

## **SUMMARY OF PRODUCT CHARACTERISTICS**

## 1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Spizobactin 3,000,000 IU / 500 mg chewable tablets for dogs  
(AT, BE, BG, CY, CZ, DE, EL, ES, FR, HR, HU, IE, IT, LU, NL, PT, RO, SI, SK, UK(NI))  
Spizobactin vet 3,000,000 IU / 500 mg chewable tablets for dogs  
(DK, FI, IS, NO, EE, LT, LV, PL)

## 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each tablet contains:

### Active substances:

Spiramycin	3,000,000 IU
Metronidazole	500 mg

### Excipient(s):

For the full list of excipients, see section 6.1.

## 3. PHARMACEUTICAL FORM

Chewable tablet.

Light brown with brown spots, round and convex flavoured tablet with a cross-shaped break line on one side.

Tablets can be divided into 2 or 4 equal parts.

## 4. CLINICAL PARTICULARS

### 4.1 Target species

Dogs.

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

For the adjunct treatment of mechanical or surgical periodontal therapy in the treatment of multi-bacterial infections of periodontal and related (peri)oral conditions – e.g. gingivitis, stomatitis, glossitis, periodontitis, tonsillitis, dental fistula and other fistulous wounds in the oral cavity, cheilitis and sinusitis - in dogs caused by microorganisms susceptible to spiramycin / metronidazole, such as Gram-positive bacteria and anaerobes (see also section 4.4 and 4.5) .

### 4.3 Contraindications

Do not use in cases of hepatic disorders.

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

### 4.4 Special warnings for each target species

In many cases of endodontic/periodontal disease the primary treatment is non-medicinal and does not require antimicrobial medication.

Antimicrobial treatment of periodontal disease should be accompanied or preceded by endodontic therapy and/or professional dental cleaning especially if the disease is advanced. Dog owners are encouraged to routinely brush their dog's teeth to remove plaque to prevent or to control periodontal disease.

## 4.5 Special precautions for use

### Special precautions for use in animals

The combination of spiramycin and metronidazole should not be used as first-line empirical treatment.

Whenever possible, metronidazole and spiramycin should only be used based on susceptibility testing of the pathogens.

Official, national and regional antimicrobial policies should be taken into account when the veterinary medicinal product is used.

Limiting the duration of treatment is necessary because damage to the germ cells cannot be excluded with the use of metronidazole, and because in long-term studies with high doses, an increase of certain tumours was seen in rodents. The chewable tablets are flavoured. In order to avoid any accidental ingestion, store tablets out of reach of the animals.

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

Metronidazole has confirmed mutagenic and genotoxic properties in laboratory animals as well as in humans. Metronidazole is a confirmed carcinogen in laboratory animals and has possible carcinogenic effects in humans. However, there is inadequate evidence in humans for the carcinogenicity of metronidazole.

Metronidazole may be harmful for the unborn child. Pregnant women should be careful when handling this veterinary medicinal product.

Spiramycin and metronidazole may in rare cases induce hypersensitivity reactions, e.g. contact dermatitis.

Direct contact with the skin or mucous membranes of the user should be avoided because of the risk of sensitization. Do not handle the product if you are known to be hypersensitive to the active substances or to any of the excipients.

Impervious gloves should be worn during administration of the product to avoid skin contact and hand-to-mouth contact with the product.

Metronidazole may cause adverse (neurological) effects if ingested by a child. To avoid accidental ingestion, particularly by a child, unused part-tablets should be returned to the open blister space and inserted back into the carton.

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

Wash hands thoroughly after handling the tablets.

## 4.6 Adverse reactions (frequency and seriousness)

Vomiting has rarely been observed in dogs.

Hypersensitivity can occur in rare cases. In cases of hypersensitivity reactions, treatment should be stopped.

Spermatogenesis disorders may occur in very rare cases.

Hematuria could be observed in very rare cases.

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

Spiramycin has not been found to be teratogenic or embryo- or foetotoxic. Studies in laboratory animals have shown inconsistent results with regard to teratogenic/embryotoxic effects of metronidazole. Therefore, use of this product during pregnancy is not recommended. Metronidazole and spiramycin are excreted in milk and use during lactation is therefore not recommended.

