COXIRIL® 0.2% MICROGRANULATE

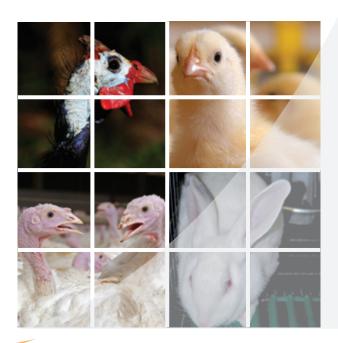
oxiril® 0.2% microGranulate

Introduction

The prevention of sub-clinical coccidiosis remains an economical important factor in a modern poultry industry. The key is to create an environment with low infection pressure where coccidiostats can not only keep the situation under control but also enable the development of natural immunity.

Coxiril® is a feed additive for the prophylactic control of coccidiosis in **broilers**, **turkeys**, **guinea fowl and rabbits** and contains **2 g/kg** of its active ingredient **diclazuril**.

It is a potent synthetic coccidiostat which can be used strategically to clean-up high infection pressures at regular intervals. Coxiril® wipes out ionophore resistant coccidia strains and helps to restore ionophore efficacy.





Unique profile and formulation

Natural immunity development

The development of natural immunity is essential to fight off coccidial infection. The early stages of *Eimeria* are highly immunogenic and as a consequence products that act on the later stages of the *Eimeria* lifecyle will not interfere with **natural immunity build-up**.

Diclazuril has a strong cidal action against the later stages of *Eimeria* but allows the early, immunogenic stages to develop. Coxiril® will not interfere with the formation of natural immunity (Maes *et al.*,1988).

No disturbance of the natural intestinal microflora

Coxiril® provides **maximum protection** against clinical coccidiosis outbreaks and allows a **normal development of intestinal microflora.** Because of the strong coccidiocidal effect, the product also contributes to decrease the occurence of dysbacteriosis.

Well tolerated

Coxiril® 0.2% microGranulate is by far the safest coccidiostat on the market.

No adverse effects were observed with very high doses; in broilers up to 200 ppm and in turkeys up to 100 ppm.

No side effects

Coxiril® will not influence feed and water uptake, it does not induce higher sensitivity to heat stress or increase litter humidity.

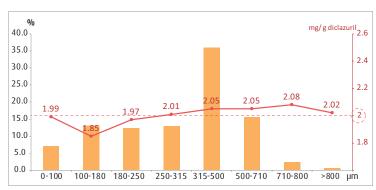
Safe in use

No known incompatibility with other feed ingredients or medications.

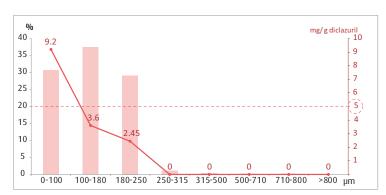
Unique microgranules

Coxiril® is a 0.2% microgranulated premix.
This unique formulation results in uniform granules that ensure a product with superior mixing properties and a much lower dust fraction.

Particle Size Distribution (%) and diclazuril content (mg/g) in Coxiril® 0.2% microGranulate



Particle Size Distribution (%) and diclazuril content (mg/g) in EU registered diclazuril 0.5% powder



MicroGranules for better performance

- Coxiril® 0.2% microGranulate for a better diclazuril delivery and performance.
- Coxiril® has the optimal particle size distribution for homogeneous mixing and contains a more precise diclazuril content.

Wipe out resistant coccidia strains

Dosage range chickens, turkeys and quinea fowl

- Coxiril® 0.2% microGranulate can be dosed at 400-600 gram per Ton of feed.
- In feed concentration of 0.8-1.2 ppm diclazuril for higher Quality Assurance.
- Flexible dosing with broader range and enhanced homogeneity.

Dosage in rabbits

 Coxiril 0.2% is dosed at 500 gram per ton of feed to obtain an infeed concentration of 1 ppm diclazuril per ton of feed.

Safe and effective for use in broilers, turkeys, guinea fowl and rabbits.

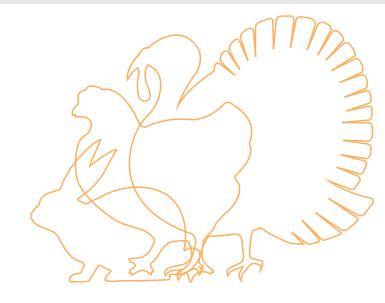
• Coxiril® is highly effective against coccidial species like *Eimeria acervulina*, *E. maxima*, *E. tenella*, *E. necatrix*, *E. mitis*, *E. praecox* and *E. brunetti* in chickens for fattening; *E. meleagrimitis*, *E. adenoeides*, *E. gallopavonis*, *E. meleagridis* and *E. dispersa* in turkeys; *E. numidae* and *E. grenieri* in guinea fowl and *E. intestinalis*, *E. perforans*, *E. magna*, *E. stiedae*, *E. flavescens*, *E. media*, *E. coecicola*, *E. exiqua*, *E. piriformis*, *E.vejdovskyi* and *E. irresidua* in rabbits.

