# SUMMARY OF PRODUCT CHARACTERISTICS

# FORTHYRON FLAVOURED 200 MICROGRAM TABLETS FOR DOGS

EUROVET ANIMAL HEALTH B.V. Handelsweg 25 5531 AE Bladel The Netherlands

# 1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Forthyron flavoured 200 microgram tablets for dogs (BE, BG, CY, CZ, EL, HR, HU, LU, NL, PL, RO, SI, SK)

Forthyron Flavour 200 microgram tablets for dogs (AT, DE, EE, LT, LV)

Forthyron flavoured vet., 200 microgram tablets for dogs (DK)

Forthyron Smak vet, 200 microgram tablets for dogs (FI, SE)

Forthyron F S tablets for dogs (FR)

Forthyron vet., 200 microgram flavoured tablets for dogs (NO)

Canitroid Sabor, 200 microgram tablets for dogs (ES)

Canitroid flavoured 200 microgram tablets for dogs (PT, IT)

Thyforon flavoured 200 microgram tablets for dogs (XI, IE)

# 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

One tablet contains:

## Active substance :

200 microgram levothyroxine sodium per tablet equivalent to 194 microgram levothyroxine

For the full list of excipients, see section 6.1

## 3. PHARMACEUTICAL FORM

Tablet.

Off white round tablet with brown spots, quadrisect with side scores. The tablets may be divided into halves or quarters.

# 4. CLINICAL PARTICULARS

## 4.1. Target species

Dogs.

# 4.2. Indications for use, specifying the target species

For the treatment of hypothyroidism in dogs.

## 4.3. Contra-indications

Do not use in dogs suffering from uncorrected adrenal insufficiency. Do not use in cases of known hypersensitivity to levothyroxine sodium or to any of the excipients.

## 4.4. Special warnings for each target species

The diagnosis of hypothyroidism should be confirmed with appropriate tests.

# 4.5. Special precautions for use

## Special precautions for use in animals

The tablets are flavoured. In order to avoid any accidental ingestion, store tablets out of reach of animals. A sudden increase in demand for oxygen delivery to peripheral tissues, plus the chronotropic effects of levothyroxine sodium, may place undue stress on a poorly functioning heart, causing decompensation and signs of congestive heart failure. Hypothyroid dogs suffering from hypoadrenocorticism have a decreased ability to metabolise levothyroxine sodium and therefore an increased risk of thyrotoxicosis. Dogs with concurrent hypoadrenocorticism and hypothyroidism should be stabilised with glucocorticoid and mineralocorticoid treatment prior to treatment with levothyroxine sodium to avoid precipitating a hypoadrenocortical crisis. After this, thyroid tests should be repeated, then gradual introduction of levothyroxine therapy, starting with 25% of the normal dose, increasing by 25% increments every fortnight until optimal stabilisation is achieved is recommended. Gradual introduction of therapy is also recommended for dogs with other concurrent illnesses; particularly in dogs with cardiac disease, diabetes mellitus and renal or hepatic dysfunction.

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

Any unused tablet portion(s) should be returned to the open blister for use at the next administration.

Wash hands after administering the tablets. Pregnant women should handle the product with caution. In the case of accidental ingestion, seek medical advice immediately and show the package leaflet or the label to the physician.

To the physician: This product contains a high concentration of L-thyroxine sodium and may present a risk to humans, in particular children, if ingested.

## 4.6. Adverse reactions (frequency and seriousness)

Restoration of physical activity may unmask or intensify other health-related problems, such as osteoarthrosis. Adverse reactions of thyroid hormones are generally associated with excessive dosage and correspond to the symptoms of hyperthyroidism, including weight loss without loss of appetite, hyperactivity, excitability, panting, tachycardia, polydipsia, polyuria and polyphagia.

Hypersensitivity reactions (pruritus) have been reported very rarely See also section 4.10.

