

Injection for Cattle and Swine

1% Sterile Solution



EFFECTIVE TREATMENT MADE EASY

A Broad Spectrum of Activity

Noromectin[®] 1% Injection is an ivermectin-based parasiticide for the effective treatment of a wide range of internal and external parasites of beef cattle, dairy cattle of non-breeding age and swine.

| Internal Parasites | Adults | L ₄ | Inhibited Stage | | |
|--------------------------|--------|----------------|--------------------|--|--|
| Ostertagia ostertagi | • | • | • | | |
| <i>O. lyrata</i> | • | 5. | | | |
| Haemonchus placei | • | • | | | |
| Trichostrongylus axei | • | • | | | |
| T. colubriformis | • | • | | | |
| Cooperia oncophora | • 7 | • | | | |
| C. punctata | • | • | | | |
| C. pectinata | • 1 | • | | | |
| Oesophagostomum radiatum | • | • | | | |
| Bunostomum phlebotomum | • 11 | | | | |
| Nematodirus helvetianus | • | | | | |
| N. spathiger | • | | | | |
| Lungworms | | | | | |
| Dictyocaulus viviparous | • | • | | | |

| Cattle Grubs (parasitic stages) |
|---|
| Hypoderma bovis |
| H. lineatum |
| Sucking Lice |
| Linognathus vituli |
| Haematopinus eurysternus |
| Solenopotes capillatus |
| Mites (scabies) |
| Psoroptes ovis (syn. P. communis var. bov |
| Sarcoptes scabiei var. bovis |
| |

IN THE Control the inhibited stage Reduce parasite xposure on of the brown pasture for stomach v pasta forag (O. osterta utilization

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overwinter by controlling ummer parasite infestation

Noromectin[®] 1% Injection Offers Your **Customers:**

- → One low-volume dose for effective treatment and control of internal and external parasites, including gastrointestinal roundworms, lungworms, grubs, sucking lice and mange mites
- > The active ingredient ivermectin provides convenience, broad-spectrum efficacy and a high margin of safety
- Plastic bottles enclosed in display carton for protection from dust and sunlight
- → Four convenient, ready-to-use pack sizes of 50 mL, 250 mL, 500 mL* and 1000 mL*
- → Uncompromising quality control from Norbrook Laboratories - a worldwide leader in animal health
- → A competitively priced solution
- *Plastic Hanger Bottles

Recommend Strategic Parasite Control for Herd Protection and Profitability

The economics of **Noromectin® 1% Injection** allow cow/calf and stocker operations to treat multiple times per year for improved herd health.

Observe label directions and withdrawal times. Consult your veterinarian for assistance in the diagnosis, treatment, and control of parasitism. Do not use in female dairy cattle of breeding age or in calves to be processed for yeal. Do not use in unapproved species as severe reactions, including fatalities in dogs, may result. See product labeling for full product information.



| | Sucking Lice: Linganatus vituli Haematopinus eurysternus Solenopotes capilatus | Cattle Gnubs (parasitic stages): Hypoderma bovis H. lineatum | Lungworms (adults and fourth-stage larvae): Dictyocaulus viviparus | Nermone, hus plecei Trichostronylvis avei T. colubriarmis C. portexta C. portexta D. perinata D. perinatarus (adutts D. portexta D. postornum phébotomum Nemaodrus he/batorum Nemaodrus he/batorum | following harmful species of gastrointestinal roundwor ubs, sucking lice, and mange mites in cattle: al Roundworms (adults and fourth-stage larvae): ertagi (including inhibited <i>O. ostertagi</i>) | annials do not have building and a sub-sub-sub-sub- annials do not have guidamate-general colloride channels, the cyclic lactones have a low affinity for other mammalian ligs is channels and they do not readily cross the blood-brain Montone in laceton in inforted for the offention treatment Montone in laceton in inforted for the offention treatment | MODE OF ACTION Wernetch is a mamber of the macrosycic lactone class of endectocides wernetch is an ended of action. Compounds of the class bind selectively and with high efinity to guitamate-gated chloride ion than es- which cack and the selection of the selection of the selective which cack in the perneability of the cell membrane to chloride ions with increase in the perneability of the cell membrane to chloride ions with hyperplantation of the nerve or nucleic cell. Twisting in pravises and death of the perneability of the cell membrane to chloride ions with hyperplantation of the nerve or nucleic cell. This deats the ligand-gated chloride channels, such as those gated by the neurotransmitter gamma-animobutyric acid (GABA). | Trapportyces averantics against source union termentation on trapportyces averantics. % ivormectin, 40% glycerol formal, and propylene glycol (s. a. d. 2000 meg the standards to deliver the recommended toronectin higection is formulated to deliver the recommended processing thermectin-kilogram of body weight in cattle when gav piection is formulated to deliver the recommended dose level of remencinkilogram body weight when given subcutaneously at the remencinkilogram body weight when given subcutaneously in the the rate of 1 mL per 75 lb (33 kg). | PRODUCT DESCRIPTION Vermectin is derived from the avermectins, a family of potent, Vermectin is derived from the avermectins, a family of potent, broad-spectrum antiparasitic agents isolated from fermentation of | NUTODUCTION Nuccencia, ⁴ Normacial Injection is an injectable parasiticide for cattle Nuccencia, ⁴ Normacial parasiticide services and transfer the the following. One have done and see effective transfer the the the relative and service service transfer the transfer the the service and service service transfer to conference to the the Creative and service service transfer to conference to the the Creative asservative cattle, language the transfer the transfer mange mitse of water Normacian convenience. Inservices the transfer and service margin make Normacian injection a unique product for parasite control of cattle and swine. | Consult your veterinarian for assistance in the diagnosis, treatment and control of parasitism. | 3 Solution Ind Control of Internal and Extern | Noromectin (ivermectin) Disertion for Cattle and Swine | ANADA 200-437, Approved by FDA |
|--|---|---|---|--|---|---|---|---|--|--|---|--|---|--------------------------------|
|--|---|---|---|--|---|---|---|---|--|--|---|--|---|--------------------------------|

