

Technical Data Sheet

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Performance Additives

Animal feed

GLOBALFEED T1

Selected bentonites as additives in animal feed (1m558)

Properties and characteristics

GLOBALFEED T1 is made up of a carefully selected bentonite, with agglomerating and mycotoxins capturing properties, which facilitate production processes and improve animal productivity.

Water retention (typical behavior of bentonite-based products) facilitates the agglomeration of the other components of the feed and removes the humidity present in the feed.

The high colloidal properties, combined with the fineness of the products, help the uptake of the mycotoxins present in the feed, in particular it is very effective for Aflatoxin B1 and Fumonisin B1.

GLOBALFEED T1 can be used in any feed (pigs, poultry, ruminates and fish).

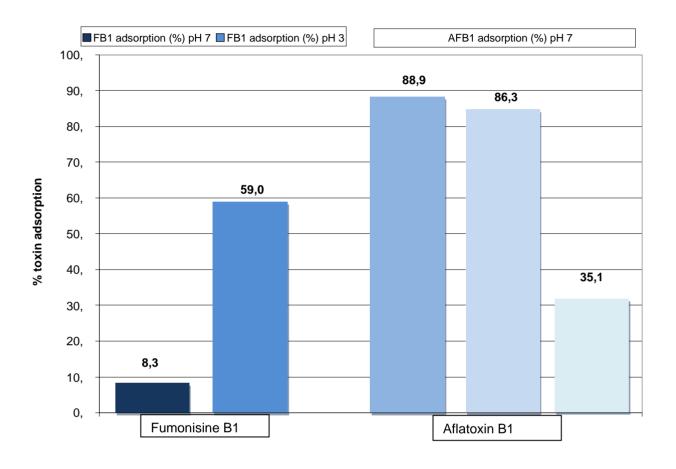
GLOBALFEED T1 is a fine powder, not hygroscopic, extremely fluent.

	GLOBALFEED T1				
Physical and Chemical charac	cteristics (typical values):				
Montmorillonite	[%]	ca. 85			
Moisture	[%] 10 - 14				
Cation exchange capacity	[meq/100g]	90 -100			
Dry residue on 75 micron	[%]	max 10			
Lead content (directive 2005/87/CE)	[ppm]	max 30			
Cadmium content (directive 2005/87/CE)	[ppm]	max 2			
Dioxines content (directive 2006/13/CE)	[ng WHO PCDD/F-TEQ/kg]	max 0,75			
Dioxines content and PCB (directive 2006/13/CE)	[ng WHO PCDD/F-PCB-TEQ/kg]	max 1,5			
Chemical analysis (typical):	[%]				
Na ₂ O	1,65				
MgO	1,91				
Al_2O_3	18,69				
SiO ₂	62,23				
P ₂ O ₅	0,11				
K ₂ O	1,94				
CaO	2,18				
TiO ₂	0,39				
MnO	0,10				
Fe ₂ O ₃	4,73				
LOI	6,10				





Analysis on the mycotoxins adsorbing capacity

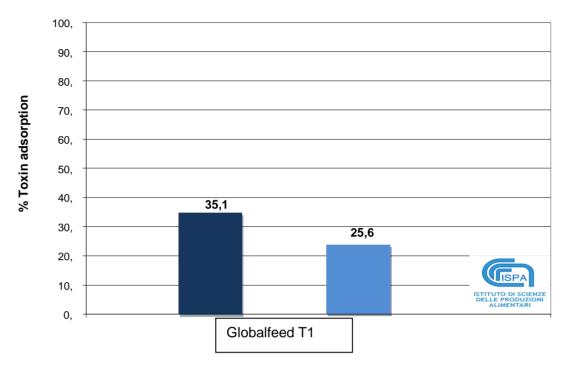


Test conditions: AFB1 adsorption − □ pH 7-adsorbent dose = 0.02% □ pH 7- adsorbent dose = 0.01% □ pH 7- adsorbent dose = 0.001% Toxin concentration = 1 µg/mL





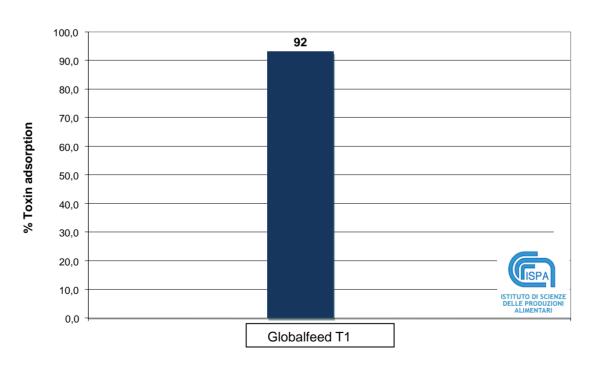




Test conditions:

- pH 7-Afla B1 concentration= 1 μg/mL
- □ pH 7-Afla B1 concentration= 5 μg/mL

Bentonite concentration 0,001%



Test conditions:

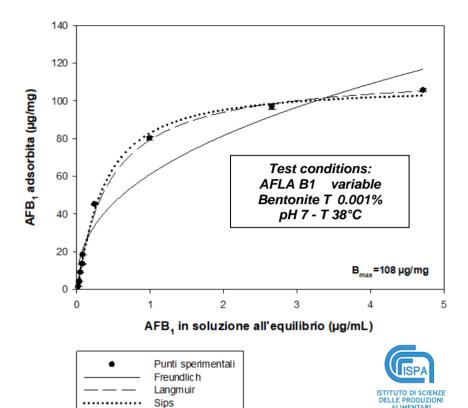
■ pH 3-Aflatoxin B1 concentration= 1 μg/mL Bentonite concentration 0,001%





For **AFLATOXIN** the bond strength with bentonite was evaluated and the percentage of desorption at pH 7 was 8%.

The absorption isotherm was also made for this material to evaluate the maximum absorption capacity which was equal to $108 \, \mu g/mg$.



GLOBALFEED T1 meets the requirements of the European community as a mycotoxin binder.

Product	Smectite content	Impurities	AFLA B1 adsorption (%) [Test conditions: pH 5 Bentonite = 0,02% AFLAB1 = 4 μg/mL]	
GLOBALFEED T1	> 80%	< 10% opali and feldspar < 4% quartz and calcite	91%	





Recommended dose

RECOMMENDED DOSAGE		Preventive	Existing contamination
Ruminants	[g/animal/day]	12-50	50-100
Others	[Kg / feed ton]	0.5-2	2-4

Packaging

Product packaged in 25 kg paper bags (1250 kg pallets), 1000 kg big bags, in bulk.

Storage and Shelf Life

Product must be stocked in a dry and clean place.

Shelf life is 5 years from production date.

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