



Prophyl® S at 2% (1:50) is effective on *Cryptosporidium parvum* and *Eimeria spp.*

Trial description

Study objective

In vitro inactivation of Prophyl® S, at different concentrations, temperatures and contact times, on *Cryptosporidium parvum*.

The objective of the study is to determine the Prophyl® S effectiveness on *Cryptosporidium parvum* (*C. parvum*) oocysts at a concentration of 2% at 10°C during 6 hours, at a concentration of 2,5% at 10°C during 4 hours, at a concentration of 2% at 20°C during 3 hours.

Oocyst viability was determined according to DVG guideline by calculation of the *in vitro* replication rate of *C. parvum* after disinfection with the test product. Enumeration of oocysts obtained after cell culture was made by quantitative PCR targeting the Zinc Protease Telomerase gene of *C. parvum*.

The study was conducted according to Good Scientific Practice (ISO 17025, NF U 47-200, NF U 47-600).

Study design

The *in vitro* efficacy study was conducted using *C. parvum* oocysts purified from calves' feces on a host cell culture. Oocysts were disinfected with Prophyl® S at the different concentrations and times.

Results

The results are summarized in Table 1.

Table 1. Mean inactivation efficacy of Prophyl® S (% inhibition compared to infected untreated negative control group NC; n.a., not applicable).

Group	Mean efficacy (% of NC)	NC used as reference	SD* (absolute %)
NC 4h 20°C	n. a.	n. a.	n. a.
NC 6h 10°C	n. a.	n. a.	n. a.
PC (product B)	100	NC 4h - 20°	0
Prophyl® S 1 - 2%, 6h at 10°C	100	NC 6h - 10°	0
Prophyl® S 2 - 2.5%, 4h at 10°C	100	NC 6h - 10°	0
Prophyl® S 3 - 2%, 3h at 20°C	100	NC 4h - 20°	0

*Standard Deviation

Conclusion

According to the DVG* criteria, the 95% reduction threshold of the *Cryptosporidium parvum* population is reached, Prophyl® S is active on *Cryptosporidium parvum* and *Eimeria spp.* if applied:

- at 2% for an incubation period of 6 hours at 10°C
- at 2.5% for an incubation period of 4 hours at 10°C
- at 2% for an incubation period of 3 hours at 20°C

Use biocides safely. Always read the label and product information before use.

*(Deutsche Veterinärmedizinische Gesellschaft)