#### MILBEGUARD FLAVORED- milbemycin oxime tablet Ceva Sante Animale

Ceva Salite All

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## MILBEGUARD™ (milbemycin oxime) Flavored Tablets

MilbeGuard™

(milbemycin oxime)

**Flavored Tablets** 

## **INFORMATION FOR DOSING DOGS**

The once-a-month tablet that prevents heartworm disease, controls adult hookworm, and removes and controls adult roundworm and whipworm infections in dogs and puppies.

**Caution:** Federal (USA) law restricts this drug to use by or on the order of a licensed veterinarian. Keep this and all drugs out of the reach of children.

**Description:** MILBEGUARD (milbemycin oxime) Flavored Tablets are available in four tablet sizes in color-coded packages for oral administration to dogs and puppies. Each tablet is formulated to provide a minimum of 0.23 mg/lb (0.5 mg/kg) body weight of milbemycin oxime. Milbemycin oxime consists of the oxime derivatives of 5-didehydromilbemycins in the ratio of approximately 80% A<sub>4</sub> ( $C_{32}H_{45}NO_7$ , MW 555.71) and 20% A<sub>3</sub> ( $C_{31}H_{43}NO_7$ , MW 541.68).

Package Color	Milbemycin oxime tablet	
Yellow	2.3 mg*	
Blue	5.75 mg	
Purple	11.5 mg	
Red	23.0 mg	

\*for dogs only

**Indications :** MILBEGUARD Flavored Tablets are indicated for use in the prevention of heartworm disease caused by *Dirofilaria immitis*, the control of adult *Ancylostoma caninum* (hookworm), and the removal and control of adult *Toxocara canis* and *Toxascaris leonina* (roundworms) and *Trichuris vulpis* (whipworm) infections in dogs and in puppies four weeks of age or greater and two pounds body weight or greater.

**Dosage:** MILBEGUARD Flavored Tablets are given orally, once a month, at the recommended minimum dosage rate of 0.23 mg milbemycin oxime per pound of body weight (0.5 mg/kg).

### **Recommended Dosage Schedule for Dogs**

Body Weight	MILBEGUARD Flavored Tablets
2-10 lbs.	One tablet (2.3 mg)
11-25 lbs.	One tablet (5.75 mg)
26-50 lbs.	One tablet (11.5 mg)
51-100 lbs.	One tablet (23.0 mg)

Dogs over 100 Ibs. are provided the appropriate combination of tablets.

Administration: MILBEGUARD Flavored Tablets are dual-purpose and may be offered in food or administered as other tablet medications. Watch the dog closely following dosing to be sure the entire dose has been consumed. If it is not entirely consumed, redose once with the full

recommended dose as soon as possible.

MILBEGUARD Flavored Tablets must be administered monthly, preferably on the same date each month. The first dose should be administered within one month of the dogs first exposure to mosquitoes and monthly thereafter until the end of the mosquito season. If a dose is missed and a 30-day interval between dosing is exceeded, administer MILBEGUARD Flavored Tablets immediately and resume the monthly dosing schedule.

If MILBEGUARD Flavored Tablets replaces diethylcarbamazine (DEC) for heartworm prevention, the first dose must be given within 30 days after the last dose of DEC.

**Precautions:** Do not use in puppies less than four weeks of age or less than two pounds of body weight. Prior to initiation of the MILBEGUARD Flavored Tablets treatment program, dogs should be tested for existing heartworm infections. Infected dogs should be treated to remove adult heartworms and microfilariae prior to initiating treatment with MILBEGUARD Flavored Tablets. Mild, transient hypersensitivity reactions manifested as labored respiration, vomiting, salivation and lethargy, have been noted in some treated dogs carrying a high number of circulating microfilariae. These reactions are presumably caused by release of protein from dead or dying microfilariae.

**Adverse Reactions:** The following adverse reactions have been reported following the use of MILBEGUARD Flavored Tablets: Depression/lethargy, vomiting, ataxia, anorexia, diarrhea, convulsions, weakness and hypersalivation.

