

SANOVITA
Produktions- und Vertriebs GmbH
HERBAGREEN® Product Line

SANOVITA



animamineral®

VARIOUS ANIMALS

SANOVITA
Produktions- und Vertriebs GmbH
HERBAGREEN® Product Line



Chief Executive Officer:

Harald Breinlinger

Founder, 40+ years background as successful serial entrepreneur and inquisitive mind.



Chief Operating Officer:

Martin Nesensohn, Dipl.-Agr.-Ing. / M. Sc.

Unmatched international agrotech expertise, 15+ years of experience in soil science, plant production and farm product markets.



Chief Technology Officer:

Rudolf Linke Dipl.-Ing. (FH)

Landscape design and planning, 25+ years as entrepreneur.



Chief Financial Officer:

Prof. Dr. Barnim Jeschke

Business developer, successful serial entrepreneur and managing director in the area of green technologies and energy for 15+ years.



FAO - Food and Agriculture Organization of the United Nations

Facts

- 850 million people suffer and die of hunger.
- Up to 2 billion people are malnourished. The Earth's population will grow by about 30% over the next four decades.
- The demand for food will grow by 70%.
- Deforestation and intensification of agricultural processes are of great importance for their effects on soil degradation.
- Investment in agriculture is essential to combat hunger and increase the environmental sustainability of our planet.
- Farmland is limited, extensive agriculture is less productive. Deforestation continues.
- The area of degraded land is growing due to significant erosion, climate change and inappropriate farming practices.
- Rapid development of the market for the use of grain for food and biofuel production.
- **The main problem whose solution will be dominated by global markets is and remains the search for more efficient, biologically clean and environmentally friendly technologies for decades to come.**

Source: FAO Food and Agriculture Organization of the United Nations *Statistical data base 2016*

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**Sanovita Produktions-
und Vertriebs GmbH**
Tuttlingen, Germany

SANOVITA



**World wide acting structure of the
SANOVITA GmbH with more than 20
authorized partners on different
continents in more than 45 countries**

SANOVITA



Sanovita India Pvt. Ltd
Ludhiana, India

SANOVITA



OOO Sanovita RUS
Moscow, Russia

SANOVITA



Sanovita Brazil i.G
Goiania, Brazil

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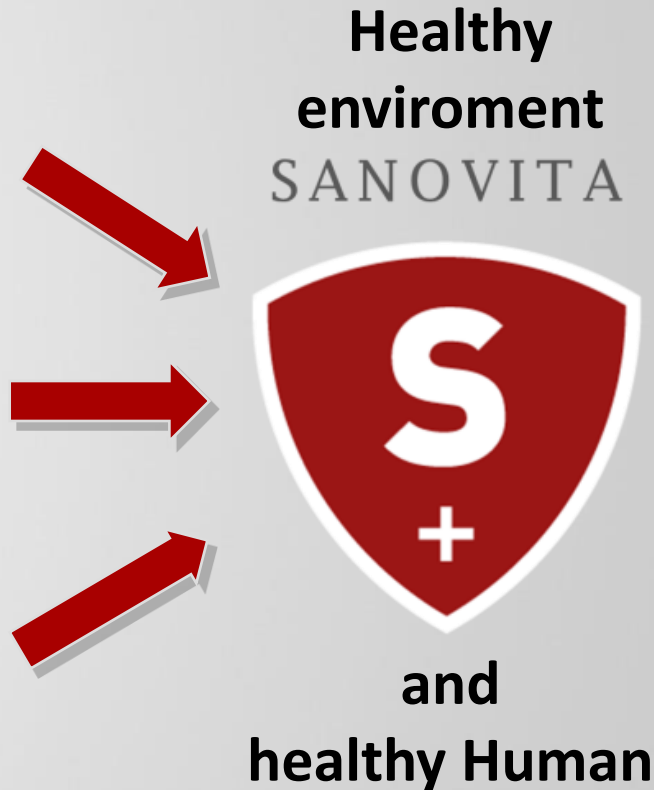
Healthy soils



Healthy plants



Healthy animals



The company "**SANOVITA GmbH**" was founded in 2011. The mission and goal of the company is the development of natural products to improve the health of soils, plants and animals.



THE SANOVITA PRODUCT LINE

soil health	Sanovita.gmbh.de
plant health	
animal health	

herbaland®	extra	classic	ultra
	herbaland®	herbaland®	herbaland®
herbaland®	K	Z	
	herbaland®	herbaland®	

herbagreen®	classic	Z20	c/m
	herbagreen®	herbagreen®	herbagreen®
herbagreen®	fluisan	boron	amino
	herbagreen®	herbagreen®	herbagreen®

animamineral®	cattle	pork	wing	horse	sheep	fish
	animamineral®	animamineral®	animamineral®	animamineral®	animamineral®	animamineral®
animamineral®	premium	premium	premium	premium	premium	premium
	animamineral®	animamineral®	animamineral®	animamineral®	animamineral®	animamineral®



The Sanovita - ANIMAL HEALTH PRODUCTS

animal health

The **SANOVITA GmbH** was founded in 2011. Their task and goal are the development of natural products for soil, plant and animal health. **animamineral®** has its origin in research – and development on micronized minerals, which began in 2007 and has been continued by SANOVITA GmbH. The modern new feed supplement **animamineral®** is a valuable contribution to sustainable, lasting, healthy animals feeding and is distributed worldwide by SANOVITA GmbH and their partner companies.

animamineral®

animamineral® promotes and stabilizes the general health of animals, improves the external appearance and condition and ensures healthy growth of young animals.

