

International expertise in Biosecurity

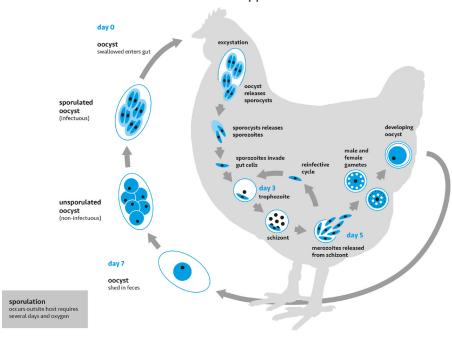
# **Interkokask®**

The professional's choice

# Additional Information

# **Coccidiosis Control**

Interkokask is a specialist disinfectant that combines rapid kill of bacteria, fungi and viruses with high efficacy against coccidial oocysts, cryptosporidium, worms and worm eggs, bacterial spores, mycobacterium. It is effective even in the presence of organic matter and biofilm. Interkokask has been independently tested and approved under the German DVG, UK's DEFRA approval schemes.



Coccidiosis is a problem for all poultry, but in particular the short-lived bird like the broiler. The traditional way of treating coccidiosis was by using coccidiostats, but the introduction of coccidiosis vaccines and the withdrawal of antibiotic compounds from poultry farming has meant that the anti-coccidial oocyst disinfectant becomes an important tool in the control of coccidiosis.

An effective anti-coccidial oocyst disinfectant must be able to not only destroy the coccidial oocyst, but also stop further sporulation.

Some biosecurity companies have been claiming there are no disinfectants that kill 100% of sporulating oocyts! This is unfortunate for 2 reasons, firstly it's wrong and shows a lack of knowledge about the subject, but secondly and more importantly, it is sending the wrong message to the veterinary surgeon and farmer.

Coccidial oocysts can be killed effectively through disinfection, provided the products are suitable and applied correctly.

Experience from using Interkokask in poultry integrations has shown that coccidiosis can be controlled without the use of coccidiostats.

Table 1. Shows the results when Interkokask (Interask) was tested according to the German DVG guidelines. It is important to note that the efficacy of Interkokask is shown on its ability to lyse the cell wall, and also to stop sporulation of oocysts. Many disinfectants don't specify these two parameters in their results.

Concentration	Exposure time (minutes)	Lysis rate (%)	Relative sporulation (%)
3%	60	83.6	47.3
3%	120	95.8	40.6
3%	180	99.1	0.0
3%	240	100	0.0
4%	60	99.1	0.0
4%	120	99.1	0.0
4%	180	100	0.0
4%	240	100	0.0



The independent researcher who tested Interkokask noted that "with a concentration of 4% and an exposure of only 60 minutes, produces an almost complete destruction of the oocysts. The effect is based mostly upon the lysis of the non-sporulated oocysts".

## Put simply:

#### **Oocyst Lysis**

- At a 3% concentration, the coccidial oocyst is completely destroyed in 4 hours.
- At a 4% concentration, the coccidial oocyst is completely destroyed in 3 hours.

# No Sporulation

- Using a 3% concentration, the coccidial oocyst cannot sporulate after 3 hours.
- Using a 4% concentration, the coccidial oocyst cannot sporulate after 1 hour.

#### Interkokask + Coccidiosis Vaccines

Historically, coccidiosis vaccines seemed to work well in experimental farms and also in breeder farms, but when they were tried in broiler farms the efficacy was not seen. Hysolv had long held the view that the reason for the poor performance of coccidiosis vaccines in broiler farms was due in part, to the field strains of Eimeria (coccidia) outcolonising the vaccine strains therefore causing coccidiosis before the vaccine could provide immunity.

In 2016 two major UK boiler integrations conducted a trial using a "Deep Clean" in which boiler houses were cleaned carefully with Hysolv cleaners and disinfected with Interkokask to remove the field strains of Eimeria (coccidia). The results were extremely good and one integrator commented, "the birds grew as well with the vaccine as they had with coccidiostats".

Unfortunately both integrators refused to allow publication of the results.

Both integrators continued to use the "Deep Clean" after the trial had finished, proving that the trial had been successful.

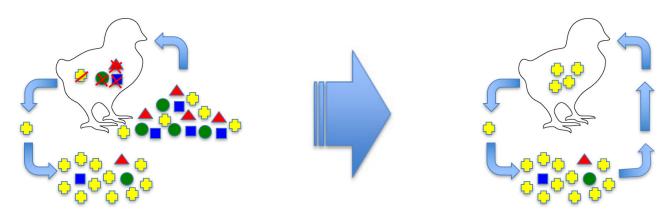
## **IMPORTANT**:

It is important to use a foot dip containing Interkokask until the coccidiosis vaccine has colonised the birds.



### Interkokask + coccidiostats

When broiler chicks are placed in the broiler farm, they are exposed to different Eimeria strains. A coccidiostat will usually be very efficient for a period of time, killing all but a very few types of Eimeria. The Eimeria that survive the coccidiostat treatment eventually becomes the dominant species of Eimeria in the house. The chick will then develop coccidiosis that the coccidiostat will not be able to control. This is represented in the diagrams below showing the yellow cross Eimeria becoming dominant.



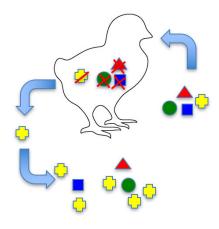
This is the basis of the coccidiostat shuttle programme, where different coccidiostats based upon different chemical families are used to prevent the domination of a single Eimeria species.

# Interkokask disinfects the building and removes coccidial oocysts

This means that when the chicks are placed in the boiler farm, they will not face a challenge from coccidia unless coccidial oocysts are walked-in from the environment around the farm.

If coccidial oocysts are walked-in, the challenge to the chick should be small and comprised of a mixture of Eimeria species, not just one dominant species. (This is shown in the diagram to the right.) The disinfection at the next cycle will remove these coccidial oocyts.

The use of Interkokask can therefore lengthen the useful life of a coccidiostat by delaying the build-up of resistance to the coccidiostat being used.



#### IMPORTANT:

Use a foot dip containing Interkokask throughout the broiler's growing period to stop re-infection of the house. Refresh the foot dip at least once a week.