**Efficacy:** MILBEGUARD Flavored Tablets eliminate the tissue stage of heartworm larvae and the adult stage of hookworm (*Ancylostoma caninum*), roundworms (*Toxocara canis, Toxascaris leonina*) and whipworm (*Trichuris vulpis*) infestations when administered orally according to the recommended dosage schedule. The anthelmintic activity of milbemycin oxime is believed to be a result of interference with invertebrate neurotransmission.

**Safety:** Milbemycin oxime has been tested safely in over 75 different breeds of dogs, including collies, pregnant females, breeding males and females, and puppies over two weeks of age. In well-controlled clinical field studies, 786 dogs completed treatment with milbemycin oxime. Milbemycin oxime was used safely in animals receiving frequently used veterinary products such as vaccines, anthelmintics, antibiotics, steroids, flea collars, shampoos and dips.

Two studies in heartworm-infected dogs were conducted which demonstrated mild, transient hypersensitivity reactions in treated dogs with high microfilaremia counts (see Precautions for reactions observed). Safety studies in pregnant dogs demonstrated that high doses (1.5 mg/kg =3X) of milbemycin oxime given in an exaggerated dosing regimen (daily from mating through weaning), resulted in measurable concentrations of the drug in milk. Puppies nursing these females which received exaggerated dosing regimens demonstrated milbemycin-related effects. These effects were directly attributable to the exaggerated experimental dosing regimen. The product is normally intended for once-a-month administration only. Subsequent studies included using 3X daily from mating to one week before weaning and demonstrated no effects on the pregnant females or their litters. A second study where pregnant females were dosed once at 3X the monthly use rate either before, on the day of or shortly after whelping resulted in no effects on the puppies.

Some nursing puppies, at 2, 4, and 6 weeks of age, given greatly exaggerated oral milbemycin oxime doses (9.6 mg/kg = 19X) exhibited signs typified by tremors, vocalization and ataxia. These effects were all transient and puppies returned to normal within 24 to 48 hours. No effects were observed in puppies given the recommended dose of milbemycin oxime (0.5 mg/kg). This product has not been tested in dogs less than 1 kg weight.

A rising-dose safety study conducted in rough-coated collies, manifested a clinical reaction consisting of ataxia, pyrexia and periodic recumbency, in one of fourteen dogs treated with milbemycin oxime at 12.5 mg/kg (25X monthly use rate). Prior to receiving the 12.5 mg/kg dose (25X monthly use rate) on day 56 of the study, all animals had undergone an exaggerated dosing regimen consisting of 2.5 mg/kg milbemycin oxime (5X monthly use rate) on day 0, followed by 5.0 mg/kg (10X monthly use rate) on day

14 and 10.0 mg/kg (20X monthly use rate) on day 32. No

adverse reactions were observed in any of the collies treated with this regimen up through the 10.0 mg/kg (20X monthly use rate) dose.

**How supplied:** MILBEGUARD Flavored Tablets are available in four tablet sizes (see Dosage section), formulated according to the weight of the dog. Each tablet size is available in color-coded packages of 6 tablets each, which are packaged 10 per display carton.

**Storage conditions:** MILBEGUARD Flavored Tablets should be stored at room temperature, between 68° and 77°F (20-25°C).

#### Manufactured for:

Ceva Animal Health, LLC Lenexa, KS 66215

Made in Canada.

ANADA #200-629, Approved by FDA

**MilbeGuard**<sup>™</sup>

(milbemycin oxime)

#### **Flavored Tablets**

### **INFORMATION FOR DOSING CATS**

The once-a-month tablet that prevents heartworm disease and removes adult roundworms and hookworms in cats and kittens.

**Caution:** Federal (USA) law restricts this drug to use by or on the order of a licensed veterinarian. Keep this and all drugs out of the reach of children.

**Description:** MILBEGUARD (milbemycin oxime) Flavored Tablets for Cats are available in three tablet sizes in color-coded packages for oral administration to cats and kittens. Each tablet is formulated to provide a minimum of 0.9 mg/lb (2.0 mg/kg) body weight of milbemycin oxime. Milbemycin oxime consists of the oxime derivatives of 5-didehydromilbemycins in the ratio of approximately 80% A<sub>4</sub> ( $C_{32}H_{45}NO_7$ , MW 555.71) and 20% A<sub>3</sub> ( $C_{31}H_{43}NO_7$ , MW 541.68).

