AURORA PHARMACEUTICAL, INC. 1196 HIGHWAY 3 SOUTH, NORTHFIELD, MN, 55057

Telephone:

888-215-1256

Website: Email: http://aurorapharmaceutical.com

info@aurorapharmaceutical.com

DectoGard Cattle Pour On

Antiparasitic

0.5% pour-on solution for cattle

5 mg/mL

PRODUCT DESCRIPTION:

DectoGard Pour-On solution is a ready-to-use, systemically active, clear, light blue solution containing 0.5% w/v doramectin (5 mg/mL). It is formulated to deliver the recommended dosage of 500 mcg/kg (227 mcg/lb) of body weight when given by topical administration at the rate of 1 mL/22 lb (10 kg) of body weight.

PRODUCT CHARACTERISTICS:

DectoGard Pour-On solution is a highly active, broad-spectrum parasiticide for topical administration to cattle. It contains doramectin, a novel fermentation-derived macrocyclic lactone. Doramectin is isolated from fermentations of selected strains derived from the soil organism *Streptomyces avermitilis*.

A primary mode of action of macrocyclic lactones is to modulate chloride ion channel activity in the nervous system of nematodes and arthropods. Macrocyclic lactones bind to receptors that increase membrane permeability to chloride ions. This inhibits the electrical activity of nerve cells in nematodes and muscle cells in arthropods and causes paralysis and death of the parasites. In mammals, the neuronal receptors to which macrocyclic lactones bind are localized within the central nervous system (CNS), a site reached by only negligible concentrations of doramectin.

One dose of DectoGard Pour-On solution effectively treats and controls a wide range of roundworm and arthropod parasites that impair the health and productivity of cattle.

Studies have demonstrated the safety margin of doramectin.

In USA trials, no toxic signs were seen in cattle given up to 25 times the recommended dose of doramectin injectable solution. A study using doramectin injectable solution also demonstrated safety in neonatal calves treated with up to 3 times the recommended dose. In breeding animals (bulls, and cows during folliculogenesis, organogenesis, implantation, and through gestation), a dose 3 times the recommended dose of doramectin injectable solution had no effect on breeding performance. A pharmacokinetic study demonstrated that systemic exposure to doramectin from doramectin topical solution was less than systemic exposure to doramectin from doramectin injectable solution.

PRODUCT INDICATIONS:

DectoGard Pour-On solution is indicated for the treatment and control of the following species of gastrointestinal roundworms, lungworms, eyeworms, grubs (see PRECAUTIONS), biting and sucking lice, horn flies, and mange mites in cattle. Consult your veterinarian for assistance in the diagnosis, treatment, and control of parasitism.

Gastrointestinal roundworms, Ostertagia ostertagi (adults and L₄, including inhibited larvae)

O. lyrata (adults) Haemonchus placei (adults and L₄) *Trichostrongylus axei* (adults and L₄) *T. colubriformis* (adults and L₄) Cooperia oncophora (adults¹ and L₄) C. pectinata (adults) C. punctata (adults and L₄) C. surnabada (adults) Bunostomum phlebotomum (adults) Oesophagostomum radiatum (adults and L4) Trichuris spp. (adults) ¹ Efficacy below 90% was observed against adult *C. oncophora* in some clinical studies. Lungworms (adults and fourth stage larvae) Dictyocaulus viviparus Eveworms Thelazia gulosa (adults) T. skrjabini (adults) Lice **Biting Lice** Bovicola (Damalinia) bovis) Sucking Lice Haematopinus eurysternus Linognathus vituli Solenopotes capillatus Grubs Hypoderma bovis *H. lineatu*m Horn Flies Haematobia irritans Mange Mites Chorioptes bovis Sarcoptes scabiei Doramectin topical solution has been proved to effectively control infections and to protect cattle from reinfection with Cooperia oncophora, Dictyocaulus viviparus, Ostertagia ostertagi, and Oesophagostomum radiatum for 28 days; and Cooperia punctata and Haemonchus placei for 35 days after treatment.

Doramectin topical solution has been proved to effectively control infestations and to protect cattle from reinfestation with *Bovicola (Damalinia) bovis* for 77 days and *Linognathus vituli* for 42 days after treatment.

Management Considerations For Horn Flies

DectoGard Pour-On solution provides 7 days of persistent activity against horn flies. The product should be used as part of an integrated control program and be combined with other methods for extended horn fly control. For optimal horn fly control, consult with your veterinarian or a livestock entomologist.

DOSAGE:

Administer DectoGard Pour-On solution to cattle topically at a dosage of 500 mcg doramectin per kg (227 mcg/lb) of body weight. Each mL contains 5 mg of doramectin, sufficient to treat 22 lb (10 kg) of body weight.