With **animamineral®** a new generation of food supplements begins. The product consists of natural crushed minerals and has a „intelligent function“ in metabolism of animals. The specific active properties of mineral powders are achieved by the special treatment methods during the production process.

cattle

animamineral®

pork

animamineral®

wing

animamineral®

fish

animamineral®

sheep

animamineral®

horse

animamineral®

camel

animamineral®



QAL CERTIFICATE - animamineral®



Approval SANOVITA GmbH

is registered in accordance with Article 9 of Regulation (EC) No 1831/2003 of the European Parliament and the Council of 22.10.2003 (Feed Hygiene Regulation)

SANOVITA GmbH

is certified according to QAL GmbH accredited certification body
DIN EN 45011
DAkkS German Accreditation Council D-ZE-14579-01-00.
QS –ID: 4048473483681
Certificate No. 16218-012-2013-1

SANOVITA

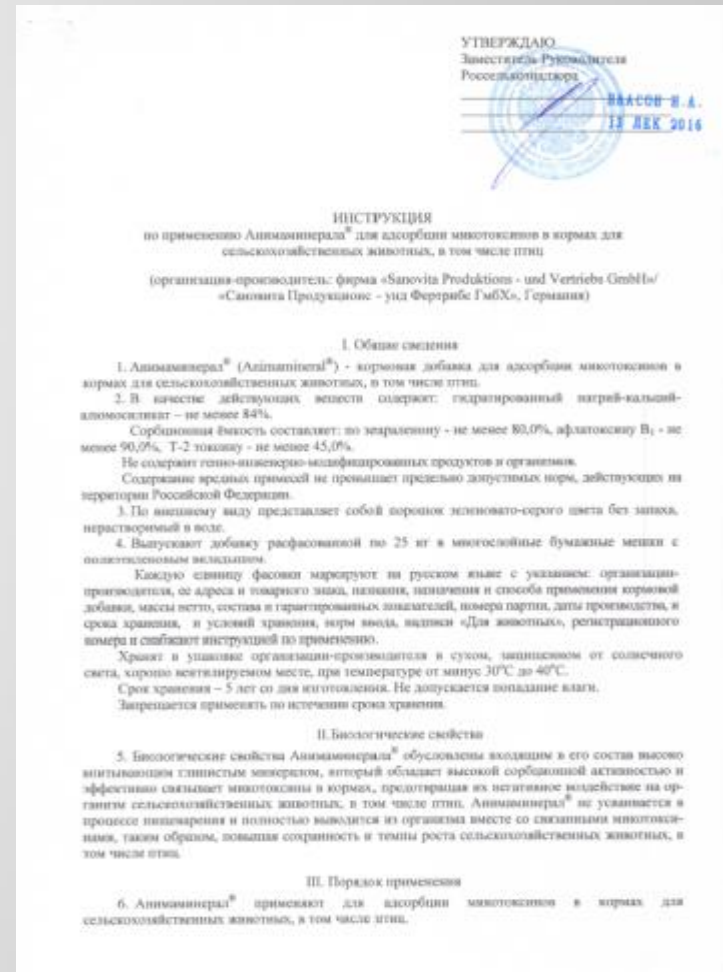
Produktions- und Vertriebs GmbH

ANIMAMINERAL® Produktlinie

SANOVITA



The product has been successfully tested and registered for use in the Russian Federation





Components and Origin

animamineral® is made from natural zeolites with high clinoptilolite content and other ingredients through high-tech manufacturing processes with constant quality control



+



+

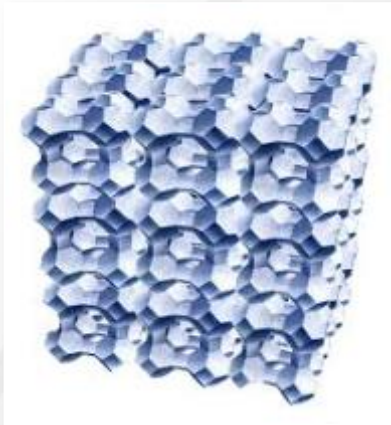
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**Produktions- und Vertriebs GmbH
ANIMAMINERAL® Produktlinie**



Zeolite (Zeo »- cooking and« lithos »- stone) in 1756 named by the Swedish mineralogist Himik Aksel Fredrik Cronstedt (Axel Frederic of Cronstedt).

The positive influence of zeolites on the health and vitality of humans and animals was already described in the 80's by the neuroscientist and researcher Karl Hecht, professor, doctor of medicine at the Humboldt University of Berlin. Also by foreign scientists, positive effects on livestock and plants were repeatedly confirmed



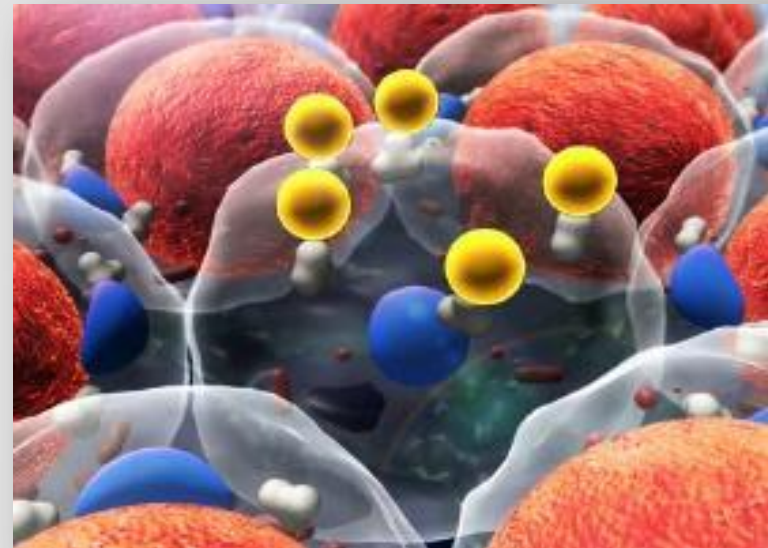
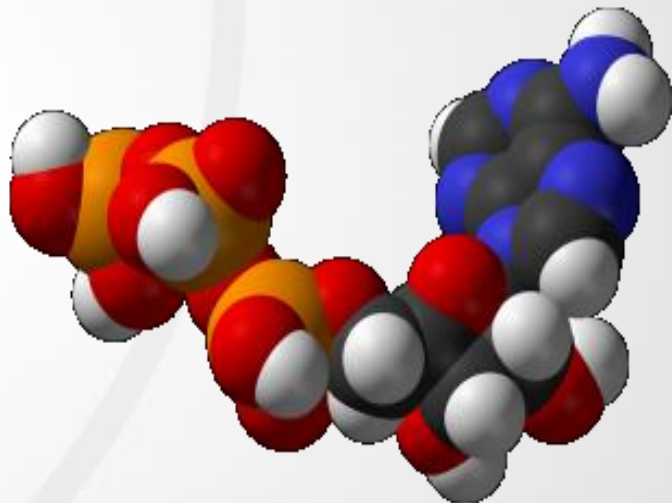
Both the raw material and the process technology are of great importance for the quality of the end products.