Package Color	Milbemycin oxime tablet	
Blue	5.75 mg	
Purple	11.5 mg	
Red	23.0 mg	

**Indications:** MILBEGUARD Flavored Tablets for Cats are indicated for use in the prevention of heartworm disease caused by *Dirofilaria immitis*, and the removal of adult *Ancylostoma tubaeforme* (hookworm) and *Toxocara cati* (roundworm) in cats and kittens six weeks of age or greater and 1.5 lbs. body weight or greater.

**Dosage:** MILBEGUARD Flavored Tablets fort Cats are given orally, once a month, at the recommended minimum dosage rate of 0.9 mg milbemycin oxime per pound of body weight (2.0 mg/kg).

Reco	mmended Dosage Schedule for Cats	
Body Weight	MILBEGUARD Flavored Tablets	
1.5-6 lbs.	One tablet (5.75 mg)	
6.1-12 lbs.	One tablet (11.5 mg)	
12.1-25 lbs.	One tablet (23.0 mg)	

Administration: MILBEGUARD Flavored Tablets for Cats may be offered in food or administered as other tablet medications. The tablets can be broken for ease of administration. Watch the cat closely following dosing to be sure the entire dose has been consumed. If it is not entirely consumed, redose once with the full recommended dose as soon as possible.

MILBEGUARD Flavored Tablets for Cats must be administered monthly, preferably on the same date each month. The first dose should be administered within one month of the cats first exposure to mosquitoes and monthly thereafter until the end of the mosquito season. If a dose is missed and a 30-day interval between dosing is exceeded, administer MILBEGUARD Flavored Tablets for Cats immediately and resume the monthly dosing schedule. It is recommended that cats be tested for existing heartworm infection prior to starting treatment with MILBEGUARD Flavored Tablets for Cats (See Precautions).

**Precautions:** Do not use in kittens less than six weeks of age or less than 1.5 lbs. body weight. Safety in heartworm positive cats has not been established. Safety in breeding, pregnant, and lactating queens and breeding toms has not been established.

**Efficacy:** MILBEGUARD Flavored Tablets for Cats eliminate the tissue stage of heartworm larvae and hookworm (*Ancylostoma tubaeforme*) and roundworm (*Toxocara cati*) infections when administered orally according to the recommended dosage schedule. The anthelmintic activity of milbemycin oxime is believed to be a result of interference with invertebrate neurotransmission.

**Safety:** Milbemycin oxime has been tested safely in over 8 different breeds of cats. In well-controlled clinical field studies 141 cats completed treatment with milbemycin oxime. Milbemycin oxime was used safely in animals receiving frequently used veterinary products such as vaccines, anthelmintics, anesthetics, antibiotics, steroids, flea collars, shampoos and dips.

Safety studies were conducted in young cats and kittens and doses of 1X, 3X and 5X the minimum recommended dose of 2.0 mg/kg demonstrated no drug-related effects. Tolerability studies at exaggerated doses of 10X also demonstrated no drug-related adverse effects in kittens and young adult cats.

**How supplied:** MILBEGUARD Flavored Tablets for Cats are available in three tablet sizes (see Dosage section), formulated according to the weight of the cat. Each tablet size is available in color-coded packages of 6 tablets each, which are packaged 10 per display carton.

**Storage conditions:** MILBEGUARD Flavored Tablets for Cats should be stored at room temperature, between 68° and 77°F (20-25°C).

#### **Manufactured for:**

Ceva Animal Health, LLC Lenexa, KS 66215

Made in Canada.

ANADA #200-629, Approved by FDA

# PRINCIPAL DISPLAY PANEL - 2.3 mg Tablet Blister Pack

### MILBEGUARD™ Flavored Tablets

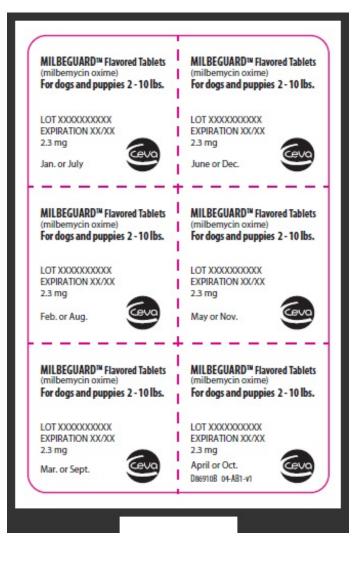
(milbemycin oxime)

