

Coxiril^{plus}

Solution

For Veterinary Use Only

Composition:

Each ml contains	
Toltrazuril.....	25mg
Vitamin A.....	2.5mg
Vitamin K3.....	5mg

Pharmacology:

Metabolism:

Toltrazuril is absorbed at a rate of at least 50%. The highest equivalent concentrations are found in kidney and liver.

Activity Spectrum:

The spectrum of activity of **Coxiril Plus Solution** is extremely wide. It is highly effective not only against all coccidia of chickens and turkeys, but also against those of waterfowl and pigeons. **Coxiril Plus Solution** proved to be fully effective against numerous field isolates and strains, some of which are highly resistant to other commercial products. Moreover, **Coxiril Plus Solution** is active against mammalian coccidia, *Sarcocystis* and *Toxoplasma*.

By giving treatments on different days after the infection (1-6 days post inf.) it was found that **Coxiril Plus Solution** was always consistently effective. This treatment schedule permits the following conclusions:

- **Coxiril Plus Solution** acts both on the schizogony stages and the gametogony (macrogamonts) of the parasites.
- A short period of medication of 1-2 days was sufficient for a completely successful clinical response. **Coxiril Plus Solution** shows the extensive efficacy against all intracellular developmental stages.

Mode of Action:

Light and electron microscopic studies showed that all intracellular development stages of *Eimeria* are damaged. These changes occur only in the parasites and do not affect the tissue cells of the host animals.

These findings suggest that toltrazuril interferes with the division of the nucleus and with the activity of the mitochondria, which are responsible for the respiratory metabolism of the parasites.

Coxiril Plus Solution thus has coccidiocidal rather than coccidiostatic action. There was no evidence of any efficacy on unsporulated or sporulated oocysts.

The efficacy of **Coxiril Plus Solution** is largely independent of the severity of the infection. The special mode of action results in the following product advantages:

- As **Coxiril Plus Solution** acts on all intracellular development stages, a 2-day treatment period is sufficient.
- As the product does not interfere with the development of immunity, a follow-up treatment is usually not necessary; moreover, this mode of action permits a strategic administration.
- Even an advanced infection (after 3-5 days: gametogony) can still be treated successfully with **Coxiril Plus Solution**.
- Due to the different mode of action (intracellular stages) an additive effect is achieved in conjunction with ionophores (extra-cellular stages).
- Poultry require relatively large amounts of Vitamin A. Young birds become lethargic, stand about with ruffled feathers, and when they do move, show in coordination with a staggering gait. The birds stop growing, become progressively emaciated and may even die. **Coxiril Plus Solution** also contains VitA1b to address this insufficiency.
- Vitamin K3 stimulates final production of prothrombin and it is an essential component of the blood coagulation process. Vitamin K is added to prevent hypoprothrobinaemia.

Coccidiosis Control:

The product characteristics make **Coxiril Plus Solution** highly suitable for

- Therapy
- Strategic administration programs.

Dosage and Administration:

Administer via drinking water:

7mg/kg body weight for 2 consecutive days; 24 hours continuously or for 8 hours each day in the drinking water. In cases of restricted water uptake (e.g. pullets on feed restriction or concurrent disease) treatment may be for 3 days.

Instructions:

- Calculate flock weight accurately.
- Choose amount of **Coxiril Plus Solution** as needed.
- Estimate water consumption of the flock to ensure that the birds are dosed for the correct time.

Weight	Dose
100kg	28ml
250kg	0ml
500kg	140ml
1000kg	280ml
5000kg	1.4L

Toxicity:

Acute toxicity:

The acute toxicity of Toltrazuril in rat, mouse and chicken is very low. Rats and chicks are slightly more sensitive than mice. The LD50 in the rat ranged from 1600-5000 mg/kg b.w., in the mouse it was approx. 5000 mg/kg and in chicks 1000 mg/kg, which is more than 100 times the recommended therapeutic dose of 7 mg/kg b.w.

Using **Coxiril Plus Solution**, hypervitaminosis for Vitamin A and Vitamin K3 may not be expected.

Indication:

Coxiril Plus Solution acts against following relevant coccidia of poultry:

Eimeria acervulina, *Eimeria brunette*, *Eimeria maxima*, *Eimeria mitis*, *Eimeria necatrix*, *Eimeria tenella*. Growth retardation and dysentery in coccidiosis. It acts on all intercellular developing stages of coccidia
Vitamin A and Vitamin K3 ensure normal growth, trigger immunity and healing of digestive lining respectively.

Contraindication:

Eggs of layers under treatment should not be used.

Precautions:

- Store between 15-25°C in a cool and dry place.
- Keep out of the reach of children.
- Consult the veterinarian before use.

Withdrawal Time: 16 days.

Innovator's Specs.



Manufactured by:
Selmore Pharmaceuticals (Pvt) Ltd.
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