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

The safety of the veterinary medicinal product has not been established in pregnant or lactating bitches. However, levothyroxine is an endogenous substance and thyroid hormones are essential for the developing foetus, especially during the first period of gestation. Hypothyroidism during pregnancy may result in major complications such as foetal death and a poor perinatal outcome. Maintenance dose of levothyroxine sodium may need adjustment during pregnancy. Pregnant bitches should therefore be monitored on a regular basis from conception until several weeks after delivery.

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

A variety of drugs may impair plasma or tissue binding of the thyroid hormones or alter thyroid hormone metabolism (e.g. barbiturates, antacids, anabolic steroids, diazepam, furosemide, mitotane, phenylbutazone, phenytoin, propranolol, large doses of salicylates, and sulphonamides). When treating dogs that are receiving concurrent medication the properties of these drugs should be taken into consideration. Oestrogens may increase thyroid requirements.

Ketamine may cause tachycardia and hypertension when used in patients receiving thyroid hormones. The effect of catecholamines and sympathomimetics is increased by levothyroxine.

An increase in the dosage of digitalis may be necessary in a patient that had previously compensated congestive heart failure and that is placed on thyroid hormone supplementation. Following treatment of hypothyroidism in dogs with concurrent diabetes, careful monitoring of diabetic control is recommended.

Most dogs on chronic high-dose, daily glucocorticoid therapy will have very low or undetectable serum  $T_4$  concentrations, as well as subnormal  $T_3$  values.

## 4.9 Amounts to be administered and administration route

For oral administration.

The recommended starting dosage of levothyroxine sodium is 10 µg/kg body weight orally every 12 hour. Because of variability in absorption and metabolism, the dosage may require alterations before a complete clinical response is observed. The initial dosage and frequency of administration are merely a starting point. Therapy has to be highly individualised and tailored to the requirements of the individual dog. When initiating dosing of dogs weighing less than 5 kg bodyweight, a quarter of one 200 µg tablet should be administered once daily. Such cases should be monitored carefully. In the dog, absorption of levothyroxine sodium may be affected by the presence of food. The timing of treatment and its relation to feeding should therefore be kept consistent from day to day. To adequately monitor therapy, trough values (just prior to treatment) and peak values (about three hours after dosing) of plasma T<sub>4</sub> can be measured. In adequately dosed dogs peak plasma concentration of T<sub>4</sub> should be in the high-normal range (approximately 30 to 47 nmol/l) and trough values should be above approximately 19 nmol/l. If T<sub>4</sub> levels are outside this range the levothyroxine dose can be adjusted in 50 to 200 µg increments using the appropriate strength(s) of tablets until the patient is clinically euthyroid and serum  $T_4$  is within the reference range. Plasma  $T_4$ 

levels can be retested two weeks after change of dosage, but clinical improvement is an equally important factor in determining individual dosage and this will take four to eight weeks. When the optimum replacement dose has been attained, clinical and biochemical monitoring may be performed every 6 - 12 months.

To break a tablet accurately and easily, place the tablet score side up and apply pressure with your thumb.



To break the tablet in two parts; hold one half of the tablet down and press down the other half.

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

Following administration of overdoses thyrotoxicosis could occur. Thyrotoxicosis as a side effect of mild oversupplementation is uncommon in dogs, owing to the canine ability to catabolize and excrete thyroid hormones. In case of accidental intake of large amounts of the veterinary medicinal product absorption can be decreased by induction of vomiting and oral administration of both activated charcoal and magnesium sulphate once.

Overdoses of three up to six times label recommended starting dose for 4 consecutive weeks in healthy, euthyroid dogs resulted in no significant clinical signs that could be attributed to treatment. Single overdose up to 3-6x the recommended dose does not pose a threat to the dog, and no actions are necessary. However, following chronic over-supplementation, clinical signs of hyperthyroidism such as polydipsia, polyuria, panting, weight loss without anorexia, and either or both tachycardia and nervousness may theoretically occur. The presence of these signs should result in evaluation of T<sub>4</sub> serum concentrations to confirm the diagnosis, and immediate discontinuance of the supplementation. Once the signs have abated (days to weeks), the thyroid dosage has been reviewed, and the animal has fully recovered, a lower dosage may be instituted, with the animal being monitored closely.

