

**AMPICOL<sup>®</sup>**  
**Water-soluble powder for oral administration**

**Description**

White water-soluble powder.

**Composition**

1 ml of the drug contains:

*active ingredients*: colistin sulfate – 1 200 000 IU; amoxicillin trihydrate – 200 mg;

*excipient* - glucose.

**Pharmacological properties**

*ATC vet QJ01*. Antibacterials for systemic use.

The composition of the drug includes combination of amoxicillin and colistin, which has a synergistic antimicrobial effect.

*Colistin* is an antibiotic of the polymyxin group, which demonstrates an effective bactericidal activity against gram-negative microorganisms (*E. coli*, *Salmonella spp.*, *Pasteurella spp.*, *Haemophilus spp.*, *Bordetella spp.*). The mechanism of action of colistin consists in violation of integrity of bacterium cytoplasmic membrane. Antibiotic interacts with phospholipids and penetrates inside, destroying the cell membrane structure, permeability of which changes soon after interaction with the drug. Except for antibacterial effect, colistin binds phospholipid A and neutralizes biological effect of bacterial endotoxin.

*Amoxicillin* is a broad-spectrum semi-synthetic antibiotic of the penicillin group, which has bactericidal effect against gram-positive and gram-negative microorganisms (*E. coli*, *Campylobacter spp.*, *Corynebacterium spp.*, *Erysipelothrix spp.*, *Clostridium spp.*, *Streptococcus spp.*, *Staphylococcus spp.*, *Actinobacillus spp.*, *Haemophilus spp.*, *Pasteurella spp.*, *Proteus mirabilis*, *Salmonella spp.*). Amoxicillin prevents synthesis of bacteria cell walls, inhibiting the activity of enzymes of transpeptidase and carboxypeptidase, which causes osmotic balance disorders, resulting in death of microorganisms at their growth stage.

*Colistin* is poorly absorbed in intestinal tract, therefore, it acts effectively in treatment of diseases of digestive tract. In contrast to low concentrations of colistin in blood serum and tissues, its concentration in various segments of digestive tract is constantly high. Particularly, concentration of the antibiotic is higher in colon and caecum as compared to concentration in oral cavity. Colistin is poorly absorbed systemically following its oral administration: 40% of the antibiotic accumulates in an unchanged form in feces, 60% is bound to phospholipids and liposaccharides of gram-negative bacteria. It is eliminated with feces.

*Amoxicillin* remains stable in stomachs of animals. It is absorbed in larger quantities from digestive tract as compared to ampicillin when administered orally. Amoxicillin is quickly distributed in body fluids, particularly – in synovial fluid. Its plasma protein binding level reaches 37-38%. The half-life period makes 0.7-1.4 h. It is primarily eliminated from the body with urine.

**Administration**

Treatment of calves, goatlings and lambs of up to 3 months of age, in swine and broiler chickens of gastrointestinal diseases caused by amoxicillin- and colistin-sensitive microorganisms.

**Dosage**

Orally with drinking water or feed in the following doses:

- **calves, goatlings and lambs of up to 3 months of age** 5 g per 100 kg body weight twice daily for 3-5 days with feed or drinking water;

- **broiler chickens, swine**: 1 kg per 1 ton of drinking water for 3-5 days.

In case of administration with drinking water the drug solution shall be the only source of drinking water throughout the whole treatment period!

**Contraindications**

Do not prescribe to animals with hypersensitivity to colistin and amoxicillin as well as with kidney injuries. Do not use concurrently with chloramphenicol, tetracyclines and sulfanilamides. Do not administer to ruminants with functionally developed proventriculi and hens laying eggs for human consumption.

**Precautions**

Ampicol® is not prescribed in sub-therapeutic doses.

Animal slaughter for meat is possible in 8 days following the last administration. Meat obtained before the mentioned term shall be utilized or fed to non-productive animals depending on the statement of veterinary physician. Turbidity or residues may be observed following preparation of stock solution with the use of hard water, which do not influence therapeutic effectivity of the drug.

**Packaging**

Packages of film or foil materials of 1 000 g.

**Storage**

Store in a dry dark place out of the reach of children at 5-30°C.

**Shelf life**

2 years.

8 hours following dissolution in water.