



ORFFA
TOP SELECT

CALSPORIN®- EXCENTIAL FARM PACK

Probiotic *Bacillus subtilis* application on farm level



A healthy gut ensures optimal nutrient absorption which is essential for high performance. Stress and intestinal pathogens can easily disturb the gut microflora. Various trials and practical experiences with Calsporin®, containing viable spores of *Bacillus subtilis* C-3102, have shown to improve performance and the ability to reduce pathogenic pressure of the most common pathogens like *Clostridium perfringens*, *Salmonella*, *E.coli* and *Campylobacter*. Calsporin®- Excential Farm Pack is specially developed for direct use of the probiotic on farm level.

OPTIMIZE INTESTINAL MICROFLORA

Calsporin® is a spore forming probiotic which contains *Bacillus subtilis* C-3102. The provision of the special selected *Bacillus* strain to broiler chickens and turkeys has shown to improve growth and feed conversion. In laying hens and poultry breeders improved laying performance, egg shell quality and fertility were recorded.

Bacillus subtilis has several pathways in which the probiotic improves gut health. In the gut there is a great amount of bacteria (microflora), both good ones (beneficial bacteria) and negative ones like the pathogenic bacteria *Clostridia*, *E.coli*, *Salmonella* and *Campylobacter*. *Bacillus subtilis* creates an environment which is positive for the beneficial gut bacteria (e.g. *Lactobacilli*) by consumption of oxygen, production of enzymes and competitive exclusion.

In this way Calsporin® promotes the proliferation of a beneficial gut microflora and reduces the pathogenic bacteria. The result is a healthier gut for better utilization of feed, less digestive disorders, healthier animals and better performance.

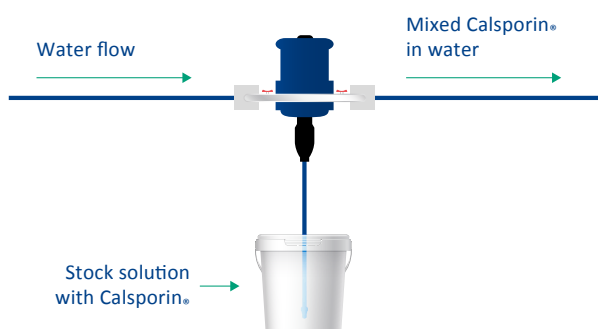
**Optimal nutrient absorption
starts with a healthy gut**

Calsporin®- Excential Farm Pack is specially developed by Orffa for direct use of the probiotic on farm level. The product can easily be added to the water system and used in the preferred periods by the farmer directly.



ADDITION TO THE WATER SYSTEM ON FARM

- Calsporin®- Excential Farm Pack can be used through a dosing system, the liquid stock solution can be added to the drinking water 24/7
- Dosage recommendation (water/ feed ratio 2:1):
 - Broilers and chickens reared for laying 8.5 – 17 g / m³ drinking water
 - Laying hens, turkeys, piglets, ornamental and game birds: 5 – 10 g / m³ drinking water

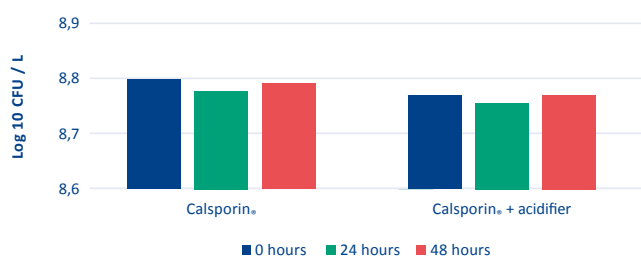


Probiotic for direct application in water systems on farms

COMPATIBILITY WITH FURTHER SUPPLEMENTS

- *B. subtilis* is a robust spore forming bacteria, this ensures the compatibility with the main used organic acids, coccidiostats and antibiotics for therapeutic use
- The spores are highly stable in drinking water with (pH 4,0) or without acidifiers to control pathogenic bacteria in the water system

Calsporin® in drinking water with/without acidifier

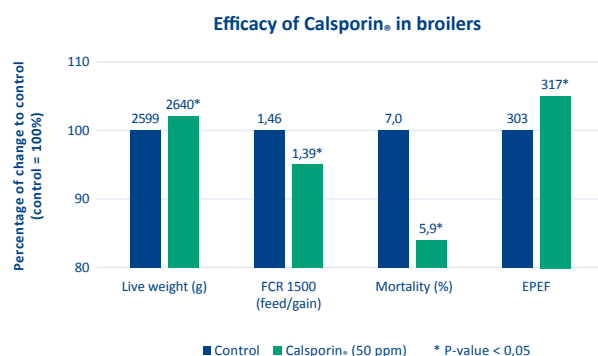


ANIMAL TRIALS

Calsporin® contributes to an ideal balance in the intestinal microflora, which support growth performance and help to control intestinal pathogens.

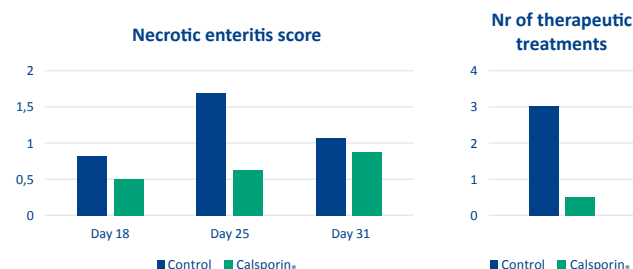
Results from 4 efficacy studies with minimum Calsporin® dosage in broilers at 42 days of age are combined in a meta-analyses.

- Improved growth (+1,6%), feed efficacy (-2,6%) and reduced mortality
- Higher efficiency: EPEF (+4,8%)



Control of intestinal pathogens is key for high performance and food safety. Practical farm trials in broilers show the beneficial effect of Calsporin® on necrotic enteritis.

- Lower severity of necrotic lesions
- Reduced amount of therapeutic treatments to stabilize gut health



CALSPORIN®- EXCENTIAL FARM PACK

- Robust viable spores of *Bacillus subtilis* C-3102
- Direct use on farms
- Drinking water application
- Compatible with acidifiers, coccidiostats and antimicrobials