## 4.11. Withdrawal periods

Not applicable.

## 5. PHARMACOLOGICAL PROPERTIES

Pharmacotherapeutic group: Thyroid hormones ATCvet code: QH03A A 01.

#### 5.1. Pharmacodynamic properties

Pharmacologically levothyroxine is classified as a hormonal preparation that replaces deficient endogenous hormones.

Levothyroxine T<sub>4</sub> is converted to triiodothyronine T<sub>3</sub>. T<sub>3</sub> acts on cellular processes via

specific ligand-receptor interactions with the nucleus, the mitochondria, and the plasma membrane. Interaction of  $T_3$  with binding sites leads to augmented transcription of DNA or modulation of RNA, thus influencing protein synthesis and enzyme action.

Thyroid hormones act on many different cellular processes. In developing animals and human beings, they are crucial determinants of normal development, especially in the central nervous system. Thyroid supplementation increases basal cellular metabolism and oxygen consumption thereby affecting the function of virtually all organ systems.

# 5.2. Pharmacokinetic particulars

Some dogs appeared to consistently either absorb L-thyroxine better and/or eliminate it more slowly than do other dogs. Furthermore absorption and elimination rate is influenced by daily intake of levothyroxine sodium (high absorption/low elimination in case of low intake and vice versa in case of high intake). The variability in pharmacokinetic parameters between individual dogs is considerable and, although the presence of food may affect absorption, it is considered to have a minor effect on the parameters overall. Absorption is relatively slow and incomplete: In most cases T<sub>max</sub> occurs between 1 to 5 hours after oral administration, mean Cmax varies more than 3 fold between dogs on the same doses. In adequately dosed dogs the plasma peak approaches or slightly exceeds the upper limit of normal plasma T<sub>4</sub> levels, and by the end of 12 hours after oral administration, plasma T<sub>4</sub> usually declines to the lower half of the normal range. The rates of disappearance of T<sub>4</sub> from the plasma are slowed in hypothyroidism. A large part of the thyroxine is taken up by the liver. L-thyroxine is bound to plasma-proteins and plasma lipoproteins. Part of a dose of thyroxine is metabolised to the more potent triiodothyronine (T<sub>3</sub>) by deiodination. The process of deiodination continues. These further deiodinated metabolic products (other than T<sub>3</sub> and T<sub>4</sub>) do not have thyromimetic activity. Other pathways of thyroid hormone metabolism include conjugation to form soluble glucuronides and sulphates for biliary or urinary excretion as well as cleavage of the ether linkage of the iodothyronine molecule. In the dog, over 50% of the T<sub>4</sub> produced each day are lost in the faeces. The extrathyroidal body stores of T<sub>4</sub> are eliminated and replaced in about 1 day.

# 6. PHARMACEUTICAL PARTICULARS

## 6.1. List of excipients

Calcium hydrogen phosphate dihydrate, Cellulose, Microrcrystalline, Sodium Starch Glycolate (type A), Magnesium stearate. Natural meat flavour

# 6.2. Major Incompatibilities

Not applicable.

## 6.3. Shelf-life

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

Shelf-life of remaining tablet parts: 4 days.

# 6.4. Special precautions for storage

Do not store above 25°C.

Return any divided tablet to the opened blister and use within 4 days.

# 6.5. Nature and composition of immediate packaging

The product is packaged in a blister [Aluminium (20µm) - PVC/PE/PVDC (250/30/90) white].

10 Tablets per blister, 5 or 25 blisters per carton, 50 or 250 tablets per carton. 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 product should be disposed of in accordance with local requirements.

