

## 1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Ecomectin 10 mg/ml solution for injection for cattle, sheep and pigs.

Alfamectin (DE)

Vetomectin (FR)

## 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each ml contains:

### Active substance:

Ivermectin: 10 mg

### Excipients:

Qualitative composition of excipients and other constituents	Quantitative composition if that information is essential for proper administration of the veterinary medicinal product
Benzyl alcohol	10 mg
Ethanol 96%	
Propylene glycol	
Water for injections	

A clear, colourless solution.

## 3. CLINICAL INFORMATION

### 3.1 Target species

Cattle, sheep and pigs.

### 3.2 Indications for use for each target species

#### Cattle:

For the treatment of gastrointestinal nematodes, lungworms, eyeworms, warble flies, mites and lice (as shown below) of beef and non-lactating dairy cattle:

#### Gastrointestinal worms (adults and 4<sup>th</sup> stage larvae):

*Ostertagia ostertagi*

*Ostertagia lyrata*

*Haemonchus placei*

*Trichostrongylus colubriformis*

*Cooperia oncophora* (adults)

*Cooperia punctata* (adults)

*Cooperia pectinata* (adults)

*Bunostomum phlebotomum*

*Oesophagostomum radiatum*

#### Lungworms (adult and 4<sup>th</sup> stage larvae):

*Dictyocaulus viviparus*

Eyeworms (adult):

*Thelazia* spp.

Warble flies (parasitic stages):

*Hypoderma bovis*

*H. lineatum*

Mites:

*Psoroptes ovis*

*Sarcoptes scabiei* var. *bovis*

Sucking lice:

*Linognathus vituli*

*Haematopinus eurysternus*

*Solenopotes capillatus*

May also be used as an aid in the control of the mange mite *Chorioptes bovis* but complete elimination may not occur.

Treatment with the veterinary medicinal product at the recommended dose rate prevents re-infection with *Haemonchus placei*, *Cooperia oncophora*, *Cooperia pectinata* and *Trichostrongylus axei* for 7 days after treatment, *Ostertagia ostertagi* and *Oesophagostomum radiatum* for 14 days after treatment and *Dictyocaulus viviparus* for 21 days after treatment.

**Sheep:**

For the treatment of psoroptic mange (sheep scab), gastrointestinal nematodes, lungworms and nasal bots of sheep:

Gastrointestinal roundworms (adults):

*Ostertagia circumcincta*

*Haemonchus contortus*

*Trichostrongylus axei*

*T. colubriformis* and *T. vitrinus*

*Cooperia curticei*

*Nematodirus filicollis*

Variable activity may be observed against *Cooperia curticei* and *Nematodirus filicollis*.

Lungworms:

*Dictyocaulus filaria* (adults)

Mange mites:

*Psoroptes ovis*

Nasal bot:

*Oestrus ovis* (all larval stages)

**Pigs:**

For the treatment of gastro-intestinal nematodes, lungworms, lice and mange mites of pigs.

Gastro-intestinal worms (adult and 4<sup>th</sup> stage larvae):

*Ascaris suum*

*Hyostrongylus rubidus*

*Oesophagostomum* spp.

*Strongyloides ransomi* (adults).

Lungworms:

*Metastrongylus* spp. (adults)

Lice:

*Haematopinus suis*

Mange Mites:

*Sarcoptes scabiei* var. *suis*

### 3.3 Contraindications

Do not use in cases of hypersensitivity to the active substance or to any of the excipients.

Do not administer by the intravenous or intramuscular route.

### 3.4 Special warnings

Care should be taken to avoid the following practices because they increase the risk of development of resistance and could ultimately result in ineffective 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 bodyweight, misadministration of the veterinary medicinal 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.

Treatment of psoroptic mange (sheep scab) with one injection is not recommended because, although clinical improvement may be seen, elimination of all mites may not occur.

Sheep scab (*Psoroptes ovis*) is an extremely contagious external parasite of sheep. Following treatment of infected sheep great care must be taken to avoid re-infestation as mites may be viable for up to 15 days off the sheep. It is important to ensure all sheep which have been in contact with infected sheep are treated. Contact between treated infected and non-treated, non-infected flocks must be avoided until at least 7 days after the last treatment.

