PRILIUM 75 mg powder for oral solution

Powder for oral solution

SUMMARY OF PRODUCT CHARACTERISTICS

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1. NAME OF THE VETERINARY MEDICINAL PRODUCT

PRILIUM 75 mg powder for oral solution for dogs

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Powder/vial	
Imidapril hydrochloride	75 mg
Sodium benzoate (E 211)	30 mg
Excipient to	0.805 g
Solution after reconstitution	
Imidapril hydrochloride	2.5 mg
Sodium benzoate(E 211)	1.0 mg
Excipient to	1 ml

For full list of excipients, see 6.1.

3. PHARMACEUTICAL FORM

Powder for oral solution.
Vial containing a white powder. After reconstitution, the solution is limpid and colourless.

4. CLINICAL PARTICULARS

4.1. Target species
Dogs weighing over 2 kg

4.2. Indications for use, specifying the target species
In dogs: treatment of moderate to severe heart failure caused by mitral regurgitation or by dilated cardiomyopathy.

4.3. Contraindications
Do not use in dogs with low blood pressure.
Do not use in dogs with acute renal insufficiency.
Do not use in dogs with congenital heart disease
Do not use in dogs hypersensitive to an ACE inhibitor
Do not use in dogs with hemodynamically relevant stenoses (aortic stenosis, mitral valve stenosis, pulmonal stenosis)
Do not use in dogs with obstructive hypertrophic cardiomyopathy

4.4. Special warnings for each target species
None

4.5. Special precautions for use

i) Special precautions for use in animals
The use of ACE inhibitors in dogs with hypovolaemia/dehydration can lead to acute hypotension. In such cases the fluid and electrolyte balance should be restored immediately and treatment suspended until it has been stabilised. Parameters used for monitoring renal function should be checked at the beginning of the treatment and at regular time intervals thereafter.

ii) Special precautions to be taken by the person administering the medicinal product to animals
In case of accidental ingestion, seek medical advice immediately and show the package insert or the label to the physician.
Wash hands after having administered the veterinary medicinal product. In case of contact with eyes, rinse immediately with plenty of water.
The vial must be closed using the child proof stopper before being stored in the fridge.

iii) Other precautions

4.6. Adverse reactions (frequency and seriousness)
Diarrhoea, hypotension and related symptoms such as fatigue, dizziness or anorexia can occur in rare cases. Vomiting can also accur in very rare cases. In such cases treatment should be discontinued until the patient's condition has returned to normal.

4.7. Use during pregnancy, lactation or lay
Laboratory studies in rats and rabbits did not produce any evidence of teratogenic, embryotoxic or maternotoxic effects, or effects on reproductive performances, when imidapril was administered at the therapeutic dose. In the absence of data, do not use in pregnant or lactating bitches or in breeding dogs.

4.8. Interaction with other medicinal products and other forms of interaction
In the clinical trial, the veterinary medicinal product has been used with furosemide and digoxin and no safety concerns were noted.
However diuretics and a low sodium diet potentiate the effect of ACE inhibitors by activating the renin-angiotensin-aldosterone system (RAAS). Diuretics used at high doses and a low sodium diet are thus not recommended during a treatment with ACE inhibitors in order to avoid hypotension with clinical signs such as apathy, ataxia, rare syncope and kidney failure. In case of joint administration with potassium retaining diuretics, potassium must be monitored because there is a risk of hyperkaliemia.

4.9. Amount(s) to be administered and administration route
The recommended dose of imidapril is 0.25 mg/kg once a day per oral route, ie:
0.1 ml/kg of PRILIUM® 75 mg for dogs weighing more than 2 kg (1ml/10kg).
The veterinary medicinal product can be administered either directly into the mouth of the animal on an empty stomach or during the meals, or on food.

Preparation of the oral solution: Remove the nipple and the stopper of the vial containing the powder and fill with tap water up to the mark (30ml) place the child proof cap and screw on tightly.
Administration: Unscrew the child proof cap, introduce the graduated syringe into the applicator, turn the assembly upside down and measure the quantity to administer using the syringe graduated in kg. Once the veterinary medicinal product has been administered, replace the child proof cap onto the vial and rinse the syringe with water. Store the vial in the fridge.

4.10. Overdose (symptoms, emergency procedures, antidotes)
Repeated oral doses up to 5 mg/kg/d of imidapril have been well tolerated in healthy dogs.
Hypotension may occur as a symptom of overdosage with signs of apathy and ataxia. The treatment is symptomatic.

