



LIST OF PRODUCTS

Product	Active ingredients	ROA	Cattle	Sheep, Goats	Poultry	Horses	Fur bearing animals	Pets	Withdrawal period/days			Pack size	Page
									Meat	Milk	Eggs		
Amoxiclin 70% WS	Amoxicillin trihydrate	Oral	+	+	+				15	-	-	500 g	2
Apravetin	Apramycin sulphate	Oral	+	+	+				6-30		-	500 g	3
Benstrep	Procaine benzylpenicillin, Dihydrostreptomycin sulphate	INJ	+	+		+		+	23-31	3	-	100 ml	4
Oxykin	Oxytetracycline hydrochloride	Oral	+	+	+		+		20	20	-	500 g	5
Oflostin	Ofloxacin, Colistin sulphate	Oral	+	+	+				12-14	-	-	1 L	6
Ribavex	Enrofloxacin, Ribavirin, Trimethoprim	INJ	+	+				+	14	-		100 ml	7
Sulfprim 24	Sulfadimidine, Trimethoprim	INJ	+	+		+		+	28	10		100 ml	8
Sulfaprim 48 BT	Sulfadimidine, Trimethoprim	Oral	+	+	+			+	7		-	500 g	9
Tiamulin 45% BT	Tiamulin	Oral			+				7			500 g	10
Tiacin	Tiamulin, Colistin sulphate	Oral			+				7		-	1 L	11
Tylankin	Tylosin tartrate	Oral	+		+				25		-	500 g	12
Tilflotrim	Tilmicosin, Levofloxacin, Trimethoprim	Oral			+				12		-	1 L	13
Floxamin	Enrofloxacin, Gentamicin	Oral			+				14		-	1 L	14
Floxacin 10% oral	Enrofloxacin	Oral	+	+	+		+		15		-	1 L	15
Eriprim BT	Tylosin tartrate, Sulfadimidine, Trimethoprim, Colistin sulfate	Oral	+	+	+				8		-	100, 500 g	16
Vetacef 50	Ceftiofur hydrochloride	INJ	+	+				+	8	0		100 ml	17
Fertadin	Cloprostenol sodium	INJ	+						0	0		10 ml	18
Uberol	Vaseline, stearic acid, benzyl alcohol, Peru balsam	EXT	+	+		+			0	0		400 g	19
Heptran	L-carnitine, Magnesium, Sorbitol, Vitamin B ₁₂ , Calcium pantothenate, Nicotinamide	Oral	+	+	+	+		+	0	0		10 L	20
Trivit BT	Vitamin A, D ₃ , E	INJ	+	+	+	+	+	+	0	0		100 ml	22
Amprolium 25% BT	Amprolium	Oral	+	+	+				5		-	500 g	24
Coccitox 2,5%	Toltrazuril	Oral			+		+		14-16		-	1 L	25
Formilac	Formic acid, Lactic acid	Oral	+	+	+				0	0	0	10 L	26
Iotoin	Active iodine	Oral /EXT	+		+				0	0	0	1, 5, 10 L	27



Amoxicillin 70% WS

700 mg/ml Amoxicillin trihydrate

Oral powder for calves, lambs, goatlings, poultry



COMPOSITION PER GRAM

Amoxicillin trihydrate700 mg.

Excipients (sodium carbonate, ethylenediaminetetraacetic acid disodium salt dihydrate). White to light yellow powder.

INDICATIONS FOR USE

For the treatment of gastrointestinal, respiratory and urinary tract infections, septicaemia, salmonellosis, anaerobic enterotoxemia, escherichiosis, staphylococcosis, streptococcosis and other bacterial infections in calves, lambs, goatlings, poultry caused by organisms sensitive to amoxicillin.

DOSAGE AND ADMINISTRATION

For oral administration via drinking water or feed for 3-5 days.

- Calves, lambs, goatlings: 150 mg per 10 kg body weight, which is equivalent to 10,5 mg of amoxicillin per 1 kg body weight, twice a day given with water, feed, milk or milk replacer.

- Poultry (broiler chicks, replacement pullets, turkey-poults, goslings, ducklings): 20 mg per 1 kg body weight, which is equivalent to 14 mg of amoxicillin per 1 kg body weight once a day;

Poultry under 4 weeks of age: 70-140 g per 1000 litres of drinking water.

Poultry older than 4 weeks of age: 115-230 g per 1000 litres of drinking water.

The product is very soluble in water. Medicated drinking water should be freshly prepared every 24 hours. No other source of drinking water should be available during the medication period.

Do not store the mixture prepared via milk or milk replacer. It is possible to administer the medicated solution in a daily dose by the pulse dosing method for 4-6 hours.

PHARMACOLOGICAL PROPERTIES

Amoxicillin is a broad-spectrum semisynthetic antibiotic of the penicillin group. It is highly active against Gram-positive and Gram-negative bacteria, such as *Staphylococcus* spp., *Streptococcus* spp., *Clostridium perfringens*, *Corynebacterium* spp., *Actinobacillus* spp., *Erysipelothrix rhusiopathiae*, *Listeria monocytogenes*, *Haemophilus* spp., *Pasteurella* spp., *Escherichia coli*, *Salmonella* spp., *Leptospira* spp., *Klebsiella* spp., *Proteus* spp., *Fusobacterium necrophorum*, *Moraxella bovis*, *Brachyspira hyodysenteriae*, excluding penicillinase-producing strains.

Amoxicillin inhibits the development of the peptidoglycan network structure in the bacterial cell wall by suppression of transpeptidase and carboxypeptidase, which leads to osmotic imbalance and cell wall destruction during the division and growth phase. The product is well absorbed from the gastrointestinal tract and distributed throughout the body reaching peak blood concentrations after 1,5-2 hours and remains within the therapeutic range for at least 12 hours. It is eliminated unchanged primarily by kidneys in urine and to a lesser extent in milk and bile in 8-12 hours.

CONTRAINDICATIONS

Do not use in the case of known hypersensitivity to beta-lactam antibiotics.

Do not use in birds producing eggs for human consumption, ruminants over 6 months of age, animals during the lactation period.

For pregnant animals, the product is prescribed with caution (under the supervision of a veterinarian).

ADVERSE REACTIONS

No undesirable effects are to be expected when the prescribed dosage regimen is followed.

A hypersensitivity reaction may occur. If allergy reactions (dermatitis, itching, swelling) occur, antihistamine agents and symptomatic treatment should be undertaken as appropriate.

DRUG INTERACTIONS

Concurrent administration of bacteriostatic agents (tetracyclines, macrolides, lincosamides and chloramphenicol) is not allowed due to antagonistic effect.

WITHDRAWAL PERIODS

Meat: 15 days.

Eggs: Not authorised for use in birds producing eggs for human consumption.

Milk: Not authorised for use in lactating animals.

STORAGE CONDITIONS AND SHELF LIFE

Store in the original package between 5°C to 25°C, protected from light and moisture.

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

Do not use this veterinary product after the expiry date which is stated on the label.

Keep out of the reach and sight of children.

MARKETING PACKAGING

Amoxicillin 70% WS is marketed in metallized polyethylene bags of 50, 100, 150, 200, 250, 500, 1000 g.



Apravetin

500 mg/g Apramycin sulphate
Powder for use in drinking water/milk for calves, lambs,
poultry



COMPOSITION PER GRAM

Apramycin sulphate.....500 mg.

Light yellow to brown powder.

INDICATIONS FOR USE

For the treatment of bacterial infections in calves, lambs and poultry caused by microorganisms sensitive to apramycin. For the treatment of gastroenterocolitis of salmonella, colibacterial, pseudomonous and coccal etiology, toxic dyspepsia.

DOSAGE AND ADMINISTRATION

For oral solution once daily for 5-7 consecutive days.

- Pre-ruminant calves (under 6 weeks of age): 40-80 mg per kg body weight given via drinking water, milk or milk replacer.

- Lambs (under 6 weeks of age): 20 mg per kg body weight.

- Poultry (replacement layers, broiler chicks): 50-100 mg per kg body weight or 0,5-1,0 g per 1 litre of water.

Medicated drinking water should be freshly prepared every 24 hours. Before use, the calculated dose of the product should be dissolved in 5-10 times the volume of liquid (water, milk, milk replacer). Use rusty free metal containers to avoid reduction of activity by iron ions.

Before group treatment, test the product on 5-10 animals. If no complications are observed for 2-3 days, the entire livestock can be treated.

PHARMACOLOGICAL PROPERTIES

Apramycin is a veterinary antibiotic from the group of aminoglycosides and a subgroup of amino-cyclic alcohols (aminocyclitols). It is active mainly against Gram-negative bacteria and some Gram-positive bacteria including *Escherichia coli*, *Salmonella* spp., *Pseudomonas* spp., *Staphylococcus* spp., *Streptococcus* spp., *Proteus* spp., *Bordetella bronchiseptica*, *Klebsiella* spp., *Campylobacter* spp., *Borrelia hyodysenteriae*, *Mycoplasma hyopneumoniae*. It is not active against anaerobic microorganisms.

Apramycin acts bactericidal by suppressing bacterial growth at each development phase. It interferes with the protein synthesis by binding irreversibly to the 30S ribosomal subunit causing misreading of mRNA-tRNA. Apramycin is not susceptible to enzymatic inactivation by aminoglycoside-modifying enzymes (AME) of Gram-negative bacteria, which ensures high efficacy in the case of multidrug-resistant bacteria.

Apramycin inhibits R factor DNA (plasmids conferring resistance to antibacterial agents) replication and thus restores the sensitivity in resistance to antibiotics bacteria strains and decreases the risk of resistance development.

Following oral administration, the product is poorly absorbed reaching selective higher therapeutic concentrations in the gastrointestinal tract. Apramycin is not converted in the animal's body; following oral administration, it is excreted in its unchanged active form mainly via faeces and in the small amount in the urine.

Following oral administration, apramycin has a very low toxic effect due to poor absorption from the gastrointestinal tract.

CONTRAINDICATIONS

Do not use in the cases of hypersensitivity to apramycin.

Do not use in animals producing milk for human consumption.

Do not use in laying birds producing eggs for human consumption.

ADVERSE REACTIONS

No undesirable effects are to be expected when the prescribed dosage regimen is followed.

In animals with hypersensitivity to apramycin allergy reactions may occur (dermatitis, itching, swelling). In such an event, treatment should be discontinued and antihistamine and desensitizing therapy (e.g. diphenhydramine, calcium chloride solution and glucose solution) should be undertaken as appropriate.

DRUG INTERACTIONS

None known.

WITHDRAWAL PERIOD

Calves (meat): 28 days.

Lambs (meat): 30 days.

Poultry (meat): 6 days.

Eggs: Not authorised for use in laying birds producing eggs for human consumption.

STORAGE CONDITIONS AND SHELF LIFE

Store in the original package between 5°C to 25°C, protected from light and moisture.

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

Do not use this veterinary product after the expiry date which is stated on the label.

Keep out of the reach and sight of children.

MARKETING PACKAGING

Apravetin is marketed in metallized polyethylene bags of 50, 100, 200, 250, 500, 1000 g.



Benstrep

200 mg/ml Procaine benzylpenicillin + 250 mg/ml
Dihydrostreptomycin sulphate
Sterile suspension for intramuscular injection
for cattle, horses, sheep, goats, dogs, cats



COMPOSITION PER ML

Procaine benzylpenicillin..... 200 mg.
Dihydrostreptomycin sulphate 250 mg.

White to yellow suspension containing sediment that disperses easily when the content is shaken.

INDICATIONS FOR USE

For the treatment of respiratory, gastrointestinal and urogenital tract infections, septicaemia, peritonitis, postoperative complications, purulent infections of the skin and soft tissues, mastitis, postpartum and secondary bacterial infections in cattle, horses, sheep, goats, dogs, cats caused by organisms sensitive to procaine benzylpenicillin and dihydrostreptomycin sulphate.

DOSAGE AND ADMINISTRATION

The dose should be given once daily by intramuscular injection for 3-5 consecutive days:

- Cattle, sheep, goats, horses: 1 ml per 25 kg body weight (0,04 ml/kg), but not more than 10 ml per injection site.
- Dogs, cats: 1 ml per 10 kg body weight (0,1 ml/kg), but not more than 2,5 ml per injection site.

Shake well before use.

PHARMACOLOGICAL PROPERTIES

Procaine benzylpenicillin and dihydrostreptomycin sulphate provide a synergistic effect and widen spectrum of antimicrobial action.

The combination is highly active against Gram-positive bacteria including *Clostridium* spp., *Corynebacterium* spp., *Erysipelothrix* spp., *Enterococcus* spp., *Listeria* spp., *Staphylococcus* spp. (including *Staphylococcus aureus*), *Streptococcus* spp. and Gram-negative bacteria: *Escherichia coli*, *Salmonella* spp., *Klebsiella* spp., *Pasteurella* spp., *Haemophilus* spp., *Campylobacter* spp., etc. Pathogenic fungi and viruses are not sensitive to Benstrep.

