

NADA 141-220, Approved by FDA

# CYDECTIN<sup>®</sup>

## moxidectin



### Injectable Solution for Beef and Nonlactating Dairy Cattle

Antiparasitic

Contains 10 mg moxidectin/mL

**Not for use in female dairy cattle 20 months of age or older (including dry dairy cows), veal calves, and calves less than 8 weeks of age.**

### For Treatment of Infections and Infestations Due to Internal and External Parasites of Cattle

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

#### PRODUCT DESCRIPTION

CYDECTIN Injectable Solution is a ready-to-use, sterile solution containing 1% moxidectin. Moxidectin is an endectocide in the milbemycin chemical class which shares the distinctive mode of action characteristic of macrocyclic lactones. CYDECTIN Injectable is specially formulated to allow moxidectin to be absorbed from the site of injection and distributed internally to the areas of the body affected by endo- and/or ectoparasitism. Moxidectin binds selectively and with high affinity to glutamate-gated chloride ion channels which are critical to the function of invertebrate nerve and muscle cells. This interferes with neurotransmission resulting in paralysis and elimination of the parasite.

#### INDICATIONS

CYDECTIN Injectable, when administered at the recommended dose level of 0.2 mg/2.2 lb (0.2 mg/kg) body weight, is effective in the treatment and control of the following internal and external parasites of cattle:

##### Gastrointestinal Roundworms

*Ostertagia ostertagi* - Adults and L<sub>4</sub>  
(including inhibited Larvae)  
*Haemonchus placei* - Adults  
*Trichostrongylus axei* - Adults and L<sub>4</sub>  
*Trichostrongylus colubriformis* - Adults and L<sub>4</sub>  
*Cooperia oncophora* - Adults  
*Cooperia pectinata* - Adults  
*Cooperia punctata* - Adults and L<sub>4</sub>  
*Cooperia spatulata* - Adults  
*Cooperia surnabada* - Adults and L<sub>4</sub>  
*Nematodirus helvetianus* - Adults  
*Oesophagostomum radiatum* - Adults and L<sub>4</sub>  
*Trichuris* spp. - Adults

##### Lungworms

*Dictyocaulus viviparus* - Adults and L<sub>4</sub>

##### Cattle Grubs

*Hypoderma bovis*  
*Hypoderma lineatum*

##### Mites

*Psoroptes ovis*  
(*Psoroptes communis* var. *bovis*)

##### Lice

*Linognathus vituli*  
*Solenopotes capillatus*

**Persistent Activity:** CYDECTIN Injectable has been proven to effectively protect cattle from reinfection with *Dictyocaulus viviparus* and *Oesophagostomum radiatum* for 42 days after treatment, *Haemonchus placei* for 35 days after treatment, and *Ostertagia ostertagi* and *Trichostrongylus axei* for 14 days after treatment.

**Management Considerations for External Parasites:** For most effective external parasite control, CYDECTIN Injectable should be administered to all cattle in the herd. Cattle entering the herd following this administration should be treated prior to introduction. Consult your veterinarian or a livestock entomologist for the most appropriate time to administer CYDECTIN Injectable in your location to effectively control external parasites.

#### DOSAGE

The recommended rate of administration for CYDECTIN Injectable is 1 mL for each 110 lb (50 kg) body weight to provide 0.2 mg moxidectin/2.2 lb (0.2 mg/kg) body weight. The table below will assist in the calculation of the appropriate volume of injectable which must be administered based on the weight of animal being treated. Be careful not to overdose animals; estimate animal's body weight as closely as possible or weigh animals individually.

<b>Weight (lb)</b>	165	220	330	440	550	660	770	880	990	1100
<b>Weight (kg)</b>	75	100	150	200	250	300	350	400	450	500
<b>Dose (mL)</b>	1.5	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0

### ADMINISTRATION

CYDECTIN Injectable should be administered by subcutaneous injection under the loose skin in front of or behind the shoulder (Figure 1). Needles 1/2 to 3/4 inch in length and 16 to 18 gauge are recommended for subcutaneous injections. Use sterile, dry equipment and aseptic procedures when withdrawing and administering CYDECTIN.

