# 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(NI))

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

Thiamacare (EE)

Thiacare Vet (DK, NO)

# 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each ml contains:

Active substance: Thiamazole 10 mg

#### **Excipients:**

Qualitative composition of excipients and other constituents	
Glycerol	
Sorbitol, liquid (non-crystallising)	
Vanillin	

Clear, colourless to pale yellow, homogeneous solution

#### 3. CLINICAL INFORMATION

# 3.1 Target species

Cats

#### 3.2 Indications for use for each target species

For the stabilisation of hyperthyroidism in cats prior to surgical thyroidectomy. For the long-term treatment of feline hyperthyroidism.

#### 3.3 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 cases of hypersensitivity to the active substance or to any of the excipients.

Do not use in pregnant and lactating females (refer to section 3.7).

#### 3.4 Special warnings

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

# 3.5 Special precautions for use

Special precautions for safe use in the target species:

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

Use of the veterinary medicinal 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 3.9 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 vanillin 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 physician.

Thiamazole may cause gastrointestinal disturbances, headache, fever, joint pain, pruritus (itching) and pancytopaenia (decrease in blood cells and platelets).

The veterinary medicinal 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 veterinary medicinal product or used litter.

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

Following administration of the veterinary medicinal product any residual veterinary medicinal 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 veterinary medicinal 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 veterinary medicinal 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 veterinary medicinal 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 veterinary medicinal product or handle the litter/vomit of treated cats.

Special precautions for the protection of the environment:

Not applicable.

#### 3.6 Adverse events

#### Cats:

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.

Uncommon (1 to 10 animals / 1,000 animals treated):	Vomiting <sup>1</sup> , Inappetence <sup>1</sup> , Anorexia <sup>1</sup> , Lethargy <sup>1</sup> , Pruritus <sup>1,2</sup> , Excoriation <sup>1,2</sup> , Bleeding <sup>1,3,4</sup> , Icterus <sup>1,4</sup> , Hepatopathy <sup>1</sup> Eosinophilia <sup>1</sup> , Lymphocytosis <sup>1</sup> , Neutropenia <sup>1</sup> , Lymphopenia <sup>1</sup> , Leucopenia <sup>1</sup> (slight), Agranulocytosis <sup>1</sup> , Thrombocytopenia <sup>1</sup> , Haemolytic anaemia <sup>1</sup>
Rare	Serum anti-nuclear antibodies
(1 to 10 animals / 10,000 animals treated):	Anaemia
Very rare	Lymphadenopathy <sup>5</sup>
(<1 animal / 10,000 animals treated, including isolated reports):	

Resolve within 7-45 days after cessation of the therapy.

- <sup>2</sup> Severe, in head and neck.
- <sup>3</sup> Sign of a bleeding diathesis.
- Associated with hepatopathy.
- <sup>5</sup> 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.

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 and Lactation:

Do not use during pregnancy or 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.

### 3.8 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.

#### 3.9 Administration routes and dosage

For oral use.

The veterinary medicinal product should be administered directly into the mouth of the cat. Do not administer in food as efficacy of the veterinary medicinal 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 veterinary medicinal 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 veterinary medicinal 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.

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

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 3.6: Adverse reactions.

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

# 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

Not applicable.

#### 4. PHARMACOLOGICAL INFORMATION

#### 4.1 ATCvet code:

QH03BB02.

#### 4.2 Pharmacodynamics

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.

#### 4.3 Pharmacokinetics

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  $1.6 \pm 0.4 \, \mu g/ml$ .

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.

#### 5. PHARMACEUTICAL PARTICULARS

# 5.1 Major incompatibilities

In the absence of compatibility studies, the 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: 3 months.

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

Keep the bottle tightly closed.

# 5.4 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 veterinary medicinal product is supplied with one clear polypropylene oral syringe of 1.0 ml dosing device graduated in 1.25 mg or in 0.1 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 graduated in 0.1 mg. Cardboard box with 1 bottle of 30 ml and an oral syringe of 1.0 ml graduated in 1.25 mg.

Not all pack sizes may be marketed.

