

## **SUMMARY OF PRODUCT CHARACTERISTICS**

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

Thiafeline 2.5 mg Film-coated Tablets for Cats

### **2. QUALITATIVE AND QUANTITATIVE COMPOSITION**

Each tablet contains:

**Active substance:**

Thiamazole 2.5 mg

**Excipient(s):**

Titanium dioxide (E171) 0.45 mg

Carmoisine (E122) 0.009 mg

For the full list of excipients, see section 6.1.

### **3. PHARMACEUTICAL FORM**

Film-coated tablet.

Pink biconvex tablets 5.5 mm diameter.

### **4. CLINICAL PARTICULARS**

#### **4.1 Target species**

Cats.

#### **4.2 Indications for use, specifying the target species**

For the stabilisation of hyperthyroidism in cats prior to surgical thyroidectomy.

For the long-term treatment of feline hyperthyroidism.

#### **4.3 Contraindications**

Do not use in cats suffering from systemic disease such as primary liver disease or diabetes mellitus.

Do not use in cats showing signs of autoimmune disease.

Do not use in animals with disorders of white blood cells, such as neutropenia and lymphopenia.

Do not use in animals with platelet disorders and coagulopathies (particularly thrombocytopenia).

Do not use in pregnant or lactating females. Refer to section 4.7.

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

#### 4.4 Special warnings for each target species

None

#### 4.5 Special precautions for use

##### **Special precautions for use in animals**

As thiamazole can cause haemoconcentration, cats should always have access to drinking water.

If more than 10 mg per day is required animals should be monitored particularly carefully.

Use of the product in cats with renal dysfunction should be subject to careful risk : benefit assessment by the clinician. Due to the effect thiamazole can have on reducing the glomerular filtration rate, the effect of therapy on renal function should be monitored closely as deterioration of an underlying condition may occur.

Haematology must be monitored due to risk of leucopenia or haemolytic anaemia.

Any animal that suddenly appears unwell during therapy, particularly if they are febrile, should have a blood sample taken for routine haematology and biochemistry.

Neutropenic animals (neutrophil counts  $<2.5 \times 10^9/l$ ) should be treated with prophylactic bactericidal antibacterial drugs and supportive therapy.

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

People with known hypersensitivity to thiamazole should avoid contact with the veterinary medicinal product.

Do not handle this product if you are allergic to anti-thyroid products. Do not break or crush tablets. If allergic symptoms develop, such as a skin rash, swelling of the face, lips or eyes or difficulty in breathing, you should seek medical attention immediately and show the package leaflet or label to the doctor.

Thiamazole may cause vomiting, epigastric distress, headache, fever, arthralgia, pruritus and pancytopenia. Treatment is symptomatic.

In the case of accidental ingestion, seek medical advice immediately and show the package leaflet or the label to the physician.

Do not eat, drink or smoke while handling the tablet or used litter.

Wash hands after use.

Wash hands with soap and water after handling litter used by treated animals.

As thiamazole is a suspected human teratogen, women of child-bearing age and pregnant should wear gloves when handling litter of treated cats.

Pregnant women should wear gloves when handling this product.

#### 4.6 Adverse reactions (frequency and seriousness)

Adverse reactions have been reported following long term control of hyperthyroidism. In many cases signs may be mild and transitory and not a reason for withdrawal of treatment. The more serious effects are mainly reversible when medication is stopped. Adverse reactions are uncommon. The most common clinical side effects reported include vomiting, inappetence/anorexia, lethargy, severe pruritus and excoriations of the head and neck, bleeding diathesis and icterus associated with hepatopathy, and haematological abnormalities (eosinophilia, lymphocytosis, neutropenia, lymphopenia, slight leucopenia, agranulocytosis, thrombocytopenia or haemolytic anaemia). These side effects resolved within 7-45 days after cessation of thiamazole therapy.

Possible immunological side effects include anaemia, with rare side effects including thrombocytopenia and serum anti-nuclear antibodies), and, very rarely, lymphadenopathy can occur. Treatment should be stopped immediately and alternative therapy considered following a suitable period for recovery. Following long-term treatment with thiamazole in rodents, an increased risk of neoplasia in the thyroid gland has been shown to occur, but no evidence is available in cats.

The frequency of adverse reactions is defined using the following convention:

- very common (more than 1 in 10 animals treated displaying adverse reaction(s))
- common (more than 1 but less than 10 animals in 100 animals treated)
- uncommon (more than 1 but less than 10 animals in 1,000 animals treated)
- rare (more than 1 but less than 10 animals in 10,000 animals treated)
- very rare (less than 1 animal in 10,000 animals treated, including isolated reports).

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

Laboratory studies in rats and mice have shown evidence of teratogenic and embryotoxic effects of thiamazole. The safety of the product was not assessed in pregnant or lactating cats. Do not use in pregnant or lactating females.

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

Concurrent treatment with phenobarbital may reduce the clinical efficacy of thiamazole.

Thiamazole is known to reduce the hepatic oxidation of benzimidazole wormers and may lead to increases in their plasma concentrations when given concurrently.

Thiamazole is immunomodulatory, therefore this should be taken into account when considering vaccination programmes.

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

For oral use.

For the stabilisation of feline hyperthyroidism prior to surgical thyroidectomy and for the long term treatment of feline hyperthyroidism, the recommended starting dose is 5 mg per day.