Resistance to ivermectin has been reported in *Ostertagia circumcincta* in lambs and in *Ostertagia ostertagi* in cattle. Therefore, the use of this veterinary medicinal product should be based on local (regional, farm) epidemiological information about susceptibility of these *helminth species* and recommendations on how to limit further selection for resistance to anthelmintics.

### 3.5 Special precautions for use

Special precautions for safe use in the target species:

Do not combine treatment with vaccination against lungworms. If vaccinated animals are to be treated, treatment should not be carried out within a period of 28 days before or after vaccination.

The shedding of nematode eggs can continue for some time after treatment.

In Cattle: To avoid secondary reactions due to the death of Hypoderma larvae in the oesophagus or in the spine, it is recommended to administer the product at the end of warble fly activity and before the larvae reach their resting sites.

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

Do not smoke, eat or drink while handling the veterinary medicinal product.

Wash hands after use.

Take care to avoid self-injection: the veterinary medicinal product may cause local irritation and/or pain at the site of injection. In case of accidental self-injection, seek medical advice immediately and show the package leaflet or the label to the physician.

#### Other precautions

Ivermectins may not be well tolerated in non-target species. Cases of intolerance with fatal results are reported in dogs – especially collies, old English sheepdogs and related breeds and crosses, and also in turtles/tortoises.

#### Special precautions for the protection of the environment:

Not applicable.

### **3.6 Adverse events**

Cattle, sheep and pigs:

Undetermined frequency (cannot be estimated from the available data):	Discomfort <sup>1,2</sup> , Injection site swelling <sup>3</sup> , Injection site thickening <sup>3</sup>
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<sup>1</sup> Transitory immediately after subcutaneous administration.

<sup>2</sup> In cattle jumping and rolling may occur, but behaviour returns to normal after 15 minutes.

<sup>3</sup> Transient and typically disappear within 1 to 4 weeks.

Reporting adverse events is important. It allows continuous safety monitoring of a veterinary medicinal product. Reports should be sent, preferably via a veterinarian, to either the marketing authorisation holder or its local representative or the national competent authority via the national reporting system. See the package leaflet for respective contact details.

### **3.7 Use during pregnancy, lactation or lay**

#### Pregnancy, lactation and fertility:

Can be used during pregnancy.

Do not use in lactating cows producing milk for human consumption. Do not use in non-lactating dairy cows, including pregnant dairy heifers, within 60 days of calving.

Do not use in lactating ewes producing milk for human consumption. Do not use in sheep which are intended to produce milk for human consumption within 60 days of lambing.

The fertility of males is not affected by administration of the veterinary medicinal product.

### **3.8 Interaction with other medicinal products and other forms of interaction**

Do not combine ivermectin treatment with vaccination against lungworms. If vaccinated animals are to be treated, treatment should not be carried out within a period of 28 days before or after vaccination (see section 3.5).

### **3.9 Administration routes and dosage**

Subcutaneous use.

For single administration only (except for the treatment of *Psoroptes ovis* infections in sheep).

To ensure administration of a correct dose, bodyweight should be determined as accurately as possible. Accuracy of the dosing device should be checked.

If animals are to be treated collectively rather than individually, they should be grouped according to their bodyweight and dosed accordingly, in order to avoid under- or over-dosing.

When using the 200, 250 or 500 ml pack sizes, use only automatic syringe equipment. For the 50 ml pack size, use of a multiple dose syringe is recommended. To refill the syringe, use of a draw-off needle is recommended to avoid excessive broaching of the stopper.

### **Cattle**

#### Dosage:

1.0 ml per 50 kg bodyweight (based on a recommended dosage level of 200 micrograms ivermectin per kg bodyweight).

#### Administration:

Inject subcutaneously in front of, or behind, the shoulder using aseptic technique. A sterile 1.4 x 15 mm (17G x ½ inch) needle is recommended.

### **Sheep**

#### Dosage:

0.5 ml per 25 kg of bodyweight (based on a recommended level of 200 micrograms ivermectin per kg bodyweight).

