTERVAL

Following treatment for parasites with eprinomectin, both heifers and dairy cows show improved fertility, i.e. 58% v 38% conception rate at first service. <sup>2</sup>



ZERO MILK DISCARD





### STOPS PARASITES AT THEIR SOURCE

**EXTERNAL PARASITES** 

### FOR LONGER CONTROL AND SAFETY

Studies have shown eprinomectin kept efficacy levels higher than 90% from 2 up to 28 days<sup>3</sup> versus competitive pour-on parasite treatments.

### PUT EPRIZERO® POUR-ON TO WORK TODAY

Additionally, research shows that the active ingredient in Eprizero® Pour-On outperformed Cydectin® (moxidectin), Ivomec® (ivermectin) and Dectomax® (doramectin) in head-to-head university studies.³

INTERNAL PARASITES

A=ADULT STAGE L4=LARVAL STAGE

Brown stomach worm

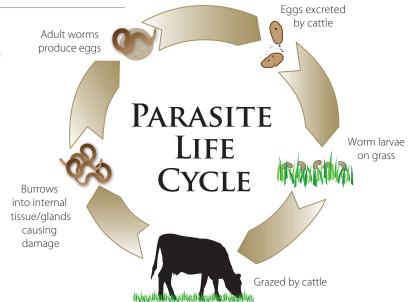
C. surnabada

Hairworm

Black scour worm
T. longispicularis
Hookworm

Bunostomum phlebotomum

T axei



Ostertagia ostertagi	A, L4	LICE
Brown stomach worm (inhibited)	L4	Biting louse Damalinia bovis
Barbers pole worm Haemonchus placei	A, L4	Short-nosed cattle louse Haematopinus eurysternus
Black scour worm Trichostrongylus colubriformis	A, L4	Long-nosed cattle louse Linognathus vituli
Thread-necked intestinal worm Nematodirus helvetianus	A, L4	Small blue louse Solenopotes capillatus
Intestinal threadworm Strongyloides papillosus	А	GRUBS
Nodular worm Oesophagostomum radiatum	A, L4	Northern cattle grub 1/2/3 instar Hypoderma bovis
Whipworm Trichuris spp	А	Common cattle grub 1/2/3 instar Hypoderma lineatum
<b>Lungworm</b> Dictyocaulus viviparus	A, L4	HORN FLIES
Small intestinal worm Cooperia oncophora	A, L4	Horn flies Haematobia irritans
Small intestinal worm C. punctata	A, L4	MANGE
Small intestinal worm		

A, L4

A. L4

Sarcoptes scabiei

Chorioptes bovis (tailhead mange)

Mange mite

### RAIN IS NOT AN ISSUE

Where rain is an issue after treatment, the active ingredient in Eprizero Pour-On was 99% effective against adults and immature larvae (L4) of the most economically significant internal parasites (worms) and nematodes found in cattle.4

# Eprizero® Pour-On - A HIGHER LEVEL OF CONVENIENCE AND SAFETY

- Kills 39 species and stages of internal/ external parasites
- Weatherproof formulation that works in rain, cold or heat
- Zero milk discard
- Zero days meat withdrawl
- Safe for any age animal including pregnant cows, calves and bulls
- Nonflammable for improved safety and storage



External parasites such as lice, flies, ticks, grubs and mites limit dairy production and animal welfare.

### **External parasites:**

- Feed on body tissues such as blood, skin and hair
- Produce wounds and skin irritation
- Transmit diseases from infected animals to healthy ones
- Cause depressed appetite and subsequent weight loss, reduced milk production and general weakness
- Create sites for secondary invasion of disease organisms

Internal parasites are the most economically damaging parasites and are particularly detrimental in mature dairy cows at calving and during lactation resulting in serious economic losses.