Procaine benzylpenicillin is a beta-lactam antibiotic with bactericidal action mostly against Gram-positive bacteria. It prevents the bacterial cell from growing by interfering with peptidoglycan synthesis and activates enzymes, which hydrolyze peptidoglycan leading to rupture of covalent bonds of the cell wall. Growing cells stop dividing, enlarge, swell and disintegrate with the formation of small particles. Following intramuscular injection, it is slowly absorbed providing prolonged action.

Dihydrostreptomycin is an aminoglycoside bactericidal antibiotic active mostly against Gram-negative bacteria. It binds to subunits of the bacterial ribosome, induces misreading of the genetic code preventing bacterial growth and development. Unlike procaine benzylpenicillin, dihydrostreptomycin sulphate is active against bacteria in log and stationary phase.

After intramuscular injection, Benstrep is rapidly absorbed and distributed to most organs and tissues from the site of injection with maximum levels being obtained with 30-90 minutes after injection. Therapeutic concentrations are maintained for at least 24 hours.

Excretion occurs through the urine and bile, partially in milk in lactation animals.

CONTRAINDICATIONS

Do not use in cases of known hypersensitivity to penicillins or aminoglycoside. If allergy reactions occur, treatment should be discontinued and adrenaline and/or antihistamine therapy should be undertaken as appropriate.

Do not use in cases of known kidney disease or defective renal function, disturbances of auditory or vestibular organs.

Do not use in animals during the last third of pregnancy.

ADVERSE REACTIONS

Dihydrostreptomycin possess the potential to induce nephrotoxic and ototoxic reactions in cases of prolonged therapy.

DRUG INTERACTIONS

Do not administer concurrently with other potentially nephrotoxic and ototoxic drugs (gentamicin, kanamycin, neomycin).

This product must not be mixed with other veterinary medicinal products in the same syringe.

WITHDRAWAL PERIOD

Cattle (meat): 23 days. Cows (milk): 3 days.

Sheep (meat): 31 days.

Horses: Not authorised for use in horses intended for human consumption.

STORAGE CONDITIONS AND SHELF LIFE

Store in the original package between 5°C to 25°C, protected from light and moisture.

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

Do not use this veterinary product after the expiry date which is stated on the label.

Keep out of the reach and sight of children.

MARKETING PACKAGING

Benstrep is marketed in glass vials of 10, 50, 100, 200, 400, 450, 500 ml.



Oxykin

200 mg/g Oxytetracycline hydrochloride
Oral powder for cattle, sheep, goats, fur-bearing animals,
poultry



COMPOSITION PER GRAM

Oxytetracycline hydrochloride200 mg.
Excipient (silica), filler (dextrose). Light yellow to yellow-brown powder.

INDICATIONS FOR USE

For the treatment of diseases caused by organisms sensitive to oxytetracycline. Oxykin is indicated for the treatment of respiratory, gastrointestinal and urinary tract infections, colibacillosis, pasteurellosis, salmonellosis, chlamydiosis, mycoplasmosis and other diseases in cattle, sheep, goats, fur-bearing animals, poultry.

DOSAGE AND ADMINISTRATION

For oral administration twice daily for 3-5 consecutive days:

- Cattle, sheep, goats: 0,05-0,10 g per kg body weight.
- Fur-bearing animals (mink, fox, arctic fox): 0,10-0,15 g per kg body weight.
- Poultry: 0,10-0,25 g per kg body weight mixed with feed or water. To poultry (broilers, meat turkeys, breeding stock, replacement pullets) Oxykin may also be given at a rate of 2,5-5 g per 5 L of water (50-100 g per 100 L) or 0,5-2,5 kg per ton of feed.

Before mass treatment, test Oxykin on 5-10 animals. The observation time is 2-3 days.

PHARMACOLOGICAL PROPERTIES

Oxytetracycline, as an active ingredient of Oxykin, has a broad-spectrum antibacterial activity against Gram-negative (*Escherichia coli*, *Klebsiella* spp., *Salmonella* spp., *Campylobacter* spp., *Bordetella* spp., *Pasteurella* spp., *Haemophilus* spp., *Actinobacillus* spp.) and Gram-positive bacteria (*Staphylococcus* spp., *Streptococcus* spp., *Listeria monocytogenes*, *Erysipelothrix rhusiopathiae*), *Mycoplasma* spp., *Chlamydia* spp., *Borrelia* spp., *Rickettsia* spp. Oxytetracycline penetrates susceptible bacterial cell by passive diffusion and active transport. As a result, the intracellular concentration of oxytetracycline is much higher than the extracellular. Inside the cell, it binds irreversibly to receptors on the 30S subunit of the bacterial ribosome where it interferes with the binding of the aminoacyl-tRNA to the acceptor site on the messenger RNA ribosome complex. This effectively prevents the addition of amino acids to the elongating peptide chain, inhibiting protein synthesis.

Following the oral administration, it is absorbed from the gastrointestinal tract and widely distributed to the organs, tissues and fluids of the body providing antibacterial action. It remains in the therapeutic range for 12 hours. The product is excreted in the faeces and urine.

CONTRAINDICATIONS

Do not use in cases of known hypersensitivity to the active substance or to any of the excipients, severe liver or renal damage.

Do not use in hens during the egg-laying period.

ADVERSE REACTIONS

No undesirable effects are to be expected when the prescribed dosage regimen is followed. Overdose may result in dysbiosis.

If adverse reactions, such as hives or vomiting occur, treatment should be discontinued and antihistamine therapy, calcium compounds, antacids should be undertaken as appropriate.

Prolonged use may result in staining of teeth yellow-gray-brown color.

DRUG INTERACTIONS

Concurrent administration of penicillins or cephalosporins, as well as compounds of aluminum, calcium, magnesium, iron limit the efficacy of the Oxykin.

WITHDRAWAL PERIODS

Milk: 20 days.

Meat: 20 days.

Eggs: Not authorised for use in birds producing eggs for human consumption.

STORAGE CONDITIONS AND SHELF LIFE

Store in the original package between 5°C to 25°C, protected from light and moisture.

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

Do not use this veterinary product after the expiry date which is stated on the label.

Keep out of the reach and sight of children.

MARKETING PACKAGING

Oxykin is marketed in metallized polyethylene bags of 50, 100, 150, 200, 250, 500, 1000 g.



Oflostin

100 mg/ml Ofloxacin + 1 000 000 IU/ml Colistin sulphate
Solution for use in drinking water for calves, lambs,
goatlings, carnivores, poultry



COMPOSITION PER ML

Ofloxacin.....	100 mg.
Colistin sulphate.....	1 000 000 IU.

Excipients (benzyl alcohol, propionic acid, 1-methyl-2-pyrrolidone), solvent (distilled water). Clear light yellow to light brown solution.

INDICATIONS FOR USE

For the treatment of respiratory, gastrointestinal and urogenital tract infections, septicaemia, colibacillosis, salmonellosis, bacterial and enzootic pneumonia, atrophic rhinitis in calves, lambs, goatlings, carnivores caused by microorganisms sensitive to ofloxacin and colistin. It is used in poultry for the treatment of colibacillosis, salmonellosis, necrotic enteritis, haemophilus infection, mycoplasmosis, mixed infections, secondary bacterial infections after viral infection.

DOSAGE AND ADMINISTRATION

Solution for use in drinking water once daily for 3-5 days:

- Calves, lambs, goatlings: 0,25-0,5 ml per 10 kg body weight.

- Carnivores: 0,025-0,05 ml per 1 kg body weight. It is recommended to mix the product with drinking water at a ratio of 1:10.

- Poultry (broilers, fattening turkeys): 500 ml per 1000 litres of water. No other source of drinking water should be available during the medication period. Medicated drinking water should be freshly prepared every 24 hours.

PHARMACOLOGICAL PROPERTIES

The combination of ofloxacin and colistin provides broad-spectrum antibacterial activity against Gram-positive bacteria (*Staphylococcus epidermidis*, *Staphylococcus aureus*, including beta-lactamase-producing organisms) and Gram-negative bacteria (*Escherichia coli*, *Salmonella* spp., *Pasteurella* spp., *Staphylococcus* spp., *Streptococcus* spp., *Bordetella* spp., *Klebsiella* spp., *Haemophilus* spp., *Leptospira* spp., *Listeria monocytogenes*, *Mycoplasma* spp., *Chlamydia* spp., *Rickettsia* spp., anaerobic bacteria).

Ofloxacin is a second-generation fluoroquinolone, a synthetic chemotherapeutic antibacterial agent. It inhibits bacterial DNA gyrase (type II topoisomerases) involved in replication of a DNA helix in the nucleus of a bacterial cell.

Ofloxacin is well absorbed from the gastrointestinal tract and fully distributed throughout the body. The concentration in organs and tissues is 2-3 greater than in blood. The greatest concentration is detected in the lungs, liver, kidneys, bones, lymphatic system organs. The maximum plasma concentration is achieved in 0,5-1 hour following administration and remains at that level for 4-6 hours, therapeutic concentrations are maintained for 24 hours. Ofloxacin is partially metabolised and excreted mostly in the urine (75-90%) and milk in lactating animals.

Colistin is an antibiotic belonging to the polymyxin class. It exerts a bactericidal action on susceptible bacterial strains by disruption of the bacterial cytoplasmic membrane. Colistin is poorly absorbed from the gastrointestinal tract and provides local antibacterial activity.

CONTRAINDICATIONS

Do not use during pregnancy.

Do not use in horses.

Do not use in laying birds producing eggs for human consumption.

Do not use in animals producing milk for human consumption.

ADVERSE REACTIONS

Hypersensitivity reactions, such as tremors, seizures, vomiting, anorexia, hemolytic anemia, can occur rarely. In that case, treatment should be discontinued and symptomatic therapy should be undertaken as appropriate.

DRUG INTERACTIONS

Concurrent administration of tetracyclines, macrolides, amphenicols reduces antimicrobial activity of the product.

Concurrent administration of theophylline and/or nonsteroidal anti-inflammatory drugs (acetylsalicylic acid, ibuprofen) is not allowed.

WITHDRAWAL PERIODS

Cattle, sheep, goats (meat): 14 days.

Poultry (meat): 12 days.

Eggs: Not authorised for use in birds producing eggs for human consumption.

Milk: Not authorised for use in animals producing milk for human consumption.

STORAGE CONDITIONS AND SHELF LIFE

Store in the original package between 5°C to 25°C, protected from light and moisture.

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

Do not use this veterinary product after the expiry date which is stated on the label.

Keep out of the sight and reach of children.

MARKETING PACKAGING

Oflostin is marketed in polymer bottles of 10, 20, 50, 100, 200, 250, 400, 500 ml and 1, 2, 5 L.



Ribavex

55 mg/ml Enrofloxacin + 25 mg/ml Ribavirin + 10 mg/ml
Trimethoprim

Sterile solution for intramuscular, subcutaneous injection for
calves, lambs, goatlings, dogs, cats



COMPOSITION PER ML

Enrofloxacin.....	55 mg.
Ribavirin.....	25 mg.
Trimethoprim.....	10 mg.

Excipients (dimethylacetamide, sodium thiosulphate, potassium hydroxide, methylparaben, propylparaben, propylene glycol), solvent (water).
Clear, light yellow to yellow solution free from visible particles.

INDICATIONS FOR USE

For the treatment of gastrointestinal, respiratory, urogenital tract infections, septicemia and other diseases of bacterial and viral etiology in calves, lambs, goatlings, dogs, and cats caused by pathogens sensitive to active ingredients.

DOSAGE AND ADMINISTRATION

For subcutaneous, intramuscular injection once a day for 3-5 consecutive days.

- Calves, lambs, goatlings, dogs, cats: 1 ml per 10 kg body weight.

The volume administered per injection site should not exceed 5 ml in big animals and 2,5 ml in small animals.

PHARMACOLOGICAL PROPERTIES

The combination of components provides the anti-viral and broad-spectrum antibacterial activity. Ribavex is highly active against *Staphylococcus* spp., *Streptococcus* spp., *Escherichia coli*, *Salmonella* spp., *Pasteurella* spp., *Clostridium* spp., *Haemophilus* spp., *Campylobacter* spp., *Klebsiella* spp., *Listeria monocytogenes*, *Mycoplasma* spp., *Chlamydia* spp., *Rickettsia* spp., *Borrelia* spp., including DNA and RNA viruses.

