



nufense

Mycotoxin Management Solutions

agri



nuevo

Solutions for the Mycotoxin Challenges



Mycotoxins are secondary metabolites of low molecular weight produced by fungi, mostly by saprophytic moulds growing on a variety of feed and food-stuffs (Turner et al., 2009).

Contamination of feeds with mycotoxins is a worldwide problem with serious impact on livestock production. Mycotoxin-detoxifying agents are used to control their negative effects.

The most well-known approach for detoxification involves the use of nutritionally inert adsorbents with the capacity to bind and immobilize mycotoxins in the gastrointestinal tract (GIT) of animals, thus reducing their bioavailability (Magnoli et al., 2011).

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- Thermally & Mechanically activated Aluminosilicate



The mineral clay used is highly porous, thermally, and mechanically activated with a highly sorbitive capacity and enhanced hydrophilic (anti-diarrhea) and oleophilic (toxin-binding) activity.

Aiming to determine the mycotoxin detoxifying activity of **nufense agri** in broiler, layer and breeder feed, a mycotoxin eliminating analysis was carried out. Two pH values (pH=4.5, pH=7.5) were tested, simulating gastric and intestinal juice. In order to determine the mycotoxin eliminating efficiency of the product during the transition in poultry gastrointestinal tract, 6 incubation times were used (0,30,60,120,240 and 300 min).

The mycotoxin concentration was calculated using HPLC-DAD chromatographic analysis.

Results: Strong adsorption efficiency: Aflatoxin concentration decreased by more than 95% for 30 min incubation time.

Trilogy Results:

	AF1.
% Efficiency	99.6
Incl. rate	0.02%
Toxin conc.	4000 ppb.



EURL Method:
Adsorption of 4000 ppb AB1
with 0.02% product at pH 5.0

Dosage for all species: 0,5 – 1 kg / ton of feed

Note: Dosage depends on the mycotoxin risk level