### **Internal parasites:**

- Loss of milk yield
- Reduced feed intake and dramatically lowered live weight gain
- Reduced body condition



## **DOSING** GUIDE

Body	Dose Volume	Number of doses per pack					
Weight		1 L	2.5 L	5 L	20 L		
220 lbs (100 kg)	10 mL	100	250	500	2000		
330 lbs (150 kg)	15 mL	66	166	333	1333		
440 lbs (200 kg)	20 mL	50	125	250	1000		
550 lbs (250 kg)	25 mL	40	100	200	800		
660 lbs (300 kg)	30 mL	33	83	166	666		
880 lbs (400 kg)	40 mL	25	62	125	500		
990 lbs (450 kg)	45 mL	22	55	111	444		
1100 lbs (500 kg)	50 mL	20	50	100	400		





# TREATMENT REGIMEN

Administer Eprizero\* Pour-On only by topical application at the dose rate of 1 mL per 10 kg (22 lb) of body weight, corresponding to the recommended dose rate of 0.5 mg eprinomectin per kg of body weight.

The product should be applied topically by pouring along the backline in a narrow strip extending from the withers to the tailhead.

Rainfall at any time before or after treatment will not affect the efficacy of the product.

To ensure administration of a correct dose, bodyweight should be determined as accurately as possible; accuracy of the dosing device (dosing cup or dosing gun delivery system) should be checked.

For best results use as part of a program to control both internal and external parasites of cattle based on the epidemiology of these parasites.

Approved by FDA under ANADA # 200-563



# Pour-On for Beef and Dairy Cattle

# **Parasiticide**

Contains 5 mg eprinomectin/mL

Not for use in calves to be processed for veal.

unique avermectin. Its broad-spectrum efficacy in a weatherproof formulation, margin of safety, zero slaughter withdrawal and zero milk discard, make it a convenient product for parasite control in beef and control in one application. Eprizero Pour-On contains eprinomectin, a INTRODUCTION Pour-On delivers effective internal and external parasite

Use Conditions
Varying weather conditions, including rainfall, do not affect the efficacy of Eprizero Pour-On.

Hom files: For optimal control of hom files, as Eprizero Pour-On provides 7 days of persistent activity against hom files, the product should be used as part of an integrated control program utilizing other control methods to provide extended control.

ion channets which occur in invertebrate nervie and mustle cells. This leads to an increase in the permeability of the cell membrane to chioride ions with hyperpolarization of the nerve or muscle cell, resulting in paralysis and death of the parasite. Compounds of this class may also interact with other ligand-gated chloride channels, such as those gated by the neurotransmitter gamma-aminountyric acid (GABA). The margin of safety for compounds of this class is attributable to the

Eprinomectin is a member of the macrocyclic lactone class of endectocides which have a unique mode of action. Compounds of the class bind selectively and with high affinity to glutamate-gated chloride

MODE OF ACTION

dairy cattle, including lactating dairy cattle.

fact that mammals do not have glutamate-gated chloride channels, the macrocyclic lactones have a low affinity for other mammalian ligant-gated chloride channels and they do not readily cross the

Eprizero (eprinomectin) Pour-On is indicated for the treatment and control of gastrointestinal roundworms (including inhibited *Ciscragia osterzapi*). Lingworms, gubas, sucking and bring liee, phoripotic and sarcoptic mange mites, and horn files in beef and dairy cartle of all

INDICATIONS blood-brain barrier.

weight, Eprizero Pour-On is indica control of the following parasites.

astrointestinal Roundworms

laemonchus placer

Ostertagia ostertagi (including inhibited L4)

ooperia punctata ooperia oncophora richostrongylus longispicularis richostrongylus axei

(adults and L4)
(adults and L4)
(adults only)
(adults and L4)

lematodirus helvetianus trongyloides papillosus ınostomum phlebotomum esophagostomum radiatum operia surnabada ages, including lactating dairy cattle.

Applied at the recommended dose

volume of 1 mL/10 kg (22 lb) body ctin/kg body

veight, to achieve a dose level of 500 mcg eprinom

Eprizero Pour-On is indicated for the effective treatment and

(adults and L4) (adults and L4)

ADMINISTRATION
Metering Cup with Measure-Squeeze-Pour System
I Liter (338 if out Container with 25 m.l. Metering Cup
This pack contains I Metering Cup and I dip tube
This pack contains I Metering Cup and I dip tube
This pack contains I Metering Cup and I dip tube
This pack contains I Metering Cup and I dip tube
This pack contains I Metering Cup not container top.