Since 2011, SANOVITA GmbH has been researching raw material samples from various sources worldwide, as well as various process technologies to meet the highest requirements.

NOTE "At the beginning of the 1980s, the Ministry of Agriculture of the RSFSR established the needs of livestock and poultry breeding in Kemerovo (Russia) and other surrounding regions of Siberia and the Ural of natural zeolites at 140,000 tonnes / year."



The basic of animamineral® - natural Minerals

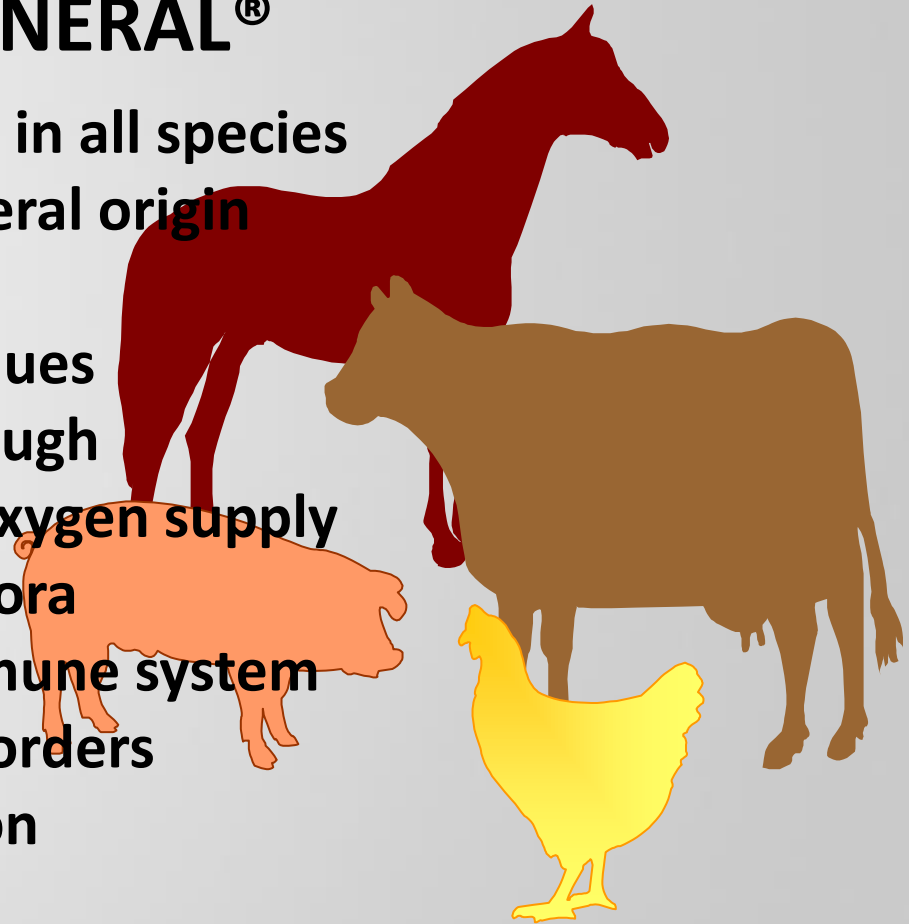


Due to the high-tech processing of minerals in the production of **animamineral®**, the end product can influence the metabolism of the cells. Thanks to the optimized control of the vital activity of the cells, a gradual improvement of the animal's health and productivity can be achieved.



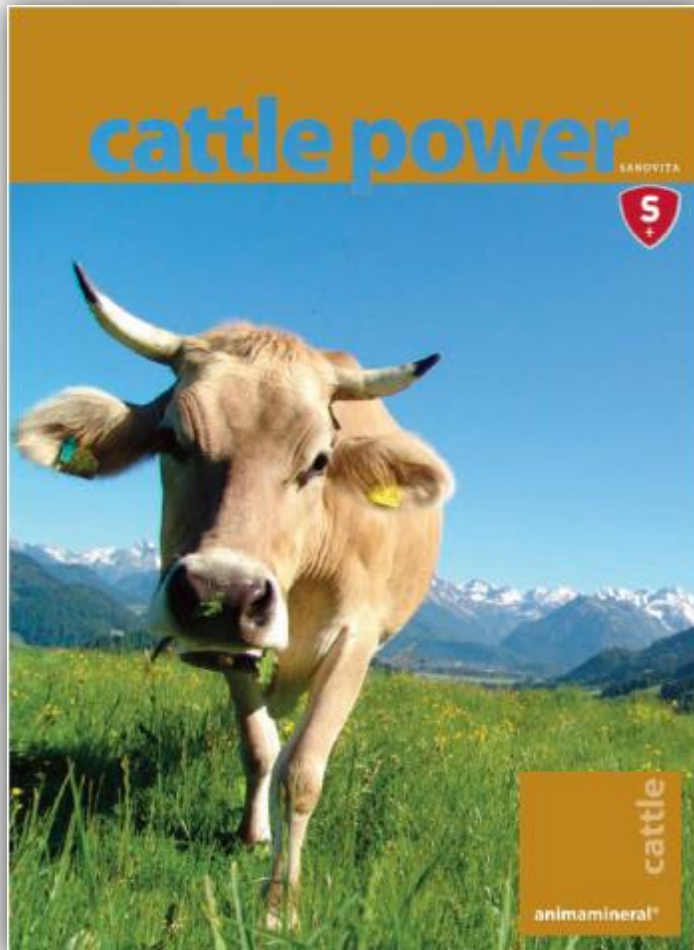
ANIMAMINERAL®

- Powder products for use in all species
- Natural products of mineral origin
- Effective in low dosages
- No side effects - no residues
- Better performance through
 - Improvement of the oxygen supply
 - Control of microbial flora
 - strengthening the immune system
- Reduction of growth disorders
- Improvement of digestion
- Improve stress defenses
- Higher vitality and faster increase in weight