Enrofloxacin is a synthetic chemotherapeutic agent of the fluoroquinolones class. It has a broad spectrum of anti-mycoplasmal and antibacterial activity against Gram-negative and Gram-positive bacteria. It inhibits DNA gyrase and protein synthesis, blocks DNA replication in a microorganism providing bactericidal effect. It is not inactivated by enzymes of bacteria and is active against multi-resistant strains of microorganisms. Trimethoprim, as a derivative of diaminopyrimidine, has a slow bactericidal action against Gram-negative, Gram-positive bacteria, and toxoplasma. Trimethoprim blocks bacterial production of tetrahydrofolic acid from dihydrofolic acid by binding to and reversibly inhibiting the enzyme dihydrofolate reductase. Ribavirin is a synthetic triazole nucleoside with pronounced activity against many RNA and DNA viruses. Ribavirin easily penetrates cells affected by a virus and rapidly undergoes intracellular phosphorylation catalysed by adenosine kinase to ribavirin monophosphate, ribavirin diphosphate, and ribavirin triphosphate, which exhibit antiviral effect. Ribavirin inhibits inosine monophosphate dehydrogenase (IMPDH), which ultimately leads to the decreased levels of intracellular guanosine triphosphate (GTP) and which is accompanied by suppression of viral RNA synthesis and infected cell protein. Ribavirin inhibits virion production reducing viral load, also selectively inhibits the synthesis of viral RNA without suppressing the synthesis of RNA in normally functioning cells.

Ribavex is well absorbed and widely distributed in the body. Peak concentrations are achieved in 1-2 hours following administration. Therapeutic concentrations are maintained for at least 24 hours. Ribavex is eliminated mainly in urine and bile.

CONTRAINDICATIONS

Do not use in pregnant or lactating animals.

Do not use in case of known cartilage disorders, nervous system diseases accompanied by cramps.

Do not use in cases of known hypersensitivity to the active substances.

ADVERSE REACTIONS

Ribavex should be discontinued if hypersensitivity reactions occur. In such an event, antihistamine and calcium compounds therapy should be undertaken as appropriate.

Transient local swelling may occur at the injection site.

DRUG INTERACTIONS

Concurrent administration of amphenicols, macrolides, tetracycline, theophylline and non-steroidal anti-inflammatory agents is not allowed.

WITHDRAWAL PERIODS

Meat: 14 days.

Milk: Not authorised for use in lactating animals producing milk for human consumption.

STORAGE CONDITIONS AND SHELF LIFE

Store in the original package between 5°C to 25°C, protected from light and moisture.

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

Shelf life after first opening the container: 28 days.

Do not use this veterinary product after the expiry date which is stated on the label.

Keep out of the reach and sight of children.

MARKETING PACKAGING

Ribavex is marketed in glass vials of 10, 20, 50, 100, 200, 400, 450, 500 ml.



Sulfprim 24

200 mg/ml Sulfadimidine + 40 mg/ml Trimethoprim
Sterile solution for intramuscular injection for cattle, horses,
sheep, goats, dogs



COMPOSITION PER ML

Sulfadimidine..... 200 mg.
Trimethoprim 40 mg.

Excipients (methylpyrrolidone, polyvinylpyrrolidone, dimethylacetamide, methylparaben, propylparaben, propylene glycol), solvent (water for injection). Clear light yellow to dark yellow solution free from particles.

INDICATIONS FOR USE

For the treatment of respiratory infections (pneumonia, bronchopneumonia), gastrointestinal diseases (gastroenteritis, enteritis), urinary tract infections (pyelonephritis, nephritis), mastitis, postpartum and postoperative infections and other diseases (colibacillosis, salmonellosis, pasteurellosis, campylobacteriosis, staphylococcal and streptococcal infections, listeriosis, eimeriosis, chlamydiosis, mycoplasmosis, bordetellosis, haemophilosis, etc.) caused by organisms sensitive to the sulfadimidine and trimethoprim combination in cattle, horses, sheep, goats, dogs.

DOSAGE AND ADMINISTRATION

For intramuscular injection once daily for 3-5 consecutive days:

- Cattle, horses, sheep, goats, dogs: 1 ml per 10 kg body weight.

In severe cases, administer the recommended dose twice daily every 12 hours for 2-3 days. The volume administered per injection site should not exceed 10 ml in cattle, horses, sheep, goats and 5 ml in dogs.

PHARMACOLOGICAL PROPERTIES

Sulfadimidine and trimethoprim act together synergistically widening the antimicrobial spectrum of activity including some strains resistant to other antimicrobial agents. The combination has a broad bactericidal action against many Gram-negative (*Escherichia coli*, *Salmonella* spp., *Proteus* spp., *Campylobacter* spp., *Pseudomonas aeruginosa*, *Bordetella* spp., *Pasteurella* spp., *Haemophilus* spp., *Actinobacillus* spp.) and Gram-positive bacteria (*Staphylococcus* spp., *Streptococcus* spp., *Listeria monocytogenes*, *Corynebacterium* spp., *Clostridium* spp.), eimeria, chlamydia, mycoplasma.

Sulfadimidine is a short-acting sulfonamide drug. Mode of action is based on competitive antagonism to para-aminobenzoic acid, inhibition of the dihydropteroate synthase and tetrahydrofolic acid synthesis, which is required for the synthesis of purines and pyrimidines.

Trimethoprim, as a derivative of diaminopyrimidine, exhibits slow bactericidal activity. Trimethoprim reversibly inhibits dihydrofolate reductase, conversion of dihydrofolic acid into tetrahydrofolic acid, synthesis of purine and pyrimidine bases, nucleic acids preventing the bacteria from growing. The combination of sulfadimidine and trimethoprim inhibits sequential steps in the synthesis of folic acid leading to nucleotides synthesis failure.

Following parenteral injection, the product is rapidly absorbed and distributed to all organs and tissues reaching peak blood concentrations after 2-3 hours. It remains within the therapeutic range for 18-24 hours following the injection. The higher concentrations of the product are present in the lungs, liver and kidneys. Excretion occurs mainly via the urine, to a lesser extent via bile and milk in lactating animals.

CONTRAINDICATIONS

Do not use in case of hypersensitivity to the active substances.

Do not use in animals with severe liver, renal, or blood-forming bodies damage.

Do not use in pregnant animals.

ADVERSE REACTIONS

No undesirable effects are to be expected when the prescribed dosage regimen is followed.

If allergy reactions occur, treatment should be discontinued and antihistamine and calcium compounds therapy should be undertaken as appropriate.

Administration of Sulfprim 24 may cause transient pain reactions at the injection site that can persist for a few days.

DRUG INTERACTIONS

Concurrent administration of p-aminobenzoic acid derivatives (novocaine, procaine, anesthesin, benzocaine) is not allowed.

This product must not be mixed with other veterinary medicinal products in the same syringe.

WITHDRAWAL PERIODS

Milk: 10 days. Meat: 28 days.

STORAGE CONDITIONS AND SHELF LIFE

Store in the original package between 5°C to 25°C, protected from light and moisture.

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

Shelf life after first opening the container: 28 days.

Do not use this veterinary product after the expiry date which is stated on the label.

Keep out of the reach and sight of children.

MARKETING PACKAGING

Sulfprim 24 is marketed in glass bottles of 10, 20, 50, 100, 200, 250, 400, 450 and 500 ml.



Sulfaprim 48 BT

0,4 g/g Sulfadimidine + 0,08 g/g Trimethoprim
Oral powder for calves, lambs, poultry, dogs, cats



COMPOSITION PER GRAM

Sulfadimidine.....	0,4 g.
Trimethoprim.....	0,08 g.

White to cream-colored powder.

INDICATIONS FOR USE

For the treatment of pneumonia, catarrhal bronchopneumonia, bronchitis, laryngitis, angina, septicemia, necrobacillosis, dyspepsia, gastroenteritis, urinary infections, salmonellosis, pasteurellosis, respiratory mycoplasmosis, eimeriosis and other bacterial infections in calves, lambs, dogs, cats, poultry caused by microorganisms susceptible to the sulfadimidine and trimethoprim combination.

DOSAGE AND ADMINISTRATION

For oral administration in the feed.

- Calves, lambs, dogs, cats: 0,04 g per kg body weight twice a day every 12 hours for 3-5 consecutive days (the first dose should be doubled).

- Poultry: 1 g per 5 kg of feed twice a day every 12 hours for 3-5 consecutive days.

PHARMACOLOGICAL PROPERTIES

Sulfadimidine and trimethoprim act together synergistically with a double-blockade mode of action. The combination has a broad bactericidal action against many Gram-negative (*Escherichia coli*, *Klebsiella* spp., *Salmonella* spp., *Proteus* spp., *Campylobacter* spp., *Pseudomonas aeruginosa*, *Bordetella* spp., *Pasteurella* spp., *Haemophilus* spp., *Actinobacillus* spp.) and Gram-positive bacteria (*Staphylococcus* spp., *Streptococcus* spp., *Listeria monocytogenes*, *Corynebacterium* spp.), *Eimeria* spp., *Chlamydia* spp.

The highly effective combination of sulfadimidine, an analog of para-aminobenzoic acid, and trimethoprim, which enhances antimicrobial action by inhibition of trihydrofolic acid restoration, suppresses purine and pyrimidine bases syntheses implicated in the growth and reproduction of bacteria.

Following oral administration, Sulfaprim 48 BT is rapidly absorbed and distributed to all tissues reaching peak blood concentrations after 4-5 hours and remains within the therapeutic range for 12 hours. Sulfaprim 48 BT is about 75% protein-bound and is accumulated in the blood in high concentrations. It is eliminated primarily in the urine.

CONTRAINDICATIONS

Do not use in case of known hypersensitivity to the active substances. If allergy reactions (dermatitis, itching, swelling) occur, treatment should be discontinued and desensitization therapy (e.g. diphenhydramine, promethazine, calcium compounds) and increased fluid intake should be undertaken as appropriate.

Do not use in animals with impaired liver or kidney functions.

Do not use in goats due to hypersensitivity to sulfadimidines.

Do not use in pregnant or lactating animals.

Do not use in laying hens producing eggs for human consumption.

ADVERSE REACTIONS

No undesirable effects are to be expected when the prescribed dosage regimen is followed.

DRUG INTERACTIONS

Do not use the product concomitantly with PABA derivatives (novocaine, anesthesin), sulfur compounds (sodium thiosulfate, unithiol).

WITHDRAWAL PERIODS

Meat: 7 days.

Eggs: Not authorised for use in birds producing eggs for human consumption.

STORAGE CONDITIONS AND SHELF LIFE

Store in the original package below 25°C, protected from light and moisture.

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

Do not use this veterinary product after the expiry date which is stated on the label.

Keep out of the reach and sight of children.

MARKETING PACKAGING

Sulfaprim 48 BT is marketed in metallized polyethylene bags of 50, 100, 150, 200, 250, 500, 1000 g.



Tiamulin 45% BT

0,45 g/g Tiamulin hydrogen fumarate
Powder for use in drinking water for poultry



COMPOSITION PER GRAM

Tiamulin hydrogen fumarate0,45 g.
Excipient (silica), filler (dextrose). White to light yellow powder.

INDICATIONS FOR USE

For the treatment of respiratory, alimentary and urogenital tract infections, enzootic pneumonia, chlamydiosis, mycoplasmosis, dysentery and other diseases in poultry caused by microorganisms susceptible to tiamulin.

DOSAGE AND ADMINISTRATION

To be administered orally via drinking water once daily for 3-5 consecutive days.

- Poultry (broiler chicks, replacement layers, turkey-poults, goslings, ducklings): 25-50 mg per 1 kg body weight (equivalent to 11-23 mg API per kg body weight), or 300-500 g per 1000 litres of water. No other source of drinking water should be available during the medication period.

When medicating large volumes of water, prepare a concentrated solution by adding water to the product with constant stirring first and then dilute by introducing the concentrate to the amount of water for daily intake. Fresh solutions of tiamulin-medicated drinking water should be made up every 24 hours.

PHARMACOLOGICAL PROPERTIES

Tiamulin is a bacteriostatic semi-synthetic antibiotic belonging to the pleuromutilin group of antibiotics, which is active against Gram-positive bacteria (*Staphylococcus* spp., *Streptococcus* spp., *Listeria monocytogenes*, *Clostridium* spp., *Corynebacterium* spp., *Erysipelothrix rhusiopathiae*) and Gram-negative bacteria (*Bacteroides* spp., *Fusobacterium necrophorum*, some isolates of *Klebsiella* spp.), *Mycoplasma* spp., *Chlamydia* spp., *Rickettsia* spp., *Borrelia* spp. Bacteria from Enterobacteriaceae family, *Escherichia coli*, *Salmonella* spp., *Pseudomonas aeruginosa*, fungi and viruses are not sensitive to tiamulin.

Tiamulin inhibits bacterial protein synthesis by binding to the 70S ribosomal subunit causing misreading of mRNA-tRNA.

Following oral administration, the product is well absorbed from the gastrointestinal tract and distributed throughout the body reaching peak blood concentrations after 2 hours and remains within the therapeutic range for 18-24 hours. It is eliminated primarily in faeces.

CONTRAINDICATIONS

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

Do not use in animals with hepatic and renal dysfunction.

