



ULTRASORB S 3.0

MYCOTOXIN REMEDIATOR AND ENDOTOXIN BINDER



SWINE

REDUCE THE IMPACT OF MYCOTOXINS

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Pigs are highly susceptible and frequently exposed through feed and bedding to all mycotoxins, mainly those produced by *Fusarium* and *Aspergillus* species. UltraSorb S 3.0 is a species-specific mineral feed developed to reduce the negative impact of mycotoxins in pig production.

Major Benefits

- Protection against multiple mycotoxins
- Endotoxins (LPS) add to the stress load
UltraSorb S 3.0 provides defence against both endotoxins and mycotoxins
- Maintains and improves growth rates
- Protects natural immunity
- Supports good fertility
- Supports overall performance
- Suitable for use from piglet age



Mycotoxin Risk in Swine

Mycotoxins are one of the most dangerous hidden threats to swine health, compromising growth, fertility, disease immunity and overall performance, impacting on business profitability.

Symptoms of Exposure

- Poor growth rates, feed refusal
- Immune suppression
- Fertility issues (conception, litter size, still births, boar semen volume and quality)
- Liver and kidney damage (*Porcine nephropathy*)
- Faecal instability
- Porcine pulmonary oedema
- Increased mortality

Role of UltraSorb S

Our unique species-specific formulation has three modes of action: highly adsorbent minerals to **bind** a wide range of endotoxins and mycotoxins and their derivatives to make them harmless; biologically active yeast derivatives to **transform** and **degrade** the molecular structure of mycotoxins to improve binding efficacy and protect against the adverse affects of toxin-forming moulds which may be present in the feed.

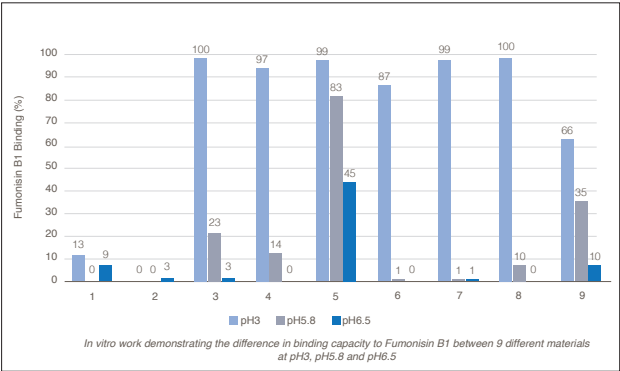
Mycotoxin Sources

Compound feeds containing a mixture of grains, especially maize can harbour mycotoxins. Common toxins include: Aflatoxins, Fumonisin, T2, HT2, DON, ZON, Ochratoxins, Ergots and Patulin. Analysis by Volac International Ltd. has also shown that straw can be a significant source of mycotoxins. 83% of straw samples showed mycotoxin contamination (ref. Survey of Straw across the UK, 2019).

Mycotoxin Remediation

UltraSorb S 3.0 delivers reliable protection by binding the most common mycotoxins affecting swine. Volac's advanced screening process tests binding capability at three pH levels (pH 3, 5.6, and 6). See figure 1. This ensures that the binders selected are most effective at the specific GI tract pH of the chosen species, creating the most efficient product for supporting swine health and protecting meat production.

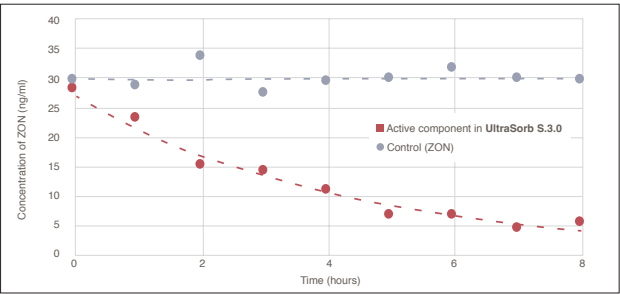
Figure 1. *In vitro* differences in the binding efficacy of materials at pH3, pH5.8 and pH6.5



Biotransformation

Not all mycotoxins can be bound effectively, that is why **UltraSorb S 3.0** now contains live yeast for improved biotransformation of those hard to bind toxins. See figure 2. This further protects swine performance and supports efficiency.

Figure 2. Biotransformation of ZON by **UltraSorb S 3.0**

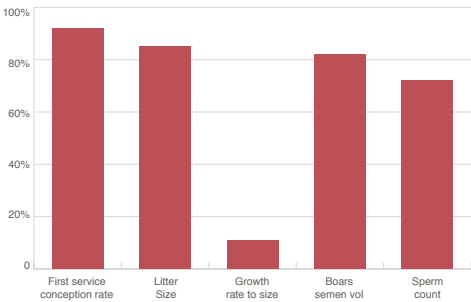


Trialled and Tested

The **UltraSorb** range has been robustly trialled on working farms.

Results from a trial on a commercial pig farm, in North Ohio, USA, where feed had been contaminated with DON demonstrated positive outcomes on the animals. Prior to supplementation the animals had been exhibiting symptoms of poor growth, low conception rates and low boar semen volume and value. Animals were fed 2.5kg/T of **UltraSorb S**. After 21 days the first service conception rate was 90%, feed intake and growth went back to normal and semen returned to normal within 7 days. See figure 3.

Figure 3. Performance observed after supplementation with **UltraSorb S**





UltraSorb S Product Range:

UltraSorb S 3.0 is available in a wide range of formulations for all swine:

- **UltraSorb S 3.0**
- **UltraSorb S Extra 3.0** - High *Fusarium sp.* (Fumonisin, T2, DON, HT2, ZON) risk. Damp & cool conditions.
- **UltraSorb S Core 3.0** - Compounders & pre-mixers. To be mixed with a binder.

Available in 25kg bags for UltraSorb S 3.0 and UltraSorb S Extra 3.0, and 20kg bags for UltraSorb S Core 3.0



Ingredients:

UltraSorb S 3.0 is a mineral feed for use in swine nutrition. It includes technological additives such as bentonites, kieselgurs (diatomaceous earth), sepiolites. Composition: Calcium carbonate (excluding core), yeasts products derived from *Saccharomyces cerevisiae*.

Storage:

Store in original sealed packaging in a cool dry place. Keep bag closed when not in use. Best before 24 months after date of manufacture.

ABOUT VOLAC

Volac is dedicated to developing cutting-edge product-based agricultural solutions and species-specific programs designed to improve animal health and performance.

Mycocheck - The Mycotoxin Analysis Service, available from Volac.
For more information go to volac.com/feed-additives



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