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

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

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

# 7. MARKETING AUTHORISATION NUMBER(S)

# 8. DATE OF FIRST AUTHORISATION

Date of first authorisation:

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

# 10. CLASSIFICAITON OF VETERINARY MEDICINAL PRODUCTS

Veterinary medicinal product subject to prescription.

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

# ANNEX III LABELLING AND PACKAGE LEAFLET

A. LABELLING

# PARTICULARS TO APPEAR ON THE OUTER PACKAGE

30 ml Carton box

# 1. NAME OF THE VETERINARY MEDICINAL PRODUCT

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

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

Thiamacare (EE)

Thiacare Vet (DK, NO)

# 2. STATEMENT OF ACTIVE SUBSTANCES

Each ml contains:

Thiamazole 10 mg

# 3. PACKAGE SIZE

30 ml

# 4. TARGET SPECIES

Cats

# 5. INDICATION(S)

#### 6. ROUTES OF ADMINISTRATION

Oral use.[EE, DK, NO]

Oral use. [AT, BE, CY, CZ, DE, ES, EL, FR, HU, IT, LT, LU, LV MT, NL, PL, PT, RO, SK, UK(NI), FI, SE]

# 7. WITHDRAWAL PERIOD(S)

#### 8. EXPIRY DATE

Exp {mm/yyyy}

Once broached, use within 3 months

Use by ...

# 9. SPECIAL STORAGE PRECAUTIONS

Keep the container tightly closed.

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
Ecuphar
An Animalcare Company
14. MARKETING AUTHORISATION NUMBERS
15 DATECH NUMBER
15. BATCH NUMBER
Lot {number}

# MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS

# 30ml Immediate label

# 1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Thiamacare (AT, BE, CY, CZ, DE, ES, EL, FR, HU, IT, LT, LU, LV MT, NL, PL, PT, RO, SK, UK(NI))

Thiamacare Vet (FI, SE)

Thiamacare (EE)

Thiacare Vet (DK, NO)

# 2. QUANTITATIVE PARTICULARS OF THE ACTIVE SUBSTANCES

Thiamazole 10 mg/ml

# 3. BATCH NUMBER

Lot {number}

# 4. EXPIRY DATE

Exp {mm/yyyy}

Once broached, use within 3 months.

Use by...

**B. PACKAGE LEAFLET** 

#### PACKAGE LEAFLET:

# 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(NI))

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

Thiamacare (EE)

Thiacare Vet (DK, NO)

# 2. Composition

Each ml contains:

**Active substance:** 

Thiamazole 10 mg

Clear, colourless to pale yellow, homogeneous solution

# 3. Target species

Cats

#### 4. Indications for use

For the stabilisation of hyperthyroidism in cats prior to surgical thyroidectomy. For the long-term treatment of feline hyperthyroidism.

### 5. 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 such as anaemia, multiple inflamed joints, skin ulceration and crusting.

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

Symptoms may include lethargy and increased susceptibility to infection.

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

Symptoms may include bruising and excessive bleeding from wounds.

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

Do not use in pregnant or lactating females.

# 6. Special warnings

Special precautions for safe use in the target species:

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

Special precautions for use in animals:

Cats should always have access to drinking water.

Please inform the veterinarian if your cat has kidney problems.

If your cat suddenly appears unwell during treatment, particularly if s/he is febrile (has a high temperature), s/he should be examined by a veterinarian as soon as possible and have a blood sample taken for routine haematology.

#### Information for the treating veterinarian:

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

Use of the veterinary medicinal 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 x 10<sup>9</sup>/l) should be treated with prophylactic bactericidal antibacterial drugs and supportive therapy. Please refer to section "Dosage for each species, routes and method of administration/Additional information for the treating veterinarian" 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 vanillin 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 physician.

Thiamazole may cause gastrointestinal disturbances, headache, fever, joint pain, pruritus (itching) and pancytopaenia (decrease in blood cells and platelets).

The veterinary medicinal 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 veterinary medicinal product or used litter.

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

Following administration of the veterinary medicinal product any residual veterinary medicinal 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 veterinary medicinal 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 veterinary medicinal lproduct 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 may cause harm to the unborn child, women of child-bearing age must wear non-permeable single use gloves when administering the veterinary medicinal 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 veterinary medicinal product or handle the litter/vomit of treated cats.