#### Administration:

For the treatment of gastrointestinal roundworms, lungworms and nasal bots inject once subcutaneously in the neck, using aseptic precautions; a sterile 1.4 x 15 mm (17G x ½ inch) needle is recommended. For the treatment of *Psoroptes ovis* (sheep scab), two injections with a seven-day interval are required to treat clinical signs of scab and to eliminate living mites.

For young lambs weighing less than 20.0 kg give 0.1 ml per 5 kg. In these lambs the use of a syringe which can deliver as little as 0.1 ml is recommended.

### **Pigs**

#### Dosage:

1.5 ml per 50 kg bodyweight (based on a recommended dosage level of 300 micrograms ivermectin per kg bodyweight)

#### Administration:

The recommended route of administration is by subcutaneous injection into the neck using aseptic technique and a sterile 1.4 x 15 mm (17G x ½ inch) needle.

For piglets weighing less than 16 kg give 0.1 ml per 3 kg. In these piglets the use of a syringe which can deliver as little as 0.1 ml is recommended.

### **3.10 Symptoms of overdose (and where applicable, emergency procedures and antidotes)**

Clinical symptoms of ivermectin toxicity include ataxia and depression. No antidote has been identified. In case of overdose, symptomatic treatment should be given. No signs of toxicity were observed in animals treated at up to 3 times the recommended dose rate.

### **3.11 Special restrictions for use and special conditions for use, including restrictions on the use of antimicrobial and antiparasitic veterinary medicinal products in order to limit the risk of development of resistance**

Not applicable.

### **3.12 Withdrawal periods**

#### Cattle:

Meat and offal: 49 days.

Do not use in lactating cows producing milk for human consumption. Do not use in non-lactating dairy cows, including pregnant dairy heifers, within 60 days of calving.

#### Sheep:

Meat and offal: 42 days.

Do not use in lactating ewes producing milk for human consumption. Do not use in sheep which are intended to produce milk for human consumption within 60 days of lambing.

#### Pigs:

Meat and offal: 28 days.

## **4. PHARMACOLOGICAL INFORMATION**

### **4.1 ATCvet code : QP54AA01.**

### **4.2 Pharmacodynamics**

Ivermectin is a macrocyclic lactone derivative and acts by inhibiting nerve impulses. It binds 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 relevant parasites. Compounds of this class may also interact with other ligand-gated chloride channels, such as those gated by the neurotransmitter gammaaminobutyric 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.

### **4.3 Pharmacokinetics**

In each of the target species the pharmacokinetic profile following subcutaneous administration was characterised as follows (pharmacokinetic parameters presented as mean values):

Following administration to cattle,  $C_{max}$  was 51 ng/ml, with a  $T_{max}$  of 43 h,  $T_{1/2}$  of 129 h and an AUC of 7398 ng.h/ml.

Following two subsequent administrations seven days apart to sheep,  $C_{max}$  was 14 ng/ml, with a  $T_{max}$  of 202 h,  $T_{1/2}$  of 380 h and an AUC of 4686 ng.h/ml.

Following administration to pigs,  $C_{max}$  was 6.35 ng/ml, with a  $T_{max}$  of 106 h,  $T_{1/2}$  of 219 h and an AUC of 1260 ng.h/ml.

Only about 2% of the drug is excreted in urine, faecal excretion being the major route of elimination. Tissue residues of radioactivity following subcutaneous administration of tritiumlabelled ivermectin are highest in liver and fat; lowest levels are found in brain.

In cattle, the residual antiparasitic effect of ivermectin is due to its persistence which in turn is due in part to its long intrinsic half life and its relatively high protein binding (90%).

## **5. PHARMACEUTICAL PARTICULARS**

### **5.1 Major incompatibilities**

In the absence of compatibility studies, this veterinary medicinal product must not be mixed with other veterinary medicinal products.

### **5.2 Shelf life**

Shelf life of the veterinary medicinal product as packaged for sale: 2 years.

Shelf life after first opening the immediate packaging: 28 days.

### **5.3 Special precautions for storage**

Store below 25 °C.

Protect from direct sunlight.

Keep the container in the outer carton in order to protect from light.