animamineral® cattle



Possible advantages for farmer

- ✓ enhancing the vitality of the animals
- ✓ improvement of disease resistance
- ✓ long-term improved udder and claw health
- ✓ reduced odor in the barn
- ✓ minimized Ammonia exposure – reduced
- ✓ formation of NH₃
- ✓ higher income by increasing the milk output
- ✓ better meat quality
- ✓ cost savings due to increased feed efficiency
- ✓ reduced veterinary costs
- ✓ improved protein utilization and stable
- ✓ binding of NH₄ in the manure
- ✓ higher efficiency of manure nitrogen

Produktions- und Vertriebs GmbH
ANIMAMINERAL® Produktlinie



The influence of animamineral® on the digestive process

- ✓ pH stabilization of rumen contents, reduction of acidosis risk;
- ✓ Reduction of ammonia in the rumen - reducing the release of ammonia into the environment;
- ✓ Increasing the content of milk fatty acids for protein synthesis;
- ✓ increased milk production;
- ✓ promotes the growth of the number of microorganisms in the rumen, improves the digestive process and the digestibility of the feed
- ✓ irreversible binding of bio-amines, toxins and animal metabolites that are harmful to the health of animals;
- ✓ Decline of acute intestinal infections.

RESULTS

- + Reduction of acidosis
- + Reduction of mastitis
- + Increase in milk production
- + Increased fertility
- + Supporting the growth and health of animals
- + Positive influence on meat quality,



EFFECT OF ANIMAMINERAL® CATTLE ON DAIRY CATTLE

- Reducing the release of ammonia into the environment,
- Decrease of unpleasant smell of stables and moisture of excrements: (influence on milk production),
- Improved nitrogen binding in manure
- The substance absorbs water during the production of the feed (improvement of the structure and compatibility of the feed);
- Excellent carrier of premixes, feed additives and concentrates;
- Effect as a synergist of enzymes
- Increase the digestibility of the feed





animamineral® cattle in dairy cattle



Expected results of animamineral®

- ✓ higher milk output
- ✓ higher fat content in the milk
- ✓ reduction of cell number

Application and recommendation of the daily feeding dosage

- ✓ daily feeding with normal food ration
- ✓ mixable with all power feeding
- ✓ no change of the usual feed composition
- ✓ approximately 15 grams / 100 kg live weight / day



EXPECTE ECONOMICAL EFFECTS

Increase in daily weight gain and / or
Shortening of the fattening period to reach the final weight
and / or reduced feed intake

6 - 10
%

Increase in milk production

5 - 8
%

Lowering the costs of animal health care

10-30
%

Reducing the animal mortality

15-25
%

Expectet Cost/Benefits Ratio up to 1:3



animamineral® cattle in calf breeding



Expected results of animamineral®

- ✓ higher daily weight gain,
- ✓ reduction of diarrheal diseases

Bild: Süt Kardesler / Turkey

Application and recommendation of the daily feeding dosage

- ✓ daily feeding with normal food ration
- ✓ mixable with all power feeding
- ✓ no change to the usual feed composition
- ✓ approximately 15 grams / 100 kg live weight / day



animamineral® cattle in cattle fattening



Expected results of animamineral®

- ✓ higher daily weight gain, considering the same feeding
- ✓ Reducing the veterinary costs
- ✓ a significant improvement in meat quality

Bild: Shahbazlar Farms in Adana/Turkey

Application and recommendation of the daily feeding dosage

- ✓ daily feeding with normal food ration
- ✓ mixable with all power feeding
- ✓ no change to the usual feed composition
- ✓ approximately 15 grams / 100 kg live weight / day



animamineral® in cattle fattening Meat production at Shahbazlar farms in Adana/Turkey 2014