Wherever possible, the total daily dose should be divided into two and administered morning and evening. Tablets should not be split.

If, for reasons of compliance, once daily dosing with a 5 mg tablet is preferable, then this is acceptable although the 2.5 mg tablet given twice daily may be more efficacious in the short term. The 5 mg tablet is also suitable for cats requiring higher dose rates.

Haematology, biochemistry and serum total T4 should be assessed before initiating treatment and after 3 weeks, 6 weeks, 10 weeks, 20 weeks, and thereafter every 3 months. At each of the recommended monitoring intervals, the dose should be titrated to effect according to the total T4 and to clinical response to treatment. Dose adjustments should be made in increments of 2.5 mg and the aim should be to achieve the lowest possible dose rate.

If more than 10 mg per day is required animals should be monitored particularly carefully.

The dose administered should not exceed 20 mg/day.

For long term treatment of hyperthyroidism the animal should be treated for life.

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

In tolerance studies in young healthy cats, the following dose-related clinical signs occurred at doses of up to 30 mg/animal/day: anorexia, vomiting, lethargy, pruritus and haematological and biochemical abnormalities such as neutropenia, lymphopenia, reduced serum potassium and phosphorus levels, increased magnesium and creatinine levels and the occurrence of anti-nuclear antibodies. At a dose of 30 mg/day some cats showed signs of haemolytic anaemia and severe clinical deterioration. Some of these signs may also occur in hyperthyroid cats treated at doses of up to 20 mg per day.

Excessive doses in hyperthyroid cats may result in signs of hypothyroidism. This is however unlikely, as hypothyroidism is usually corrected by negative feedback mechanisms. Please refer to Section 4.6: Adverse reactions.

If overdosage occurs, stop treatment and give symptomatic and supportive care.

#### **4.11 Withdrawal period(s)**

Not applicable.

### **5. PHARMACOLOGICAL PROPERTIES**

Pharmacotherapeutic group: antithyroid preparations, sulphur-containing imidazole derivatives.

ATC Vet Code: QH03BB02.

#### **5.1 Pharmacodynamic properties**

Thiamazole acts by blocking the biosynthesis of thyroid hormone *in vivo*. The primary action is to inhibit binding of iodide to the enzyme thyroid peroxidase, thereby preventing the catalysed iodination of thyroglobulin and T<sub>3</sub> and T<sub>4</sub> synthesis.

#### **5.2 Pharmacokinetic particulars**

##### Absorption

Following oral dosing in healthy cats, thiamazole is rapidly and completely absorbed with a bioavailability of >75 %. However, there is a considerable variation between animals.

Peak plasma levels occur approximately 0.5-1 hour after dosing ( $t_{\max} = 0.69$  h).  $C_{\max}$  is between 1.1 and 2.7 µg/ml (1.78 µg/ml) and half-life is 3.3 h.

##### Distribution

From man and rats it is known that the drug can cross the placenta and concentrates in the foetal thyroid gland. There is also a high rate of transfer into breast milk.

The drug residence time in the thyroid gland is assumed to be longer than in the plasma.

##### Metabolism and elimination

The metabolism of thiamazole in cats has not been investigated, however, in rats thiamazole is rapidly metabolised in the thyroid gland. About 64 % of the administered dose being eliminated in the urine and only 7.8 % excreted in faeces. This is in contrast with man where the liver is important for the metabolic degradation of the compound.

### **6. PHARMACEUTICAL PARTICULARS**

## **6.1 List of excipients**

Tablet core:

Lactose monohydrate

Povidone

Sodium starch glycolate Type A

Silica, colloidal anhydrous

Magnesium stearate

Coating:

Hypromellose

Cellulose, microcrystalline

Lactose monohydrate

Macrogol

Titanium dioxide (E171)

Carmoisine (E122)

## **6.2 Major incompatibilities**

Not applicable.

## **6.3 Shelf life**

Shelf-life of the veterinary medicinal product as packaged for sale: 3 years.

## **6.4 Special precautions for storage**

Keep the blister in the outer package in order to protect from light.

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

30 tablets in a cardboard carton containing 1 aluminium/pvc strips each strip with 30 tablets.

60 tablets in a cardboard carton containing 2 aluminium/pvc strips each strip with 30 tablets.

120 tablets in a cardboard carton containing 4 aluminium/pvc strips each strip with 30 tablets.

150 tablets in a cardboard carton containing 5 aluminium/pvc strips each strip with 30 tablets.

300 tablets in a cardboard carton containing 10 aluminium/pvc strips each strip with 30 tablets.

Not all pack sizes 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**

Any unused veterinary medicinal product or waste materials derived from such veterinary medicinal products should be disposed of in accordance with local requirements.

**7. MARKETING AUTHORISATION HOLDER**

Le Vet Beheer B.V.  
Wilgenweg 7  
3421 TV Oudewater  
The Netherlands

**8. MARKETING AUTHORISATION NUMBER**

Vm 41821/4005

**9. DATE OF FIRST AUTHORISATION**

22 August 2013

**10. DATE OF REVISION OF THE TEXT**

April 2019

Approved: 25 April 2019

A handwritten signature in black ink, appearing to read 'J. Muelb', with a horizontal line underneath.