#### For dogs and puppies 2-10 lbs.

LOT XXXXXXXXXX

EXPIRATION XX/XX

2.3 mg



# **PRINCIPAL DISPLAY PANEL - 2.3 mg Carton**

### MilbeGuard™

(milbemycin oxime)

**Flavored Tablets** 

### **BROAD SPECTRUM PARASITICIDE**

Contains once-a-month Flavored Tablets to prevent heartworm disease, control adult hookworm infeaction, and remove and control adult roundworms and whipworms in dogs and puppies.

### For dogs 2-10 lbs.

Net contents: 6 tablets 2.3 mg each.

ANADA #200-629, Approved by FDA

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

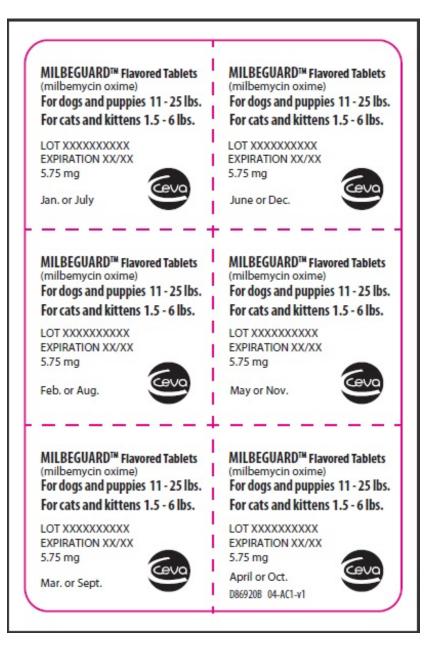
**Caution:** Federal (USA) law restricts this drug to use by or on the order of a licensed veterinarian. Keep this and all drugs out of the reach of children.

#### Give monthly

6 pack



PRINCIPAL DISPLAY PANEL - 5.75 mg Tablet Blister Pack MILBEGUARD™ Flavored Tablets (milbemycin oxime) For dogs and puppies 11-25 lbs. For cats and kittens 1.5-6 lbs. LOT XXXXXXXXX EXPIRATION XX/XX 5.75 mg



### PRINCIPAL DISPLAY PANEL - 5.75 mg Carton

### MilbeGuard™

(milbemycin oxime)

**Flavored Tablets** 

### **BROAD SPECTRUM PARASITICIDE**

Contains once-a-month Flavored Tablets to prevent heartworm disease, control adult hookworm infeaction, and remove and control adult roundworms and whipworms in dogs and puppies, and to prevent heartworm disease and remove adult hookworms and roundworms in cats and kittens.

### For dogs 11-25 lbs.

For cats 1.5-6lbs.

Net contents: 6 tablets 5.75 mg each.

ANADA #200-629, Approved by FDA

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

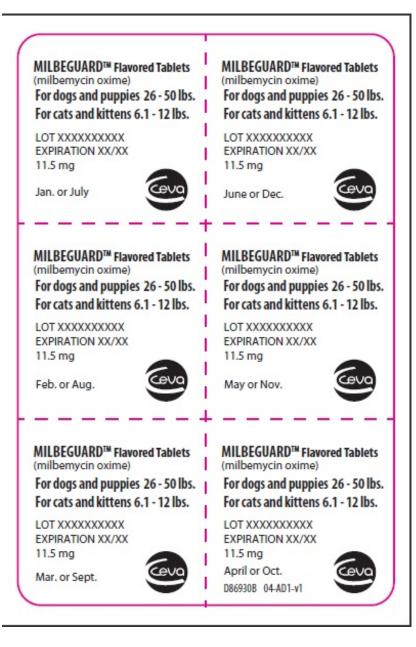
**Caution:** Federal (USA) law restricts this drug to use by or on the order of a licensed veterinarian. Keep this and all drugs out of the reach of children.

