

Sal CURB® B Liquid: a formaldehyde based antimicrobial

INTRODUCTION

Animal feed can serve as a carrier for a range of microbial contaminants such as bacteria, yeast and moulds (Maciorowki et al, 2007). Such contaminants have been shown to influence animal performance adversely and to compromise the safety of animal products. Formaldehyde is well known for its antimicrobial properties. It has been shown to be highly effective at killing *Salmonella* and other pathogenic bacteria in feed, and remain effective against recontamination of feed after heat treatment. Sal CURB B Liquid is designed as a balanced blend of formaldehyde, organic acids and its salts, and a surfactant. In addition to excellent antimicrobial activity, Sal CURB B Liquid is easy to apply and is a safe antimicrobial product.

MATERIALS AND METHODS

Antimicrobial efficacy was tested on feed contaminated with *Salmonella*. The presence of *Salmonella* in the feed samples was evaluated after different exposure times.

RESULTS

The ability of Sal CURB B Liquid to reduce the level of *Salmonella* in feed to undetectable levels was examined for dosages of 2 and 4 kg/tonne (Table 1). Each sample was tested in triplicate. The results showed the clear effect of the product, even after as little as 4 hours of exposure. After 24 hours, all treated samples tested negative. *Salmonella* was detected in the control samples during the whole experiment, while no *Salmonella* was detected in the Sal CURB Liquid group after 24 hours in 30 grams of feed.

Table 1. The effect of Sal Curb B Liquid on *Salmonella* using three separate feed samples of 10 grams each.

Sal CURB B Liquid dose rate (kg/tonne)	Exposure time	
	4 hours	24 hours
0	+/+/+	+/+/+
2	+/-/-	-/-/-
4	+/-/-	-/-/-

+ = *Salmonella* detected in 10g feed
- = no *Salmonella* detected in 10g feed

Kemin Internal Reference TL-10-00055

CONCLUSION

Sal CURB B liquid was shown to be very effective in reducing the *Salmonella*; no *Salmonella* was detected 24 hours after treatment.

References

Maciorowski, K.G., Herera, P., Jones, F.T., Pillai, S.D. and Ricke, S.C. (2007) Effects on poultry and livestock of feed contamination with bacteria and fungi. *Animal Feed Science and Technology*, 133: 109 – 136.