

PRODUCT DATA SHEET

Product: **Sanbio® SANA**

DESCRIPTION

ANA is a micronized natural product for advanced broad spectrum detoxification and immune modulation used for all animal species in livestock production. SANA provides a significant and rapid adsorption of a broad spectrum of mycotoxins in the feed and endotoxins in the gastrointestinal tract. SANA activates the digestion and enhances the productive performance.

MAIN ADVANTAGES

The advantages of **SANA** are:

- Detoxification of feed and animal body
- Health protection
- Modulation of gut microbiota
- Stimulation of digestion
- Enhancement of breeding performance.

COMPOSITION

Activated*) natural clay mineral Bentonite-Montmorillonite-Illite (1m558), supercharged micronized material (particle size: 97% <=5µm)

*) processed by *SANBIO Biocatalytic Stimulation Technology*

CLASSIFICATION ACCORDING FEED LAW

SANA is classified as binders, anti-caking agents and coagulants E558, EC1831/2003.

MODE OF ACTION

SANA combines the core functions in one product:

- 1. ADSORPTION of toxic substances**
- 2. MODULATION of healthy microbiota**
- 3. STIMULATION of digestion.**

The effectiveness of SANA is based on the synergistic combination of physical and chemical adsorption methods towards toxins and active stimulation of cells in the small intestine (SANBIO Biocatalytic Stimulation Technology). The mechanism of **electrical stimulation of cells** makes the difference of SANA versus conventional products acting on chemical mechanisms only.

RAPID ACTION. The unique composition and advanced processing of SANA ensure instant improvement of health situation.

ADVANCED PROCESSING. The minerals are utilized in a special milling and grinding process down to less than 5 micron size. As a result, the micronized very tiny particles have an extremely large reaction surface. Subsequently, the particles in the complex being charged and polarized in a special electrical process. Now, the refined physico-chemico complex has a huge capability to interact with polar and non-polar compounds and body cells.

DOUBLE-STAGE ADSORPTION. The combined physical and chemical adsorption method binds a wide spectrum of mycotoxins and endotoxins. The toxins being immobilized and discharged. It acts selectively and independently from pH value throughout the complete gastrointestinal tract.

SELECTIVE AND COMPATIBLE. SANA does not bind amino acids and fat-soluble vitamins. Water-soluble vitamins are only temporarily bound to a small extent and fast released again. SANA is compatible with the most antibiotics.

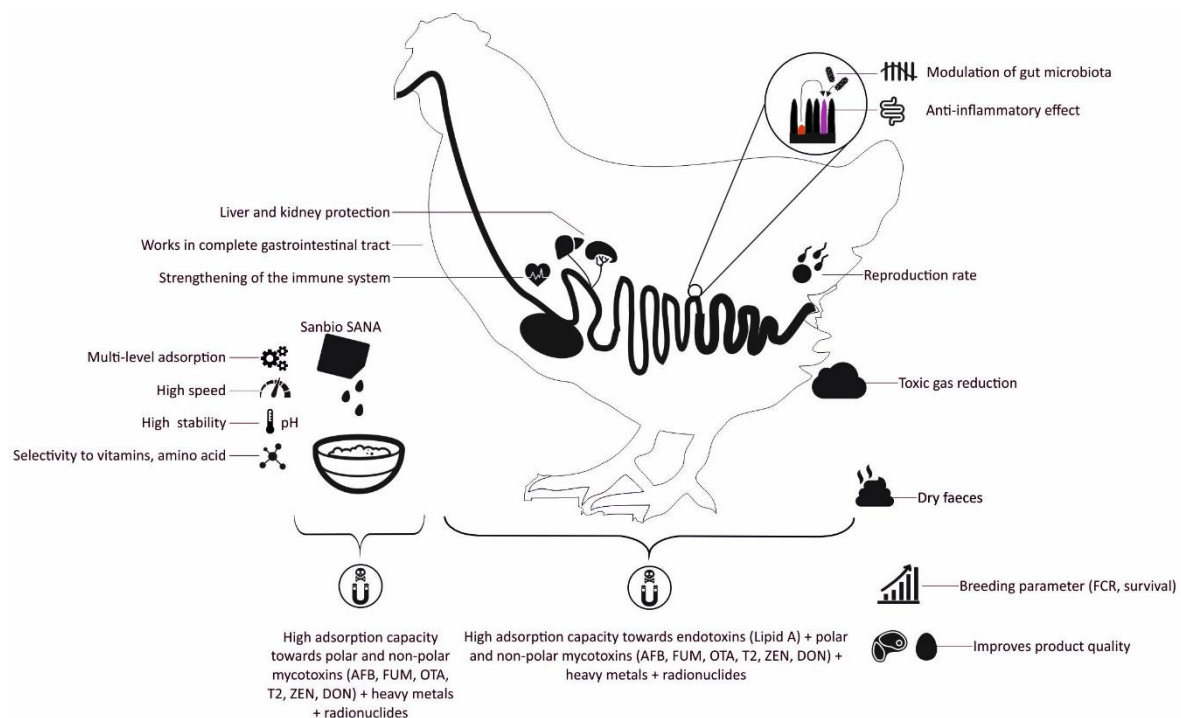
HEALTHY GUT MICROBIOTA. SANA acts as microhabitat to supply a large surface media for growth of useful microorganisms. The electrical gut stimulation supports the modulation of promoting bacterial flora (e.g. Lactobacilli, Bifidobacteria).