Do not use in birds during the egg-lying period.

ADVERSE REACTIONS

No undesirable effects are to be expected when the prescribed dosage regimen is followed.

On rare occasions, allergy reactions (dermatitis, itching, swelling), indigestion (anorexia, vomiting, diarrhea) may occur in animals with hypersensitivity to the active substance. In that case, treatment should be discontinued and antihistamine therapy and calcium compounds treatment should be undertaken as appropriate.

DRUG INTERACTIONS

Concurrent administration of monensin, narasin or salinomycin is not allowed.

WITHDRAWAL PERIODS

Meat: 10 days.

Eggs: Not authorised for use in birds during the egg-lying period.

STORAGE CONDITIONS AND SHELF LIFE

Store in the original package between 5°C to 25°C, protected from light and moisture.

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

Do not use this veterinary product after the expiry date which is stated on the label.

Keep out of the reach and sight of children.

MARKETING PACKAGING

Tiamulin 45% BT is marketed in metallized polyethylene bags of 50, 100, 150, 200, 250, 500, 1000 g, polymer bags of 5, 10, 15, 20, 25, 30 kg.



Tiacin

125 mg/ml Tiamulin hydrogen fumarate + 200 000 IU/ml

Colistin sulphate

Solution for use in drinking water for poultry



COMPOSITION PER ML

Tiamulin hydrogen fumarate	125 mg.
Colistin sulphate	200 000 IU.

Excipients (propylene glycol, benzyl alcohol, sodium hydroxymethanesulfinate), solvent (water). Light yellow to a light brown solution.

INDICATIONS FOR USE

For the treatment of bacterial infections in poultry caused by microorganisms sensitive to tiamulin and colistin such as colibacillosis, salmonellosis, necrotic enteritis, mycoplasmosis, listeriosis, streptococcosis, staphylococcosis, borreliosis and mixed infections.

DOSAGE AND ADMINISTRATION

Solution for use in drinking water for 5 consecutive days.

Poultry: 800 ml per 1000 litres of drinking water given through the water system.

Medicated drinking water should be freshly prepared every 24 hours. No other source of drinking water should be available during the medication period.

PHARMACOLOGICAL PROPERTIES

The combination of active substances tiamulin and colistin provide a wide range of antibacterial action against Gram-positive bacteria (*Staphylococcus* spp., *Streptococcus* spp., *Listeria monocytogenes*, *Corynebacterium* spp., *Clostridium* spp., *Bacillus suis*) and Gram-negative bacteria (*Escherichia coli*, *Enterobacter* spp., *Bacteroides* spp., some strains of *Klebsiella* spp., *Salmonella* spp.), *Mycoplasma* spp., *Chlamydia* spp., *Rickettsia* spp., *Borrelia* spp.

Tiamulin is a bacteriostatic semi-synthetic antibiotic belonging to the pleuromutilin group of antibiotics. It inhibits bacterial protein synthesis by binding to the 70S ribosomal subunit causing misreading of mRNA-tRNA.

Colistin is an antibiotic belonging to the polymyxin class. It acts by disruption of the bacterial cytoplasmic membrane.

Following oral administration, tiamulin is well absorbed from the gastrointestinal tract and distributed throughout the body reaching peak blood concentrations after 2-3 hours and remains within the therapeutic range for 18-24 hours. Colistin is poorly absorbed from the gastrointestinal tract and provides the local antibacterial activity.

The product is metabolised by the liver and eliminated primarily in faeces.

CONTRAINDICATIONS

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

Do not use in animals with hepatic and renal dysfunction.

Do not use in birds producing eggs for human consumption.

ADVERSE REACTIONS

No undesirable effects are to be expected when the prescribed dosage regimen is followed.

On rare occasions, allergy reactions (dermatitis, itching, swelling), indigestion (anorexia, vomiting, diarrhea) may occur in animals with hypersensitivity to the active substance. In that case, treatment should be discontinued and antihistamine therapy and calcium compounds treatment should be undertaken as appropriate.

DRUG INTERACTIONS

Concurrent administration of monensin, salinomycin, maduramicin, narasin and aminoglycosides is not allowed, because of possible side effects and complications (diarrhea, paralysis, nephrotoxic effects). Animals should not receive products containing ionophores such as monensin, salinomycin, maduramicin and narasin during or at least 7 days before or after treatment with the product.

WITHDRAWAL PERIODS

Meat: 7 days.

Eggs: Not authorised for use in laying birds producing eggs for human consumption.

STORAGE CONDITIONS AND SHELF LIFE

Store in the original package between 5°C to 25°C, protected from light and moisture.

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

Do not use this veterinary product after the expiry date which is stated on the label.

Keep out of the reach and sight of children.

MARKETING PACKAGING

Tiacin is marketed in polymer packages of 20, 50, 100, 200, 250, 400, 450, 500 ml and 1 L.



Tylankin

500 mg/g Tylosin tartrate

Oral powder for calves, carnivores, poultry



COMPOSITION PER GRAM

Tylosin tartrate..... 500 mg.

Excipient (silica), filler (dextrose). White to light yellow powder.

INDICATIONS FOR USE

For the treatment of respiratory, alimentary and urinary infections, colibacillosis, salmonellosis, pasteurellosis, chlamydiosis, mycoplasmosis, and other diseases in calves (under 3 months of age), carnivores and poultry caused by microorganisms susceptible to tylosin.

DOSAGE AND ADMINISTRATION

For oral administration via feed or water once daily for 3-5 consecutive days.

- Calves under 3 months of age, carnivores: 0,01-0,02 g per kg body weight given with feed or water 2 times a day; or in case of group treatment 0,5-1 kg per 1000 kg of feed or 1 kg per 1000 litres of drinking water (no other source of drinking water should be available during the medication period).

- Poultry (broiler chicks, replacement chickens, turkeys, geese, ducks): 0,5-1 kg per 1000 litres of drinking water (no other source of drinking water should be available during the medication period.) or 1-1,3 kg per 1000 kg of feed.

Medicated feed remains active for two months. Medicated drinking water should be replaced every 48 hours.

Sick animals have a reduced appetite and an altered drinking pattern, and severely affected animals may therefore require individual treatment with the product via drinking water. The product may be administered combined with coccidiostats.

PHARMACOLOGICAL PROPERTIES

Tylosin is a macrolide antibiotic with a wide spectrum of antimicrobial action against Gram-negative bacteria (*Escherichia coli*, *Klebsiella* spp., *Salmonella* spp., *Proteus* spp., *Campylobacter* spp., *Pseudomonas aeruginosa*, *Bordetella* spp., *Pasteurella* spp., *Haemophilus* spp., *Actinobacillus* spp. and *Brucella* spp.) and Gram-positive bacteria (*Staphylococcus* spp., *Streptococcus* spp., *Listeria monocytogenes*, *Corynebacterium* spp., *Erysipelothrix rhusiopathiae*, *Clostridium* spp.), mycoplasma and chlamydia.

Tylosin inhibits protein synthesis by binding to the bacterial 50S ribosomal subunit (interfering with the binding of peptidyl-tRNA and aminoacyl-tRNA to 50S and blocking peptide bond formation). It also suppresses translocase enzyme activity, which is involved in transfer of ribosomes along the growing polypeptide chains of messenger RNA.

Following oral administration, the product is rapidly absorbed from the gastrointestinal tract and distributed to all tissues, organs and fluids of the body. It remains within the therapeutic range for 12 hours. The product is eliminated via the urine and faeces, milk (lactating animals) and eggs (poultry).

CONTRAINDICATIONS

Do not use in known cases of hypersensitivity to tylosin or other macrolides.

Do not use in animals with hepatic and renal dysfunction.

Do not use in birds producing eggs for human consumption

ADVERSE REACTIONS

No undesirable effects are to be expected when the prescribed dosage regimen is followed.

Overdose may result in dysbiosis.

If adverse reactions (hives, vomiting) occur, treatment should be discontinued and antihistamine therapy, calcium compounds, sodium hydrogen carbonate treatment should be undertaken as appropriate.

DRUG INTERACTIONS

Concurrent administration of tetracyclines and amphenicols limits the antibacterial activity of the product.

WITHDRAWAL PERIODS

Meat: 25 days.

Eggs: Not authorised for use in laying birds producing eggs for human consumption.

STORAGE CONDITIONS AND SHELF LIFE

Store in the original package below 30°C, protected from light and moisture.

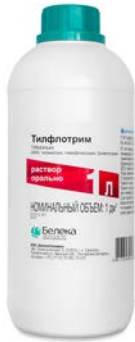
Shelf life of the veterinary medicinal product as packaged for sale: 3 years.

Do not use this veterinary product after the expiry date which is stated on the label.

Keep out of the reach and sight of children.

MARKETING PACKAGING

Tylankin is marketed in metallized polyethylene bags of 50, 100, 150, 200, 250, 500, 1000 g.



Tilflotrim

50 mg/ml Tilmicosin + 25 mg/ml Levofloxacin + 25 mg/ml
Trimethoprim



Solution for use in drinking water for poultry

COMPOSITION PER ML

Tilmicosin	50 mg.
Levofloxacin	25 mg.
Trimethoprim.....	25 mg.

Excipients (sodium formaldehyde sulfoxylate, EDTA disodium salt, acetic acid), solvent (water).

Light yellow to dark yellow liquid. A small amount of sediment may form during storage.

INDICATIONS FOR USE

For the treatment of infections in poultry associated with microorganisms susceptible to active ingredients. Tilflotrim is indicated for the treatment of respiratory, gastrointestinal and urogenital diseases; colibacillosis, pasteurellosis, salmonellosis, staphylococcal and streptococcal infections, necrotic enteritis, dysentery, haemophilus infection, ornithobacteriosis, mycoplasmosis, chlamydiosis and other infections.

DOSAGE AND ADMINISTRATION

Solution for use in drinking water for 3 days.

- Poultry (broiler pullets, replacement chickens, turkeys, geese, ducks): 0,25-0,5 ml per kg body weight for 3 days. If administered to a group of birds, the dose is 1-2 L per 1000 L of drinking water.

No other source of drinking water should be available during the medication period. Medicated drinking water should be freshly prepared every 24 hours. When preparing the medicated solution, the product is added to the water.

PHARMACOLOGICAL PROPERTIES

Active ingredients of Tilflotrim provide a synergistic effect, thereby expanding the antibacterial spectrum of this product. The combination of active ingredients is highly active against Gram-negative bacteria (*Mycoplasma* spp., *Campylobacter* spp., *Enterobacter* spp., *Escherichia coli*, *Haemophilus* spp., *Klebsiella* spp., *Pasteurella* spp., *Proteus* spp., *Pseudomonas* spp., *Salmonella* spp., *Serratia* spp., *Rickettsia* spp., *Bordetella* spp., *Ornithobacterium rhinotracheale*) and Gram-positive bacteria (*Staphylococcus* spp., *Streptococcus* spp., *Enterococcus* spp., *Mycobacterium* spp., *Clostridium* spp., *Listeria monocytogenes*, *Corynebacterium* spp.), and *Chlamydia* spp., *Brachyspira hyodysenteriae*.

Tilmicosin is a semi-synthetic broad-spectrum antibiotic of the macrolide group. It acts on ribosomal subunit causing inhibition of protein synthesis. Tilmicosin not only provides antibacterial action, but also has potent anti-inflammatory and immunomodulatory effects.

Levofloxacin is a broad-spectrum, fluoroquinolone antibiotic with a broad spectrum of bactericidal activity. It acts via the inhibition of DNA gyrase and topoisomerase IV, violation of supercoiling and cross-linking of deoxyribonucleic acid breaks, inhibition of the synthesis of deoxyribonucleic acid, profound metabolic changes in the cytoplasm, cell wall and membranes. Bacterial resistance to levofloxacin occurs slowly and is not related to cross-resistance to other antibacterial agents including fluoroquinolones. Trimethoprim is a derivative of diaminopyrimidine. It acts by inhibiting dihydrofolate reductase of bacteria. Following oral administration, the product is well absorbed and widely distributed in the body due to the high availability of all ingredients. Peak concentrations are achieved in 1-2 hours. Therapeutic concentrations are maintained for 24-48 hours. Tilflotrim is eliminated as metabolites in the urine and bile.

CONTRAINDICATIONS

Do not use in case of known hypersensitivity to the active substances, or to any of the excipients. If allergy reactions occur, the treatment should be withdrawn and antihistamine and symptomatic therapy should be undertaken as appropriate.

Do not use in animals suffering from impaired hepatic or renal functions.

Not for use in birds producing eggs for human consumption.

ADVERSE REACTIONS

No undesirable effects are to be expected when the prescribed dosage regimen is followed.

DRUG INTERACTIONS

Concurrent administration of bacteriostatic antimicrobial agents (amphenicols, aminoglycosides, penicillins, tetracyclines), ionophore coccidiostats, theophylline, non-steroidal anti-inflammatory agents, medications containing magnesium and calcium is not allowed.