#### Give monthly

# 6 pack



PRINCIPAL DISPLAY PANEL - 11.5 mg Tablet Blister Pack MILBEGUARD™ Flavored Tablets (milbemycin oxime) For dogs and puppies 26-50 lbs. For cats and kittens 6.1-12 lbs. LOT XXXXXXXXX EXPIRATION XX/XX 11.5 mg



### PRINCIPAL DISPLAY PANEL - 11.5 mg Carton

### MilbeGuard™

(milbemycin oxime)

**Flavored Tablets** 

# **BROAD SPECTRUM PARASITICIDE**

Contains once-a-month Flavored Tablets to prevent heartworm disease, control adult hookworm infeaction, and remove and control adult roundworms and whipworms in dogs and puppies, and to prevent heartworm disease and remove adult hookworms and roundworms in cats and kittens.

For dogs 26-50 lbs.

For cats 6.1-12 lbs.

Net contents: 6 tablets 11.5 mg each.

ANADA #200-629, Approved by FDA

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

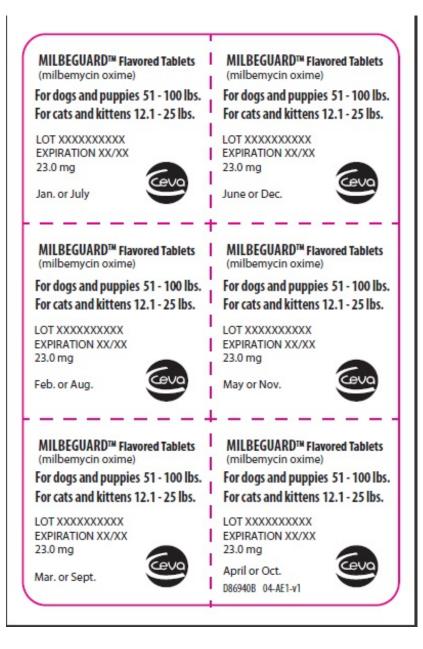
**Caution:** Federal (USA) law restricts this drug to use by or on the order of a licensed veterinarian. Keep this and all drugs out of the reach of children.

#### Give monthly





PRINCIPAL DISPLAY PANEL - 23 mg Blister Pack MILBEGUARD<sup>™</sup> Flavored Tablets (milbemycin oxime) For dogs and puppies 51-100 lbs. For cats and kittens 12.1-25 lbs. LOT XXXXXXXXX EXPIRATION XX/XX 23.0 mg



### PRINCIPAL DISPLAY PANEL - 23 mg Carton

#### MilbeGuard™

(milbemycin oxime)

**Flavored Tablets** 

### **BROAD SPECTRUM PARASITICIDE**

Contains once-a-month Flavored Tablets to prevent heartworm disease, control adult hookworm infeaction, and remove and control adult roundworms and whipworms in dogs and puppies, and to prevent heartworm disease and remove adult hookworms and roundworms in cats and kittens.

#### For dogs 51-100 lbs.

For cats 12.1-25 lbs.

Net contents: 6 tablets 23.0 mg each.

ANADA #200-629, Approved by FDA

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

**Caution:** Federal (USA) law restricts this drug to use by or on the order of a licensed veterinarian. Keep this and all drugs out of the reach of children.

#### Give monthly





MILBEGUARD FLAVO	RED				
Product Information					
Product Type	PRESCRIPTION ANIMAL DRUG	Item Code (S	ource)	NDC:13	744-510
Route of Administration	ORAL				
Active Ingredient/Active Moi	ety				
Iı	ngredient Name		Basis of Str	ength	Strength
MILBEMYCIN OXIME (UNII: 0502PUN	0GT) (MILBEMYCIN OXIME - UNII:0502P	UN0GT)	MILBEMYCIN	OXIME	2.3 mg

<b>Product Character</b>	istics				
Color	brown (beige mottled)	Sc	ore		no score
Shape	ROUND	Siz	ze		6 m m
Flavor	MEAT	Im	print Code		PAH;2
Contains					
Packaging					
# Item Code	Package Description	Marketin	ng Start Date	Mark	eting End Date
1 NDC:13744-510-10	1 in 1 CARTON				
1	6 in 1 BLISTER PACK				
Marketing Info	rmation				
Marketing Category	Application Number or Monogr	aph Citation	Marketing Start I	Date M	arketing End Date
ANADA	ANADA200629		12/21/2018		