For the best results, DectoGard Pour-On solution should be a part of a parasite control program for both internal and external parasites based on the epidemiology of these parasites. Consult a veterinarian or an entomologist for information regarding the most effective timing of applications.

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.

ADMINISTRATION:

DectoGard Pour-On solution should be applied topically along the mid-line of the back in a narrow strip between the withers and tailhead.

Dosing guidelines are provided in the following list:

Body Weight (Ib)	Dose (mL)
Up to 110	5 mL*
111-220	10 mL
221-330	15 mL
331-440	20 mL
441-550	25 mL
551-660	30 mL
661-770	35 mL
771-880	40 mL
881-990	45 mL
991-1100	50 mL

Warning

Flammable! Keep away from heat, sparks, open flame, and other sources of ignition. Not for human use. Keep out of reach of children. The Safety Data Sheet (SDS) contains more detailed occupational safety information. To report adverse effects in users, to obtain more information, or to obtain an SDS, call 1-888-215-1256.

DectoGard Pour-On solution for cattle may be irritating to human skin and eyes, and users should be careful not to apply it to themselves or to other persons. Operators should wear protective clothing including a long-sleeved shirt, protective gloves, and boots with a waterproof coat when applying the product. Protective clothing should be washed after use. If accidental skin contact occurs, wash the affected area immediately with soap and water. If accidental eye exposure occurs, flush the eyes immediately with water and get medical attention.

OTHER WARNINGS:

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 management practices appropriate to the geographic area and the animal(s) 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 herd prior to the use of any dewormer. Following the use of any dewormer, effectiveness of treatment should be monitored (for example, 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.

Residue Warning:

Cattle must not be slaughtered for human consumption within 45 days of treatment. Not for use in female dairy cattle 20 months of age older. A withdrawal period has not been established for this product in preruminating calves. Do not use in calves to be processed for w

Precautions

DectoGard Pour-On solution has been developed specifically for use in cattle only. This product should not be used in other animal species as severe adverse reactions, including fatalities in dogs, may result.

This product is to be applied to skin surface only. Do not administer orally or parenterally.

Do not apply to areas of skin which are caked with mud or manure.

Wash hands after use.

Do not smoke or eat while handling the product.

Cloudiness in the formulation may occur when DectoGard Pour-On solution is stored at temperatures below 0°C (32°F). Allowing to warm to room temperature will restore the normal appearance without affecting efficacy.

DectoGard Pour-On solution is highly effective against cattle grubs. However, proper timing of treatment is important. For most effective results, cattle should be treated as soon as possible after the end of the heel fly (warble) season.

Destruction of *Hypoderma larvae* (cattle grubs) at the period when these grubs are in vital areas may cause undesirable host-parasite reactions including the possibility of fatalities. Killing *H. lineatum* when it is in the tissue surrounding the gullet may cause bloat; killing *H. bovis* when it is in the vertebral canal may cause staggering or paralysis. These reactions are not specific to treatment with DectoGard Pour-On solution, but can occur with any successful treatment of grubs. Cattle should be treated either before or after the migratory phase of grub development. Consult your veterinarian concerning the proper time for treatment.

Cattle treated with DectoGard Pour-On solution after the end of heel fly season may be re-treated with DectoGard Pour-On during the winter for internal parasites, mange mites, or biting and sucking lice, without danger of grub-related reactions. A planned parasite control program is recommended.

USE CONDITIONS:

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

ENVIRONMENTAL SAFETY:

Studies indicate that when doramectin comes in contact with the soil, it readily and tightly binds to the soil and becomes inactive over time. Free doramectin may adversely affect fish and certain aquatic organisms. Do not permit cattle to enter lakes, 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 landfill or by incineration. As with other avermectins, doramectin 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.

Precaution:

For topical use in cattle only

Store Below 30°C (86°F)

Protect From Light

To report suspected adverse drug events, for technical assistance or to obtain a copy of the SDS, contact Aurora Pharmaceutical at 1-888-215-1256 or www.aurorapharmaceutical.com. For additional information about adverse drug experience reporting for animal drugs, contact FDA at 1-888-FDA-VETS or http://www.fda.gov/reportanimalae

Approved by FDA under ANADA # 200-738

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

Not for human use.

Restricted Drug (CA) Use only as directed.

Manufactured by:

Aurora Pharmaceutical, Inc., Northfield, Minnesota 55057

DectoGard[™] is a trademark of Aurora Pharmaceutical, Inc.

CPN: 1544034.0