INSTRUCTIONS
for Use of the Veterinary Drug DOXY 500

1. General Information

1.1. The veterinary drug DOXY 500

International non-proprietary name of active pharmaceutical substance: doxycycline.

Formulation: Powder for oral administration.

1.2. The veterinary drug DOXY 500 (hereafter referred to as the drug) is a powder, ranging from light yellow to brown in color. In 1.0 g of the drug, the active substance contains 500 mg of doxycycline hyclate, along with excipients: dextrose and citric acid.

1.3. The drug is packaged in double bags made of metallized polymer film with net weights of 100 g and 1000 g.

1.4. The drug should be stored with caution (List B) in a dry, light-protected place at temperatures ranging from 0°C to +30°C. Keep in places out of reach of children.

1.5. Shelf life: 3 (three) years from the date of manufacture. Do not use after the expiration date.

2. Pharmacological Properties

2.1. Doxycycline, the active ingredient in the drug, belongs to the semi-synthetic antibiotics of the tetracycline group and has a broad spectrum of antibacterial activity. It is effective against most Gram-negative (*Salmonella spp.*, *Proteus spp.*, *Campylobacter spp.*, *Pseudomonas aeruginosa*, *Pasteurella multocida*, *Bordetella bronchiseptica*, *Mannheimia haemolytica*, *Haemophilus parasuis*, *Actinobacillus sp.*) and Gram-positive microorganisms (*Staphylococcus spp.*, *Streptococcus spp.*, *Listeria monocytogenes*, *Corynebacterium spp.*, *Erysipelothrix rhusiopathiae*, *Clostridium spp.*), mycoplasmas, chlamydias, rickettsiae, spirochetes, treponemes, and other pathogens sensitive to doxycycline.

2.2. The drug acts bacteriostatically; it penetrates the cell and blocks protein synthesis in the microbial cell at the ribosomal level, which leads to the death of the microorganism.

2.3. The drug is well absorbed from the gastrointestinal tract, binds to blood proteins, and penetrates all organs and tissues. It maintains a therapeutic concentration for 18–24 hours.

The drug is excreted slowly from the body, predominantly through the urine, with a lesser amount in the feces.

3. Directions for Use

3.1. The drug is prescribed to pigs, calves, and poultry for therapeutic purposes in primary and secondary bacterial infections, caused by pathogens sensitive to doxycycline, including acute and chronic infections of the respiratory system, urogenital system, and gastrointestinal tract.

3.2. The drug is administered orally, either individually or in a group, in the following dosages:

- For calves: 5 mg of doxycycline per 1 kg body weight, administered twice daily with drinking water or milk replacer for 3–4 days. The medicinal solution should be prepared immediately before use.
- For pigs: 12.5 mg of doxycycline per 1 kg body weight with drinking water. The medicinal solution should be prepared daily during the treatment period. Treatment lasts for 3–4 days.
- For poultry: 10–20 mg of doxycycline per 1 kg body weight with drinking water. The medicinal solution should be prepared daily during the treatment period. Treatment lasts for 3–4 days.

In group administration, pigs and poultry should receive only the water containing the medicinal product.

3.3. No special effects have been established for the first administration or discontinuation of the drug.

3.4. It is important to avoid missing a dose of the drug, as this may reduce its therapeutic effectiveness. If a dose is missed, resume treatment as soon as possible with the same dosage and schedule.

3.5. The drug should not be used in animals with hypersensitivity to doxycycline. If hypersensitivity or side effects occur, discontinue use and provide symptomatic treatment.

3.6. Overdose in calves may result in symptoms of poisoning, characterized by impaired respiratory and cardiovascular functions.

3.7. The drug is prohibited for use in other animal species. It is also contraindicated in animals with severe liver and kidney dysfunctions, immediately before or after vaccination. The use of the drug is prohibited in pregnant animals during the second half of pregnancy, laying hens during egg production, and cows whose milk is used for human consumption.

3.8. The effectiveness of the drug is reduced when used in combination with antibiotics that interfere with cell wall synthesis (penicillins, cephalosporins), quinolones, and drugs containing aluminum, magnesium, calcium, or iron. Prolonged use may lead to drug accumulation.

3.9. Animals and poultry may be slaughtered for meat no earlier than 20 days after the last administration of the drug. In the case of forced slaughter before the specified period, the meat may be used to feed carnivorous animals.

4. Precautionary Measures

4.1. When working with the drug, general hygiene and safety rules should be observed.

4.2. If the drug or its components come into contact with the skin or mucous membranes, wash them off with water.

5. Claims Procedure

5.1. If complications arise after the use of the drug, its use should be discontinued, and the consumer should contact the state veterinary institution in their area. Veterinary specialists will investigate the compliance with the application rules in accordance with the instructions. If the negative impact of the drug on the animal’s body is confirmed, veterinary specialists will take samples of the drug in unopened packaging in the required amount, from the batch that caused the complication, for laboratory testing. A sampling act will be written and sent to the State Institution "Belarusian State Veterinary Center" for confirmation of compliance with regulatory documents. The address is: Republic of Belarus, 220005, Minsk, Krasnaya St. 19A, Tel.: 8-017-290-42-75.

6. Manufacturer Information

6.1. Production Cooperative "Biogel".

Legal address: Republic of Belarus, 220035, Minsk, Timiryazev St., 65, office 313.

Production facility address: Republic of Belarus, 222680, Minsk region, Stolbtsovsky district, Derevno village.

Manufactured by order of the Private Production and Trade Unitary Enterprise "Letyal" Republic of Belarus, 220075, Minsk, Engineer St., 1e.

Instruction for use developed by PC "Biogel" (L.E. Yanushevskaya) and PE "Letyal" (A.N. Bezbrodkin).