WITHDRAWAL PERIODS

Meat: 12 days.

Eggs: Not authorised for use in birds producing eggs for human consumption.

STORAGE CONDITIONS AND SHELF LIFE

Store in the original package between 5°C to 25°C, protected from light and moisture.

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

Shelf life after first opening the container: 28 days.

Do not use this veterinary product after the expiry date which is stated on the label.

Keep out of the reach and sight of children.

MARKETING PACKAGING

Tilflotrim is marketed in polymer bottles of 10, 20, 50, 100, 200, 250, 400, 450, 500 ml and 1, 2 litres.



Floxamin

100 mg/ml Enrofloxacin + 50 mg/ml Gentamicin
Solution for use in drinking water for poultry



COMPOSITION PER ML

Enrofloxacin	100 mg.
Gentamicin	50 mg.

Light yellow to dark yellow solution.

INDICATIONS FOR USE

For the treatment of colibacillosis, pasteurellosis, salmonellosis, streptococcosis, mycoplasmosis, chronic respiratory disease (CRD), necrotic enteritis and other bacterial infections in poultry caused by microorganisms sensitive to enrofloxacin and gentamicin.

DOSAGE AND ADMINISTRATION

Solution for use in drinking water for 3-5 days.

- Poultry: 0,5-1 litre per 1000 litres of drinking water.

In the case of mixed infections or chronic diseases, the treatment may be extended to 7 days.

No other source of drinking water should be available during the medication period. Medicated drinking water should be freshly prepared every 24 hours.

PHARMACOLOGICAL PROPERTIES

Enrofloxacin and gentamicin act synergistically providing enhanced antimicrobial effect and a wide spectrum of activity. The combination is active against Gram-negative bacteria (*Escherichia coli*, *Enterobacter* spp., *Klebsiella* spp., *Salmonella* spp., *Proteus* spp., *Campylobacter* spp., *Pseudomonas aeruginosa*, *Bordetella* spp., *Pasteurella* spp., *Haemophilus* spp., *Actinobacillus* spp., *Brucella* spp., *Treponema hyodysenteriae*) and Gram-positive bacteria (*Clostridium* spp., *Streptococcus* spp., *Staphylococcus* spp., including beta-lactamase-producing organisms), mycoplasma, ureaplasma and chlamydia.

Enrofloxacin is a broad-spectrum agent, belonging to the fluoroquinolone group of antibiotics. It inhibits the bactericidal activity of DNA gyrase and blocks DNA replication and protein synthesis of pathogenic bacteria providing a bactericidal effect. Enrofloxacin is well absorbed from the gastrointestinal tract and distributed throughout the body. Tissues and body fluids concentrations are 2-3 times greater than serum concentrations. Organs in which high levels can be expected are the lungs, liver, kidney, skin, bone and lymphatic system.

Gentamicin is a broad-spectrum bactericidal antibiotic from the class of aminoglycosides. It inhibits protein synthesis in susceptible bacteria by binding to 30S ribosomal subunits. Following oral administration. Gentamicin is poorly absorbed from the intact intestinal wall and better absorbed in case of damaged intestinal mucosa due to inflammation.

The maximum concentration is achieved in 1,5-2 hours and maintained for 6 hours. Therapeutic concentrations of the components persist within 24 hours.

Enrofloxacin is partially metabolized and eliminated unchanged or as a metabolite (ciprofloxacin) in the urine and bile. Gentamicin is excreted from the body in unchanged form in faeces.

CONTRAINDICATIONS

Do not use in cases of known hypersensitivity to the active substance.

Do not use in laying hens producing eggs for human consumption.

ADVERSE REACTIONS

No undesirable effects are to be expected when the prescribed dosage regimen is followed.

Hypersensitivity reactions may occur (convulsions, tremors, vomiting, anorexia, hemolytic anemia). In that case, treatment should be discontinued and symptomatic therapy (antihistamine agents, calcium chloride solution, glucose solution) should be undertaken as appropriate.

DRUG INTERACTIONS

Concurrent administration of bacteriostatic agents (tetracyclines, macrolides, levomycetin) is not allowed due to possible antagonistic effects.

Concurrent administration of theophylline, polyether ionophores, non-steroidal anti-inflammatory drugs, magnesium and calcium compounds, other potentially nephrotoxic drugs is not allowed.

WITHDRAWAL PERIODS

Meat: 14 days.

Eggs: Not authorised for use in laying birds producing eggs for human consumption.

STORAGE CONDITIONS AND SHELF LIFE

Store in the original package between 5°C to 25°C, protected from light and moisture.

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

Shelf life after first opening the container: 28 days.

Do not use this veterinary product after the expiry date which is stated on the label.

Keep out of the reach and sight of children.

MARKETING PACKAGING

Floxamin is marketed in polymer bottles of 10, 20, 25, 50, 100, 200, 250, 400, 500 and 1000 ml.



Floxacin 10% oral

100 mg/ml Enrofloxacin

Solution for use in drinking water

for calves, lambs, goatlings, poultry, carnivores, fur-bearing animals



COMPOSITION PER ML

Enrofloxacin 100 mg.

Excipients (benzyl alcohol, potassium hydroxide), solvent (water). Clear light yellow to light brown solution.

INDICATIONS FOR USE

For the treatment of bacterial infections caused by microorganisms sensitive to enrofloxacin.

- Calves, lambs, goatlings, carnivores, fur-bearing animals: for the treatment of respiratory, gastrointestinal and urogenital tract infections, septicaemia, colibacillosis, salmonellosis, bacterial and enzootic pneumonia, atrophic rhinitis and other diseases.
- Poultry: for the treatment of colibacillosis, salmonellosis, clostridial and haemophilus infections, mycoplasmosis, mixed infections and other diseases.

DOSAGE AND ADMINISTRATION

Solution for use in drinking water once a day for 3-5 consecutive days:

- Calves, lambs, goatlings: 0,5-1,0 ml per 10 kg body weight.
- Carnivores, fur-bearing animals: 2,0 ml per 10 kg body weight.
- Poultry (broiler pullets, fattening turkeys): 1 litre per 1000 litres of drinking water (100 mg of enrofloxacin per 1 litre of water) given through the water system for 3-5 days. The drinking water must be medicated throughout the treatment period, and no other water source should be available. Medicated drinking water should be replaced every 24 hours.

PHARMACOLOGICAL PROPERTIES

Enrofloxacin is a broad-spectrum antimicrobial substance, belonging to the fluoroquinolone group of antibiotics. It is active against Gram-negative bacteria (*Escherichia coli*, *Klebsiella* spp., *Salmonella* spp., *Proteus* spp., *Campylobacter* spp., *Pseudomonas aeruginosa*, *Bordetella* spp., *Pasteurella* spp., *Haemophilus* spp., *Actinobacillus* spp., *Brucella* spp.) and Gram-positive bacteria (*Staphylococcus epidermidis*, *Staphylococcus aureus*, including beta-lactamase-producing organisms), mycoplasma, ureaplasma and chlamydia. Enrofloxacin has moderate activity against some Gram-positive aerobic bacteria (*Streptococcus pyogenes*, *Streptococcus pneumoniae*). Protozoa, fungi and viruses are not sensitive to the enrofloxacin. After prolonged treatment with enrofloxacin, development of antimicrobial resistance was not observed. Enrofloxacin inhibits the activity of DNA gyrase and blocks DNA replication and protein synthesis of pathogenic bacteria providing bactericidal effect. The product is well absorbed from the gastrointestinal tract and distributed throughout the body. Tissues and body fluids concentrations are 2-3 times greater than serum concentrations. Organs in which high levels can be expected are the lungs, liver, kidney, skin, bone and lymphatic system. Following the administration, the maximum concentration is achieved in 30-60 minutes. It remains within the therapeutic range within 24 hours. Enrofloxacin is partially metabolized to ciprofloxacin and is eliminated unchanged or as a metabolite in the urine and bile.

CONTRAINDICATIONS

Do not use in cases of known hypersensitivity to the active substance.

Do not use in laying hens producing eggs for human consumption.

Do not use in pregnant or lactating dogs. Do not use in puppies under 12 months of age, and puppies of large breeds of dog under 18 months of age (because of their longer growth period) as damage to the articular cartilage may occur during the period of rapid growth. Do not use in dogs with central nervous system disorders.

ADVERSE REACTIONS

No undesirable effects are to be expected when the prescribed dosage regimen is followed.

Hypersensitivity reactions may occur (convulsions, tremors, vomiting, anorexia, hemolytic anemia). In that case, treatment should be discontinued and antihistamine agents and calcium compounds should be undertaken as appropriate.

DRUG INTERACTIONS

Concurrent administration of theophylline and/or non-steroidal anti-inflammatory drugs is not allowed.

Concurrent administration of tetracyclines, macrolides and amphenicols may reduce the antimicrobial effect of the product.

WITHDRAWAL PERIODS

Meat: 15 days.

Eggs: Not authorised for use in laying birds producing eggs for human consumption.

STORAGE CONDITIONS AND SHELF LIFE

Store in the original package between 5°C to 25°C, protected from light and moisture.

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

Shelf life after first opening the container: 30 days.

Do not use this veterinary product after the expiry date which is stated on the label.

Keep out of the reach and sight of children.

MARKETING PACKAGING

Floxacin 10% oral is marketed in polymer bottles of 10, 20, 30, 40, 50, 100, 200, 250, 300, 400, 450, 500 ml and 1 l.



Eriprim BT

0,05 g/g Tylosin tartrate + 0,175 g/g Sulfadimidine + 0,035 g/g
Trimethoprim + 300 000 IU/g Colistin sulphate
Oral powder for calves, lambs, poultry



COMPOSITION PER GRAM

Tylosin tartrate.....	0,05 g.
Sulfadimidine.....	0,175 g.
Trimethoprim.....	0,035 g.
Colistin sulphate.....	300 000 IU.

Filler: dextrose. Water-soluble white to light cream-colored powder.

INDICATIONS FOR USE

For the treatment of respiratory diseases (bronchitis, pneumonia, bronchopneumonia), gastrointestinal tract infections (colibacillosis, salmonellosis), urinary tract infections, mycoplasmosis, eimeriosis and other diseases of bacterial etiology associated with microorganisms susceptible to the combination of active substances in calves, lambs and poultry.

DOSAGE AND ADMINISTRATION

For oral administration via feed or water.

- Calves, lambs: 0,1 g per 1 kg body weight twice daily for 5-7 consecutive days. Group administration: 1,5 kg per 1 ton of feed for 5-7 consecutive days.

- Poultry (broilers, replacement chickens, turkeys, geese, ducks): 1,5 kg per 1 ton of feed or 1 kg per 1000 L of water for 3-5 consecutive days. Make sure the birds do not have access to non-medicated water during the period when the medicated water is given.

Medicated feed remains active for two months. Medicated drinking water should be replaced every 48 hours.

PHARMACOLOGICAL PROPERTIES

Eriprim BT is a combination of antibacterial substances, which act synergistically widening the antimicrobial spectrum. The powder exhibits antibacterial activity against Gram-negative bacteria (*Escherichia coli*, *Klebsiella* spp., *Salmonella* spp., *Proteus* spp., *Campylobacter* spp., *Pseudomonas aeruginosa*, *Bordetella* spp., *Pasteurella* spp., *Haemophilus* spp., *Actinobacillus* spp., *Brucella* spp.) and Gram-positive bacteria (*Staphylococcus* spp., *Streptococcus* spp., *Listeria monocytogenes*, *Erysipelothrix suis*), *Mycoplasma* spp., *Chlamydia* spp., *Eimeria* spp. Tylosin is a macrolide antibiotic and exerts its antibiotic activity by a similar mechanism to other macrolides i.e. binding to the 50S fraction of the ribosomes resulting in an inhibition of the synthesis of proteins. The combination of sulfadimidine and trimethoprim inhibits bacterial dihydrofolate reductase (DHFR), a critical enzyme that catalyzes the formation of tetrahydrofolic acid (THF), is highly effective due to inhibition of purine and pyrimidine nitrogenous bases syntheses preventing the bacteria from growing. Colistin is a polypeptide antibiotic belonging to the polymyxin class. It exerts a bactericidal action on susceptible bacterial strains by disruption of the bacterial cytoplasmic membrane leading to an alteration of cell permeability and then a leakage of intracellular materials.

Following oral administration, sulfadimidine and trimethoprim are rapidly absorbed and distributed to all tissues reaching peak blood concentrations after 2-3 hours. They remain within the therapeutic range for 12 hours. Colistin is poorly absorbed from the gastrointestinal tract and provides local antibacterial activity within the different sections of the gastrointestinal tract.

The product is eliminated via the urine and faeces.