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

Do not use concomitantly with bactericidal antibiotics.

Macrolides, such as e.g. spiramycin act antagonistic to penicillins and cephalosporins.

The product should not be used concurrently with other antibiotics of the macrolide group.

Metronidazole may have an inhibitory effect on the degradation of other drugs in the liver, such as phenytoin, cyclosporine and warfarin.

Phenobarbital may increase hepatic metabolism of metronidazole resulting in decreased serum concentration of metronidazole.

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

For oral use.

75 000 IU spiramycin + 12.5 mg metronidazole per kg body weight, in more severe cases 100 000 IU spiramycin + 16.7 mg metronidazole per kg body weight, administered daily for 6 - 10 days depending on the severity of the disease.

In severe cases one can start with the higher dose and go back in the course of treatment on to the lower dose.

The daily dose may be given once daily or divided equally for twice daily administration.

The treatment should always be continued for 1-2 days after resolution of symptoms in order to prevent relapses. The tablets are to be administered either deep in the mouth (on the base of the tongue) or given with a small amount of food containing the tablet, to ensure all the tablet is consumed.

To ensure administration of the correct dosage, body weight should be determined as accurately as possible to avoid underdosing. The following table is intended as a guide to dispensing the product at approximately the standard dose rate of 75 000 IU spiramycin + 12.5 mg metronidazole per kg body weight.

Body weight	Spizobactin 750,000 IU / 125 mg for dogs	Spizobactin 1,500,000 IU / 250 mg for dogs	Spizobactin 3,000,000 IU / 500 mg for dogs
2.5 kg			
5.0 kg			
7.5 kg			
10 kg			
12.5 kg	 		
15 kg	 		
17.5 kg	 		
20 kg			
25 kg		 	
30 kg		 	
35 kg		 	
40 kg			
50 kg			 
60 kg			 
70 kg			 

80 kg



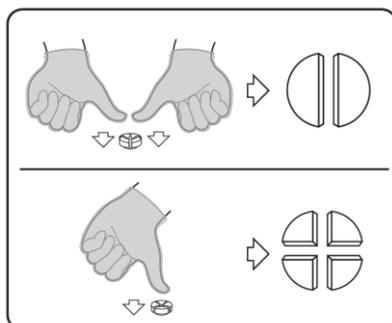
 = ¼ Tablet

 = ½ Tablet

 = ¾ Tablet

 = 1 Tablet

Tablets can be divided into 2 or 4 equal parts to ensure accurate dosing. Place the tablet on a flat surface, with its scored side facing up and the convex (rounded) side facing the surface.



Halves: press down with your thumbs on both sides of the tablet.

Quarters: press down with your thumb in the middle of the tablet

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

If neurological signs occur, treatment should be discontinued and the patient should be treated symptomatically.

#### 4.11 Withdrawal period

Not applicable

### 5. PHARMACOLOGICAL PROPERTIES

Pharmacotherapeutic group: Antibacterials for systemic use, spiramycin and metronidazole  
ATCvet code: QJ01RA04

#### 5.1 Pharmacodynamic properties

Spiramycin is an antibiotic of the macrolide group. It acts markedly bacteriostatic by inhibition of protein synthesis (interfering with the translation reaction on the ribosome). Its spectrum of activity includes mainly Gram-positive bacteria. “Three different mechanisms account for most bacterial resistance to the action of macrolides: (1) rRNA methylation; (2) active efflux; and (3) enzymatic inactivation. The first two mechanisms are the most frequent ones and genes coding for these mechanisms are often located on mobile elements. rRNA methylation, encoded by erythromycin-resistant methylase (erm) genes, results in cross-resistance to the macrolides, lincosamides, and streptogramin B (MLSB resistance).

Metronidazole is an imidazole derivative and acts against representatives of protozoa (flagellates and amoeba) and against Gram-positive and Gram-negative anaerobes.

The combination spiramycin and metronidazole broadens the spectrum due to the complementary antibacterial pattern of the two drugs. Synergistic effects have been demonstrated in some pathogens in in vitro studies and in experimental infections of laboratory animals.