Zero day withdrawal for chickens, turkeys and guinea fowl

- Lower infection pressure for the next flock
- Multiple unloading (thinning) to maintain optimal density
- Economic benefit:
 - increased performance
 - less outbreaks
 - lower transport
 - less handling charges







Key advantages

- Microgranules for better diclazuril delivery and improved performance
- Zero withdrawal time
- Extremely **powerful**, **effective** and **safe** chemical
- Strong cidal activity against all relevant coccidia species
- Allows development of natural immunity
- Can be used to decrease coccidiosis pressure before implementing coccidiosis vaccination programs
- Excellent **safety profile** in all species
- Dosage range in poultry (0.8-1.2 ppm)
- No heat stress or increased litter humidity
- Perfectly **compatible** with other feed ingredients
- **Low dust** fraction for optimal product performance and worker safety.

Multiple use

Rotation strategies

Most integrators and feed mills rotate their coccidiostat programs on a regular basis, on average every 4 to 6 months. After rotating producers clearly experience better performance and an improvement in the levels of coccidiosis control. Traditionally these programs contained different classes of coccidiostats, nowadays the concept of rotating between coccidiostats and vaccines offers new possibilities.

A clean-up program with Coxiril® prior to vaccine use will ensure that the field infection pressure is low and the vaccine multiplication is not overwhelmed, resulting in coccidiosis outbreaks.

Advice to use Coxiril® in three types for poultry programs

1. Coxiril® in starter feed as shuttle (chemical/ionophore)

The infection pressure that may have built-up in the finishing stage of earlier flocks can be a serious burden and can endanger the growth and economic performance of new placed chicks from day one. Using Coxiril® 0.2% microGranulate in a shuttle with other coccidiostats will result in highly efficient animal performance.

2. Coxiril® in a full program

It is recommended to use Coxiril® in a full clean-up program where there is a high infection pressure, especially after predominant use of ionophores.

3. Coxiril $\ensuremath{^{\$}}$ "zero withdrawal broiler program"

Coxiril® has a zero day withdrawal period. Huvepharma® recommends the use of Coxiril® in the growing phase from day 28 till slaughter.

It will manage to decrease the infection pressure in the late growing stages. The zero withdrawal time provides full flexibility in terms of handling and thinning. The next flock can effectively make a clean start.



Quality Assured

Diclazuril – the active ingredient in Coxiril® – is produced by Huvepharma® in its manufacturing site Biovet in Bulgaria in accordance with all **European quality** GMP standards and requirements.

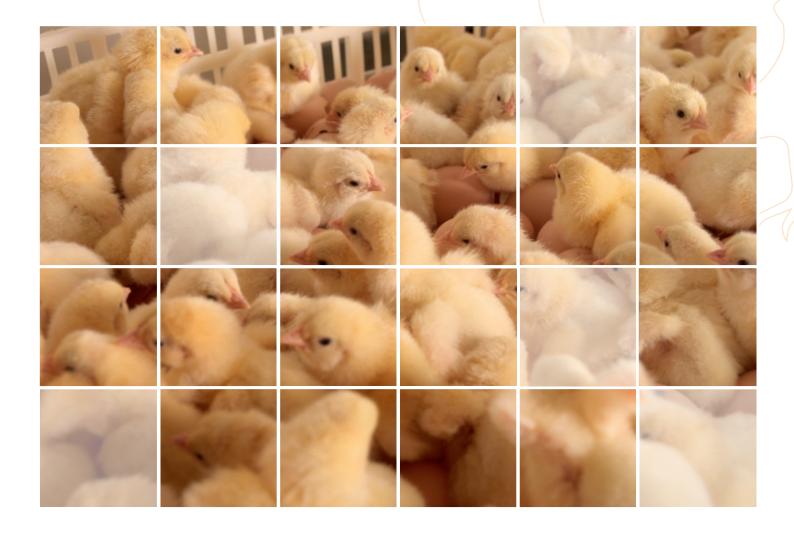
Production of Coxiril®

The manufacturing process of Coxiril® compromises different phases:

- Synthesis of diclazuril
- Standardizing of the active substance with the carrier
- Mixing and microgranulation to assure homogeneity
- Quality control of finished product

Composition Coxiril®

Coxiril® 0.5% (Registration Number 51775) and as carriers wheat meal and starch.



Practicability

Useful tip

Today we can offer our customers Coxiril® 0.2% microgranules for **better diclazuril delivery and performance.**

Directions for mixing administration

Diclazuril is well-tolerated when fed at the recommended dose range.

- **Poultry:** Recommended dose range of **0.8-1.2 ppm** per ton of feed. Mix **400-600 gram** of Coxiril® 0.2% premix per ton of complete feed to get a final dosage of 0.8 and 1.2 ppm, respectively.
- **Rabbits:** Recommended dosage of Coxiril 0.2% is 500 gram per ton of feed to obtain in the feed concentration of 1 ppm diclazuril per ton of feed.

Feed containing Coxiril® premix may be given in pelleted or meal form to the animals from the 1st day of age.

Packaging and labelling

- Inner lining is made of polyethylene
- Outer layer is made of 3- ply paper
- Multi-language label is printed on the back of the bag
- Net weight of one bag is 20 kg.





Target species	Diclazuril (ppm)	Coxiril® 0.2% Premix (g/ton)	Maximum age (weeks)	Withdrawal period (days)	
Broilers	0.8-1.2	400-600	-	0	ved.
Turkeys	0.8-1.2	400-600	-	0	ights rese
Guinea Fowl	0.8-1.2	400-600	-	0	:000. All r
Rabbits	1	500	-	2	2015 Huvepharma E00D. All rights reserved
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