# 7. MARKETING AUTHORISATION HOLDER

Eurovet Animal Health B.V. Handelsweg 25, 5531 AE Bladel The Netherlands

BE-LU: Dechra Regulatory B.V. Handelsweg 25, 5531 AE Bladel The Netherlands

# 8. MARKETING AUTHORISATION NUMBER

To be completed nationally

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

To be completed nationally

# 10. DATE OF REVISION OF THE TEXT

To be completed nationally

# LABELLING AND PACKAGE LEAFLET

# FORTHYRON FLAVOURED 200 MICROGRAM TABLETS FOR DOGS

# <PARTICULARS TO APPEAR ON THE OUTER PACKAGE>

# {NATURE/TYPE} CARTON

## 1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Forthyron flavoured 200 microgram tablets for dogs Levothyroxine sodium

#### 2. STATEMENT OF ACTIVE SUBSTANCES

One tablet contains: Active substance: 200 microgram levothyroxine sodium per tablet equivalent to 194 microgram levothyroxine

#### 3. PHARMACEUTICAL FORM

Tablet

#### 4. PACKAGE SIZE

50 tablets /250 tablets

## 5. TARGET SPECIES

Dogs

#### 6. INDICATION(S)

For treatment of hypothyroidism in dogs.

## 7. METHOD AND ROUTE(S) OF ADMINISTRATION

For oral administration. Read the package leaflet before use.

#### 8. WITHDRAWAL PERIOD(S)

#### 9. SPECIAL WARNING(S), IF NECESSARY

Read the package leaflet before use.

#### 10. EXPIRY DATE

EXP: {month/year}

## 11. SPECIAL STORAGE CONDITIONS

Do not store above 25°C.

Return any divided tablet to the opened blister and use within 4 days.

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

Disposal: Read package leaflet.

#### 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 SIGHT AND REACH OF CHILDREN"

Keep out of the sight and reach of children.

#### 15. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER

Eurovet Animal Health BV, Handelsweg 25, 5531 AE Bladel, The Netherlands

BE-LU:

Dechra Regulatory B.V., Handelsweg 25, 5531 AE Bladel, The Netherlands

#### 16. MARKETING AUTHORISATION NUMBER(S)

#### 17. MANUFACTURER'S BATCH NUMBER

Lot: {number}

# MINIMUM PARTICULARS TO APPEAR ON BLISTERS OR STRIPS

{NATURE/TYPE} BLISTER

## 1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Forthyron flavoured 200 microgram tablets for dogs Levothyroxine sodium

## 2. NAME OF THE MARKETING AUTHORISATION HOLDER

Eurovet Animal Health BV BE-LU: Dechra Regulatory B.V.

## 3. EXPIRY DATE

Exp: {month/year}

#### 4. BATCH NUMBER

Lot: {number}

## 5. THE WORDS "FOR ANIMAL TREATMENT ONLY"

For animal treatment only.

## PACKAGE LEAFLET FOR

Forthyron flavoured 200 microgram tablets for dogs

Forthyron flavoured 400 microgram tablets for dogs

Forthyron flavoured 600 microgram tablets for dogs

Forthyron flavoured 800 microgram tablets 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: Eurovet Animal Health BV Handelsweg 25, 5531 AE Bladel The Netherlands

BE-LU: Dechra Regulatory B.V. Handelsweg 25, 5531 AE Bladel The Netherlands

<u>Manufacturer's responsible for batch release:</u> Eurovet Animal Health BV Handelsweg 25, 5531 AE Bladel The Netherlands

Genera Inc. Svetonedeljska cesta 2, Kalinovica 10436 Rakov Potok, Croatia

Additional for XI Dales Pharmaceuticals Limited Snaygill Industrial Estate, Keighley Road, Skipton North Yorkshire, BD23 2RW, United Kingdom

Only the site testing and releasing the batches will be mentioned on the printed leaflet.

#### 2. NAME OF THE VETERINARY MEDICINAL PRODUCT

Forthyron flavoured 200 microgram tablets for dogs Forthyron flavoured 400 microgram tablets for dogs Forthyron flavoured 600 microgram tablets for dogs Forthyron flavoured 800 microgram tablets for dogs Levothyroxine sodium

# **3.** STATEMENT OF THE ACTIVE SUBSTANCE AND OTHER INGREDIENTS

One tablet contains:

Active substance:

200 microgram levothyroxine sodium per tablet equivalent to 194 microgram levothyroxine

400 microgram levothyroxine sodium per tablet equivalent to 389 microgram levothyroxine

600 microgram levothyroxine sodium per tablet equivalent to 583 microgram levothyroxine

800 microgram levothyroxine sodium per tablet equivalent to 778 microgram levothyroxine

Off white round tablet with brown spots, quadrisect with side scores. The tablets may be divided into halves or quarters.