First period

Average weight /Animal 16.12.2013 = 278,20 kg

Average weight/Animal 01.03.2014 = 378,75 kg

Weight difference between beginning and first weighing = 100,55 kg

First fattening period 75 days

Total daily weight gain from 16.12.13 until 01.03.14 (75 days) = 1,34 kg/day

Difference in % between control group and tested group + 11%

Second period

Average weight/Animal 16.12.2013 = 278,20 kg

Average weight/Animal 01.05.2014 = 426,90 kg

Weight difference between beginning and second weighing = 148,70 kg

Second fattening period 60 days

Total fattening time 135 days

Total daily weight gain from 16.12.13 until 01.05.14 (135 days) = 1,10 kg/day

Difference in % between control group and tested group + 12%

Third period

Average weight/Animal 01.05.2013 = 426,90 kg

Average weight/Animal 17.07.2014 = 533,16 kg

Weight difference between beginning and third weighing = 254,96 kg

Third fattening period 77 days

Total fattening time 211 days

Total daily weight gain from 16.12.13 until 17.07.204 (211 days) = 1,20 kg/day

Difference in % between control group and tested group + 12%

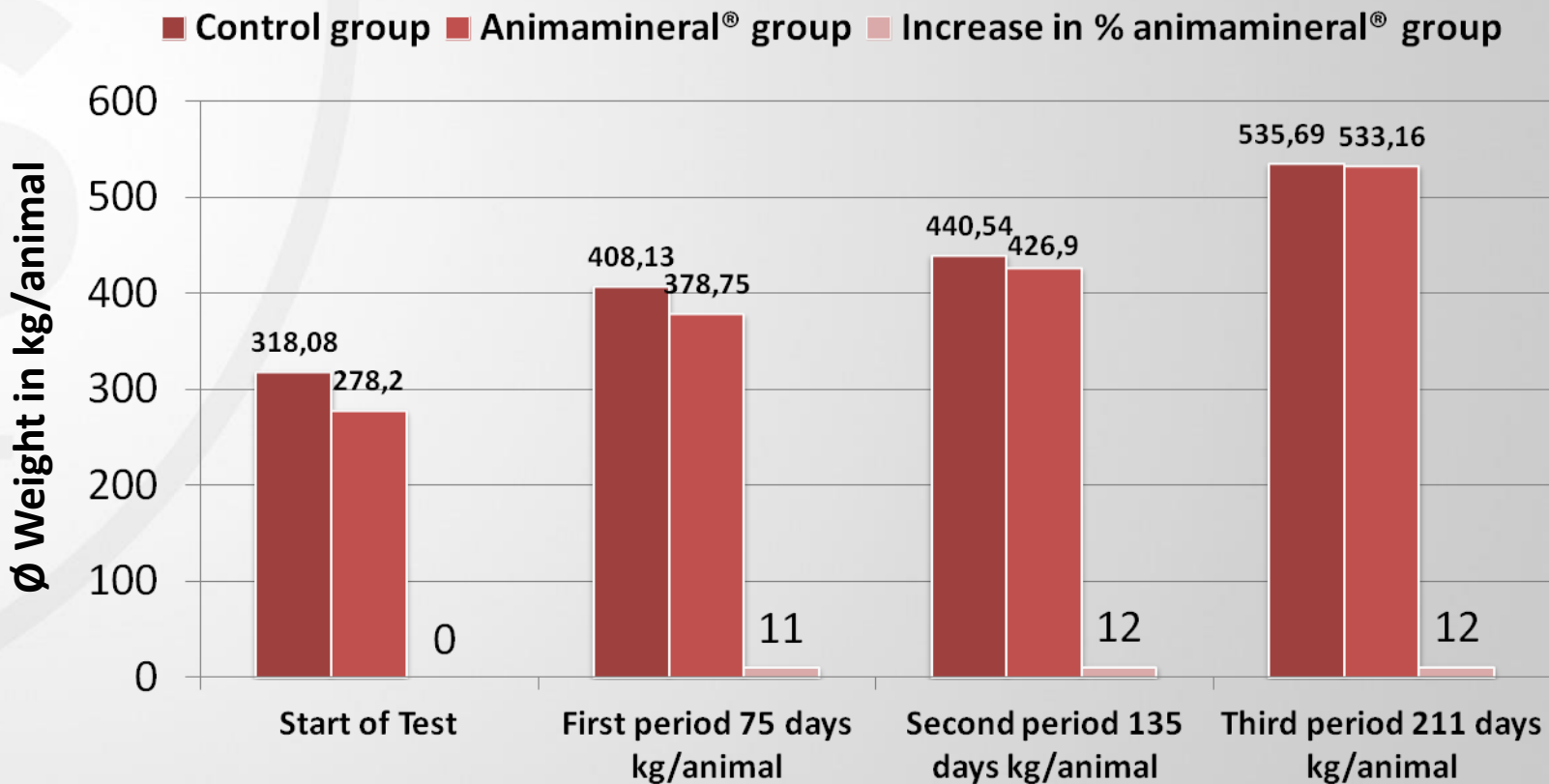


Source: Shahbazlar Farm in Adana/Turkey

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ANIMAMINERAL® Produktlinie

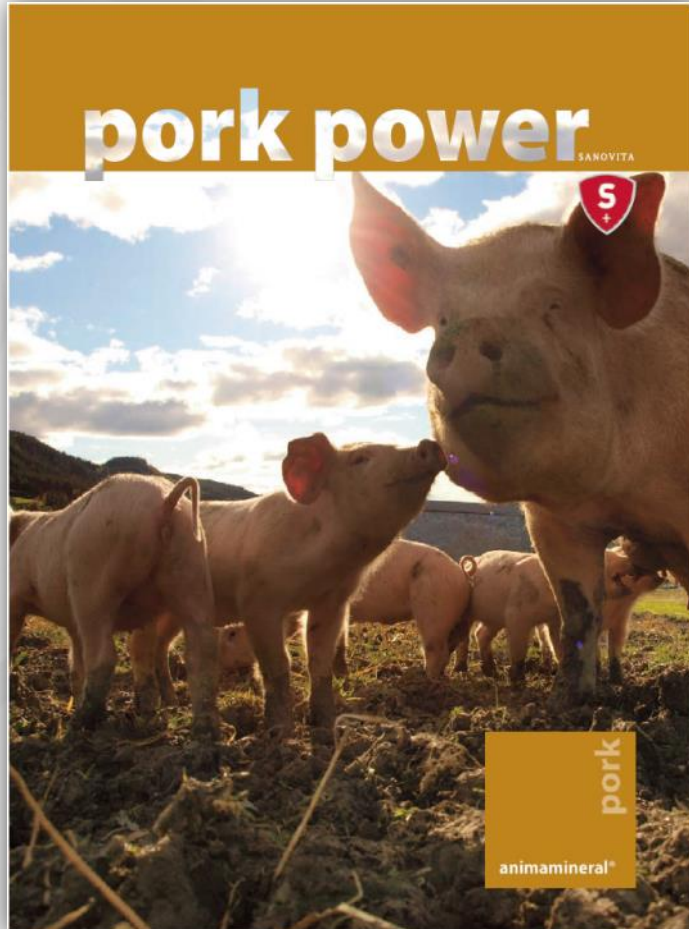


animamineral® in cattle fattening
Meat production at Shahbazlar farms in Adana/Turkey 2014





animamineral® pork



Animamineral®
the biological feed
additive for

- **Pigs**
- **Pig fattening**
- **Piglet rearing**

General information

animamineral® pork is a micronized powder manufactured in a special process, from refined Minerals (zeolite).

animamineral® pork is a feed additive which is especially suitable for pigs.

animamineral® pork promotes healthy bone structure, accelerated growth, increases the daily weight gain and provides a significantly improved health.



animamineral® pork in breeding



Expected results of animamineral® pork

- ✓ higher daily weight gain of the piglets,
- ✓ optimization of fertility services
- ✓ reduction of mortality

