

Veterinary Package Insert

TP-Diccocci Sol (0.5% w/v Diclazuril)

PRODUCT DESCRIPTION

A yellow to brown colour liquid, which contains 0.5%w/v of diclazuril in 1L bottle.

PHARMACODYNAMICS & PHARMACOKINETICS

Diclazuril is an anticoccidial of the benzene acetone nitrile group and has an anticoccidial activity against *Eimeria* species. Depending on the coccidia species, diclazuril has a coccidiocidal effect on the asexual or sexual stages of the development cycle of the parasite. Treatment with diclazuril causes interruption of the coccidial cycle and of excretion of oocysts for approximately 2 to 3 weeks after administration. This allows the lambs to bridge the period of decrease of maternal immunity (observed at approximately 4 weeks of age) and calves to reduce the infection pressure of their environment.

After oral administration, the absorption of diclazuril in lambs and calves is poor. The maximum concentration in plasma is reached between 24 h and 48 h after dosing. The absorption decreases with the age of the lambs. The elimination half-life is about 30 hours. The metabolism of diclazuril was studied in vitro using sheep hepatocytes. Studies indicate that at 24 hours after administration, the concentrations in edible tissues are far below the Acceptable Daily Intake. As a result, it is not essential to establish Maximum Residue Limits or to determine a Withdrawal Period.

In calves, kinetic profiles have been studied after administration of a single dose of 5 mg diclazuril per kg body weight and after dosing for 3 consecutive days at respectively 1 mg, 3 mg and 5 mg diclazuril per kg body weight. Following the single dose of 5 mg peak plasma concentrations in the range of 21 to 75 ng/ml were reached after 8 to 24 hours. Thereafter the concentrations decreased with a half-life of 16 hours to concentrations below 10 ng/ml after 48 hours. Following the 3 consecutive daily doses of 1 mg diclazuril per kg body weight, mean peak plasma concentrations of 65.6 ng/ml were reached 10.5 hours after the last dose. Thereafter the concentrations decreased with a half-life of 22 hours. The $AUC_{0-96\text{ h}}$ was 2127 h.ng/ml. Comparison with the profiles obtained after the multiple doses indicated dose proportionality and linearity. The time to reach peak plasma concentrations and the subsequent depletion half-life were independent of the dose. Following an oral dose of 5 mg diclazuril per kg body weight only

low concentrations of diclazuril distribute to the edible tissues which is another indication of the poor bioavailability. *In vitro* studies in ovine and bovine hepatocytes indicated that the metabolic transformation of diclazuril is very limited, as was also observed for other species. *In vivo* studies in a number of animal species have also demonstrated that diclazuril is not excreted and excreted virtually completely unchanged with the faeces.

INDICATION

For the treatment and prevention of coccidial infections in lambs caused in particular by the more pathogenic *Eimeria* species, *Eimeria crandallis* and *Eimeria ovinoidalis*.

To aid in the control of coccidiosis in calves caused by *Eimeria bovis* and *Eimeria zuernii*.

RECOMMENDED DOSAGE AND ADMINISTRATION

To ensure the correct dosage, bodyweight should be determined as accurately as possible.

Lambs:

Therapeutic use: 1 mg diclazuril per kg bodyweight or 1 ml TP-Diccocci Sol oral solution per 5 kg bodyweight, as a single administration.

Preventative use: 1 mg diclazuril per kg bodyweight or 1 ml TP-Diccocci oral solution per 5 kg bodyweight at about 4-6 weeks of age at the time that coccidiosis can normally be expected on the farm. Under conditions of high infection pressure, a second treatment may be indicated about 3 weeks after the first dosing.

Calves:

To aid in the control of coccidiosis: 1 mg diclazuril per kg bodyweight or 1 ml TP-Diccocci oral solution per 5 kg bodyweight, administered as a single dose, 14 days after moving into a potentially high risk environment. If a satisfactory response is not observed, then further advice should be sought from your veterinary surgeon and the cause of the condition should be reviewed. It is a good practice to ensure the cleanliness of calf housing.

CONTRAINDICATIONS

None.

WARNINGS & PRECAUTIONS.

Avoid direct contact with the products. Wear synthetic rubber gloves when handling the product. Wash hands after handling the products.

Keep out of the reach of children.

INTERACTIONS WITH OTHER MEDICATIONS

None known.

PREGNANCY AND LACTATION

Use only according to the benefit/risk assessment of the responsible veterinarian.

ADVERSE EFFECTS

None reported.

OVERDOSE & TREATMENT

Signs & Symptoms: Diclazuril was given to lambs as a single dose up to 60 times the therapeutic dose. No adverse clinical effects were reported. Neither were any adverse effects noted at 5 times the therapeutic dose administered four consecutive times with a 7-day interval.

In calves, the product was tolerated when administered up to 5 times the recommended dose rate.

Treatment: Supportive.

WITHDRAWAL PERIOD

Meat and offal:

Lambs: 0 days

Calves: 0 days

MAXIMUM RESIDUAL LIMIT (MRL)

Sheep

Muscle: 500 µg/kg

Fat: 1000 µg/kg

Liver: 3000 µg/kg

Kidney: 2000 µg/kg

STORAGE CONDITION

Store in a cool, dry place (below 30°C). Protect from sunlight. Keep container tightly closed.

SHELF LIFE

2 years.

After 1st opening, reconstitution or dilution, use within 24 hours.

THYE PHARMA SDN. BHD.

No.2 Lorong Industri Ringan Permatang

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