Mites (scabies): Psoroptes ovis (syn. P. communis var. bovis) Sarcoptes scablei var. bovis

Persistent Activity Ivermectin injection has been proved to effectively control infections and to protect cattler from reinfection with Dictyceaulus vivipanus and Despinagostomum radiatum for 28 days taken for 21 eatment, Geartagia Tichostrongvius area and Cooperia on cophora for 11 eatments Haemonchus placei and Cooperia on cophora for 14 days after treatment.

Swine: Noromectin 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:

Red stomach worm, *Hyostrongylus rubidus* (adutts and fourth-stage larvae) Nodular worm, *Oscophagostomum* spp. (adutts and fourth-stage larvae) Threadworm, *Strongyloides ransomi* (adults) te roundworm, Ascaris suum its and fourth-stage larvae)

Somatic Roundworm Larvae: Threadworm, *Strongyloides ransonni* (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

Cattle: Normectin injection should be given only by subcuraneous injection under the losses kinn in form of or behand the shoulder at the recommended does level of 200 mcg of kermectin per kilogram of body weight. Each nu of Noronechn hjection contains 10 mg of wernechn, sufficient to treat 110 b (50 kg) of body weight (maximum 10 mL per injection stel). DOSAGE

Body Weight (lb) Dose Volume (mL)

| viection sho | 1100 | 990 | 880 | 770 | 660 | 550 | 440 | 330 | 220 |
|---|------|-----|-----|-----|-----|-----|-----|-----|-----|
| ection should be given only by subcutaneous injection | 10 | 9 | 8 | 7 | 6 | 5 | 4 | ω | 2 |

Synner. Normertin hietoton should be given only by subctraneous injection in the neck of swine at the recommended dose level of 300 mcg of ivernectin per kilogram (22.1 b) tobogy weight. Each mL of Normerctin hietotion contains 10 mg of ivermectin, sufficient to treat 75 lb of body weight.

Body Weight (Ib) Dose Volume (mL)



Cattle: Normectin Injection is to be given subcutaneously only, to reduce Cattle: Normectin Injection is to be given subcutaneously only, to reduce risk of potentially fast closerthal infection of the injection site. Animals should be appropriately restrained to achieve the proper route of administration. Use of a Geague, it of 34, incher head is suggested. Inject administration Use skin in front of or behind the shoulder (see illustration).



When using the 250, 500 or 1000 mL pack size, use only automatic syringe equipment. But the series of the series

Swinge. Noromeetin (ivermeetin) Injection is to be given subcutaneously in the neck. Animals should be appropriately restrained to achieve the proper route of administration. Use of a 15- or 18-gauge needle is suggested for sows and boars, while an 18- or 20-gauge needle may be appropriate for young animals. Inject under the skin, immediately behind the ear (see illustration).



When using the 100, 250, 500 or 1000 mL pack size, use only automatic syringe equipment. As with any injection, sterile equipment should be used. The injection site should be cleaned and disinfected with alcohol before injection. The urbber stopper should also be disinfected with alcohol before prevent contamination of the contrast. Nild and transient pain reachon may be seen in some swine following subcutaneous administration.

Recommended Treatment Program <u>Swine:</u> At the time of initiating any parasite control program, it is important to treat all breading animals in the herd. After the initial treatment, use Noromechn injection equilatly as follows: Necernary Animator

Sows: Tre prior to farrowing, preferably 7-14 days before, to minimize

Gilts:

Boars:

FEEDER PIGS (Weaners/Gro

NOTE:
Noromerctin Injection has a persistent drug level sufficient to control mite intestations throughout the egg to adult life cycle. However, since the vermesch offect is not immediate, care must be taken to prevent reinfestation from exposite to untracted adminals or contaminated facilities. Generally, pigs should not be moved to clean quarters or exposed to unifieted by the approximately on a week helf to reament. Sows should be treated at least one week helf or farrowing to minimize transfer of mites to newborn baby pigs.
Louse eggs are unaffected by Moromechin lipicition and may require up to three weeks to hatch. Louse infestations developing from hatching eggs may require extreament.
Consult a versimination to eigh in the diagnosis and control of internal and external parasites of swine.

