

## **Biofenicol 500 Aqua**

### **Florfenicol**

### **Dosage form**

Oral powder for veterinary use

### **Pharmacotherapeutic group**

Antibacterial agent for systemic use, florfenicol group antibiotic

**ATCvet code:** QJ01BA90

### **Target species**

Domestic poultry (broilers, ducks, geese), pigs, fish

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### **Composition**

1 g of powder contains:

- **Active substance:** Florfenicol – 500 mg
- **Excipients:** Lactose – 500 mg

### **Description**

White or slightly yellowish powder.

### **Presentation**

500 g powder in a white polyethylene container.

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### **Pharmacological properties**

Florfenicol is a synthetic antibiotic and a derivative of thiamphenicol monohydrate. Compared to chloramphenicol, it has a broader antibacterial spectrum. Unlike chloramphenicol, it contains a p-methylsulfonyl group instead of a p-nitro group.

Florfenicol is highly active against Gram-positive bacteria (*Corynebacterium pyogenes*, *Streptococcus* spp., *Staphylococcus* spp., *Clostridium* spp.) and Gram-negative bacteria (*E. coli*, *Salmonella* spp., *Pasteurella haemolytica*, *P. multocida*, *Haemophilus somnus*, *Actinobacillus pleuropneumoniae*).

Its bacteriostatic and bactericidal action is based on inhibition of protein synthesis in bacterial ribosomes. High efficacy is associated with blocking bacterial enzymatic acetylation by fluorine substitution at the 3rd carbon hydroxyl group.

Florfenicol is rapidly and well absorbed from the gastrointestinal tract and distributed to all organs and tissues. At 20 mg/kg, therapeutic concentration persists for 24 hours.

Excretion:

- 97% via urine
  - Remaining via feces
- In urine:
- 52% unchanged
  - 7.5% as florfenicol
  - 25% as oxamic acid
- These metabolites retain antibacterial activity.
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## Indications

Used in poultry (broilers, ducks, geese) and pigs for prevention and treatment of gastrointestinal and respiratory infections (including colisepticemia and colibacillosis) caused by florfenicol-sensitive microorganisms (*Actinobacillus* spp., *Pasteurella* spp., *Salmonella* spp., *Streptococcus* spp.).

Also used in freshwater, brackish water and marine fish (trout, salmon, carp, bream, sea bass) for treatment of infectious diseases including:

- Furunculosis (*Aeromonas salmonicida*)
- Vibriosis (*Vibrio anguillarum*)
- Yersiniosis (*Yersinia ruckeri*)
- Bacterial hemorrhagic septicemia (*Aeromonas hydrophila*, *Pseudomonas* spp.)
- Columnaris disease (*Flexibacter columnaris*)
- Streptococcal infections
- Winter disease (*Pseudomonas anguilliseptica*)
- Edwardsiellosis (*Edwardsiella ictaluri*, *Edwardsiella tarda*)

- Pasteurellosis (*Photobacterium damsela* subsp. *piscicida*)
  - Marine flavobacteriosis (*Tenacibaculum maritimum*)
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## **Dosage and administration**

### **Poultry**

Pharmacological dose: 20 mg/kg body weight orally in drinking water for 3–5 days

Practical dose: 100 g / 400 L drinking water for 3–5 days

### **Pigs**

Pharmacological dose: 5–10 mg/kg body weight for 5–7 days

Practical dose: 1 g / 40–80 kg body weight

### **Fish**

Pharmacological dose: 10 mg/kg body weight with feed for 10 days

Practical dose: 0.02 g/kg body weight

Only medicated water or feed must be used during treatment. Prepare fresh daily.

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## **Contraindications**

Do not use in:

- Animals with liver, kidney or hematopoietic disorders
  - Animals hypersensitive to florfenicol
  - Pregnancy
  - In combination with thiamphenicol, chloramphenicol, penicillins, cephalosporins, fluoroquinolones, sulfonamides
  - Fish at water temperatures below 5°C
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## **Side effects**

No side effects observed at recommended doses.

Possible temporary reduction of feed/water intake and mild diarrhea.

In pigs: possible diarrhea, perianal erythema/edema, rectal prolapse (transient).

Incompatible with  $Mg^{2+}$ ,  $Al^{3+}$ ,  $Ca^{2+}$  containing products.

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### **Withdrawal period**

- Poultry meat and eggs: 6 days
  - Pig meat: 14 days
  - Fish:
    - 16 days (water 5–10°C)
    - 8 days (>10°C)
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### **Storage**

Store in a dry place protected from light at 15–25°C.

Shelf life: 2 years

Manufacturer: LLC “Biotecs”, Georgia