TOTAL BIOPROTECTION. SANA has anti-inflammatory effects, promotes the healing and growth of intestinal villi and ensures hepato- and immune protection.

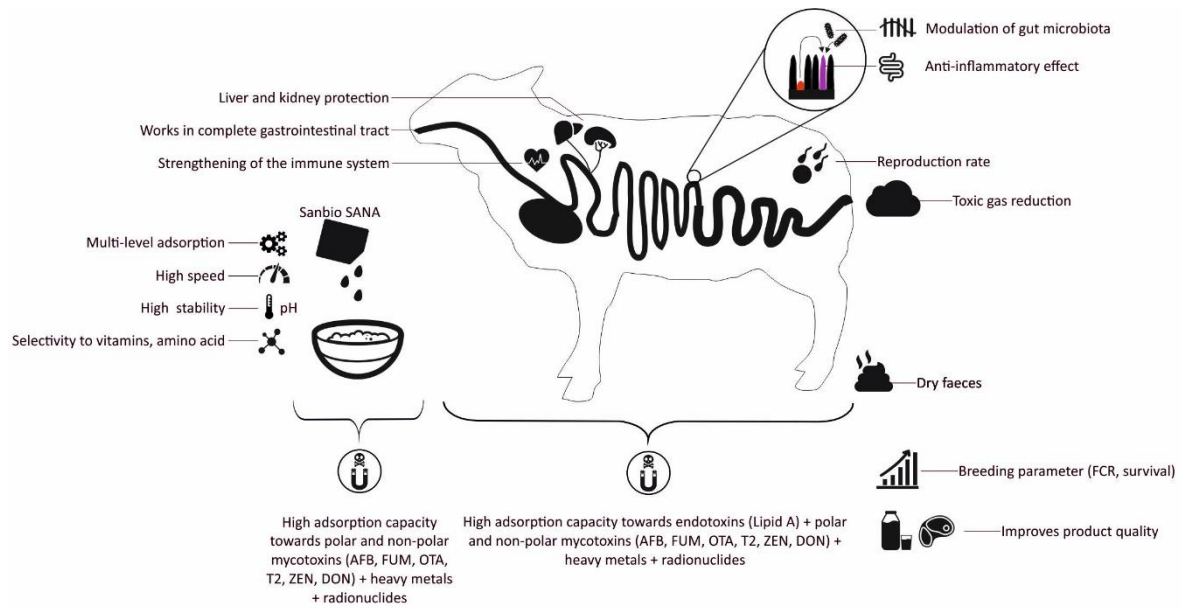
GROWTH CONTROL. The active secretion of digestive juices and enzymes lead to improved metabolism and better nutrient uptake.

FASTER. HEAVIER. BETTER. The enhanced performance is reflected in improved key indicators (weight gain, feed conversion ratio, mortality, quality) and lower costs (feed, vet).

