Animal Science Products®
Incorporated

OrganiGuard

Dry

Dry

OrganiGuard

A Powerful Solution for Feed Hygiene

OrganiGuard Dry is a powerful, heat stable, organically-based antimicrobial preservative that provides unsurpassed ingredient and finished feed hygiene. It is not an antibiotic, so it can be used in antibiotic-free programs or in combination with any medication regimen. ***OrganiGuard Dry*** is an easy-to-handle 100% soluble powder that activates easily when free moisture is present in feed ingredients. Solubility is important in a dry mold inhibitor because free moisture allows the antimicrobial to interact with harmful organisms. Without ***OrganiGuard*** present, free moisture accelerates a variety of microbial contaminants. ***OrganiGuard*** offers superior protection against molds, such as Aspergillus, and bacterial contaminants, such as Salmonella. When dissolved, its pH is neutral, so it does not corrode equipment like acid-based mold inhibitors. The results of independent laboratory testing demonstrate ***OrganiGuard Dry*** has a shield of antimicrobial effectiveness that is more powerful than competitive products.

- ***Safe for all feeds***
- ***Safe for your equipment***
- ***Keeps feed fresh***
- ***Guards against molds and bacteria***
- ***100% Soluble***

Mold and Mycotoxin Contamination

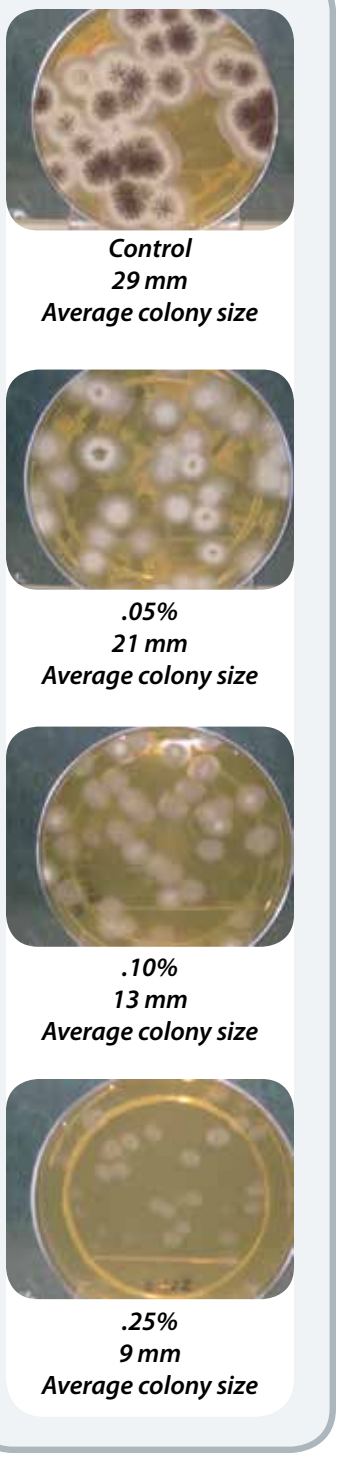
Aspergillus molds draw more attention than other molds found in feedstuffs because their mycotoxins, called aflatoxins, are substantially more poisonous than those produced by other molds such as Fusarium and Penicillium.

To help protect feed hygiene, FDA established maximum allowable mycotoxin levels. These limits vary depending on the specific mycotoxin present. FDA calls them "guidance levels" for fumonisin, and "advisory levels" for vomitoxin. The more strict term "action level" is reserved for the more hazardous aflatoxins. Guidance levels for fumonisin and advisory levels for vomitoxin (both produced by less toxic Fusarium molds) range from 5 to 50 ppm. However aflatoxin, because of its higher toxicity and status as a potent carcinogen, is limited to a range that is a thousand times lower, down to 20 ppb. Because aflatoxin is extraordinarily potent, controlling Aspergillus growth is critical for optimum livestock feed and pet food safety. This remains true even though Aspergillus may be present in fewer numbers than other mold species.

Bacterial Contamination

Similarly, FDA has highlighted Salmonella as an important hazard that threatens feed hygiene and animal and human health. FDA specifically named Salmonella as an adulterant in animal feeds and ingredients in 21 CFR 500.35. Controlling Salmonella has become an integral part of many HACCP programs, and FDA has included Salmonella contamination limits in the draft framework of their "modernized" Animal Feed Safety System (AFSS).

...offers ingredient and feed manufacturers a better tool for HACCP and AFSS compliance, meaning more responsible and safer food products for livestock and pets.