For animal treatment only.

Keep out of the sight and reach of children.

### Pregnancy and lactation:

Do not use during pregnancy or lactation.

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

# <u>Interaction</u> with other medicinal products and other forms of interaction:

Please inform the veterinarian if your cat is receiving any other medicines or if your cat is going to be vaccinated.

Information for the treating veterinarian:

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.

#### Overdose:

If you think you have given your cat more than you should (an overdose), stop treatment and contact your veterinarian who may need to give symptomatic and supportive care.

For signs of overdose, please refer to the "Adverse events" section of this package leaflet.

#### Information for the treating veterinarian:

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 "Adverse events".

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

# Major incompatibilities:

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

# 7. Adverse events

#### Cats:

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.

Uncommon	Vomiting <sup>1</sup> , Inappetence <sup>1</sup> , Anorexia <sup>1</sup> , Lethargy <sup>1</sup>
(1 to 10 animals / 1,000 animals treated):	Pruritus <sup>1,2</sup> , Excoriation <sup>1,2</sup> , Bleeding <sup>1,3,4</sup> , Icterus <sup>1,4</sup> , Hepatopathy <sup>1</sup>
	Eosinophilia <sup>1</sup> , Lymphocytosis <sup>1</sup> , Neutropenia <sup>1</sup> , Lymphopenia <sup>1</sup> , Leucopenia <sup>1</sup> (slight), Agranulocytosis <sup>1</sup> , Thrombocytopenia <sup>1</sup> , Haemolytic anaemia <sup>1</sup>
Rare	Serum anti-nuclear antibodies
(1 to 10 animals / 10,000 animals treated):	Anaemia
Very rare	Lymphadenopathy <sup>5</sup>
(<1 animal / 10,000 animals treated, including isolated reports):	

- Resolve within 7-45 days after cessation of therapy.
- <sup>2</sup> Severe, in head and neck.
- <sup>3</sup> Sign of a bleeding diathesis.
- <sup>4</sup> Associated with hepatopathy.
- <sup>5</sup> 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.

Reporting adverse events is important. It allows continuous safety monitoring of a veterinary medicinal 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 the local representative of the marketing authorisation holder using the contact details at the end of this leaflet, or via your national reporting system:

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

For oral use

The veterinary medicinal product should be administered directly into the mouth of the cat. Do not administer in food as efficacy of the veterinary medicinal 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 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.

#### Additional information for the treating veterinarian:

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 (0.25 ml of the veterinary medicinal 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 veterinary medicinal 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 per day is required animals should be monitored particularly carefully. The dose administered should not exceed 20 mg per day.

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

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

#### 9. Advice on correct administration

Follow the dosing instructions and duration of treatment advised by the veterinary surgeon.

#### 10. Withdrawal periods

Not applicable.

# 11. Special storage precautions

Keep out of the sight and reach of children.

Keep the bottle tightly closed.

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

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

# 12. Special precautions for disposal

Medicines should not be disposed of via wastewater or household waste. 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 applicable national collection systems. These measures should help to protect the environment.

# 13. Classification of veterinary medicinal products

Veterinary medicinal product subject to prescription.

# 14. Marketing authorisation numbers and pack sizes

Cardboard box with 1 bottle of 30 ml and an oral syringe of 1.0 graduated in 0.1 mg. Cardboard box with 1 bottle of 30 ml and 1 oral syringe of 1.0 ml graduated in 1.25 mg.

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 <u>Union Product Database</u> (<a href="https://medicines.health.europa.eu/veterinary">https://medicines.health.europa.eu/veterinary</a>).

#### 16. Contact details

# Marketing authorisation holder:

Ecuphar NV Legeweg 157-i 8020 Oostkamp Belgium

Tel: +32 (0) 50314510 E-mail: <u>info@ecuphar.com</u>

Manufacturer responsible for batch release:

Lelypharma BV Zuiveringweg 42 8243 PZ Lelystad The Netherlands

Local representatives and contact details to report suspected adverse reactions:

#### 17. Other information

For animal treatment only.

Information for the treating veterinarian:

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.

# 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  $1.6 \pm 0.4 \, \mu g/ml$ .

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.