CONTRAINDICATIONS

Do not use in case of known hypersensitivity to the active substances. If allergy reactions occur, treatment should be discontinued and antihistamine therapy (e.g. calcium compounds, sodium hydrogen carbonate) should be undertaken as appropriate.

Do not use in goats.

ADVERSE REACTIONS

No undesirable effects are to be expected when the prescribed dosage regimen is followed. Overdose longer than 7 days may result in dysbiosis, kidney damage, agranulocytosis.

DRUG INTERACTIONS

Do not use Eriprim BT concomitantly with PABA derivatives, sulfur compounds.

WITHDRAWAL PERIODS

Meat: 8 days

Eggs: Not authorised for use in birds producing eggs for human consumption.

STORAGE CONDITIONS AND SHELF LIFE

Store in the original package. Do not store above 30°C. Store in a dry place. Protect from light.

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

Do not use this veterinary product after the expiry date which is stated on the label.

Keep out of the reach and sight of children.

MARKETING PACKAGING

Eriprim BT is marketed in metallized polyethylene bags of 50, 100, 150, 200, 250, 500, 1000 g.



Vetacef 50

50 mg/ml Ceftiofur hydrochloride
Sterile suspension for intramuscular or subcutaneous injection
for cattle, sheep, goats, dogs, cats



COMPOSITION PER ML

Ceftiofur hydrochloride..... 50 mg.

Excipients (propylene glycol, polysorbate 80, 1-methyl-2-pyrrolidone, methylparaben, propylparaben), solvent (water for injection).

White to light yellow suspension. Any settlement should reconstitute on normal shaking.

INDICATIONS FOR USE

For the treatment of bacterial respiratory and gastrointestinal infections; septicemia, peritonitis, pyelonephritis, arthritis, wounds, postpartum infections, mastitis; interdigital necrobacillosis of cattle and sheep and other infections associated with bacteria sensitive to ceftiofur in cattle, sheep, goats, dogs and cats.

DOSAGE AND ADMINISTRATION

For intramuscular or subcutaneous injection given once daily for 3-5 consecutive days.

- Cattle: 1 ml per 50 kg body weight (1 mg of ceftiofur per 1 kg body weight), but not more than 15 ml per injection site.

- Young cattle, sheep, goats: 0,3 ml per 10 kg body weight (1,5 mg of ceftiofur per 1 kg body weight), but not more than 5 ml per injection site.

- Dogs, cats: 0,3 ml per 5 kg body weight (3 mg of ceftiofur per 1 kg body weight), but not more than 5 ml per injection site.

Shake well before use. If temperature is low, warm the bottle to 25°C - 30°C before injecting.

PHARMACOLOGICAL PROPERTIES

Ceftiofur, as an active ingredient in Vetacef 50, is a third-generation cephalosporin antibiotic with a broad spectrum of bactericidal action against both Gram-positive and Gram-negative bacteria including β -lactamase-producing strains, as well as some strains of anaerobes: *Escherichia coli*, *Pasteurella* (*Mannheimia*) *haemolytica*, *Pasteurella multocida*, *Haemophilus somnus*, *Haemophilus parasuis*, *Actinobacillus pleuropneumoniae*, *Salmonella choleraesuis*, *Salmonella typhimurium*, *Streptococcus suis*, *Streptococcus zooepidemicus*, *Streptococcus equi*, *Streptococcus agalactiae*, *Streptococcus dysgalactiae*, *Streptococcus bovis*, *Staphylococcus* spp., *Actinomyces pyogenes*, *Klebsiella* spp., *Citrobacter* spp., *Enterobacter* spp., *Proteus* spp., *Fusobacterium necrophorum*.

The bactericidal action is due to inhibition of transpeptidase and peptidoglycan synthesis - mucopeptide of cell wall, which prevents the cell wall from growing and leads to lysis of bacteria.

Following parenteral administration of therapeutic dose, maximum plasma concentrations are reached in 50-60 minutes and remain at therapeutic levels for an average of 24 hours. In endometrial tissue, maximum plasma concentrations are achieved in 3-4 hours. High concentrations are also detected in caruncles, lochia, biliary bladder, bones, joints and respiratory tract.

Following intramuscular administration, bioavailability is close to 100%. After administration, ceftiofur is quickly metabolised to desfuroylceftiofur, which has an equivalent anti-microbial activity. This active metabolite reversibly bounds to plasma proteins and accumulates at the site of infection. It remains active in the presence of necrotic tissue. The elimination occurred mainly via the urine (70 %) and faeces (30 %).

CONTRAINDICATIONS

Do not use in cases of known hypersensitivity to cephalosporins. In case of the occurrence of an allergic reaction, the treatment should be withdrawn and antihistamine and calcium therapy should be undertaken as appropriate.

ADVERSE REACTIONS

No undesirable effects are to be expected when the prescribed dosage regimen is followed.

Mild inflammatory reactions such as hardness at the injection site have been observed in some animals.

DRUG INTERACTIONS

This product must not be mixed with other veterinary medicinal products in the same syringe.

Concurrent administration of macrolides, tetracyclines and amphenicols reduces the antimicrobial properties of the product.

WITHDRAWAL PERIODS

Cattle, sheep, goats: Meat: 8 days.

Milk: zero hours.

STORAGE CONDITIONS AND SHELF LIFE

Store in the original package between 5°C to 25°C, protected from light and moisture.

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

Shelf life after first opening the container: 28 days.

Do not use this veterinary product after the expiry date which is stated on the label.

Keep out of the reach and sight of children.

MARKETING PACKAGING

Vetacef 50 is marketed in amber glass vials of 50, 100, 200, 250, 400, 450, 500 ml.



Fertadin

0,25 mg/ml Cloprostenol sodium
Sterile solution for intramuscular injection for cattle



COMPOSITION PER ML

Cloprostenol sodium 0,25 mg.

Excipients (citric acid, sodium hydroxide, phenol), solvent (water). Colorless to yellow solution free from particles.

INDICATIONS FOR USE

Treatment of reproductive disorders and regulation of reproductive performance in cows: functional ovarian disorders such as anoestrus due to persistent corpus luteum, luteal or follicular cysts, ovarian hypofunction (silent heat, anovulatory cycle), postpartum disorders of the uterus (e.g. uterine subinvolution, endometritis), synchronisation of oestrus cycles, induction of parturition or termination of pregnancy.

DOSAGE AND ADMINISTRATION

For intramuscular injection to cows.

Cattle (heifers, cows):

- Synchronization of estrus cycles in cows and heifers: 2 ml per animal twice with a 10-day interval. First dose is administered at any phase of the sexual cycle (to cows: between day 40 and 60 after calving). If visible heat is not detected, the second injection is given in 11 days following the first injection and then treated animals are inseminated (regardless of visible heat signs) on the 14th day (72-76 hours following the second injection) with repeated insemination on the 15th day.
- Persistent corpus luteum: 2 ml per animal, the insemination is to be performed when signs of heat are detected. If the heat does not appear, repeated administration follows on the 11th day and insemination - in 72-76 hours.
- Luteal cysts: 4 ml per animal as a single dose combined with equine chorionic gonadotropin (eCG) at a dose of 2,5-3,0 thou. MU;
- Presence of follicular cysts: a single dose of 4-5 thou. units of chorionic gonadotropin administered subcutaneously or 50 mcg surfagon administered intramuscularly for 3 days. In 10-12 days, animals without visible heat should be treated with 2 ml of Fertadin.
- Uterine subinvolution, endometritis: 2 ml of Fertadin twice at a 10-11-day interval combined with etiotropic, pathogenetic and symptomatic therapy.

PHARMACOLOGICAL PROPERTIES

Cloprostenol is a synthetic prostaglandin analogue structurally related to Prostaglandin F_{2α} (PG F_{2α}). Similar to natural prostaglandin, it has a luteolytic effect on the corpus luteum and persistent corpus luteum, normalizes the functional state of the ovaries, and promotes ovulation and estrus. It stimulates contraction of uterine smooth muscle.

Following intramuscular administration, it is well absorbed from the injection site. The peak blood concentrations are reached in 15-20 minutes. In an animal's body, cloprostenol is quickly metabolized and excreted mainly in urine as amino acids in 12-24 hours.

CONTRAINDICATIONS

Do not use in case of hypersensitivity to the active substance.

Do not administer to pregnant animals, unless the objective is to terminate a pregnancy, and to animals under reproductive age.

ADVERSE REACTIONS

No undesirable effects are to be expected when the prescribed dosage regimen is followed.

Hypersensitivity or overdose may cause increased respiratory and heart rates, increased body temperature and salivary secretion, increased defecation and urination, vomiting, which disappear without therapeutic intervention.

DRUG INTERACTIONS

None known.

WITHDRAWAL PERIODS

Milk: zero hours. Meat: 24 hours.

STORAGE CONDITIONS AND SHELF LIFE

Store in the original package between 5°C to 25°C, protected from light and moisture.

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

Once broached, use immediately.

Do not use this veterinary product after the expiry date which is stated on the label.

Keep out of the reach and sight of children.

MARKETING PACKAGING

Fertadin is marketed in glass vials of 10, 50, 100, 200, 250, 400, 450, 500 ml.



Uberol

Cream for topical application for animals



COMPOSITION

Medical or veterinary vaseline, stearic acid, Peru balsam, benzyl alcohol, preservative, purified water.

A thick oily homogeneous yellow to creamy color mass, with weak specific odor.

INDICATIONS FOR USE

For the treatment of udder skin of farm animals. Uberol prevents dryness, cracks, abrasions, erosion and other damage to the skin of the udder.

DOSAGE AND ADMINISTRATION

Apply 1-2 g of the cream on every teat and gently rub it in before and/or after milking.

PHARMACOLOGICAL PROPERTIES

Benzyl alcohol has antimicrobial, antifungal, keratoplastic and local anesthetic effect. Vaseline and stearic acid provide anti-inflammatory action, soften skin and protect udder skin from external adverse factors.

Cream contains no toxic ingredients, causes no irritation and can be used for a long time. No adverse effects have been established.

CONTRAINDICATIONS

None known.

ADVERSE REACTIONS

None known.

DRUG INTERACTIONS

None known.

WITHDRAWAL PERIOD

Meat/Milk: zero days/hours.

SPECIAL WARNINGS

Dispose of any unused product and empty containers in accordance with guidance from your local waste regulation authority.

USER WARNINGS

Wash hands after use.

STORAGE CONDITIONS AND SHELF LIFE

Store in the original package between 5°C to 25°C, protected from light and moisture.

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

Do not use this veterinary product after the expiry date which is stated on the label.

Keep out of the reach and sight of children.

MARKETING PACKAGING

Uberol is marketed in polymer jars of 0,05, 0,1, 0,2, 0,25, 0,4, 0,5, 0,6, 0,7, 0,8, 0,9, 1,0, 2,0 kg.



Heptran

Feed additive



for cattle, horses, sheep, goats, poultry, dogs, cats

COMPOSITION PER LITRE

L-carnitine	50 g.
Magnesium sulfate.....	200 g.
Sorbitol.....	220 g.
Cyanocobalamin.....	30 mg.
Calcium pantothenate.....	8 g.
Nicotinamide.....	20 g.

Excipients and forming substances up to 1 litre. Clear light yellow to a brown solution. GMO-free.

INDICATIONS FOR USE

For the prevention of metabolic disorders and support of the health of farm animals and poultry during convalescence or stress period. Heptran increases appetite and feed conversion, improves metabolism, growth performance and meat quality, supports proper hepatic and renal functions, prevents fatty liver syndrome.

- Stress conditions (transportation, vaccination, diet change, heatstroke, first days of life, weaning)
- Convalescence period
- Stimulation of growth, development and productive performance
- Improving the quality of meat in poultry farming

DESCRIPTION

Heptran is a combination of natural ingredients selected to stimulate energy metabolism and to optimize the overall performance of animals and poultry during critical periods of life.

L-carnitine is an amino acid, which is synthesized in the liver from methionine and lysine. L-carnitine regulates fatty acid metabolism. It is involved in the utilization of fatty acids (excessive deposition of fatty acids in the mitochondria can damage cells, especially cells of the liver, brain and myocardium). It removes the remaining fatty acids from the mitochondria, and then from the cells, and promotes their excretion through the kidneys. Carnitine indirectly stimulates the cells of the immune system by removing excess lipids, which have an immunosuppressive effect.

L-carnitine is also involved in energy metabolism because it is responsible for the transport of long-chain fatty acids into the mitochondria, which allows the body to use additional energy sources and increase energy status (energy metabolism of fatty acids occurs in the mitochondria through beta-oxidation; the mitochondrial membrane is permeable to short- and medium-chain fatty acids and impermeable to long-chain fatty acids), it also increases enzyme activity in the digestive glands and body weight.

Following oral administration, L-carnitine is fully absorbed with maximum serum levels being obtained in 3 hours. It remains within the therapeutic range for 9 hours. L-carnitine accumulates mainly in muscle tissue. It is slowly excreted in the urine and partially reabsorbed by the kidneys.