Control
29 mm
Average colony size

.05%
21 mm
Average colony size

.10%
13 mm
Average colony size

.25%
9 mm
Average colony size

Guards Against

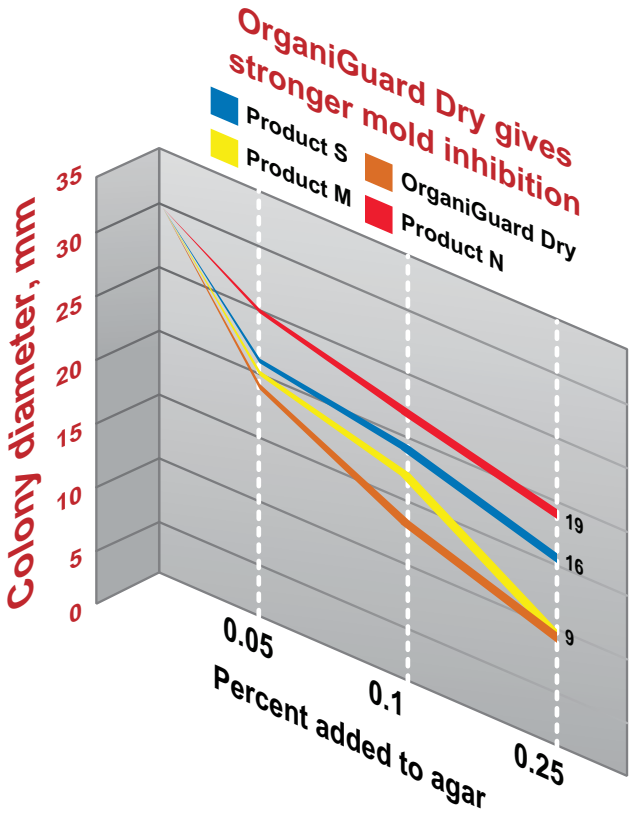
- ***Salmonella***
- ***Mycotoxin producing molds***
- ***Penicillium (produces Ochratoxin)***
- ***Aspergillus (produces Aflatoxin and Ochratoxin)***
- ***Fusarium (produces T2, vomitoxin, fumonisin and zearalenone)***

Independent Mold Inhibitor Comparisons

Procedure: An independent laboratory tested the mold inhibiting action of ***OrganiGuard Dry*** and three competitive products. Equal amounts of the mold inhibitors were dissolved into an agar gel to model the distribution of the mold inhibitor in feed ingredients. The agars were then overly contaminated with an Aspergillus mold standard and poured into culture plates (150 mm diameter, 4 mm thick, pH 7.2-7.4) and sealed with uncontaminated agar. The inoculated plates were inverted and incubated at 33-35°C (91-95 °F) for 2-5 days. All test samples and controls were run in triplicate.

Interpretation: In this type of comparison, the size of the mold colonies growing in the contaminated agar is smallest for the most effective antimicrobials. Comparing the average colony diameter indicates how powerful the antimicrobial product is. Colonies are measured from the underside of the plate, using a standardized angle and illumination.

Results: ***OrganiGuard Dry*** and the other mold inhibitors in this test reduced mold growth compared to a control plate with no antimicrobial additive. The colonies with the smallest diameter occurred in the agar containing ***OrganiGuard Dry*** (see figure) indicating the most powerful mold protection. The average colony size in unprotected agar was 29 mm. Adding 0.05% ***OrganiGuard*** reduced colony size by 34% to 19 mm, which was 5-24% better than the alternatives. Increasing the amount of ***OrganiGuard*** continued to drive down mold. At 0.1% ***OrganiGuard***, the average colony was only 13 mm, or 19-41% better than the other treatments. Increasing mold inhibitors to 0.25% gave even better protection with ***OrganiGuard*** (9 mm) and Product M. Interestingly, adding 0.25% of Product S and Product N could not inhibit mold growth as well as only 0.1% ***OrganiGuard***.



Directions For Use: ***Mixed complete feeds:*** Thoroughly mix 1-2 pounds of ***OrganiGuard Dry*** into each ton of feed.

Processed Ingredients: Mix 1-4 pounds of ***OrganiGuard Dry*** into each ton of processed ingredient, such as flaked grain etc.

OrganiGuard's powerful mold inhibition translates into better feed hygiene and more protection against mycotoxins and bacterial adulteration. More importantly, it offers ingredient and feed manufacturers a better tool for HACCP and AFSS compliance, meaning more responsible and safer food products for livestock and pets.

Made in the USA

Manufactured By
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