# 4. INDICATION

For the treatment of hypothyroidism (under production of thyroid hormone) in dogs.

# 5. CONTRAINDICATIONS

Do not use in dogs suffering from uncorrected adrenal insufficiency. Do not use in cases of known hypersensitivity to levothyroxine sodium or to any of the excipients.

# 6. ADVERSE REACTIONS

Restoration of physical activity may unmask or intensify other health-related problems, such as arthritis. Adverse reactions of thyroid hormones are generally associated with excessive dosage and correspond to the signs of excess thyroid hormone e.g. increased thirst and urination, weight loss without a loss of appetite, excessive food intake, panting, hyperactivity, excitability and increased heart rate. Hypersensitivity reactions (pruritus) have been reported very rarely

The frequency of adverse reactions is defined using the following convention: - very common (more than 1 in 10 animals treated displaying adverse reaction(s)) during the course of one treatment)

- 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)

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 inform your veterinary surgeon.

# 7. TARGET SPECIES

Dogs.

# 8. DOSAGE FOR EACH SPECIES, ROUTE AND METHOD OF ADMINISTRATION

For oral administration.

The recommended starting dosage of levothyroxine sodium is 10  $\mu$ g/kg body weight orally every 12 hours. Because of variability in absorption and metabolism, the dosage may require alterations before a complete clinical response is observed. The initial dosage and frequency of administration are merely a starting point. Therapy has to be highly individualised and tailored to the requirements of the individual dog, in accordance with monitoring by the veterinarian.

In the dog, absorption of levothyroxine sodium may be affected by the presence of food. The timing of treatment and its relation to feeding should therefore be kept consistent from day to day.

To break a tablet accurately and easily, place the tablet score side up and apply pressure with your thumb.



To break the tablet in two parts; hold one half of the tablet down and press down the other half.

When initiating dosing of dogs weighing less than 5 kg bodyweight, a quarter of one 200  $\mu$ g tablet should be administered <u>once</u> daily. Such cases should be monitored carefully by your veterinarian.

To adequately monitor therapy, trough values (just prior to treatment) and peak values (about three hours after dosing) of plasma T<sub>4</sub> can be measured. In adequately dosed dogs peak plasma concentration of T<sub>4</sub> should be in the high-normal range (approximately 30 to 47 nmol/l) and trough values should be above approximately 19 nmol/l. If T<sub>4</sub> levels are outside this range the levothyroxine sodium dose can be adjusted in 50 to 200  $\mu$ g increments using the appropriate strength(s) of tablets until the patient is clinically euthyroid and serum T<sub>4</sub> is within the reference range. Plasma T<sub>4</sub> levels can be retested two weeks after change of dosage, but clinical improvement is an equally important factor in determining individual dosage and this will take four to eight weeks. When the optimum replacement dose has been attained, clinical and biochemical monitoring may be performed every 6 – 12 months.

# 9. ADVICE ON CORRECT ADMINISTRATION

None

# 10. WITHDRAWAL PERIOD

Not applicable

## **11. SPECIAL STORAGE PRECAUTIONS**

Keep out of the sight and reach of children.

Do not store above 25°C

Return any divided tablet to the opened blister and use within 4 days.

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

# **12. SPECIAL WARNINGS**

## Information for the animal owner

The tablets are flavoured. In order to avoid any accidental ingestion, store tablets out of reach of animals.

Tell your veterinarian either if you intend to use your dog for breeding purposes or if your dog is pregnant.

Tell your veterinarian if your dog is already being treated with any other veterinary medicinal product as this may affect the treatment.

In case of overdose, contact your veterinarian.

## Information for the treating veterinarian.

The diagnosis of hypothyroidism should be confirmed with appropriate tests.