### **5.4 Nature and composition of immediate packaging**

Cardboard carton with one HDPE multidose container with bromobutyl rubber stopper and aluminium cap.

Pack size: 50 ml, 200 ml and 500 ml.

Cardboard carton with one clear PET multidose container with bromobutyl rubber stopper and aluminium cap.

Pack size: 50 ml, 250 ml and 500 ml.

Not all pack sizes may be marketed.

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

Medicines should not be disposed of via wastewater or household waste.

The veterinary medicinal product or used container should not enter water courses as ivermectin may be EXTREMELY DANGEROUS TO FISH AND AQUATIC LIFE.

Use take-back schemes for the disposal of any unused veterinary medicinal product or waste materials derived thereof in accordance with local requirements and with any national collection systems applicable to the veterinary medicinal product concerned.

## **6. NAME OF THE MARKETING AUTHORISATION HOLDER**

ECO Animal Health Europe Limited

## **7. MARKETING AUTHORISATION NUMBER(S)**

## **8. DATE OF FIRST AUTHORISATION**

Date of first authorisation: {DD/MM/YYYY}

## **9. DATE OF THE LAST REVISION OF THE SUMMARY OF THE PRODUCT CHARACTERISTICS**

{MM/YYYY}

## **10. CLASSIFICATION OF VETERINARY MEDICINAL PRODUCTS**

Veterinary medicinal product subject to prescription.

Detailed information on this veterinary medicinal product is available in the [Union Product Database](https://medicines.health.europa.eu/veterinary) (<https://medicines.health.europa.eu/veterinary>).

## **LABELLING AND PACKAGE LEAFLET**

## **A. LABELLING**

**PARTICULARS TO APPEAR ON THE OUTER PACKAGE**

CARDBOARD CARTON

**1. NAME OF THE VETERINARY MEDICINAL PRODUCT**

Ecomectin 10 mg/ml solution for injection

**2. STATEMENT OF ACTIVE SUBSTANCES**

Each ml contains:

**Active substances:**

Ivermectin: 10 mg

**3. PACKAGE SIZE**

50 ml  
200 ml  
250 ml  
500 ml

**4. TARGET SPECIES**

Cattle, sheep and pigs.

**5. INDICATIONS**

**6. ROUTES OF ADMINISTRATION**

Subcutaneous use.

**7. WITHDRAWAL PERIODS**

Withdrawal periods:

Meat and offal:

Cattle: 49 days.

Sheep: 42 days.

Pigs: 28 days.

Milk:

Do not use in lactating cows or ewes producing milk for human consumption. Do not use in non-lactating dairy cows, including pregnant dairy heifers or non-lactating dairy sheep within 60 days of calving/lambing.

**8. EXPIRY DATE**

Exp. {mm/yyyy}

Once broached use within 28 days.

**9. SPECIAL STORAGE PRECAUTIONS**

Store below 25 °C.

Protect from direct sunlight.

Keep the container in the outer carton in order to protect from light.

**10. THE WORDS “READ THE PACKAGE LEAFLET BEFORE USE”**

Read the package leaflet before use.

**11. THE WORDS “FOR ANIMAL TREATMENT ONLY”**

For animal treatment only.

**12. THE WORDS “KEEP OUT OF THE SIGHT AND REACH OF CHILDREN”**

Keep out of the sight and reach of children.

**13. NAME OF THE MARKETING AUTHORISATION HOLDER**

ECO Animal Health Europe Limited

**14. MARKETING AUTHORISATION NUMBERS**

**15. BATCH NUMBER**

Lot {number}

**PARTICULARS TO APPEAR ON THE IMMEDIATE PACKAGE**

HDPE or PET multidose container

**1. NAME OF THE VETERINARY MEDICINAL PRODUCT**

Ecomectin 10 mg/ml solution for injection

**2. STATEMENT OF ACTIVE SUBSTANCES**

Each ml contains:

**Active substances:**

Ivermectin: 10 mg

**3. TARGET SPECIES**

Cattle, sheep and pigs.

**4. ROUTES OF ADMINISTRATION**

Read the package leaflet before use.

Subcutaneous use.