Sorbitol is an osmotically active ingredient involved in energy metabolism. It has a diuretic, detoxification, choleric, antispasmodic effect. Sorbitol is quickly absorbed, 80-90% of it is utilized in the liver as glycogen, 5% is deposited in the brain and skeletal muscle, 6-12% is excreted in the urine. Sorbitol is converted by the liver to fructose and then to glucose and glycogen in its metabolism. Partially sorbitol is used for emergency energy needs and the rest is deposited as glycogen.

Magnesium sulphate has anticonvulsant, antiarrhythmic, vasodilating, hypotensive, spasmolytic, weak sedative, choleric, tocolytic action. It is a source of magnesium. Magnesium is involved in muscular excitement and neurochemical transmission. It prevents penetration of Ca²⁺ through the presynaptic membrane and reduces acetylcholine level peripheral nervous system (PNS) and central nervous system (CNS). Magnesium stimulates intestinal motility and food absorption.

Nicotinamide stimulates the synthesis of nicotinamide adenine dinucleotide (NAD) and nicotinamide adenine dinucleotide phosphate (NADP), which are cofactors of many enzymes. Nicotinamide as NAD and NADP is involved in oxidation-reduction reactions providing the normal metabolic pathways. It is an important link in a series of reactions associated with the metabolism of lipids, proteins, amino acids and purines, tissue respiration, glycogenolysis, biosynthesis processes; it also normalizes lipoprotein blood level.

Calcium pantothenate is converted to pantothenic acid in the body, which is a constituent of coenzyme A, which in turn is involved in the metabolism of lipids, carbohydrates, proteins. It participates in the oxidation and biosynthesis of fatty acids, acetylcholine, steroid hormones and mucopolysaccharides.

Cyanocobalamin is a growth factor. It is necessary for normal blood formation and erythrocyte maturation, synthesis of labile methyl groups, methionine, choline, and nucleic acids. Vitamin B₁₂ has a strong lipotropic effect, prevents fatty liver infiltration. It is required for the synthesis and accumulation of proteins, provides an anabolic effect and stimulates the defense mechanism of the body. It is involved in protein synthesis and accumulation. It provides also an anabolic effect. Cyanocobalamin strengthens the immune system due to increased phagocytic activity of leukocytes and activation of reticuloendothelial system function.

DOSAGE AND ADMINISTRATION

Solution for use in drinking water. Heptran may also be poured over feed rations.

The duration of treatment may be changed depending on the veterinarian's discretion and animal's health condition.

Prolonged use, as well as repeated treatment, are not restricted.

The prepared solution should be refreshed every 48 hours.

Target species	Groups of animals	Maintenance dose (stress)	Increased daily dose (convalescence, intensive growth and productivity)
Cattle, horses	Adult	20 ml per animal daily for 5-7 days	50 ml per animal daily for 5 days
	Young	15 ml per animal daily 2-3 times a week	20 ml per animal daily for 5 days
Sheep, goats	Adult	3 ml per animal daily for 5-7 days	10 ml per animal daily for 5 days
	Young	1 ml per animal daily for 5-7 days	5 ml per animal daily for 5 days
Dogs, cats	General recommendations	0,1-0,2 ml per 1 kg body weight daily for 5-7 days	0,3-0,4 ml per 1 kg body weight daily for 7 days
Poultry (broiler chicks, laying hens, turkeys, geese, ducks, ornamental birds)	General recommendations	0,5-1,0 ml per 1 litre of drinking water daily for 7 days	1-2 ml per 1 litre of drinking water daily for 7 days

Poultry farming:

Period	Dosage
First days of life	1-2 ml/L of drinking water for 2-5 days (depending on the state of health of chickens)
During illness	1-2 ml/L of drinking water for 2-5 days
Diet change	1-2 ml/L of drinking water for the period of feed change and adaptation to a new feed
Beginning of egg-laying	1-2 ml/L of drinking water for 2 days every 3-4 weeks up to egg laying-peak
Heatstroke	2-4 ml/L of drinking water for 1-4 hours in the morning and 1-2 ml/L of drinking water for 8-10 hours in the evening
Other stress conditions	1-2 ml/L of drinking water for 1-3 days during and after stress

Dosage to improve the quality of poultry meat (reducing fat infiltration), average daily gain, feed conversion rate:

Broilers	2 ml/L of drinking water for 5 days during the change in diet, then once a week up to slaughter
Laying hens (egg-laying start)	1-2 ml/L of drinking water for 2 days every 3-4 weeks up to the egg-laying peak
Laying hens (egg-laying peak)	2 ml/L of drinking water for 2 days every 2-3 weeks
Fattening geese, ducks	4 ml per bird a day for the first 15 days of fattening

CONTRAINDICATIONS

None known.

ADVERSE REACTIONS

None known.

DRUG INTERACTIONS

Concurrent administration with tetracyclines is not recommended.

Simultaneous administration with vaccines given via drinking water is not allowed.

WITHDRAWAL PERIOD

Meat/Eggs/Milk: Zero days/hours.

STORAGE CONDITIONS AND SHELF LIFE

Store in the original package between 0°C to 35°C, protected from light and moisture.

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

Shelf life after opening the immediate packaging: 30 days at the temperature between 3°C - 5°C (in a refrigerator).

Do not use this veterinary product after the expiry date, which is stated on the label.

Keep out of the sight and reach of children.

MARKETING PACKAGING

Heptran is marketed in polymer cans of 10 L.



Trivit BT

30 000 IU/ml Vitamin A + 40 000 IU/ml Vitamin D₃ + 20 mg/ml

Vitamin E

Sterile solution for intramuscular, subcutaneous, oral administration

for cattle, horses, sheep, goats, cats, poultry



COMPOSITION PER ML

Vitamin A..... 30 000 IU.

Vitamin D₃..... 40 000 IU.

Vitamin E..... 20 mg.

Excipient (benzyl alcohol), solvent (sunflower oil). Clear light yellow to brown solution free from visible particles.

INDICATIONS FOR USE

For the prevention and treatment of hypovitaminosis and avitaminosis A, D₃, E and associated diseases (rickets, xerophthalmia, osteomalacia, tetany, toxic liver dystrophy, dermatitis, non-healing wounds and ulcers, bone fractures) in cattle, horses, sheep, goats, dogs, cats and poultry.

Trivit BT is recommended for the treatment of infectious, noninfectious and invasive diseases, during recovery and stress periods, in case of decreased productivity and eggshell fragility. Trivit BT is used to replenish insufficient feeding of animals, improve reproductive performance and growth of young animals and as a supportive treatment during prenatal and lactation period. During Trivit BT administration, dietary intake of calcium, phosphorus, magnesium and microelements should be balanced.

DOSAGE AND ADMINISTRATION

For intramuscular, subcutaneous injection and oral administration to cattle, horses, sheep, goats, dogs, cats and poultry at the following dose rates (see Table No. 1.).

The preventive dose is given parenterally once in two weeks and the treatment dose is given once a week within a month. Repeat in a month if necessary.

Trivit BT is administered to pregnant sows 1,5-2 months before farrowing and to cows - 3-4 months before calving. By oral route of administration, Trivit BT should be mixed with feed for 2-3 weeks.

Table No. 1.

Animal species	Route of administration	
	Intramuscularly or subcutaneously, ml per animal	Orally, drops
cattle	2,0 - 4,0	2-5
horses	2,0 - 3,0	2-4
calves, foals	1,0 - 2,5	1-3
sheep, goats	1,0 - 1,5	1-2
lambs	0,5	1
dogs	0,3 - 1,5	1-2
cats	0,2 - 0,5	1
geese, turkeys	0,4	1
hens	0,2	1 per 3 birds

PHARMACOLOGICAL PROPERTIES

Trivit BT is a complex product with a physiologically balanced content of A, D₃, E vitamins, which act synergistically to normalize metabolism, prevent hypo- and avitaminosis, increase resistance to infections and promote the growth and reproductive performance of animals.

Vitamin A participates in redox processes, regeneration of epithelial tissues and mucous membranes, placental, embryonic and skeletal development. It increases resistance to infections and phagocytic ability of leukocytes and other nonspecific immunity factors.

Vitamin D₃ is important for the regulation of phosphorus and calcium blood levels, improves the absorption and reabsorption of phosphorus by renal tubules and incorporation of calcium into bone tissue; it regulates functions of adrenal glands, hypophysis, parathyroid and thyroid glands, promotes immune response and normal blood coagulation.

Vitamin E is an antioxidant that reduces inflammatory processes (by inhibiting prostaglandin and leukotriene synthesis) and promotes recovery. It prevents the dystrophy of skeletal muscles and heart muscle and plays a role in germ cells and fetus maturation.

Once absorbed into the body, compounds of Trivit BT are distributed to tissues of the body remaining for a longer period within the therapeutic range.

CONTRAINDICATIONS

Do not use in case of hypersensitivity to the active substances.

ADVERSE REACTIONS

No undesirable effects are to be expected when the prescribed dosage regimen is followed. If allergy reactions occur, treatment should be discontinued and antihistamine and calcium compounds therapy should be undertaken as appropriate.

DRUG INTERACTIONS

Not known.

WITHDRAWAL PERIODS

Meat/Eggs/Milk: zero days/hours.

STORAGE CONDITIONS AND SHELF LIFE

Store in the original package between 5°C to 25°C, protected from light and moisture.

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

Shelf life after first opening the container: 10 days.

Do not use this veterinary product after the expiry date which is stated on the label.

Keep out of the reach and sight of children.

MARKETING PACKAGING

Trivit BT is marketed in glass vials of 50, 100, 200, 250, 400, 450, 500 ml.



Amprolium 25% BT

0,25 g/g Amprolium hydrochloride
Oral powder for poultry, calves, sheep



COMPOSITION PER GRAM:

Amprolium hydrochloride..... 0,25 g.

White to light brown powder.

INDICATIONS FOR USE

For the prevention and treatment of coccidiosis in chickens (broiler pullets, breeders, replacement chickens), calves and sheep.

DOSAGE AND ADMINISTRATION

For oral administration via feed or water:

- Broilers:

Preventive dose: 480 g per 1000 litres of drinking water or 1000 kg of feed given to chickens starting from the 3-5 day of life.

Curative dose: 960 g per 1000 litres of drinking water or 1000 kg of feed for 7 - 10 days.

- Replacement chickens and breeders:

Preventive dose: 480 g per 1000 kg of feed given to chickens starting from the 3-5 day of life up to 16 weeks of age.

Curative dose: 960 g per 1000 kg of feed for 7 - 10 days.

In drinking water use:

Preventive dose: 240 g per 500 litres of drinking water given to chickens starting from the 3-5 day of life up to 21st day of life.

Curative dose: 480 g per 500 litres of drinking water for 5-7 days.

No other source of drinking water should be available during the medication period.

- Calves, sheep:

Curative dose: 0,04 g per kg body weight once daily for 5 days. In severe outbreak the dose can be doubled.

Preventive dose for calves: 0,028 g per kg body weight for 21 days.

Preventive dose for sheep: 0,028 g per kg body weight for 5 days.

Amprolium 25% BT may be given as a drench in milk replacers or in drinking water at a dose of 28 g per 300 ml of liquid feed. It also may be administered as mixture with compound feed at a dose of 28 g per 1 kg of compound feed and given based on 5 g of mixture per kg body weight for 4-5 days.

Amprolium 25% BT exhibits high water solubility.

PHARMACOLOGICAL PROPERTIES

Amprolium is active against all Eimeria species, which affected poultry, calves and sheep, including Eimeria tenella, Eimeria necatrix, Eimeria maxima, Eimeria brunetti, Eimeria praecox, Eimeria mitis, Eimeria zurnii, Eimeria ninakohlykimovi, Eimeria bovis.

Amprolium is an anticoccidial agent that acts as competitive inhibitor of thiamine in the parasite metabolism, and interferes with the metabolism of glucides necessary for coccidian multiplication and survival on later stages of development (schizonts and second-generation merozoites).

Following the oral administration, Amprolium is almost not absorbed from the gastrointestinal tract and exhibits its activity on mucous and submucosal tissue.

It is excreted unchanged mainly through faeces (up to 97%). In laying hens, a small amount of amprolium is excreted in eggs.

CONTRAINDICATIONS

Do not use in replacement chickens older than 16 weeks of age.

Do not use in layers producing eggs for human consumption.

ADVERSE REACTIONS

None known.

DRUG INTERACTIONS

Concurrent administration of other coccidiostats is not allowed.

WITHDRAWAL PERIODS

Meat: 5 days.

Eggs: Not authorised for use in laying birds producing eggs for human consumption.

STORAGE CONDITIONS AND SHELF LIFE

Store in the original package below 30°C, protected from light and moisture.

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

Do not use this veterinary product after the expiry date which is stated on the label.

