

*[Version 8.1,01/2017]*

**ANNEX I**  
**SUMMARY OF PRODUCT CHARACTERISTICS**

## 1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Thiamacare 10 mg/ml oral solution for cats (AT, BE, CY, CZ, DE, ES, EL, FR, HU, IT, LT, LU, LV, MT, NL, PL, PT, RO, SK, UK)

Thiamacare Vet 10 mg/ml oral solution for cats (DK, FI, SE)

Thiamacare (EE)

Thiacare Vet (NO)

## 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each ml contains:

### Active substance:

Thiamazole 10 mg

### Excipients:

For the full list of excipients, see section 6.1.

## 3. PHARMACEUTICAL FORM

Oral Solution

Clear, colourless to pale yellow, homogeneous liquid

## 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 cats with hypersensitivity to thiamazole or to any of the excipients.

Do not use in pregnant and lactating females (refer to section 4.7).

### 4.4 Special warnings for each target species

In order to enhance stabilisation of the hyperthyroid patient the same feeding and dosing schedule should be used daily.

### 4.5 Special precautions for use

#### Special precautions for use in animals

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.

Please refer to section 4.9 for monitoring instructions.

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

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

People with known hypersensitivity (allergy) to thiamazole, or one of the excipients, should avoid contact with the veterinary medicinal product. 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 gastrointestinal disturbances, headache, fever, joint pain, pruritus (itching) and pancytopenia (decrease in blood cells and platelets).

The product may also cause skin irritation.

Avoid dermal and oral exposure, including hand-to-mouth contact.

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

Wash hands with soap and water after administration and handling of the product and cleaning the vomit of, or litter used by, treated animals. Wash any spillages or splatter from skin immediately.

Following administration of the product any residual product remaining on the tip of the dosing syringe should be wiped clean with a tissue. The contaminated tissue should be immediately disposed of.

The used syringe should be stored with the product in the original carton.

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

This product may cause eye irritation.

Avoid eye contact including hand to eye contact.

In case of accidental eye contact, rinse eyes immediately with clean running water. If irritation develops, seek medical advice.

**As thiamazole is a suspected human teratogen, women of child-bearing age must wear non-permeable single-use gloves when administering the product or handling the litter/vomit of treated cats.**

**If you are pregnant, think you may be pregnant or are attempting to conceive, you should not administer the product or handle the litter/vomit of treated cats.**

#### **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 that are 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 resolve within 7-45 days after cessation of thiamazole therapy.

Anaemia including thrombocytopenia and serum anti-nuclear antibodies occurred rarely. Lymphadenopathy occurred very rarely. 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**

Laboratory studies in rats and mice have shown evidence of teratogenic and embryotoxic effects of thiamazole. In cats, the safety of the veterinary medicinal product has not been established during pregnancy or lactation. Do not use in pregnant or lactating females. Please refer to section 5.2.

#### **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.

The product should be administered directly into the mouth of the cat. Do not administer in food as efficacy of the product when administered via this route has not been established.

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 of thiamazole (0.5 ml of the product) per day.

The total daily dose should be divided into two and administered morning and evening. In order to enhance stabilisation of the hyperthyroid patient the same dosing schedule relative to feeding should be used daily.

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. Standard dose adjustments should be made in increments of 2.5 mg of thiamazole (0.25 ml of the product) and the aim should be to achieve the lowest possible dose rate. In cats that require particularly small dose adjustments, increments of 1.25 mg of thiamazole (0.125 ml of the product) can be used. If total T4 concentration drops below the lower end of the reference interval, and particularly if the cat is showing clinical signs of iatrogenic hypothyroidism (e.g. lethargy, inappetence, weight gain and/or dermatological signs such as alopecia and dry skin), consideration should be given to reducing the daily dosage and/or dosing frequency.

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

The dose administered should not exceed 20 mg of thiamazole per 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 thiamazole/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 thiamazole/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 thiamazole / 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 T3 and T4 synthesis.

#### **5.2 Pharmacokinetic particulars**

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. Elimination of the drug from cat plasma is rapid with a half-life of 2.6-7.1 hours. Peak plasma levels occur within a maximum of 1 hour after dosing.  $C_{max}$  is  $1.6 \pm 0.4 \mu\text{g/ml}$ .

In rats thiamazole has been shown to be poorly bound to plasma protein (5 %); 40 % was bound to red blood cells. The metabolism of thiamazole in cats has not been investigated, however, in rats thiamazole is rapidly metabolized. For 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.

### **6. PHARMACEUTICAL PARTICULARS**

#### **6.1 List of excipients**

Glycerol

Sorbitol, liquid (non-crystallising)

Vanillin

#### **6.2 Major incompatibilities**

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

#### **6.3 Shelf life**

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

Shelf life after first opening the immediate packaging: 3 months.

#### **6.4. Special precautions for storage**

Keep the bottle tightly closed.

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

30 ml amber glass type III bottle with a clear white polypropylene or polyethylene syringe adapter and a child-proof white polypropylene screw cap. The medicinal product is supplied with a clear polypropylene oral syringe of 1.0 ml dosing device graduated in 1.25 mg increments up to 10 mg of thiamazole.

#### Package size:

Cardboard box with 1 bottle of 30 ml and an oral syringe of 1.0 ml as dosing device.

#### **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 material derived from such veterinary medicinal products should be disposed of in accordance with local requirements.

### **7. MARKETING AUTHORISATION HOLDER**

Ecuphar NV,  
Legeweg 157-i  
B-8020  
Oostkamp  
Belgium

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

### **9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION**

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

### **10 DATE OF REVISION OF THE TEXT**

<{MM/YYYY}>  
<{DD/MM/YYYY}>  
<{DD month YYYY}>

### **PROHIBITION OF SALE, SUPPLY AND/OR USE**

Not applicable.