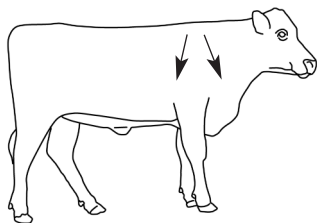


Figure 1. Sites for administration of CYDECTIN Injectable

### HUMAN WARNINGS

**Not For Use in Humans. Keep this and all drugs out of the reach of children.** To obtain a copy of the material safety data sheet (MSDS) which provides more detailed occupational safety information or to report adverse reactions attributable to exposure to this product, call 1-866-638-2226.

### RESIDUE WARNINGS

Cattle must not be slaughtered for human consumption within 21 days of treatment. This drug product is not approved for use in female dairy cattle 20 months of age or older, including dry dairy cows. Use in these cattle may cause drug residues in milk and/or in calves born to these cows. A withdrawal period has not been established for preruminating calves. Do not use in calves to be processed for veal.

### ANIMAL SAFETY WARNINGS

Do not use in sick, debilitated, or underweight animals. In foreign countries there have been reports of adverse effects, including death. This product should not be used in calves less than 8 weeks of age because safety testing has not been done in the U.S. in calves less than 8 weeks of age.

### ENVIRONMENTAL WARNINGS

Studies indicate that when moxidectin comes in contact with the soil, it readily and tightly binds to the soil and becomes inactive. Free moxidectin may adversely affect fish and certain aquatic organisms. Do not contaminate water by direct application or by improper disposal of drug containers.

### PRECAUTIONS

CYDECTIN Injectable has been formulated specifically for subcutaneous injection in cattle and should not be given by other routes of administration. Subcutaneous injection can cause transient local tissue reaction that may result in trim loss of edible tissue at slaughter if animals are slaughtered within 35 days after treatment. This product should not be used in other animal species as severe adverse reactions, including fatalities in dogs, may result.

CYDECTIN Injectable is effective against the migrating stage of cattle grubs (*Hypoderma* larvae). Treatment with CYDECTIN Injectable during the period when grubs are migrating through vital areas may cause undesirable host-parasite reactions. Killing *H. lineatum* when they are located in peri-esophageal tissues may cause bloat. Killing *H. bovis* when they are in the vertebral canal may cause staggering or hindlimb paralysis. Cattle should be treated as soon as possible after heel fly (warble fly) season to avoid this potential problem. Cattle treated with CYDECTIN Injectable at the end of fly season can be retreated during the winter without danger of grub-related reactions. Consult your veterinarian for more information regarding these secondary grub reactions and the correct time to treat with CYDECTIN Injectable.

### ANIMAL SAFETY

U.S. tolerance and toxicity studies have demonstrated that CYDECTIN Injectable has an adequate margin of safety for use in cattle 8 weeks of age and older. No toxic signs were seen in growing cattle given up to 5 times the recommended dose. Calves as young as 8 weeks of age showed no toxic signs when treated with up to 3 times the recommended dose while nursing from cows concurrently treated with the recommended dose level of CYDECTIN Injectable. Mild, transient ataxia was noted in growing cattle receiving 10 times the recommended dose and in bulls treated at 4.5 times the recommended dose. In breeding animals (bulls and cows in estrous and during early, mid and late pregnancy), treatment with at least 3 times the recommended dose had no effect on breeding performance.

Signs of toxicity include ataxia, excessive salivation, depression, and mydriasis. These signs usually occur within 12 to 48 hours post-treatment.

### STORAGE

Store product at or below 77°F (25°C). Protect from light.

### DISPOSAL

Do not contaminate water by direct application or by improper disposal of drug containers. Dispose of containers in an approved landfill or by incineration.

### PACKAGE INFORMATION

CYDECTIN Injectable is available in 200 mL and 500 mL polyethylene bottles.

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