#### 5.2 Pharmacokinetic particulars

After oral administration, peak plasma levels of spiramycin-I (main component of spiramycin) of 4.4 µg/ml are obtained within 1.3 hours. Spiramycin rapidly reaches high tissue levels that are 10-15 times higher than in plasma. The concentrations in the mucous membranes and saliva are particularly high. After a single oral dose of spiramycin concentrations remain present for about 30-40 hours.

Spiramycin is eliminated in the dog via the bile. The terminal half-life is about 8.6 hours.

After oral administration, peak plasma levels of metronidazole of 18 µg/ml are obtained within 1.4 hours. After oral ingestion metronidazole diffuses rapidly and completely in all body tissues. After 24 hours blood levels > 0.5 µg/ml are still detectable in most dogs. Excretion is via the urine. The terminal half-life is about 5.3 hours.

## **6. PHARMACEUTICAL PARTICULARS**

### **6.1 List of excipients**

Starch, pregelatinised  
Cellulose, microcrystalline  
Lactose monohydrate  
Hydroxypropylcellulose  
Yeast (dried)  
Chicken flavour  
Silica, colloidal anhydrous  
Magnesium stearate

### **6.2 Major incompatibilities**

Not applicable

### **6.3 Shelf life**

Shelf life of the veterinary medicinal product as packaged for sale: 18 months  
Shelf life of divided tablets after first opening the immediate packaging: 3 days.

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

Do not store above 30°C.

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

Aluminium - PVC/PE/PVDC blister  
Pack sizes:  
Cardboard box of 1, 2 or 3 blisters of 10 tablets  
Cardboard box containing 10 separate cardboard boxes, each containing 1 blister of 10 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(S)**

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

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

Date of last renewal: {DD/MM/YYYY}

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

{DD/MM/YYYY}

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

*National issue*

**ANNEX B**  
**LABELLING AND PACKAGE LEAFLET**

## **I. LABELLING**

**PARTICULARS TO APPEAR ON THE OUTER PACKAGE**

**Cardboard box single packs and multipacks**

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

Spizobactin 3,000,000 IU / 500 mg chewable tablets for dogs  
Spiramycin / Metronidazole



**2. STATEMENT OF ACTIVE SUBSTANCES**

One tablet contains:

Spiramycin	3,000,000 IU
Metronidazole	500 mg

**3. PHARMACEUTICAL FORM**

Chewable tablets

**4. PACKAGE SIZE**

10 tablets  
20 tablets  
30 tablets  
10 x 10 tablets

**5. TARGET SPECIES**

Dogs

**6. INDICATION(S)**

-

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

For oral use  
Read the package leaflet before use.

**8. WITHDRAWAL PERIOD**

**9. SPECIAL WARNINGS, IF NECESSARY**

User warning: Metronidazole may cause severe adverse reactions. **IMPERVIOUS GLOVES SHOULD BE WORN.** See package leaflet for full user warnings.

**10. EXPIRY DATE**

EXP:

Shelf life of divided tablets: 3 days.

**11. SPECIAL STORAGE CONDITIONS**

Do not store above 30°C.

**12. SPECIAL PRECAUTIONS FOR THE DISPOSAL OF UNUSED VETERINARY MEDICINAL 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**

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

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

**17. MANUFACTURER'S BATCH NUMBER**

Lot.

**MINIMUM PARTICULARS TO APPEAR ON BLISTERS OR STRIPS**

Aluminium-PVC/PE/PVDC blisters

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

Spizobactin 3,000,000 IU / 500 mg tablets  
Spiramycin / Metronidazole



**2. NAME OF THE MARKETING AUTHORISATION HOLDER**

Le Vet. Beheer B.V.