**5. WITHDRAWAL PERIODS**

Withdrawal periods:

Meat and offal:

Cattle: 49 days.

Sheep: 42 days.

Pigs: 28 days.

**6. EXPIRY DATE**

Exp. {mm/yyyy}

Once broached use within 28 days.

**7. SPECIAL STORAGE PRECAUTIONS**

Store below 25 °C.

Protect from direct sunlight.

Keep the container in the outer carton in order to protect from light.

**8. NAME OF THE MARKETING AUTHORISATION HOLDER**

<b>9. BATCH NUMBER</b>
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Lot {number}

**B. PACKAGE LEAFLET**

## PACKAGE LEAFLET

### 1. Name of the veterinary medicinal product

Ecomectin 10 mg/ml solution for injection for cattle, sheep and pigs.

### 2. Composition

Each ml contains:

**Active substance:**

Ivermectin: 10 mg

**Excipients:**

Benzyl alcohol: 10 mg

A clear, colourless solution.

### 3. Target species

Cattle, sheep and pigs.

### 4. Indications for use

**Cattle:**

For the treatment of gastrointestinal nematodes, lungworms, eyeworms, warble flies, mites and lice (as shown below) of beef and non-lactating dairy cattle:

Gastrointestinal worms (adults and 4<sup>th</sup> stage larvae):

*Ostertagia ostertagi*

*Ostertagia lyrata*

*Haemonchus placei*

*Trichostrongylus colubriformis*

*Cooperia oncophora* (adults)

*Cooperia punctata* (adults)

*Cooperia pectinata* (adults)

*Bunostomum phlebotomum*

*Oesophagostomum radiatum*

Lungworms (adult and 4<sup>th</sup> stage larvae):

*Dictyocaulus viviparus*

Eyeworms (adult):

*Thelazia* spp.

Warble flies (parasitic stages):

*Hypoderma bovis*

*H. lineatum*

Mites:

*Psoroptes ovis*

*Sarcoptes scabiei* var. *bovis*

Sucking lice:

*Linognathus vituli*

*Haematopinus eurysternus*

*Solenopotes capillatus*

May also be used as an aid in the control of the mange mite *Chorioptes bovis* but complete elimination may not occur.

Treatment with the veterinary medicinal product at the recommended dose rate prevents re-infection with *Haemonchus placei*, *Cooperia oncophora*, *Cooperia pectinata* and *Trichostrongylus axei* for 7 days after treatment, *Ostertagia ostertagi* and *Oesophagostomum radiatum* for 14 days after treatment and *Dictyocaulus viviparus* for 21 days after treatment.

### **Sheep:**

For the treatment of psoroptic mange (sheep scab), gastrointestinal nematodes, lungworms and nasal bots of sheep:

#### Gastrointestinal roundworms (adults):

*Ostertagia circumcincta*

*Haemonchus contortus*

*Trichostrongylus axei*

*T. colubriformis* and *T. vitrinus*

*Cooperia curticei*

*Nematodirus filicollis*

Variable activity may be observed against *Cooperia curticei* and *Nematodirus filicollis*.

#### Lungworms:

*Dictyocaulus filaria* (adults)

#### Mange mites:

*Psoroptes ovis*

#### Nasal bot:

*Oestrus ovis* (all larval stages)

### **Pigs:**

For the treatment of gastro-intestinal nematodes, lungworms, lice and mange mites of pigs.

#### Gastro-intestinal worms (adult and 4<sup>th</sup> stage larvae):

*Ascaris suum*

*Hyostrongylus rubidus*

*Oesophagostomum* spp.

*Strongyloides ransomi* (adults).

#### Lungworms:

*Metastrongylus* spp. (adults)

#### Lice:

*Haematopinus suis*

#### Mange Mites:

*Sarcoptes scabiei* var. *suis*

## **5. Contraindications**

Do not use in cases of hypersensitivity to the active substance or to any of the excipients.

Do not administer by the intravenous or intramuscular route.

## **6. Special warnings**

### Special warnings:

Care should be taken to avoid the following practices because they increase the risk of development of resistance and could ultimately result in ineffective 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 bodyweight, misadministration of the veterinary medicinal 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.

