

118x189mm

Seldox Powder

For Veterinary Use Only

Composition:

Each gram contains

Doxycycline Hyclate..... 500 mg

Indications:

Gastrointestinal and respiratory infections caused by doxycycline sensitive micro-organisms, like Bordetella, Campylobacter, Chlamydia, E.coli, Haemophilus, Mycoplasma, Pasteurella, Rickettsia, Salmonella, Staphylococcus and Streptococcus spp., in poultry, calves, goats, sheep and swine.

Pharmacology:

Doxycycline is a semi-synthetic, broad-spectrum tetracycline antibiotic. It is primarily bacteriostatic and exerts its antimicrobial effect by inhibiting bacterial protein synthesis. Doxycycline is more lipid soluble than other tetracyclines (except minocycline) and passes directly through the lipid bilayer of the bacterial cell wall. As with other tetracyclines, an energy-dependent active transport system pumps the drug through the inner cytoplasmic membrane. Once inside the bacterial cell wall, doxycycline inhibits protein synthesis by binding specifically to the 30S ribosomes. The drug prevents the binding of amino-acyl-tRNA to the messenger RNA-30S ribosomal subunit. This prevents the addition of amino acids to the growing peptide chain. Doxycycline only inhibits rapidly multiplying organisms.

Tetracyclines, including doxycycline, have a similar antimicrobial spectrum of activity against a wide range of Gram-positive and Gram-negative organisms. Cross-resistance of these organisms to tetracyclines is common.

After oral administration, doxycycline is rapidly and well absorbed from the gastrointestinal tract. Doxycycline has a longer half-life (15 - 22 hours) and is more lipid-soluble than other tetracyclines. Following absorption through various routes of administration, doxycycline is widely distributed in the body with highest levels in kidney and liver, and in bone and dentine. Doxycycline may be metabolised for up to 40% and is largely excreted in faeces (via bile and intestinal secretion), mostly in a microbiologically inactive form. All these tetracyclines form insoluble complexes with calcium, magnesium, iron and aluminium. Doxycycline metal ion complexes are unstable at acidic pH, therefore more doxycycline enters the duodenum for absorption compared with the earlier compounds. In addition, food has less effect on absorption than on absorption of earlier drugs.

Toxicology:

Doxycycline is of low acute oral toxicity. From several repeated dose and

chronic toxicity studies with rats, hamsters, mini-pigs, dogs and monkeys, it appears that sensitivity for hepatotoxic effects of doxycycline is idiosyncratic in dogs. There is no evidence of reproductive or developmental toxicity and there is no evidence of a genotoxic potential. It can be concluded that the toxicological profile of doxycycline is roughly comparable to that of oxytetracycline, chlortetracycline and tetracycline.

Dosage and Administration:

For oral administration:

Calves, Goats and Sheep:

Twice daily 1gram per 100kg body weight for 3-5 days.

Poultry and Swine:

100gram per 500-1000 liters of drinking water for 3-5 days.

Withdrawal Time:

For Eggs: 10 days.

For Meat: Calves: 07 days, Goats and Sheep: 14 days.

Swine: 8 days.

Poultry: 7 days.

Medicated drinking water should be used within 24 hours.

Medicated milk replacer should be used within 12 hours.

Note: for pre-ruminant calves, lambs and kids only.

Contra indications:

Hypersensitivity to tetracyclines.

Administration to animals of a seriously impaired hepatic function.

Concurrent administration with penicillins, cephalosporins, quinolones and cycloserine.

Administration to animals with an active microbial digestion.

Solubility of doxycycline is pH dependent. Precipitation will occur in an alkaline solution. This product should therefore not be mixed with other products.

Side effects:

Discoloration of teeth in young animals.

Hypersensitivity reactions.

Precautions:

Store between 15-25°C in a cool and dry place.

Protect from moisture and heat.

Keep out of the reach of children.

Consult the veterinarian before use.



Innovator's Specs.



Manufactured by:
Seldox Pharmaceuticals (Pvt) Ltd.
36-Km Multan Road, Lahore Pakistan.
Head Office:
82, R-1, MA Johar Town, Postal Code 54100,
Lahore, Pakistan.