**3. EXPIRY DATE**

EXP:

**4. BATCH NUMBER**

Lot:

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

For animal treatment only

## **II. PACKAGE LEAFLET**

## PACKAGE LEAFLET

### Spizobactin 3,000,000 IU / 500 mg chewable 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:

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

Manufacturer responsible for batch release:

Name: LelyPharma B.V.  
Address: Zuiveringweg 42  
8243 PZ Lelystad  
The Netherlands

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

Spizobactin 3,000,000 IU / 500 mg chewable tablets for dogs  
Spiramycin/metronidazole

#### 3. STATEMENT OF THE ACTIVE SUBSTANCES AND OTHER INGREDIENTS

Each tablet contains:

**Active substances:**

Spiramycin	3,000,000 IU
Metronidazole	500 mg

Light brown with brown spots, round and convex flavoured chewable tablet with a cross-shaped break line on one side.

Tablets can be divided into 2 or 4 equal parts.

#### 4. INDICATIONS

For the adjunct treatment of mechanical or surgical periodontal therapy in the treatment of multi-bacterial infections of periodontal and related (peri)oral conditions e.g.

Stomatitis (inflammation of the oral mucosa),

Gingivitis (inflammation of the gingiva),

Glossitis (inflammation of the tongue),

Periodontitis (periodontal inflammation)

Tonsillitis (inflammation of the tonsils),

Dental fistula and other fistulous wounds in the oral cavity,

Cheilitis (inflammation of the mucosa of the lips),

and sinusitis (inflammation of the sinuses) -

in dogs caused by microorganisms susceptible to spiramycin / metronidazole, such as Gram-positive bacteria and anaerobes. See also section 12 (special warnings).

#### 5. CONTRAINDICATIONS

Do not use in cases of hepatic disorders.

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

## 6. ADVERSE REACTIONS

Vomiting has rarely been observed in dogs.

Hypersensitivity can occur in rare cases. In cases of hypersensitivity reactions the treatment should be stopped.

Spermatogenesis disorders may occur in very rare cases.

Hematuria could be observed in very rare cases.

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).

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. Alternatively you can report via your national reporting system {national system details}.

## 7. TARGET SPECIES



Dogs

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

For oral use.

75 000 IU spiramycin + 12.5 mg metronidazole per kg body weight, in more severe cases 100 000 IU spiramycin + 16.7 mg metronidazole per kg body weight, administered daily for 6 - 10 days depending on the severity of the disease. In severe cases one can start with the higher dose and go back in the course of treatment on to the lower dose.

The daily dose may be given once daily or divided equally for twice daily administration.

The treatment should always be continued for 1-2 days after resolution of symptoms in order to prevent relapses.

To ensure administration of the correct dosage body weight should be determined as accurately as possible to avoid underdosing. The following table is intended as a guide to dispensing the product at approximately the standard dose rate of 75 000 IU spiramycin + 12.5 mg metronidazole per kg body weight.

Body weight	Spizobactin 750,000 IU / 125 mg for dogs	Spizobactin 1,500,000 IU / 250 mg for dogs	Spizobactin-L 3,000,000 IU / 500 mg for dogs
2.5 kg	◐		
5.0 kg	◑	◐	
7.5 kg	◒		
10 kg	⊕	◑	◐
12.5 kg	⊕ ◐		
15 kg	⊕ ◑	◒	
17.5 kg	⊕ ◑		
20 kg	⊕ ⊕	⊕	◑
25 kg		⊕ ◐	

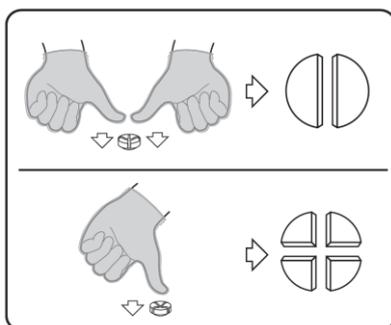
30 kg				⊕	⊕				⊕
35 kg				⊕	⊕				
40 kg				⊕	⊕				⊕
50 kg									⊕
60 kg									⊕
70 kg									⊕
80 kg									⊕

 = ¼ Tablet    
 = ½ Tablet    
 = ¾ Tablet    
 = 1 Tablet

## 9. ADVICE ON CORRECT ADMINISTRATION

The tablets are to be administered either deep in the mouth (on the base of the tongue) or given with a small amount of food containing the tablet, to ensure all the tablet is consumed.