Treatment of psoroptic mange (sheep scab) with one injection is not recommended because, although clinical improvement may be seen, elimination of all mites may not occur.

Sheep scab (*Psoroptes ovis*) is an extremely contagious external parasite of sheep. Following treatment of infected sheep great care must be taken to avoid re-infestation as mites may be viable for up to 15 days off the sheep. It is important to ensure all sheep which have been in contact with infected sheep are treated. Contact between treated infected and non-treated, non-infected flocks must be avoided until at least 7 days after the last treatment.

Resistance to ivermectin has been reported in *Ostertagia circumcincta* in lambs and in *Ostertagia ostertagi* in cattle. Therefore, the use of this veterinary medicinal product should be based on local (regional, farm) epidemiological information about susceptibility of these *helminth species* and recommendations on how to limit further selection for resistance to anthelmintics.

#### Special precautions for safe use in the target species:

Do not combine treatment with vaccination against lungworms. If vaccinated animals are to be treated, treatment should not be carried out within a period of 28 days before or after vaccination.

The shedding of nematode eggs can continue for some time after treatment.

In Cattle: To avoid secondary reactions due to the death of Hypoderma larvae in the oesophagus or in the spine, it is recommended to administer the product at the end of warble fly activity and before the larvae reach their resting sites.

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

Do not smoke, eat or drink while handling the veterinary medicinal product.

Wash hands after use.

Take care to avoid self-injection: the veterinary medicinal product may cause local irritation and/or pain at the site of injection. In case of accidental self-injection, seek medical advice immediately and show the package leaflet or the label to the physician.

#### Other precautions

Ivermectins may not be well tolerated in non-target species. Cases of intolerance with fatal results are reported in dogs – especially collies, old English sheepdogs and related breeds and crosses, and also in turtles/tortoises.

#### Pregnancy, lactation and fertility:

Can be used during pregnancy in cows, ewes and sows.

Do not use in lactating cows producing milk for human consumption. Do not use in non-lactating dairy cows, including pregnant dairy heifers, within 60 days of calving.

Do not use in lactating ewes producing milk for human consumption. Do not use in sheep which are intended to produce milk for human consumption within 60 days of lambing.

The fertility of males is not affected by administration of the product.

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

Do not combine ivermectin treatment with vaccination against lungworms. If vaccinated animals are to be treated, treatment should not be carried out within a period of 28 days before or after vaccination.

#### Overdose:

Clinical symptoms of ivermectin toxicity include ataxia and depression. No antidote has been identified. In case of overdose, symptomatic treatment should be given. No signs of toxicity were observed in animals treated at up to 3 times the recommended dose rate.

#### Major incompatibilities:

In the absence of compatibility studies, this veterinary medicinal product must not be mixed with other veterinary medicinal products.

## 7. Adverse events

Cattle, sheep and pigs:

Undetermined frequency (cannot be estimated from the available data):	Discomfort <sup>1,2</sup> , Injection site swelling <sup>3</sup> , Injection site thickening <sup>3</sup>
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<sup>1</sup> Transitory immediately after subcutaneous administration.

<sup>2</sup> In cattle jumping and rolling may occur, but behaviour returns to normal after 15 minutes.

<sup>3</sup> Transient and typically disappear within 1 to 4 weeks.

Reporting adverse events is important. It allows continuous safety monitoring of a product. If you notice any side effects, even those not already listed in this package leaflet, or you think that the medicine has not worked, please contact, in the first instance, your veterinarian. You can also report any adverse events to the marketing authorisation holder or its local representative using the contact details at the end of this leaflet, or via your national reporting system: {national system details}

## 8. Dosage for each species, routes and method of administration

Subcutaneous use.

For single administration only (except for the treatment of *Psoroptes ovis* infections in sheep).

### Cattle

#### Dosage:

1.0 ml per 50 kg bodyweight (based on a recommended dosage level of 200 micrograms ivermectin per kg bodyweight).

#### Administration:

Inject subcutaneously in front of, or behind, the shoulder using aseptic technique. A sterile 1.4 x 15 mm (17G x ½ inch) needle is recommended.