MILBEGUARD milbemycin oxime table						
Product Informatio	n					
Product Type	PRESCRIPTION ANIM	IAL DRUG	Item Code (S	Source)	NDC:1	3744-511
Route of Administratio	on ORAL					
Active Ingredient/A	Active Moiety					
	Ingredient Name			Basis of Str	ength	Strength
MILBEMYCIN O XIME (U	JNII: 0502PUN0GT) (MILBEMYCIN O	XIME - UNII:0502	PUN0GT)	MILBEMYCIN	OXIME	5.75 mg
<b>Product Characteri</b>	istics					
Color	brown (beige mottled)	Sco	re		no scor	e
Shape	ROUND	Siz	e		8mm	
Flavor	MEAT	Imp	rint Code		PAH;6	
Contains						
Packaging						
# Item Code	Package Description	Marketin	g Start Date	Marke	ting E	nd Date
<b>1</b> NDC:13744-511-10	1 in 1 CARTON					
1	6 in 1 BLISTER PACK					
Marketing Infor	rmation					

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
ANADA	ANADA200629	12/21/2018	

<b>Product Information</b>	on						
Product Type		PRESCRIPTION ANIMA	L DRUG	Item Code (S	ource)	NDC:13	744-512
Route of Administrati	on	ORAL			,		
Active Ingredient/	Active Moi	ety					
		ngredient Name			Basis of St	rength	Strengt
MILBEMYCIN O XIME (		-	IME - UNII:05021	PUN0GT)	MILBEMYCIN	-	11.5 mg
Product Character							
Color	brown (beige i	nottled)	Sco	re		no score	2
Shape	ROUND		Siz	2		10 mm	
Flavor	MEAT		Imp	rint Code		PAH;12	
Contains							
Packaging							
# Item Code		age Description	Marketin	g Start Date	Mark	ceting Er	id Date
1 NDC:13744-512-10 1	1 in 1 CAR	TER PACK					
_							
Marketing Info	rmation						
Marketing Category	Applicatio	on Number or Monogr	aph Citation	Marketing St	art Date M	/larke ting	g End Date
ANADA	ANADA2006	29		12/21/2018			

Product Information				
Product Type	PRESCRIPTION ANIMAL DRUG	Item Code (Source)	NDC:1374	4-513
Route of Administration	ORAL			
Active Ingredient/Active Moi	ety			
Iı	ngredient Name	Basis of St	rength S	Strength

							22
MILBEI		UNII: 0502PUN0GT) (MILBEMYCIN O	CIME - UNII:05021	PUNUGI) M	ILBEMIC	CINOXIME	23 mg
Produ	uct Character	istics					
Color		brown (beige mottled)	Sco	re		no scor	e
Shape		ROUND	Size	e		16 mm	
Flavor		MEAT	Imp	rint Code		PAH;23	
Contai	ns						
Packa	nging						
	nging Item Code	Package Description	Marketin	g Start Date	Ma	rketing E	nd Date
#		<b>Package Description</b> 1 in 1 CARTON	Marketin	g Start Date	Ma	rketing E	nd Date
# 1 NDC:	Item Code		Marketin	g Start Date	Ma	rketing E	nd Date
# 1 NDC:	Item Code	1 in 1 CARTON	Marketin	g Start Date	Ma	rketing E	nd Date
# 1 NDC:	Item Code	1 in 1 CARTON	Marketin	g Start Date	Ma	rketing E	nd Date
# NDC: 1 NDC:	Item Code :13744-513-10	1 in 1 CARTON 6 in 1 BLISTER PACK	Marketin	g Start Date	Ma	rketing E	nd Date
# NDC: 1 NDC:	Item Code	1 in 1 CARTON 6 in 1 BLISTER PACK	Marketin	g Start Date	Ma	rketing E	nd Date
# NDC: 1 NDC: Marl	Item Code :13744-513-10	1 in 1 CARTON 6 in 1 BLISTER PACK		g Start Date Marketing Star			
# NDC: 1 NDC: Marl	Item Code :13744-513-10 keting Info eting Category	1 in 1 CARTON 6 in 1 BLISTER PACK					nd Date g End Date

Labeler - Ceva Sante Animale (261126049)

Revised: 4/2019

Ceva Sante Animale