Application and recommendation of the daily feeding dosage

- ✓ daily feeding with normal food ration
- ✓ mixable with all power feeding
- ✓ no change to the usual feed composition
- ✓ approximately 7-10 grams / 1 kg / daily feeding of dry matter



animamineral® pork in pig fattening



Expected results of animamineral® pork

- ✓ Higher daily weight gain
- ✓ Significant improvement in meat quality
- ✓ Food savings through shortening the fattening cycles and improved feed conversion

Application and recommendation of the daily feeding dosage

- ✓ daily feeding with normal food ration
- ✓ mixable with all power feeding
- ✓ no change to the usual feed composition
- ✓ approximately 5 – 7 grams / 1 kg / daily feeding of dry matter



Possible advantages for farmer

- ✓ increase the vitality of animals
- ✓ reduced veterinary costs
- ✓ reduced odor in the barn
- ✓ lower mortality
- ✓ better meat quality
- ✓ improvement of disease resistance
- ✓ increased income because of shorter holding times
- ✓ minimize exposure to reduced formation of ammonia NH_3
- ✓ cost savings due to higher feed efficiency
- ✓ reducing cannibalistic behavior (tail biter)





EXPECTE ECONOMICAL EFFECTS

**Increase in daily weight gain and / or
Shortening of the fattening period to reach the final weight
and / or reduced feed intake**

**5 - 10
%**

Lowering the costs of animal health care

**15 - 30
%**

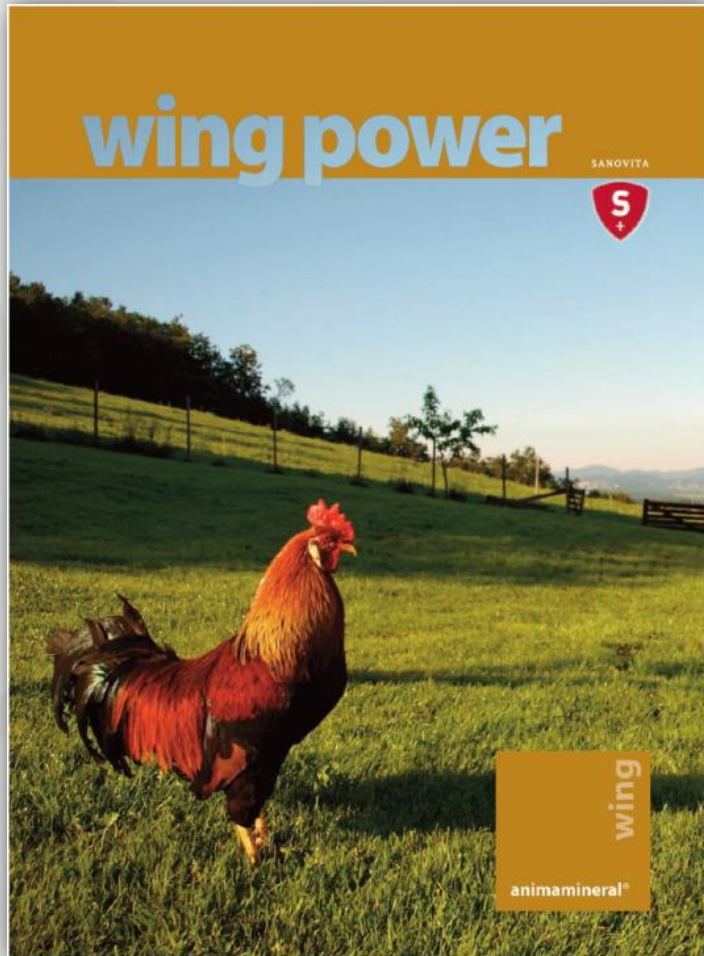
Reducing the animal mortality

**15 - 30
%**

Expectet Costs/Benefit Ratio up to 1:3



animamineral® wing



animamineral®
the biological feed
additive for

- **Laying hens**
- **Broiler**

General information

animamineral® wing is a micronized powder manufactured in a special process, from refined mineral s (zeolite).

animamineral® wing is a feed additive which is especially suitable for poultry.

animamineral® wing promotes healthy bone structure, accelerated growth, strengthens the natural defenses against disease and provides a significantly improved health.



Laying hens - egg production



Expected results of animamineral®wing

- ✓ increase the egg production
- ✓ lower excrement humidity
- ✓ less broken eggs
- ✓ extended laying time
- ✓ reduced mortality

Application and recommendation of the daily feeding dosage

- ✓ daily feeding with normal food ration
- ✓ mixable with all power feeding
- ✓ no change to the usual feed composition
- ✓ Approximately 4-6 grams / 1 Kg / daily feeding



Broiler

Fattening chicken with animamineral® wing

Fattening type	Short period	Medium period	Long period
Fattening duration in days	32 – 34 days	38 – 40 days	50 – 60 days
kg weight at end of fattening	1,5 kg	approx. 2 kg	approx. 2 – 3 kg
kg of required food for 1 kg increase of body weight	1,7 kg	1,83 kg	2,0 kg
% losses	5,2 %	4,8 %	5 %
animamineral® wing	3 g / animal / day	2,5 g / animal / day	2 g / animal / day
animamineral® wing total until end of fattening / animal	ca. 100 g	ca. 100 g	ca. 120 g

Use and recommendation of the daily feeding dose

- ✓ daily feeding with normal feed ration
- ✓ miscible with all additional feeds (concentrates)
- ✓ no change in the usual feed composition
- ✓ about 2-3 grams / animal / day



Possible advantages for farmer

- ✓ promotes digestion
- ✓ binds pollutants such as ammonia, etc.
- ✓ saves energy
- ✓ stabilizes blood values
- ✓ supports immunity
- ✓ better meat quality
- ✓ cost savings through increased feed efficiency
- ✓ lower veterinary costs
- ✓ high nitrogen efficiency of manure





EXPECTE ECONOMICAL EFFECTS

**Increase in daily weight gain and / or
Shortening of the fattening period to reach the final weight
and / or reduced feed intake**