Keep out of the reach and sight of children.

MARKETING PACKAGING

Amprolium 25% BT is marketed in metallized polyethylene bags of 50, 100, 150, 200, 250, 500, 1000 g.



Coccitox 2,5%

25 mg/ml Toltrazuril

Solution for use in drinking water for poultry, fur-bearing animals



COMPOSITION PER ML

Toltrazuril25 mg.

Excipients (benzyl alcohol, polyethylene glycol 400, triethanolamine), solvent (propylene glycol). Clear colorless to a light brown solution.

INDICATIONS FOR USE

For the treatment of coccidiosis in poultry (broilers, replacement pullets, turkey-poults, goslings, ducklings) and fur-bearing animals caused by *Eimeria* species.

Treatment should be initiated when a critical level of *Eimeria* presence (10-20 thous./g) in chicken coop litter is reached as well as when the clinical signs of disease occur.

DOSAGE AND ADMINISTRATION

Solution for use in drinking water.

- Poultry: 1 litre per 1000 litres of drinking water given through the water system for 48 hours, which is equivalent to 28 ml (0,7 g Toltrazuril) per 100 kg body weight or 3 litres per 1000 litres of drinking water administered for 2 consecutive days with an 8 hour treatment period on both days.

Repeat treatment after 5 days if infection is severe.

- Fur-bearing animals: 5 litres per 1000 litres of drinking water administered for 2 consecutive days twice with 5-day intervals.

Medicated drinking water remains active for 48 hours. In the case of precipitation, the solution should be thoroughly stirred before use.

PHARMACOLOGICAL PROPERTIES

Toltrazuril is a synthetic substance that belongs to the triazintrion group with a high degree of safety. It is active against all *Eimeria* species, which affected poultry (*Eimeria tenella*, *Eimeria necatrix*, *Eimeria brunetti*, *Eimeria acervulina*, *Eimeria maxima*, *Eimeria praecox*, *Eimeria hageni*, *Eimeria mivati*) and fur-bearing animals (*Eimeria vilson*, *Eimeria furonis*, *Isospora eversanii*, *Isospora laidlowi*), including species resistant to other coccidiostats. Toltrazuril has a coccidic effect on all intracellular stages of coccidia development.

Toltrazuril inhibits nuclear division in schizonts and microgamonts due to a decrease in the activity of respiratory chain enzymes involved in pyrimidine synthesis.

The product acts without impairing the ability to acquire natural immunity against coccidia.

After oral administration, it is slowly absorbed from the gastrointestinal tract and exhibits coccidic action in the mucosa and submucosa. The maximum plasma concentration is achieved in 24 hours. Bioavailability is 70%. The product is slowly excreted (the half-life is approximately 76 hours) unchanged and as metabolites (sulfones) in faeces.

CONTRAINDICATIONS

Do not use in cases of known hypersensitivity to the active substance.

Do not use in laying hens producing eggs for human consumption.

ADVERSE REACTIONS

No undesirable effects are to be expected when the prescribed dosage regimen is followed.

DRUG INTERACTIONS

None known.

WITHDRAWAL PERIODS

Chickens (meat): 14 days.

Turkeys, ducks (meat): 16 days.

Eggs: Not authorised for use in laying birds producing eggs for human consumption.

STORAGE CONDITIONS AND SHELF LIFE

Store in the original package between 5°C to 25°C, protected from light and moisture.

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

Do not use this veterinary product after the expiry date which is stated on the label.

Keep out of the reach and sight of children.

MARKETING PACKAGING

Coccitox 2,5% is marketed in polymer bottles 20, 50, 100, 200, 250, 400, 450 and 500 ml and 1 L.



Formilac

8/16g /100 ml Formic acid/ Lactic acid
Oral solution for cattle, sheep, goats, poultry



COMPOSITION PER 100 ML

Formic acid.....	8 g.
Lactic acid.....	16 g.

Solvent (purified water). Light yellow to yellow solution.

RECOMMENDATIONS FOR USE

For the prevention of gastrointestinal diseases in calves and poultry.
For the treatment of proventricular atony and hypotension in cattle, sheep, goats.

DOSAGE AND ADMINISTRATION

For oral administration via milk, colostrum, water.

- Calves of colostrum/milk feeding period: 10-15 ml per 1 litre of milk or 5-10 ml per 1 litre of colostrum given each feeding.
- Cattle, sheep, goats with the pathology of the rumen: 10-15 ml per 100 kg body weight. Before use, the product is diluted with water in a ratio of 1:2 or 1:3 and administered orally using a rubber bottle.
- Poultry: 3 litres per 1000 litres of drinking water to reduce bacterial contamination.

PHARMACOLOGICAL PROPERTIES

Organic acids included in Formilac composition inhibit the development of pathogenic microorganisms, reduce bacterial contamination, accelerate the feed fermentation and prevent the formation of casein clots in calves.

Following oral administration, lactic acid exhibits antifermentative, antiseptic and irritating action. It promotes relaxation of the ventricles and intestinal sphincters. It suppresses the growth of conditionally pathogenic and putrefactive microflora in the gastrointestinal tract, which leads to a decrease in the formation of toxic breakdown products in the body. Lactic acid improves metabolism and stimulates the activity of the digestive glands.

Formic acid provides bacteriostatic action. It is highly effective against *Escherichia coli*, *Salmonella* spp., *Campylobacter* spp., etc. It ameliorates the conditions of the gastrointestinal tract through the reduction of pH, creating stability of the microbial population and stimulating the growth of beneficial lactic acid bacteria and being bacteriostatic to pathogenic bacteria.

Ingredients of the product boost the activity of secretion and promote digestion. In an acidified environment, the production of enzymes increases two to three times, thereby improving the absorption of nutrients. The combined use of acids is the most beneficial since the effect of one acid is enhanced by the positive effect of the other.

The acids included in the composition are natural metabolites of metabolism and are completely safe. Following absorption from the gastrointestinal tract, acids are completely used by the body as an additional energy source.

CONTRAINDICATIONS

None known.

ADVERSE REACTIONS

No undesirable effects are to be expected when the prescribed dosage regimen is followed.

DRUG INTERACTIONS

None known.

WITHDRAWAL PERIODS

Meat/Eggs/Milk: Zero days/hours.

STORAGE CONDITIONS AND SHELF LIFE

Store in the original package between 0°C to 35°C, protected from light and moisture.

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

Do not use this veterinary product after the expiry date which is stated on the label.

Keep out of the reach and sight of children.

MARKETING PACKAGING

Formilac is marketed in polymer bottles of 100, 200, 400, 450, 500 ml and 1, 5, 10, 20 L.



Iotoin

1 mg/ml Povidone-iodine
Solution for oral, external, intrauterine administration for
animals and poultry



COMPOSITION PER ML

Active iodine as a polymer complex povidone-iodine.....1 mg.

Excipients (allantoin, glycerin, propylene glycol, potassium iodide, sodium laureth sulphate 70%, citric acid, sodium hydrogen phosphate, benzyl alcohol), solvent (water). Light brown to dark brown solution. A small amount of sediment may form during storage.

INDICATIONS FOR USE

For the monotherapy or complex treatment of gastrointestinal, uterine and oral cavity infections, skin and subcutaneous diseases, surgical field management. Iotoin is also intended for disinfection of incubator rooms, hatching eggs and sanitation of cattle-breeding premises in presence of animals (birds).

DOSAGE AND ADMINISTRATION

Skin infection and the surgical field management:

a) Iotoin can be applied (or sprayed) directly to wound sites. May be covered with a bandage if necessary. It is recommended to use a warm (37-38 °C) solution. The area (e.g. wounds and fistulas) should be fully covered with the product, but pooling should be avoided. The treatment is carried out one time a day for 7-10 days.

To treat a surgical field and injection site, the medication should be applied twice.

- Cattle:

b) In the complex treatment of acute or chronic mastitis, apply external on every affected quarter after each milking for 7-14 days. To prevent mastitis, Iotoin is applied by dipping of udder and tits in the container (cup) with the solution right after milking.

c) For the treatment of endometritis, Iotoin is administered by an intrauterine route at a dose of 100-150 ml once a day for 3-5 days. To prevent endometritis (in case of complicated labour, retained placenta, etc.) Iotoin is introduced into the uterine cavity at a dose of 100-150 ml once on the next day after calving.

d) For the treatment of intestinal infections in calves, Iotoin is administered full-strength at a dose of 1 ml per 1 kg body weight or mixed with a small amount of colostrum, milk or water twice a day for 1-2 days.

To prevent dyspepsia in calves, Iotoin is administered with colostrum or milk at a dose of 30-50 ml twice a day on the 2nd, 3rd, 4th and 7th, 8th, 9th days after birth. To treat dyspepsia in calves, Iotoin is administered at a dose of 60-100 ml in a mixture with colostrum, milk, boiled water twice a day for 10-15 days. Do not store the prepared solution.

- Poultry:

e) To treat or prevent intestinal diseases in poultry and for the sanitation of the water supply system of a poultry house, Iotoin is administered at a dose of 1 ml per kg body weight or 8-12 ml per litre of water supplied through the water system for 4-6 days.

- Sanitation:

f) Before placing in the incubator, hatching eggs are treated by dipping in the container with Iotoin or by spraying on eggshells. Hatching systems should be sanitized before incubation by spraying in the ratio 1 L per 30 m² of inner surface. Exposure duration is 60 minutes.

g) In case of respiratory diseases, sanitation of the air in the presence of birds and calves is carried out by the aerosol method in the ratio of 3 ml per m³ (in poultry houses) and 5 ml per m³ (in livestock houses) 3-5 times at 24-48-hour intervals. Exposure duration is 60 minutes. If necessary, the course of disinfection can be repeated.

For prophylactic air disinfection in the presence of animals (birds), Iotoin is first dissolved in warm water (1:1) and then applied at a dose of 3-4 ml per m³ of air 3-5 times at interval of 3-4 days between treatments. Exposure duration is 30 minutes.

It is recommended to use fogging equipment. 40% of the glucose solution can be used to stabilize the aerosol particles based on 10% of the total volume. After disinfection, washing of the equipment surfaces is not required.

PHARMACOLOGICAL PROPERTIES

Iotoin has antiseptic, disinfectant, desensitizing, anti-inflammatory and regenerative properties.

Povidone-iodine, as an active ingredient in Iotoin, is an iodophor solution containing a complex of iodine and polyvinylpyrrolidone (PVP). This agent exhibits a broad range of bactericidal activity against Gram-positive and Gram-negative bacteria (*Streptococcus* spp. (including *Streptococcus mutans*, *Streptococcus sanguinis*), *Staphylococcus* spp. (including *Staphylococcus aureus*), *Escherichia coli*, *Pseudomonas aeruginosa*, *Pasteurella multocida*, *Proteus* spp., *Salmonella enteritidis*, *Clostridium* spp., etc.), fungi (*Candida albicans*, *Aspergillus fumigatus*, *Penicillium granulum*, *Fusarium graminearum*, *Trichophyton mentagrophytes*, *Microsporum canis*, *Malassezia pachydermalis*, etc.). It acts bacteriostatically against mycoplasma.

Slow release of iodine from the PVP complex minimizes irritating and cauterizing action on the tissue. The mechanism of action is associated with the prolonged release of atomic iodine and iodide ions, which interact with the amino groups of transmembrane proteins of the bacterial wall and enzymes, forming iodamines. This leads to loss of protein quaternary structure and its structural, transport and catalytic function.

Allantoin, glycerin, and propylene glycol soften the skin and decrease inflammation, itching and flaking, provide keratolytic, regenerative and antitoxic action. Iotoin forms a semipermeable hydrophilic protective barrier on wound surfaces.

CONTRAINDICATIONS

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

Medication should be discontinued if hypersensitivity reaction, hyperthyroidism, suspected overdose, iodism symptoms appear. In such an event, calcium medication, starch, sodium thiosulfate treatment should be undertaken as appropriate.

ADVERSE REACTIONS

Iotoin does not typically cause adverse reactions with proper use.

DRUG INTERACTIONS

Iotoin decomposes by interacting with alkalis, essential oils and solutions of ammonia.

Concurrent administration of other antibiotics (penicillins, tetracyclines, macrolides) reduces the antimicrobial activity of Iotoin.

WITHDRAWAL PERIODS

Meat/Eggs/Milk: Zero days/hours.

STORAGE CONDITIONS AND SHELF LIFE

Store in the original package between 5°C to 25°C, protected from light and moisture.

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

Shelf life after first opening the immediate packaging: 30 days.

Do not use this veterinary product after the expiry date which is stated on the label.

Keep out of the reach and sight of children.

MARKETING PACKAGING

Iotoin is marketed in polymer bottles of 10, 20, 30, 40, 50, 100, 200, 250, 300, 400, 450, 500 ml or 1, 2, 3, 4, 5, 10 L.



Beleka
Care for Animals