4.11. Withdrawal period
Not applicable.

5. PHARMACOLOGICAL PROPERTIES

Imidapril is an angiotensin-converting enzyme (ACE) inhibitor.
ATC vet code : QC09AA16

5.1. Pharmacodynamic properties:
Imidapril is a pro-drug which is hydrolysed *in vivo* to form an active metabolite, imidaprilat. Imidaprilat inhibits the angiotensin-converting enzyme (ACE). This enzyme catalyses the conversion of angiotensin I to angiotensin II in the blood plasma and tissues and inhibits the breakdown of bradykinin. As angiotensin II has a potent vasoconstrictive action, while bradykinin is a vasodilator, the reduced formation of angiotensin II and the inhibition of bradykinin breakdown lead to vasodilation. Imidapril reduces heart preload and afterload, and decreases blood pressure without any compensatory increase in the heart rate.

5.2. Pharmacokinetic properties:
Following oral administration in the dog, imidapril is rapidly absorbed by the gastrointestinal tract and reaches its maximum plasma concentration within less than one hour. The half-life of imidapril is about 2 hours.
Imidapril is mainly hydrolysed in the liver and kidney to its active metabolite, imidaprilat. Maximum plasma concentrations of imidaprilat are reached within about 5 hours and declines with a half-life of more than 10 hours.
The bioavailability of imidapril and imidaprilat is decreased by the joint administration of food.
The protein binding of imidapril and imidaprilat is moderate (85% and 53%, respectively).
After oral administration of the radio-labelled compound, about 40% of total radioactivity is excreted in urine and about 60% in the faeces.
After multiple dosing, the plasma imidaprilat concentrations are about 3 times higher after the second administration than after the first administration, but no additional increase is observed after further administrations.

6. PHARMACEUTICAL PARTICULARS

6.1. List of excipients
Mannitol, sodium benzoate, hydrochloric acid (for pH adjustement)

6.2. Incompatibilities
None known

6.3. Shelf-life
18 months
After reconstitution according to directions: 77 days

6.4. Special precautions for storage
Before reconstitution: do not store above 25°C
After reconstitution: store at 2°C - 8°C (in the refrigerator)

6.5. Nature and composition of immediate packaging
Primary packaging:

- amber glass vial of type II
- bromobutyl stopper
- polypropylene blue graduated syringe
- polyethylene syringe applicator
- high density polyethylene cap

Sales presentation(s):

- box containing one 0.805 g powder vial and one 2 ml graduated syringe

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

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

7. MARKETING AUTHORISATION HOLDER

VETOQUINOL

8. MARKETING AUTHORISATION NUMBER(S):

9. DATE OF THE FIRST AUTHORISATION / RENEWAL OF THE AUTHORISATION:

10. DATE OF REVISION OF THE TEXT:

< PROHIBITION OF SALE, SUPPLY AND/OR USE >

OUTER PACKAGE

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

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2. STATEMENT OF ACTIVE AND OTHER SUBSTANCES

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Excipient to	0.805 g

Solution after reconstitution

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3. PHARMACEUTICAL FORM

Powder for oral solution

~~Vial containing a white powder. After reconstitution, the solution is limpid and colourless.~~

4. PACKAGE SIZE

Box containing one 0.805 g powder vial and one 2 ml graduated syringe.

5. TARGET SPECIES

Dogs weighing over 2 kg

6. INDICATIONS

In dogs: treatment of moderate to severe heart failure caused by mitral regurgitation or by dilated cardiomyopathy.

7. METHOD AND ROUTE OF ADMINISTRATION

The veterinary medicinal product can be administered either directly into the mouth of the animal on an empty stomach or during the meals, or on food.

8. WITHDRAWAL PERIOD

Not applicable.

9. SPECIAL WARNINGS, IF NECESSARY

Read the package leaflet before use.

10. EXPIRY DATE

EXP:

After reconstitution: 77 days

11. SPECIAL STORAGE PRECAUTIONS

Before reconstitution: do not store above 25°C
After reconstitution: store at 2°C - 8°C (in the refrigerator)

12. SPECIAL PRECAUTIONS FOR THE DISPOSAL OF UNUSED PRODUCTS OR WASTE MATERIALS, IF ANY

Any unused the veterinary medicinal product or waste material should be disposed of in accordance with national requirements.

13. THE WORDS "FOR ANIMAL TREATMENT ONLY" AND CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE, if applicable

FOR ANIMAL TREATMENT ONLY
TO BE SUPPLIED ONLY ON VETERINARY PRESCRIPTION

14. THE WORDS "KEEP OUT OF THE REACH AND SIGHT OF CHILDREN"

Keep out of the reach and sight of children.

15. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER

VETOQUINOL

16. MARKETING AUTHORISATION NUMBER(S)

BATCH NUMBER:

PACKAGE LEAFLET

PRILIUM 75 mg powder for oral solution for dogs

1. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER AND OF THE MANUFACTURING AUTHORISATION HOLDER RESPONSIBLE FOR BATCH RELEASE, IF DIFFERENT

Marketing Authorisation holder
VETOQUINOL

Manufacturer for the batch release:
VETOQUINOL
MAGNY VERNOIS
F-70200 LURE

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Do not use in dogs with acute renal insufficiency.
Do not use in dogs with congenital heart disease
Do not use in dogs hypersensitive to an ACE inhibitor
Do not use in dogs with hemodynamically relevant stenoses (aortic stenosis, mitral valve stenosis, pulmonal stenosis)
Do not use in dogs with obstructive hypertrophic cardiomyopathy

6. ADVERSE REACTIONS

Diarrhoea, hypotension and related symptoms such as fatigue, dizziness or anorexia can occur in rare cases. In such cases treatment should be discontinued until the patient's condition has returned to normal.

If you notice any serious effects or other effects not mentioned in this leaflet, please inform your veterinary surgeon.

7. TARGET SPECIES

Dogs weighing over 2 kg

8. DOSAGE FOR EACH SPECIES, ROUTE(S) AND METHOD OF ADMINISTRATION

The recommended dose of imidapril is 0.25 mg/kg once a day per oral route, ie:
0.1 ml/kg of PRILIUM® 75 mg powder for oral solution for dogs weighing more than 2 kg (1ml/10kg).
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Administration: Unscrew the child proof cap, introduce the graduated syringe into the applicator, turn the assembly upside down and measure the quantity to administer using the syringe graduated in kg. Once the veterinary medicinal product has been administered, replace the child proof cap onto the vial and rinse the syringe with water. Store the vial in the fridge.

9. ADVICE ON CORRECT ADMINISTRATION

None.

10. WITHDRAWAL PERIOD

Not applicable.

11. SPECIAL STORAGE PRECAUTIONS

Keep out of the reach and sight of children.
Before reconstitution: do not store above 25°C
After reconstitution: store at 2°C - 8°C (in the refrigerator)
Do not use after the expiry date stated on the carton.
Shelf-life after reconstitution: 77 days

12. SPECIAL WARNINGS

Special precautions for use in animals
The use of ACE inhibitors in dogs with hypovolaemia/dehydration can lead to acute hypotension. In such cases the fluid and electrolyte balance should be restored immediately and treatment suspended until it has been stabilised. Parameters used for monitoring renal function should be checked at the beginning of the treatment and at regular time intervals thereafter.

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

In case of accidental ingestion, seek medical advice immediately and show the package insert or the label to the physician.
Wash hands after having administered the veterinary medicinal product. In case of contact with eyes, rinse immediately with plenty of water.
The vial must be closed using the child proof stopper before being stored in the fridge.

Use during pregnancy, lactation or lay
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Interaction with other medicinal products and other forms of interaction
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Overdose (symptoms, emergency procedures, antidotes)
Repeated oral doses up to 5 mg/kg/d of imidapril have been well tolerated in healthy dogs.
Hypotension may occur as a symptom of overdosage with signs of apathy and ataxia. The treatment is symptomatic.

13. SPECIAL PRECAUTIONS FOR THE DISPOSAL OF UNUSED PRODUCT OR WASTE MATERIALS, IF ANY

Any unused the veterinary medicinal product or waste material should be disposed of in accordance with national requirements.
Medicines should not be disposed of via wastewater or household waste
Ask you veterinary surgeon how to dispose of medicines no longer required. These measures should help to protect the environment.

14. DATE ON WHICH THE PACKAGE LEAFLET WAS LAST APPROVED

DECEMBER 2006

15. OTHER INFORMATION

For animal treatment only.

Box containing one 0.805 g white powder vial and one 2 ml graduated blue syringe. After reconstitution, the solution is limpid and colourless.~~Not all pack sizes may be marketed~~

LABEL

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

PRILIUM 75 mg powder for oral solution for dogs

2. QUANTITY OF THE ACTIVE SUBSTANCE

Imidapril hydrochloride ……..75 mg

3. CONTENTS BY WEIGHT, BY VOLUME OR BY NUMBER OF DOSES

Box containing one 0.805 g powder vial and one 2 ml graduated syringe

4. ROUTE(S) OF ADMINISTRATION

The veterinary medicinal product can be administered either directly into the mouth of the animal on an empty stomach or during the meals, or on food.

5. WITHDRAWAL PERIOD

Not applicable.

6. BATCH NUMBER

7. EXPIRY DATE

EXP:
Shelf-life after reconstitution: 77 days

8. THE WORDS "FOR ANIMAL TREATMENT ONLY"

For animal treatment only.

KEEP OUT OF REACH AND SIGHT OF CHILDREN

Before reconstitution: do not store above 25°C
After reconstitution: store at 2°C - 8°C (in the refrigerator)