5 - 10
%

Lowering the costs of animal health care

15 - 30
%

Reducing broken eggshells

2 - 5
%

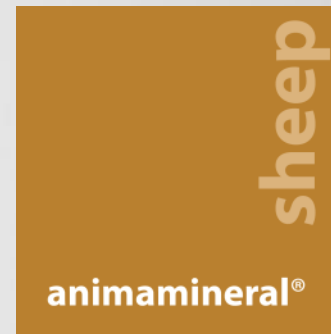
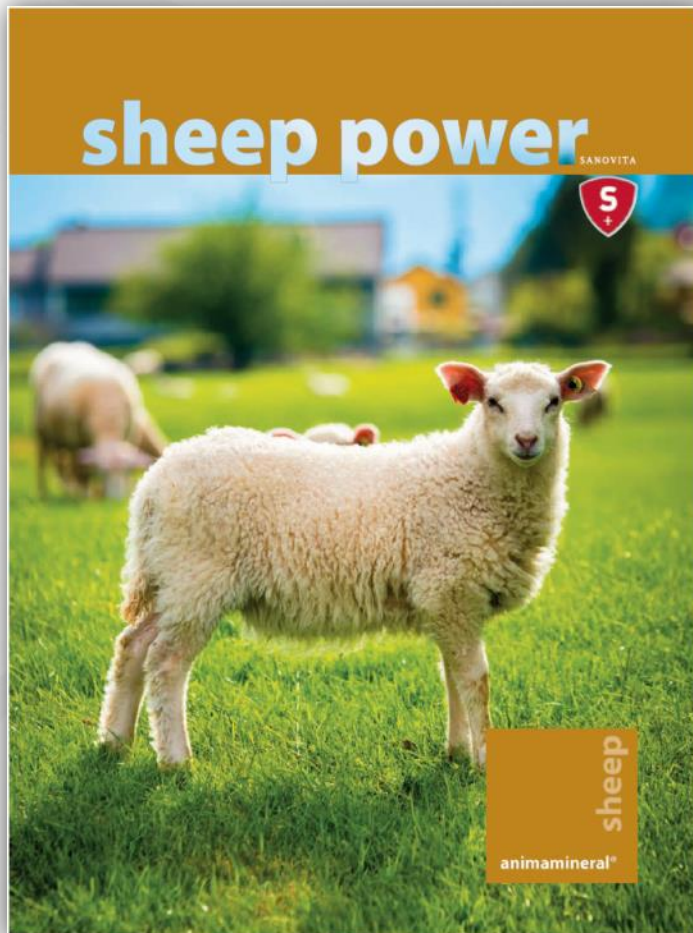
Reducing the animal mortality

15 - 30
%

Expectet Costs/Benefit Ratio up to 1:3



animamineral® sheep



Animamineral®
the biological feed
additive for

- Sheeps
- Lambs rearing
- Goats

General information

animamineral® sheep is a micronized powder manufactured in a special process, from refined minerals (zeolite).

animamineral® sheep is a feed additive which is especially suitable for sheeps and goats.

animamineral® sheep promotes healthy bone structure, accelerated growth, strengthens the natural defenses against disease and provides a significantly improved health.



animamineral® in Lambs rearing



Expected results of animamineral® sheep

- ✓ higher daily weight gain in the same feeding
- ✓ optimization of fertility
- ✓ shortening the rearing time to achieve breeding goals
- ✓ better meat quality

Application and recommendation of the daily feeding dosage

- ✓ daily feeding with normal food ration
- ✓ mixable with all power feeding
- ✓ no change to the usual feed composition
- ✓ Approximately 5 – 7 gr. /Animal/ Day



Animamineral® in sheep production

Expected results of animamineral® sheep

- ✓ higher daily weight gain in the same feeding
- ✓ significant meat quality improvement
- ✓ higher milk production in milk sheeps
- ✓ reduced veterinary costs

Source: Shahbazlar Adana/Turkey



animamineral® in goat production



Expected results of animamineral® sheep

- ✓ higher daily weight gain in the same feeding
- ✓ significant meat quality improvement
- ✓ optimization of fertility
- ✓ shortening the rearing time to achieve breeding goals
- ✓ higher milk production
- ✓ reduced veterinary costs

Application and recommendation of the daily feeding dosage

- ✓ daily feeding with normal food ration
- ✓ mixable with all power feeding
- ✓ no change to the usual feed composition
- ✓ Approximately 5 -7 gr. /Animal / Day



Mögliche Vorteile für den Landwirt

- ✓ Verbesserte Vitalität der Tiere
- ✓ Verbesserung der Krankheitsresistenz
- ✓ langfristig verbesserte Euter- und Hufgesundheit
- ✓ reduzierter Geruch im Stall
- ✓ reduzierte Bildung von Ammoniak NH₃
- ✓ Höheres Einkommen durch Erhöhung der Milchleistung
- ✓ bessere Fleischqualität
- ✓ Kostenersparnis durch höhere Futtereffizienz
- ✓ reduzierte Veterinärkosten
- ✓ erhöhte Stickstoffausbeute von Wirtschaftsdüngern





