

## INDICATIONS

For the treatment and control of gastrointestinal roundworms, lungworms, lice, and mange mites. See package insert for complete indications, precautions, warnings, residue warning, and use directions.

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

## RECOMMENDED DOSE

**Cattle:** 1 mL per 110 lb body weight.  
**Swine:** 1 mL per 75 lb body weight.



Manufactured for  
Agri Laboratories, Ltd.  
St. Joseph, MO 64503

LOT NO.:

EXP. DATE:

NDC 57561-468-07

# AGRI-MECTIN<sup>®</sup>

(ivermectin)

**Injection for Cattle and Swine**  
**1% Sterile Solution**

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

**ANADA 200-429, Approved by FDA**

**NET CONTENTS: 200 mL**



## WARNING

**Not for use in humans.**  
**Keep this and all drugs out of the  
reach of children.**



**RESIDUE WARNING:** Do not treat cattle within 35 days of slaughter. 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. Do not treat swine within 18 days of slaughter.

**PRECAUTIONS:** For subcutaneous injection in cattle and swine only. Use automatic syringe equipment only. Protect product from light.

Restricted Drug (California) - use only as directed.  
Store at 20-25°C.

TAKE TIME



OBSERVE LABEL  
DIRECTIONS

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I-3468-07

Iss. 04-10

treated either before or after these stages of grub development. Consult your veterinarian concerning the proper time for treatment. Cattle treated with AGRI-MECTIN® after the end of the heel fly season may be retreated with AGRI-MECTIN® during the winter for internal parasites, mange mites, or sucking lice without danger of grub-related reactions. A planned parasite control program is recommended.

#### 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 water-borne organisms on which they feed. Do not permit water runoff from feedlots or production sites to enter lakes, streams, or ponds. 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.

**How Supplied:** 50 mL, 200 mL, 500 mL

Store at 20-25°C.

Restricted Drug (California) - use only as directed.

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St. Joseph, MO 64503, USA

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#### Persistent Activity

AGRI-MECTIN® Injection has been proven to effectively control infections and to protect cattle from reinfection with *Dicrocoelium viviparum* and *Oesophagostomum radiatum* for 28 days after treatment; *Ostertagia ostertagi*, *Trichostrongylus axei* and *Cooperia punctata* for 21 days after treatment; *Haemonchus placei* and *Cooperia oncophora* for 14 days after treatment.

**Swine:** AGRI-MECTIN® Injection is indicated for the effective treatment and control of the following harmful species of gastrointestinal roundworms, lungworms, lice and mange mites in swine:

#### Gastrointestinal Roundworms

Large roundworm, *Ascaris suum* (adults and fourth-stage larvae)  
Red stomach worm, *Hyostrogylus rubidus* (adults and fourth-stage larvae)  
Nodular worm, *Oesophagostomum spp.* (adults and fourth-stage larvae)  
Threadworm, *Strongyloides ransomi* (adults)

#### Somatic Roundworm Larvae:

Threadworm, *Strongyloides ransomi* (somatic larvae)  
Sows must be treated at least seven days before farrowing to prevent infection in piglets.

#### Lungworms:

*Metastrongylus spp.* (adults)

#### Lice:

*Haematopinus suis*

#### Mange Mites:

*Sarcoptes scabiei* var. *suis*

#### Dosage

**Cattle:** AGRI-MECTIN® Injection should be given only by subcutaneous injection under the loose skin in front of or behind

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the shoulder at the recommended dose level of 200 mcg ivermectin per kilogram of body weight. Each mL of AGRI-MECTIN® contains 10 mcg of ivermectin, sufficient to treat 110 lb (50 kg) of body weight (maximum 10 mL per injection site).

**Swine:** AGRI-MECTIN® Injection should be given only by subcutaneous injection in the neck of swine at the recommended dose level of 300 mcg ivermectin per kilogram (2.2 lb) of body weight. Each mL of AGRI-MECTIN® contains 10 mcg of ivermectin, sufficient to treat 75 lb of body weight.

#### Administration

**Cattle:** AGRI-MECTIN® Injection is to be given subcutaneously only, to reduce risk of potentially fatal clostridial infection of the injection site. Animals should be appropriately restrained to achieve the proper route of administration. Use of a 16-gauge, 1/2 to 3/4" needle is suggested. Inject under the loose skin in front of or behind the shoulder (see illustration). When using the 200 mL, 500 mL size, use only automatic syringe equipment. Use sterile equipment and sanitize the injection site by applying a suitable disinfectant. Clean, properly disinfected needles should be used to reduce the potential for injection site infections. No special handling or protective clothing is necessary.

**Swine:** AGRI-MECTIN® Injection is to be given subcutaneously in the neck. Animals should be appropriately restrained to achieve the proper route of administration. Use of a 16- or 18-gauge needle is

	Body Weight (lb)	Dose (mL)
Growing Pigs	19 - 14	1
	38 - 1/2	1
	75 - 1	2
Breeding Animals (Sows, Gilts, and Boars)	150 - 2	4
	300 - 4	5
	450 - 6	6



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**WARNING**  
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**RESIDUE WARNING:** Do not treat cattle within 35 days of slaughter. 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. Do not treat swine within 18 days of slaughter.

**PRECAUTIONS:** For subcutaneous injection in cattle and swine only. Use automatic syringe equipment only. Protect product from light.

Restricted Drug (California) - use only as directed. Store at 20-25°C.