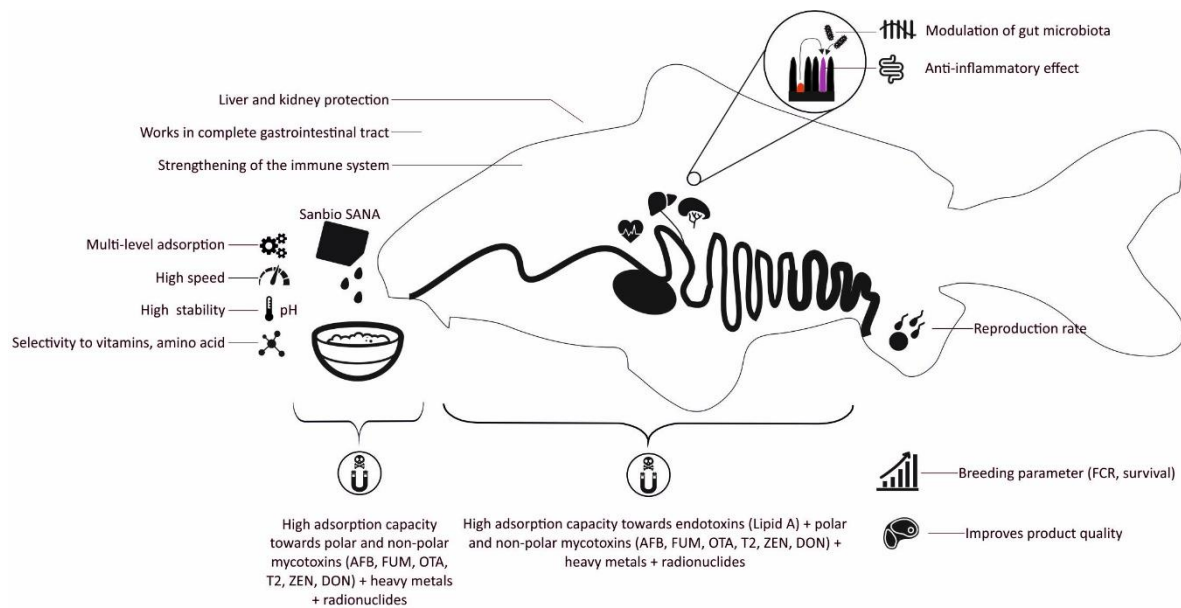
Poultry:



Goat, sheep, cow, cattle, horse, camel:



Fish, shrimp:



DIRECTIONS OF USE

Species	Minimal dosage (Prophylaxis)	Recommended dosage in case of increased toxin concentration	Maximal dosage	Unit
broiler, egg-laying hens, duck, goose, turkey, rabbit	0.5	1	20	kg / t total feed
goat, sheep	0.5	1-2		
cow, cattle, horse, camel	1	3-4		
fish, shrimps	2	5		

It may be used at any time during production, requires no withdrawal period. Ensure a homogeneous mixing of SANA with the feed to achieve best results. Regularly use is recommended, at least use for 14 days. SANA works systemically, preventively and curatively with associated natural mechanisms. SANA is suitable for use in feed pelletizing process (max. process temperature $\leq 105^{\circ}\text{C}$).

INDICATIONS FOR USE

- Mycotoxin contaminated feed
- Abnormal bacterial flora
- Fever, gut inflammation, diarrheas, wet litter
- After antibiotica use and vaccination
- Incidence of endotoxins
- Stress and weak immune system
- Improvement of hatchability
- Slow feed intake
- Improvement of fertility and performance
- Prophylaxis.

RESTRICTIONS ON ALL FEEDSTUFFS

The simultaneous oral use with macrolides shall be avoided. The total amount of bentonite must not exceed the permitted maximum level in complete feeding stuff of 20 000 mg/kg of complete feeding stuff. For poultry: The simultaneous use with robenidine shall be avoided. The simultaneous use with coccidiostats other than robenidine is contraindicated with level of bentonite above 5 000 mg/kg of complete feed.

PACKAGE

20 kg bags (3-layer with PE inliner)
500 kg Big bag

SHELF TIME

3 years in unopened packages. Opened packages should be stored tightly closed.

STORAGE

Store cool and dry. Temperature range $+5...40^{\circ}\text{C}$. Protect from sunlight and frost.

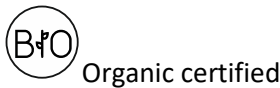


SAFETY

Read SDS carefully.
Keep out of reach of children.
Wear protection gloves and eye protection.
Avoid breathing dust/mist/spray.
Wash with water thoroughly after handling.



APPROVALS



The product meets following regulations:


Country	Standard	Link
Germany	Demeter Germany Demeter International FiBL Inputs list for the organic agriculture in Germany Gäa Germany Naturland Germany Reg. (EC) 834/2007	→ http://www.betriebsmittelliste.de/de/bml-suche.html (enter company name)
EC	EC 834/2007, EC 889/2008	→ www.inputs.bio (enter company name)
USA	American Regulation NOP (National Organic Program)	→ www.inputs.bio (enter company name)

COUNTRY OF ORIGIN

Federal Republic of Germany

PRODUCER

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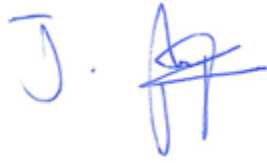
 www.sanbio.eu
 <https://www.youtube.com/channel/UCcP8e0Ev1wGnl93x44lGfMg>

OTHER INFORMATION

Certain statements may not be applicable in all geographical regions. Product associated claims may differ based on government requirements. Product availability may vary by country. Please contact SANBOS for further information.

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The data given above is based on our continuous quality monitoring system. They do not exempt the user from his obligation to make an incoming inspection of the delivered product. The data are for information purposes and do not constitute any guarantee. It is the responsibility of the user to determine the product's suitability for his intended use.



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