3 Screw the Metering Cup not container top.

4 Measure: To select the correct cose rate, rotate the adjuster
cap (top) in either direction to position the dose indicator to the
weight of the animal you want to treat. When body weight is
between markings, uses the higher setting.

5 Squeeze the container gently to fill the Metering Cup to the
required dose. Release your grip and any excess will return to
the container the flad cose by tipping and pouring along the
backline of the animal until the Metering Cup is the reach
use and replace the shipping cap to close the container top.
If the animal being treated weighs more than 550 bs (250 kg), refill the
Metering Cup on the additional amount required to provide the total
dose for that animal and apply as directed.

Collapsible Pack (25 Use 43 for za and 5 Linges that pack (25 Use), and
papilicator, Aftach the draw-off tubing to the cap with the stem that is
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dose and papilicator, checking for leaks. Follow the
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dose and the dosing applicator, checking the dose and

adults and

and maintenance of the dosing applicator and draw-off tubing

Dictyocaulus viviparus

(adults and L4)

Cattle Grubs (all parasitic stages)
Hypoderma lineatum, Hypoderma bovis

Solenopotes capillatus Damalinia bovis, Linognathus vituli, Haematopinus eurysternus,

Mange Mites Chorioptes bovis, Sarcoptes scabiei

# Haematobia irritans

Eprizero leprinomectin) Pour-On for Beef and Dairy Cattle has been proved to effectively control infections and to protect cattle from re-infection with *Discopacialus wipoparus* for 21 days after treatment and *Haematobia irritans* for 7 days after treatment. Persistent Activity

Management Considerations for Treatment of External Parasites for best results Eprizer of Pour-On should be applied to all cattle in the for Dest results are considered to the herd later should be treated prior to introduction. Consult your veterinarian or an entomologist for the most effective timing of applications for the control of external parasites.

Chorioptic Mange. In clinical studies evaluating the efficacy of epinomeetin against chorioptic mange mites, mites were not recovered from skin scrapings taken 8 weeks after treatment, however, chronic skin lesions were still present on some animals.

**DOSAGE**The product is formulated only for external application to beef and dairy castle. The dose rate is ImL/10 kg (1/21b) of body weight. The product should be applied topically along the backline in a narrow strip extending from the withers to the tailhead.

Do not underdose. Ensure each animal receives a complete dose based on a current body weight. Underdosing may result in ineffective treatment, and encourage the development of parasite resistance.

# Keep this and all drugs out of the reach of children. NOT FOR USE IN HUMANS. WARNING

As with any topical medication intended for treatment of animals, skin contact should be avoided. If accidental skin contact occurs, wash immediately with soap and water. If accidental eye exposure occurs, flush eyes immediately with soap and water. If accidental eye exposure occurs, flush eyes immediately with water. The safety data sheet (SDS) contains more detailed occupational safety information. To report suspected adverse drug events, for technical assistence or to obtain a copy of the Safety Data Sheet (SDS), contact Norbrook at 1-886-591-5777. For additional information about adverse drug experience reporting for animal drugs, contact FIA at 1-888-FDA-VETS or

HOW SUPPLIED

This product is for topical application only. Do not administer orally or by

injection.

Do not apply to areas of the backline covered with mud or manure.

Do not apply to areas of the backline covered with mud or manure.

Epizzor Pour-On is not recommended for use in species other than

cattle. Severe adverse reactions have been reported in other species treated with products containing compounds of this class.

Restricted Drug (California) - Use Only as Directed.