Tablets can be divided into 2 or 4 equal parts to ensure accurate dosing. Place the tablet on a flat surface, with its scored side facing up and the convex (rounded) side facing the surface.



Halves: press down with your thumbs on both sides of the tablet.

Quarters: press down with your thumb in the middle of the tablet

## 10. WITHDRAWAL PERIOD

Not applicable

## 11. SPECIAL STORAGE PRECAUTIONS

Keep out of the sight and reach of children.

Shelf life of divided tablets after first opening the immediate packaging: 3 days.

Do not store above 30°C.

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

## 12. SPECIAL WARNINGS

### Special warnings for each target species:

In many cases of endodontic/periodontal disease the primary treatment is non-medicinal and does not require antimicrobial medication.

Antimicrobial treatment of periodontal disease should be accompanied or preceded by endodontic therapy and/or professional dental cleaning especially if the disease is advanced. Dog owners are encouraged to routinely brush their dog's teeth to remove plaque to prevent or to control periodontal disease

### Special precautions for use in animals:

The combination of spiramycin and metronidazole should not be used as first-line empirical treatment. Whenever possible, metronidazole and spiramycin should only be used based on susceptibility testing of the pathogens.

Official, national and regional antimicrobial policies should be taken into account when the veterinary medicinal product is used.

Limiting the duration of treatment is necessary because damage to the germ cells cannot be excluded with the use of metronidazole, and because in long-term studies with high doses, an increase of certain tumours was seen in rodents. The chewable tablets are flavoured. In order to avoid any accidental ingestion, store tablets out of reach of the animals

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

Metronidazole has confirmed mutagenic and genotoxic properties in laboratory animals as well as in humans. Metronidazole is a confirmed carcinogen in laboratory animals and has possible carcinogenic effects in humans. However, there is inadequate evidence in humans for the carcinogenicity of metronidazole.

Metronidazole may be harmful for the unborn child. Pregnant women should be careful when handling this veterinary medicinal product.

Spiramycin and metronidazole may in rare cases induce hypersensitivity reactions, e.g. contact dermatitis.

Direct contact with the skin or mucous membranes of the user should be avoided because of the risk of sensitization. Do not handle the product if you are known to be hypersensitive to the active substances or to any of the excipients. **IMPERVIOUS GLOVES SHOULD BE WORN** during administration of the product to avoid skin contact and hand-to-mouth contact with the product.

Metronidazole may cause adverse (neurological) effects if ingested by a child. To avoid accidental ingestion, particularly by a child, unused part-tablets should be returned to the open blister space and inserted back into the carton.

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

Wash hands thoroughly after handling the tablets.

Use during pregnancy and lactation:

Spiramycin has not been found to be teratogenic or embryo- or foetotoxic. Studies in laboratory animals have shown inconsistent results with regard to teratogenic/embryotoxic effects of metronidazole. Therefore, use of this product during pregnancy is not recommended. Metronidazole and spiramycin are excreted in milk and use during lactation is therefore not recommended.

Interactions with other medicinal products and other forms of interaction:

Do not use concomitantly with bactericidal antibiotics.

Macrolides, such as e.g. spiramycin act antagonistic to penicillins and cephalosporins.

The product should not be used concurrently with other antibiotics of the macrolide group.

Metronidazole may have an inhibitory effect on the degradation of other drugs in the liver, such as phenytoin, cyclosporine and warfarin.

Phenobarbital may increase hepatic metabolism of metronidazole resulting in decreased serum concentration of metronidazole.

Overdose (symptoms, emergency procedures, antidotes):

If neurological signs occur, treatment should be discontinued and the patient should be treated symptomatically.

**13. SPECIAL PRECAUTIONS FOR THE DISPOSAL OF UNUSED VETERINARY MEDICINAL PRODUCTS OR WASTE MATERIALS, IF ANY**

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

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

**15. OTHER INFORMATION**

Aluminium - PVC/PE/PVDC blister

Pack sizes:

Cardboard box of 1, 2 or 3 blisters of 10 tablets

Cardboard box containing 10 separate cardboard boxes, each containing 1 blister of 10 tablets.

Not all pack sizes may be marketed.

Divisible tablet