### Sheep

#### Dosage:

0.5 ml per 25 kg of bodyweight (based on a recommended level of 200 micrograms ivermectin per kg bodyweight).

#### Administration:

For the treatment of gastrointestinal roundworms, lungworms and nasal bots inject once subcutaneously in the neck, using aseptic precautions; a sterile 1.4 x 15 mm (17G x ½ inch) needle is recommended. For the treatment of *Psoroptes ovis* (sheep scab), two injections with a seven-day interval are required to treat clinical signs of scab and to eliminate living mites.

For young lambs weighing less than 20.0 kg give 0.1 ml per 5 kg. In these lambs the use of a syringe which can deliver as little as 0.1 ml is recommended.

### Pigs

#### Dosage:

1.5 ml per 50 kg bodyweight (based on a recommended dosage level of 300 micrograms ivermectin per kg bodyweight)

#### Administration:

The recommended route of administration is by subcutaneous injection into the neck using aseptic technique and a sterile 1.4 x 15 mm (17G x ½ inch) needle.

For piglets weighing less than 16 kg give 0.1 ml per 3 kg. In these piglets the use of a syringe which can deliver as little as 0.1 ml is recommended.

When using the 200, 250 or 500 ml pack sizes, use only automatic syringe equipment. For the 50 ml pack size, use of a multiple dose syringe is recommended. To refill the syringe, use of a draw-off needle is recommended to avoid excessive broaching of the stopper.

## **9. Advice on correct administration**

To ensure administration of a correct dose, bodyweight should be determined as accurately as possible. Accuracy of the dosing device should be checked.

If animals are to be treated collectively rather than individually, they should be grouped according to their bodyweight and dosed accordingly, in order to avoid under- or over-dosing.

## **10. Withdrawal periods**

### Cattle:

Meat and offal: 49 days.

Do not use in lactating cows producing milk for human consumption. Do not use in non-lactating dairy cows, including pregnant dairy heifers, within 60 days of calving.

### Sheep:

Meat and offal: 42 days.

Do not use in lactating ewes producing milk for human consumption. Do not use in sheep which are intended to produce milk for human consumption within 60 days of lambing.

### Pigs:

Meat and offal: 28 days.

## **11. Special storage precautions**

Keep out of the sight and reach of children.

Store below 25 °C.

Protect from direct sunlight.

Keep the container in the outer carton in order to protect from light.

Do not use this veterinary medicinal product after the expiry date which is stated on the label and carton after Exp. The expiry date refers to the last day of that month.

Shelf life after first opening the immediate packaging: 28 days.

## **12. Special precautions for disposal**

Medicines should not be disposed of via wastewater or household waste.

The veterinary medicinal product or used container should not enter water courses as ivermectin may be **EXTREMELY DANGEROUS TO FISH AND AQUATIC LIFE**.

Use take-back schemes for the disposal of any unused veterinary medicinal product or waste materials derived thereof in accordance with local requirements and with any national collection systems applicable to the veterinary medicinal product concerned.

Ask your veterinary surgeon or pharmacist how to dispose of medicines no longer required.

## **13. Classification of veterinary medicinal products**

Veterinary medicinal product subject to prescription.

#### **14. Marketing authorisation numbers and pack sizes**

Pack sizes: Cardboard box with 1 vial of 50 ml, 200 ml, 250 ml and 500 ml.

Not all pack sizes may be marketed.

#### **15. Date on which the package leaflet was last revised**

Detailed information on this veterinary medicinal product is available in the [Union Product Database \(https://medicines.health.europa.eu/veterinary\)](https://medicines.health.europa.eu/veterinary).

#### **16. Contact details**

Marketing authorisation holder:

ECO Animal Health Europe Limited  
6th Floor  
South Bank House  
Barrow Street  
Dublin 4  
D04 TR29  
Ireland

Manufacturer responsible for batch release:

Divasa-Farmavic, S.A.  
Ctra. Sant Hipòlit, km 71,  
08503 Gurb-Vic (Barcelona)  
SPAIN

**Or**

Produlab Pharma b.v  
Forellenweg 16, NL-4941, Sj Raamsdonksveer  
Netherlands

Local representatives and contact details to report suspected adverse events: