#### SUMMARY OF PRODUCT CHARACTERISTICS

## 1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Noromectin 0.5% w/v Pour-On Solution

## 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Active Substance(s) % w/v

Ivermectin 0.5

Excipient(s):

Patent Blue V (E131) 0.0005

For a full list of excipients, see section 6.1

#### 3. PHARMACEUTICAL FORM

Pour-on Solution A clear blue liquid

#### 4. CLINICAL PARTICULARS

# 4.1 Target species

Beef and non-lactating dairy cattle

# 4.2 Indications for use, specifying the target species

Indicated for the effective treatment and control of the following gastrointestinal roundworms, lungworms, eyeworms, warbles, chorioptic and sarcoptic mange and sucking and biting lice in beef and non-lactating dairy cattle.

## Gastrointestinal roundworms (adults and fourth stage larvae):

Ostertagia ostertagi (including inhibited O ostertagi), Haemonchus placei, Trichostrongylus axei, Trichostrongylus colubriformis, Cooperia spp, Oesophagostomum radiatum, Strongyloides papillosus (adult), Trichuris spp (adult).

## **Lungworms (adult and fourth stage larvae):**

Dictyocaulus viviparus.

# Eyeworms (adult):

Thelazia spp

## Warbles (parasitic stages):

Hypoderma bovis, Hypoderma lineatum.

#### Lice:

Linognathus vituli, Haematopinus eurysternus, Solenopotes capillatus, Damalinia bovis.

## Mange mites:

Chorioptes bovis, Sarcoptes scabiei var bovis.

Rainfall before or after treatment will not affect the efficacy of Noromectin 0.5% w/v Pour-On Solution.

## 4.3 Contraindications

Do not apply to areas of skin which have mange, scabs or other lesions or to areas contaminated with mud or manure.

Formulated for specific use in cattle. It should not be applied or administered to other species, as severe reactions, including fatalities in dogs, may occur.

# 4.4 Special Warnings for each target species

Assess bodyweight as accurately as possible before calculating the dosage.

# 4.5 Special precautions for use

Care should be taken to avoid the following practices because they increase the risk of development of resistance and could ultimately result in effective therapy:

- Too frequent and repeated use of anthelmintics from the same class, over an extended period of time.
- Underdosing, which may be due to underestimation of body weight, misadministration of the product, or lack of calibration of the dosing device (if any).

Suspected clinical cases of resistance to anthelmintics should be further investigated using appropriate tests (e.g. Faecal Egg Count Reduction Test). Where the results of the test(s) strongly suggest resistance to a particular anthelmintic, an anthelmintic belonging to another pharmacological class and having a different mode of action should be used.

Resistance to ivermectin (an avermectin) has been reported in *Cooperia oncophora* in cattle within the EU, in *Teladorsagia* in cattle in developed countries such as New Zealand and *Haemonchus* in cattle outside the EU. Therefore the use of this product should be based on local (regional, farm) epidemiological information about susceptibility of nematodes and recommendations on how to limit further selection for resistance to anthelmintics.

# Special precautions for use in animals

For external use only.

# Special precautions to be taken by the person administering the veterinary medicinal product to animals

Highly flammable – keep away from heat, sparks, open flame or other sources of ignition.

Noromectin 0.5% w/v Pour-On Solution may be irritating to human skin and eyes and the user should be careful not to apply it to himself or other persons. Operators should wear nitrile rubber 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.

Do not eat, drink or smoke while handling the product. Wash hands after use. Use only in well ventilated areas or outdoors.

# 4.6 Adverse reactions (frequency and seriousness)

Undesirable effects are not expected when the product is used at the recommended dose rate.

## 4.7 Use during pregnancy, lactation or lay

Can be administered to beef cows at any stage of pregnancy or lactation.

# 4.8 Interaction with other medicinal products and other forms of interaction

None

#### 4.9 Amounts to be administered and administration route

Ivermectin should be administered topically at 500  $\mu$ g per kg bodyweight (1 ml per 10 kg bodyweight).

The formulation should be applied along the midline of the back in a narrow strip between the withers and the tailhead.

To ensure administration of a correct dose, body weight should be determined as accurately as possible; accuracy of the dosing device should be checked.

#### 250 ml bottle and 1 litre pack

(Squeeze dispensing bottle/twin-neck container/single neck container)

- Remove the cap (twin-neck container/single neck container) or attach the dispensing cup to the product bottle (squeeze-measure container) and hold the container in an upright position.
- Gently squeeze the container until the product is level with the desired dose volume increment.
- Dispense the product by tipping the container forward until inverted.

# 2.5 litre and 5 litre pack (Collapsible Back Pack)

- Remove the shipping cap from the backpack container and replace with the vent cap provided.
- Attach the hose from the automatic dosing equipment to the outlet from the vent cap.
- Follow the applicator gun manufacturer's directions for priming the gun, adjusting the dose, and care of the applicator gun following use.

# 4.10 Overdose (symptoms, emergency procedures, antidotes), if necessary

No signs of toxicity are likely up to 5 mg/kg (10 times the recommended dose rate). There is no known antidote

## 4.11 Withdrawal period

Cattle

Meat: 28 days

Not to be used in animals producing milk for human consumption.

Do not use in non-lactating dairy cows including pregnant heifers within 60 days of calving.

## 5. PHARMACOLOGICAL PROPERTIES

Pharmacotherapeutic group: Anthelmintic

ATC Vet Code: QP 54 AA 01

# 5.1 Pharmacodynamic properties

Ivermectin is a 22,23-dihydro derivative of an avermectin (which is a fermentation product produced by *Streptomyces avermitilis*) and consists of 2 homologues: B1a and B1b. It is a parasiticide with nematocidal, insecticidal and acaricidal activity documented in a wide range of domesticated animals.

Avermectins act to stimulate GABA mediated chloride ion conductance, causing irreversible neuromuscular blockade in nematodes, followed by paralysis and death.

## 6. PHARMACEUTICAL PARTICULARS

## 6.1 List of excipients

Patent Blue V (E131) Triethanolamine Crodamol Cap Isopropyl Alcohol

# 6.2 Incompatibilities

None known

#### 6.3 Shelf life

Shelf-life of veterinary medicinal product as packaged for sale: 2 years Shelf-life after opening the immediate packaging: 1 Year

## 6.4 Special precautions for storage

Do not store above 30°C.

Protect from light.

Store in tightly closed original container.

The container should be stored upright in their original boxes when not in use. If stored at temperatures below 0°C. Noromectin 0.5% w/v Pour-On Solution may apppear cloudy. Allowing it to warm at room temperature will restore the normal appearance without affecting efficacy.

Following withdrawal of the first dose, use the product within 1 year.

## 6.5 Nature and composition of immediate packaging

250 ml and 1.0 litre natural high density polyethylene twin neck bottle with polypropylene screw cap with woodpulp faced aluminium wad seal.

250 ml and 1.0 litre natural high density polyethylene single neck bottle with polypropylene screw cap with woodpulp faced aluminium wad seal.

250 ml and 1.0 litre natural high density polyethylene squeeze bottle with polypropylene screw cap with woodpulp faced aluminium wad seal.

2.5 L and 5 litre white low density polyethylene backpack with polypropylene screw caps with woodpulp faced aluminium wad seal.

Not all pack sixes may be marketed.

# 6.6 Special precautions for the disposal of unused veterinary medicinal product or waste materials derived from the use of such products

EXTREMELY DANGEROUS TO FISH AND AQUATIC LIFE.

Do not contaminate ponds, waterways or ditches with the product or used containers.

Any unused product or waste materials should be disposed of in accordance with national requirements.

# 7. MARKETING AUTHORISATION HOLDER

Norbrook Laboratories Limited Station Works Camlough Road Newry Co Down BT35 6JP

# 8. MARKETING AUTHORISATION NUMBER(S)

Vm 02000/4172

# 9. DATE OF FIRST AUTHORISATION

3<sup>rd</sup> September 1999

## 10. DATE OF REVISION OF THE TEXT

February 2009