## Special precautions for use in animals

The increased metabolic rate resulting from treatment with levothyroxine sodium may place undue stress on a poorly functioning heart, causing signs of heart failure. Hypothyroid dogs suffering from hypoadrenocorticism (Addison's disease) have a decreased ability to metabolise levothyroxine sodium and therefore an increased risk of overdose. Dogs with concurrent hypoadrenocorticism and hypothyroidism should be stabilised with glucocorticoid and mineralocorticoid treatment prior to treatment with levothyroxine sodium to avoid precipitating a hypoadrenocortical crisis. After this, thyroid tests should be repeated, then gradual introduction of the levothyroxine sodium therapy, starting with 25% of the normal dose, increasing by 25% increments every fortnight until optimal stabilisation is achieved is recommended.

Gradual introduction of therapy is also recommended for dogs with other concurrent illnesses; particularly in dogs with cardiac disease, diabetes mellitus and kidney or liver disease.

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

Any unused tablet portion(s) should be returned to the open blister for use at the next administration. Wash hands after administering the tablets. Pregnant women should

handle the product with caution. In the case of accidental ingestion, seek medical advice immediately and show the package leaflet or the label to the physician. To the physician: this product contains a high concentration of L-thyroxine sodium and may present a risk to humans, in particular children, if ingested.

#### Pregnancy and lactation

The safety of the veterinary medicinal product has not been established in pregnant or lactating bitches. However, levothyroxine is produced naturally in the body and thyroid hormones are essential for the developing foetus, especially during the first period of pregnancy. Hypothyroidism during pregnancy may result in major complications such as foetal death and a poor outcome at birth. Maintenance dose of levothyroxine sodium may need adjustment during pregnancy. Pregnant bitches should therefore be monitored on a regular basis from conception until several weeks after delivery by the veterinarian.

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

A variety of drugs may impair plasma or tissue binding of the thyroid hormones or alter thyroid hormone metabolism (e.g. barbiturates, antacids, anabolic steroids, diazepam, furosemide, mitotane, phenylbutazone, phenytoin, propranolol, large doses of salicylates and sulphonamides).

Oestrogens may increase thyroid requirements.

Ketamine may cause tachycardia and hypertension when used in patients receiving thyroid hormones. The effect of catecholamines and sympathomimetics is increased by levothyroxine. An increase in the dosage of digitalis may be necessary in a patient that had previously stabilised congestive heart failure and that is placed on thyroid hormone supplementation.

Following treatment of hypothyroidism in dogs with concurrent diabetes, careful monitoring of diabetic control is recommended.

Most dogs on long term high-dose, daily glucocorticoid therapy will have very low or undetectable serum  $T_4$  concentrations, as well as subnormal  $T_3$  values.

#### Overdose (symptoms, emergency procedures, antidotes):

Following administration of overdoses signs of toxicity relating to increased levels of thyroid hormone could occur. Toxicity as a side effect of mild oversupplementation is uncommon in dogs, owing to the canine ability to break down and excrete thyroid hormones. Single overdose up to 3-6x the recommended dose does not pose a threat even to the healthy dog with normal thyroid function, and no actions are necessary. In case of accidental intake of large amounts of the veterinary medicinal product absorption can be decreased by induction of vomiting and oral administration of both activated charcoal and magnesium sulphate once.

Following long term over-supplementation, clinical signs of excess thyroid hormone such as increased thirst and urination, panting, weight loss without loss of appetite, and either or both increased heart rate and nervousness may theoretically occur. The presence of these signs should result in evaluation of T<sub>4</sub> serum concentrations to confirm the diagnosis, and immediate discontinuance of the supplementation. Once the signs have abated (days to weeks), the thyroid dosage has been reviewed, and the

animal has fully recovered, a lower dosage may be instituted, with the animal being monitored closely.

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

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

# **14. DATE ON WHICH THE PACKAGE LEAFLET WAS LAST APPROVED**

DD-MM-YYYY

## **15. OTHER INFORMATION**

10 tablets per blister, 5 or 25 blisters per carton, 50 or 250 tablets per carton. Not all pack sizes may be marketed.

For any information about this veterinary medicinal product, please contact the local representative of the marketing authorisation holder.