20 Liter Pack (20 L/676 ff oz Pack) Connect the dosing applicator and and draw-off tubing to the container as

shipping cap with the cap having the draw-off tubing. Gently prime the dosting applicator, checking for leaks. Follow the dosting applicator manufacturer's directions for adjusting bithe dose and proper use and maintenance of the dosting applicator and draw-off tubing. Attach the open end of the draw-off tubing to an appropriate dosing applicator. Attach draw-off tubing to the cap with the stem. Replace the

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

application of up to 5 times the recommended dose 3 times at 7 day intervals had no adverse effects on 8 week old calves. In the tolerance study, one of 6 cattle treated once at 10 times the recommended dose ANIMAL SAFETY
Tolerance and toxicity studies have demonstrated the margin of safety for Tolerance and toxicity studies, application of 3 times the perinomechin in cattle. In toxicity studies, application of 3 times the recommended dose had no adverse effects on neonatal calves, and cows or bulls. recommended dose had no adverse effect on breeding performance of showed clinical signs of mydriasis. Application of 3 times the

Residue Warnings: When used according to label directions, neither a pre-slaughter drug withdrawal period nor a mlk discard time is required; therefore, mear and mlk from cattle treated with Eprizero (eprinomectin) Pour-On may be used for human consumption at any time following treatment. A withdrawal period has not been established for pre-ruminating calves. Do not use in calves to be processed

ADVERSE REACTIONS

No adverse reactions were observed during clinical trials.

Store container in the carton to protect from light and at temperatures up to 86° F/30° C. Storage at temperatures up to 104°F/40°C is permitted for a short period of time, however, such exposure should be minimized.

# Made in the UK.

Manufactured by: Norbrook Laboratories Limited Newry, B135 6PU, Co. Down, Northern Ireland

® Eprizero is a registered trademark of Norbrook Laboratories Limited.

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# When to Treat Cattle with Grubs Eprizero Pour-On is effective aga

Eprizero Pour-On is effective against all stages of cattle grubs. However, project timing of treatment is important. For the most effective results, cattle should be treated as soon as possible after the end of the heef ity want be fly season. While this is not peculiar to epinnomectin, destruction of *Hypodermal learnes* create uptus at the period when these grubs are in vital areas may cause undestrable host-parasite reactions. Killing *Hypodermal learnes* my cause undestrable host-parasite reactions. Killing *Hypodermal learnes* my cause staggering or paralysis. Cattle should be reacted either before or after staggering or paralysis. Cattle should be reacted with Eprizero Pour-On at the end of the fly season may be re-treated with Eprizero Pour-On during the writter without danger of grub-related reactions. For further information and advice on a planned parasite control program, consult with various programs. your veterinarian.

OTHER WARNINGS

Parasite resistance may develop to any dewormer, and has been Parasite resistance may develop to any dewormer, and has been reported for most classes of dewormers.

Treatment with a dewormer used in conjunction with parasite Treatment practices appropriate to the geographic area and the management practices appropriate to the geographic area and the animals) to be treated may slow the development of parasite resistance. Fecal examinations or other diagnostic tests and parasite management history should be used to determine if the product is appropriate for the heart diagnostic management. Following the use of any dewormer. Following the use of any dewormer. Following the use of any dewormer. with the use of a fecal egg count reduction test or another appropriate

method).

A decrease in a drug's effectiveness over time as calculated by fecal egg count reduction tests may indicate the development of resistance to the dewormer administered. Your parasite management plan should be adjusted accordingly based on regular monitoring.

ENVIRONMENTAL SAFETY

Studies indicate that when eprinomechin comes in contact with soil, it studies indicate that when eprinomechin comes inactive over time. Free early and dightly binds to the soil and becomes inactive over time. Free wemechin eprinomechin may adversely affect fish and certain aquatic organisms. Do not permit catell to enter lekes, streams or ponds for at least 6 hours after treatment. Do not contaminate water by direct application or by the improper disposal of drug containers. Dispose of containers in an approved landfull or by incineration. As with other averamechins, eprinomechin 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 sepecies and tifle-cycle specific. When used according to label directions, the product is not expected to have an adverse impact on populations of dung-dependent insects.

# STORAGE CONDITIONS

For the 1 L (33.8 fl oz) container with a measure-squeeze-pour system, the Metering Cup should not remain attached to the container when not in use. Datach the Metering Cup after each use and replace the shipping cap to close the container top.

# Eprizero (eprinomectin) Pour-On for Beef and Dairy Cattle is available in a 1 (233.8) or container with a measure-squeeze-pour system, or in a 25.1 (245.1 or container intended for use with appropriate automatic dosing equipment.

www.norbrook.com
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