Special Minor Use Reinder: For the cartment and control of warbles (*Dedemagene terandi*) in reindeer, inject 200 micrograms ivermectin per kilogram of body weight subcitaneously...

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

RESIDUE WARNINGS: 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 an MSDS or for assistance, contact Norbrook toll free 1-866-591-5777.

RESIDUE WARKINGS: Do not treat cartle within 35 days of staulante. Because a withdrawal time in milk has not been astbuished do not use in female dairy cattle of breefing age. A withdrawal period has not been established for this product in pre-numinating calves. Do not use in calves to be processed for yeal. Do not use with a whys of stagitter.

PRECAUTIONS Transition disconfort has been observed in some cattle following transition disconfort has been observed. These reactions have disappeared the injection site has been observed. These reactions have disappeared without treatment. For cattle, divide doses greater than 10 nL 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.

Noromechin 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 with Grubs Norometin Injection 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 heil fly warbid by treated as soon as possible after the end of the productive period when these grubs are in vital areas may cause undesirable hypothermatic excitons including the possibility of fatalities. Kling Hypotherma insections including the possibility of fatalities. Kling glullet may cause salivation and bloat. Kling A *Lowis* when it is in the verbaral canal may cause stagering or parakysis. These reactions are not specific to treatment with Normeerian injection, but can occur with any successful treatment of grubs. Cattle should be treated either before or after these tages of gould exelopment. Consult your veterinarian concerning the proper time for treatment.

Cattle treated with Noromectin Injection after the end of the heel fly season may be erreated with Noromechin Injection during the winter for internal parasites, mange miss, or sucking lice without danger of grup-felated reactions. A planned parasite control program is recommended.

Store at 59° to 86°F (15° to 30° C).

Environmeterral. SAFERY Studies indicate travelant in commerin comes in contact with soil, it readily studies indicate that when it we meet in comes in active over time. Free and tapity binds to the soil and becomes inactive over time. Free inemection may adversely effect its and certain equasic organisms. Do not permit water rund if one endots the anter false streams, or points. Do not permit water rund if one endots the anter false streams, or points boot permit water rund if one endots the anter false streams. The points boot permit water rund if one endots the anter false streams of the points boot permit water rund if one endots the anter false streams of the points boot permit water rund if one endots the stream of the points of the points of the points of the point of the points of

As with other avernaechins, ivermechin 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 tool and for reproduction. The mapritude and duration of such effects are species and life-cycle specific. When used according to able directions, the product is not expected to have an adverse impact on populations of dung-dependent insects.

pack sizes: HOW SUPPLIED Noromectin Injection for Cattle and Swine is available in five ready-to-use

The 50 mL pack is a multiple-dose, rubber-capped bottle. Each bottle contains sufficient solution to treat 10 head of 550 lb (250 kg) cattle or 100 head of 38 lb (17.3 kg) swine.

The 100 mL pack is a multiple-dose, rubber-capped bottle designed for use with automatic syringe equipment. Each bottle contains sufficient solution to treat 20 head of 550 lb (250 kg) cattle or 200 head of 38 lb (17.3 kg) swine.

The 250 mL pack is a multiple-dose, rubber-capped bottle designed for use with automatic syringe equipment. Each bottle contains sufficient solution to treat 50 head of 550 lb (250 kg) cattle or 500 head of 38 lb (17.3 kg) swine.

The 500 mL pack is a multiple-dose, rubber-capped bottle designed for use with automatic syringe equipment. Each bottle contains sufficient solution to treat 100 head of 550 lb (250 kg) cattle or 1000 head of 38 lb (17.3 kg) swine

The 1000 mL pack is a multiple-dose, rubber-capped bottle designed for use with automatic syring equipment. Each bottle contains sufficient solution to treat 200 head of 550 lb (250 kg) cattle or 2000 head of 38 lb (17.3 kg) swine.

Restricted Drug - California. Use Only as Directed.

Made in the UK.

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Norbrook Laboratories Limited, Newry, BT35 6PU, Co. Down, Northern Ireland

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no d'ibijets. Treat 714 days prior to breeding. Freat 714 days prior to farrowing. Frequency and need for treatments are dependent upon exposure. Treate tleast two times a year.

(Weaners/Growers/Finishers) All weaner/feeder pigs should be treated before placement in clean

quarters. Pigs exposed to contaminated soil or pasture may need retreatment if reinfection occurs.