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ANADA 200-429, Approved by FDA

## AGRI-MECTIN® (ivermectin) Injection for Cattle and Swine 1% Sterile Solution

### A Parasiticide for the Treatment and Control of Internal and External Parasites of Cattle and Swine

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

#### Introduction

AGRI-MECTIN® is an injectable parasiticide for cattle and swine. One low-volume dose effectively treats and controls the following internal and external parasites that may impair the health of cattle and swine: gastrointestinal roundworms (including inhibited *Ostertagia ostertagi* in cattle), lungworms, grubs, sucking lice, and mange mites of cattle; and gastrointestinal roundworms, lungworms, lice, and mange mites of swine.

#### Product Description

Ivermectin is derived from the avermectins, a family of potent, broad-spectrum antiparasitic agents isolated from fermentation of *Streptomyces avermectilis*.

AGRI-MECTIN® Injection is a clear, ready-to-use, sterile solution containing 1% ivermectin, 40% glycerol formal, and propylene glycol, q.s. ad 100%. AGRI-MECTIN® Injection is formulated to deliver the recommended dose level of 200 mcg ivermectin/kilogram of body weight in cattle when given subcutaneously at the rate of 1 mL/110 lb (50 kg). In Swine, AGRI-MECTIN® Injection is formulated to deliver the recommended dose level of 300 mcg ivermectin/kilogram body weight when given subcutaneously in the neck at the rate of 1 mL/75 lb (33 kg).

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(2) Louse eggs are unaffected by AGRI-MECTIN® Injection and may require up to three weeks to hatch. Louse infestations developing from hatching eggs may require retreatment.

(3) Consult a veterinarian for aid in the diagnosis and control of internal and external parasites of swine.

#### Special Minor Use

**Reindeer:** For the treatment and control of warbles (*Oudemagna tarandi*) in reindeer, inject 200 micrograms ivermectin per kilogram of body weight, subcutaneously. Follow use directions for cattle as described under **ADMINISTRATION**.

**American Bison:** For the treatment and control of grubs (*Hyoderma bovis*) in American bison, inject 200 micrograms ivermectin per kilogram of body weight, subcutaneously. Follow use directions for cattle as described under **ADMINISTRATION**.

**RESIDUE WARNING:** Do not treat reindeer or American bison within 8 weeks (56 days) of slaughter.

#### WARNING

Not for use in humans.

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

The Material Safety Data Sheet (MSDS) contains more detailed occupational safety information. To report adverse effects, obtain a MSDS or for assistance, contact Agri Laboratories, Ltd., at 1-800-542-8916.

**RESIDUE WARNING:** Do not treat cattle within 35 days of slaughter. 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.

Do not treat swine within 18 days of slaughter.

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#### Mode of Action

Ivermectin 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 ion channels which occur in invertebrate nerve and muscle cells. This leads to an increase in the permeability of the cell membrane to chloride 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-aminobutyric acid (GABA).

The margin of safety for compounds of this class is attributable to the fact that mammals do not have glutamate-gated chloride channels, the macrocyclic lactones have a low affinity for other mammalian ligand-gated chloride channels and they do not readily cross the blood-brain barrier.

#### Indications

**Cattle:** AGRI-MECTIN® Injection is indicated for the effective treatment and control of the following harmful species of gastrointestinal roundworms, lungworms, grubs, sucking lice and mange mites in cattle:

#### Gastrointestinal Roundworms

(adults and fourth-stage larvae):  
*Ostertagia ostertagi* (including inhibited *O. ostertagi*)  
*O. lyrata*  
*Haemonchus placei*

*Trichostrongylus axei*

*T. colubriformis*

*Cooperia oncophora*

*C. punctata*

*C. pectinata*

*Oesophagostomum radiatum*

*Bunostomum phlebotomum*

*Nematodirus helvetianus*

(adults only)

*H. spathiger* (adults only)

#### Lungworms

(adults and fourth-stage larvae):

*Dictyocaulus viviparus*

**Cattle Grubs** (parasitic stages):

*Hyoderma bovis*

*H. lineatum*

**Sucking Lice:**

*Limnognathus vituli*

*Haematopinus eurysternus*

*Solenopotes capillatus*

**Mites** (scabies):

*Psoroptes ovis*

(syn. *P. communis* var. *bovis*)

*Sarcoptes scabiei* var. *bovis*

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#### Precautions

Transitory discomfort has been observed in some cattle following subcutaneous administration. A low incidence of soft tissue swelling at the injection site has been observed. These reactions have disappeared without treatment. For cattle, divide doses greater than 10 mL between two injection sites to reduce occasional discomfort or site reaction.

Use sterile equipment and sanitize the injection site by applying a suitable disinfectant. Clean, properly disinfected needles should be used to reduce the potential for injection site infections.

Observe cattle for injection site reactions. Reactions may be due to clostridial infection and should be aggressively treated with appropriate antibiotics. If injection site infections are suspected, consult your veterinarian.

This product is not for intravenous or intramuscular use.

Protect product from light.

AGRI-MECTIN® Injection for Cattle and Swine has been developed specifically for use in cattle, swine, reindeer and American bison only. This product should not be used in other animal species as severe adverse reactions, including fatalities in dogs, may result.

#### When to Treat Cattle and Swine

AGRI-MECTIN® effectively controls all stages of 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 fly) season. Destruction of *Hyoderma* larvae (cattle grubs) at the period when these grubs are in vital areas may cause undesirable hyp-parasite reactions including the possibility of fatalities. Killing *Hyoderma lineatum* when it is in the tissue surrounding the esophagus (gullet) may cause salivation and bloating; killing *H. bovis* when it is in the vertebral canal may cause staggering or paralysis. These reactions are not specific to treatment with AGRI-MECTIN®, but can occur with any successful treatment of grubs. Cattle should be

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