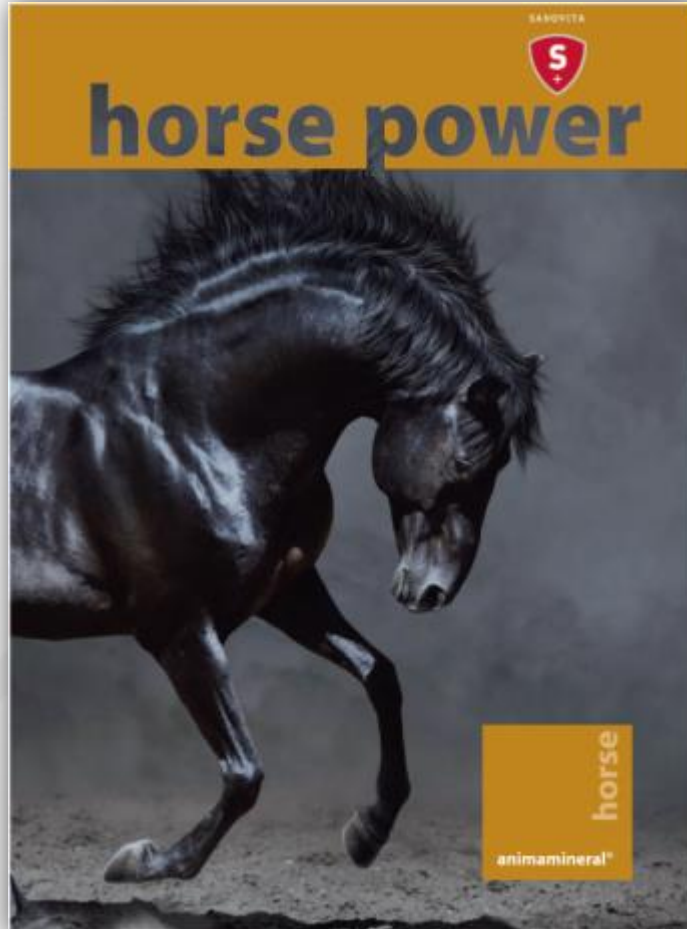
Possible advantages for farmer

- ✓ increase the vitality of animals
- ✓ improvement of disease resistance
- ✓ long-term improved udder and hoof health
- ✓ reduced odor in the barn
- ✓ minimize exposure to reduced formation of ammonia NH₃
- ✓ higher income by increasing the milk output
- ✓ better meat quality
- ✓ cost savings due to higher feed efficiency
- ✓ reduced veterinary costs
- ✓ higher efficiency of manure nitrogen





animamineral® horse





animamineral® horse at a glance



- **animamineral® horse** affects the shedding (fur change) of horses positively - particularly visible in foals.
- **animamineral® horse** improves the strength of the hoof horn and hoof quality. This is an important prerequisite for shoeing and hoof quality
- **animamineral® horse** improves the feed uptake and vitality of horses through metabolic stimulation.
- **animamineral® horse** improves the general condition of horses and reduces the nervous stress.
- **animamineral® horse** improves and reduces the wound healing in horses.



Application and dosage

Daily feeding with the conventional concentrate ration
animamineral® horse is mixable with all concentrated feeding stuffs and mash
animamineral® horse can be fed individually
 No change in usual daily feeding

Body weight	gram	application
Horses up to 200 kg	3 – 4 g	1 x daily over the mash
Horses up to 400 kg	6 – 8 g	1 x daily over the mash
Horses up to 600 kg and more	9 – 12 g	1 x daily over the mash
Competition horses (in training)	18 g	1 x per day over the concentrates
Racehorses (in training)	18 g	1 x per day over the concentrates
Competition horses (after starts) for faster regeneration feeding	25 g	divided in 2 daily doses for 2 days after starts over the mash
Racehorses (after starts) for faster regeneration feeding	25 g	divided in 2 daily doses for 2 days after starts over the mash
Stallions breeding season	25 g	divided in 2 daily doses during the breeding season





Application and dosage

Pregnant mares, starting from the 9 Month of gestation to support the intrauterine supply of the foal receive 1.5 times the regular dose.

Lactating mares get to wean the foal and for the improvement in the conception at reinsert 1.5 times the regular dose.

Foals starting from 3 Months up to 6th month of life receive 2 g of powder per 50 kg of body weight.

Weanling, yearlings, two year olds get 1.5 times the standard dose.



Produktions- und Vertriebs GmbH
ANIMAMINERAL® Produktlinie



Armenius

Owning a horse stable was the childhood dream of Sepp Waldner from Marling in South Tyrol.

More than 20 years ago, he fulfilled that dream with the acquisition of a horse farm at Reschensee, where he is since then proud of his Haflinger breeding. Some of his stallions have already won international awards.

His horses (shown here as an example the stallions Armenius, Wörthersee and Mystery) are under veterinary supervision.

Since June 2013 the stallions were additionally fed with **animamineral® horse**.

First general observations confirm the positive experiences of many breeders.

SANOVITA will prove the effect of **animamineral® horse** in a long term study.

Results of this study will be published.

Mystery

Wörthersee





Benefits for breeders and horse owners



- ✓ Improvement in the constitution, external appearance
- ✓ Vitality increase of the horses
- ✓ Laboratory parameter: Improvement of the blood chemistry and hematological parameters
- ✓ Better defence and illness resistance
- ✓ Long-term improvement of skin and hoof health
- ✓ Detoxification function in feed quality defect
- ✓ Detoxification function in the animal metabolism as well as relief of the liver and liver protection
- ✓ Reduction of health care costs
- ✓ performance stabilization
- ✓ Accelerated wound healing



animamineral® fish



Expected effects

- ✓ Strengthening the immune system
- ✓ Promoting health and growth
- ✓ Reduction of losses
- ✓ Better oxygenation of lymphocytes and macrophages





animamineral®fish Salmon - Aquaculture

4 main advantages through additional feeding with animamineral® fish

1. Reduction of toxins
2. Better growth rates
3. Increased survival
4. Improved quality



Source: Bilder Aquakulturen Lachs



animamineral® fish in Shrimp - Aquaculture

Use of animamineral® fish

- ✓ as an animal feed supplement
- ✓ faster growth
- ✓ increased survival rates
- ✓ improved quality and coloring of species
- ✓ cost savings and increased profits

Global competition is expanding in the aquaculture business. Successful farmers must cut costs, improve quality and the market value of their products.

animamineral® fish puts you in the position in developing global market for breeding fish and shrimp to be competitive.





animamineral®fish in der Garnelen- Aquakultur

Expected Results in Shrimp farming, by adding animamineral®fish in the water (5-6kg / 1000 Liter)

- ✓ Water detoxification: **animamineral®fish** absorbs ammonia, methane and other toxic substances such as heavy metals
- ✓ less water change
- ✓ significantly reduced mortality rate
- ✓ less stress on the animals
- ✓ better feed intake
- ✓ reduced NH3 binding
- ✓ better and faster growth
- ✓ Strengthens the immune system





Sanovita

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**Thank you for your interest and support
using our quality products.**

