Stalosan®
Hygiene Solutions

Stalosan® hygiene powder products

VILOFOSS®

A three step product range with increasing efficacy

STALOSAN DRY

Moisture absorption/drying is the primary mode of action within Stalosan Dry. With moisture absorption the microorganisms do not die, but are kept at a fairly low level, as long as the resting areas are completely dry. This method demands frequent applications in order to minimise the risk of moist conditions that otherwise can lead to immediate growth of microorganisms and elevated infection levels.

STALOSAN BASIC

The efficacy of drying agents can be improved with the addition of special mineral acids that break down harmful waste products and lower the pH-value in the animals' resting areas. This increases the animals' resistance towards infections and improves the health status and performance. This makes Stalosan Basic a more effective choice compared to simple drying agents.

STALOSAN F

In addition to the basic ability to dry and break down harmful waste products, Stalosan F reaches further with special active ingredients that eliminate microorganisms and inhibit their metabolism. As a result, the highest possible efficacy is achieved, which makes Stalosan F an outstanding biocide with the ability to control microorganisms at all levels independent of the moisture level.

FIGURE 1:

THE OVERALL GOAL FOR THE USE OF A HYGIENE POWDER PRODUCT IN ANIMAL RESTING AREAS IS THE CONTROL OF HARMFUL WASTE PRODUCTS AND DISEASE CAUSING MICROORGANISMS

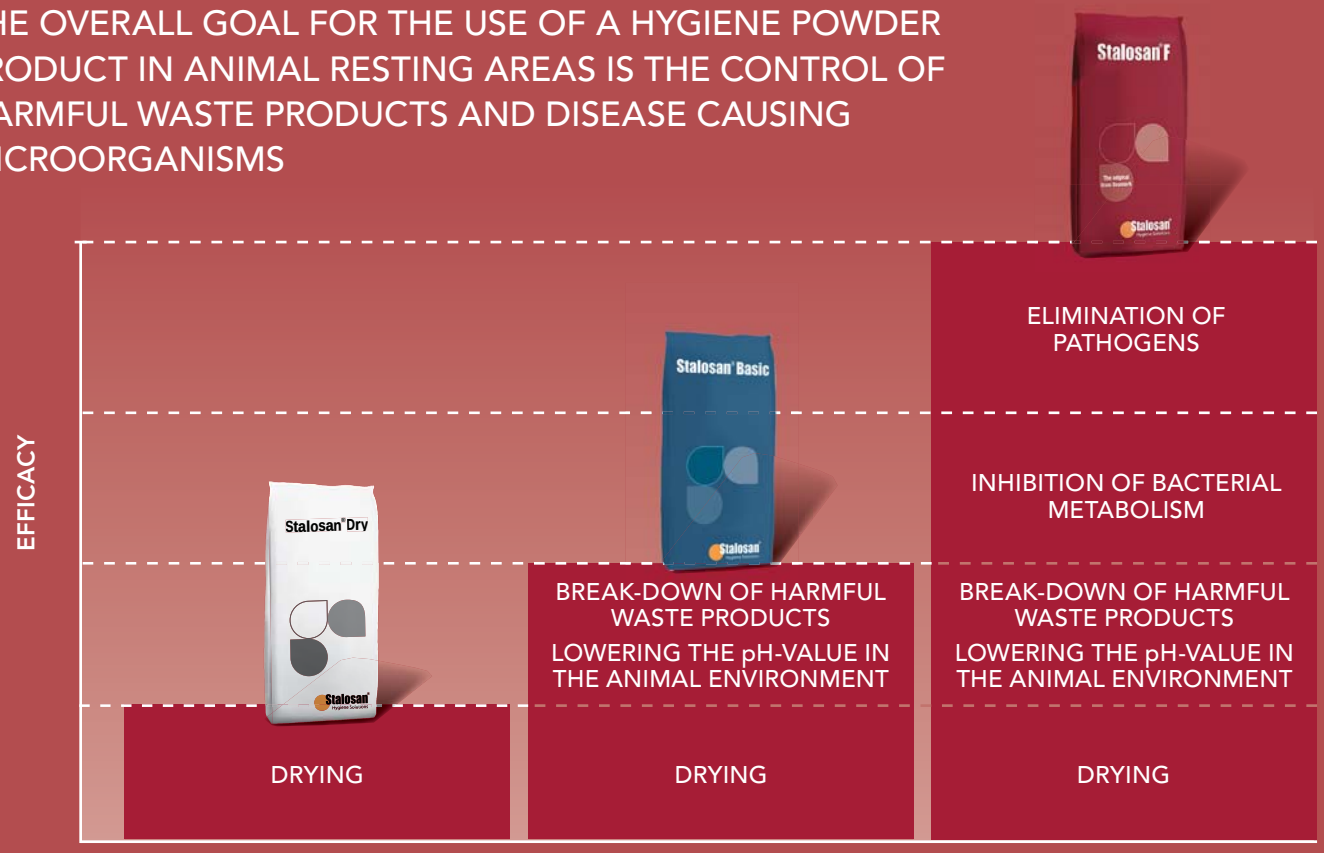


TABLE 1:

EFFECTS OF STALOSAN HYGIENE POWDER PRODUCTS

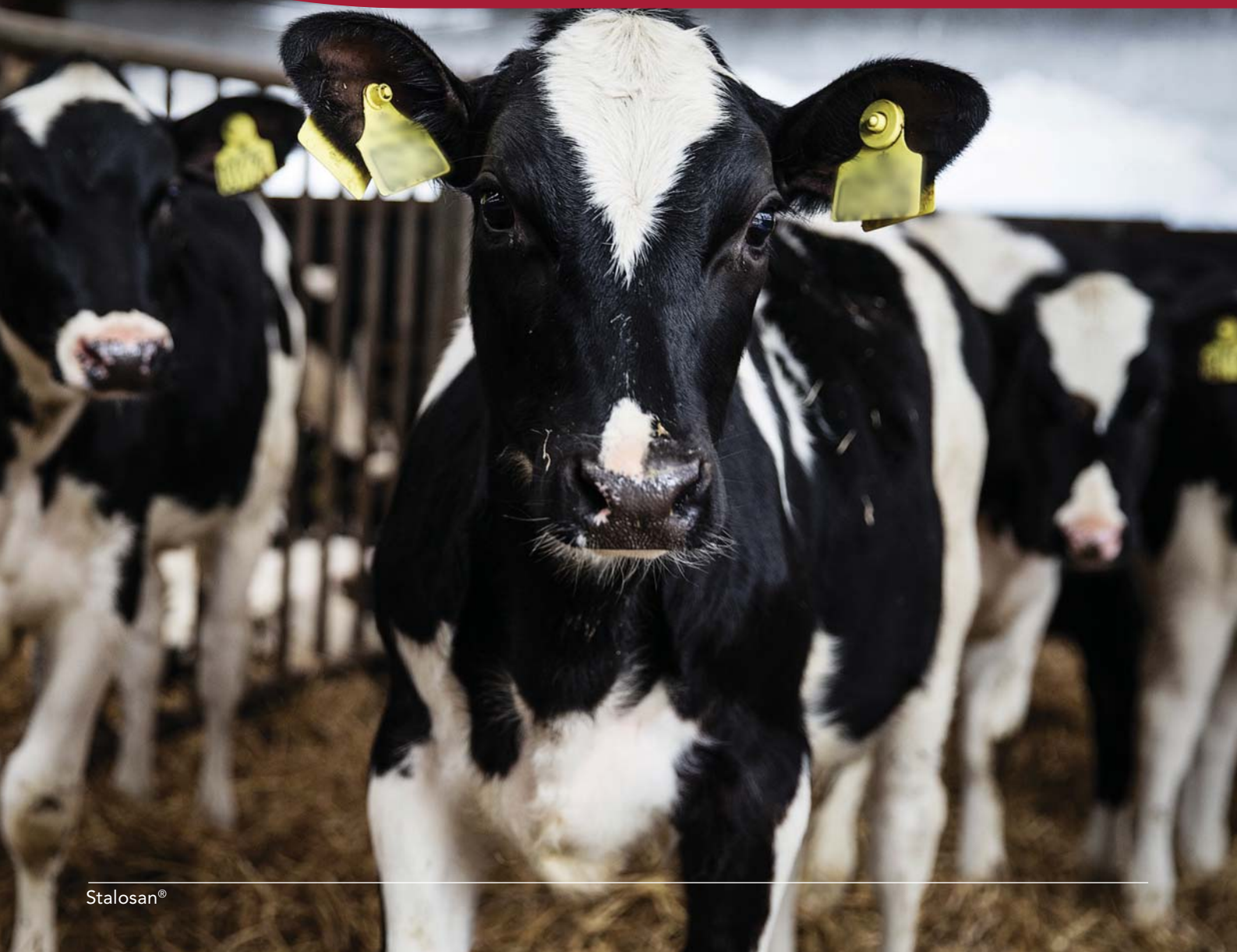
EFFECTS	STALOSAN DRY	STALOSAN BASIC	STALOSAN F
Biocidal effect	-	-	++++
Bacterial enzyme inhibition	-	-	++++
Ammonia neutralisation	+	+++	++++
Hydrogen sulphide neutralisation	++	++	++++
pH-value	6	4,5	3,5
Drying	++++	++++	++++
Application dose	100 g/m^2	50-100 g/m^2	50 g/m^2
Application rate weekly*	2	1	1

*Weekly application and dose can be increased in case of elevated moisture level and pathogenic load.

STALOSAN DRY

– MEDIUM AMMONIA AND MOISTURE CONTROL, HIGH ANIMAL COMFORT

- Stalosan Dry is a slightly acidic hygiene powder product that absorbs water and neutralises ammonia.
- Stalosan Dry supports animal resistance and welfare.
- Stalosan Dry has a soft structure that gives a high animal comfort in resting areas.
- Can be combined with Stalosan F for increased antimicrobial control.



STALOSAN BASIC
– LOW pH-VALUE, HIGH AMMONIA AND MOISTURE CONTROL

- Stalosan Basic is an effective hygiene agent. The combination of low pH-value and strong desiccating properties gives Stalosan Basic a unique efficacy profile, that reduces the development of harmful substances in the animal environment and improves animal welfare.
- The mineral acids in Stalosan Basic prevent the breakdown of sebum and skin and thereby protect the animals.
- Stalosan Basic possesses a highly active neutralisation process that breaks down ammonia and hydrogen sulphide.

STALOSAN GREEN
– FOR ORGANIC USE

- Stalosan Green is a mixture of special active ingredients that imitate the well-documented effect of Stalosan F
- Stalosan Green is an alternative and unique way to improve the health status in animal production
- Lowers ammonia and hydrogen sulphide emissions
- Improves quality and prolongs the durability of bedding
- Regular addition of Stalosan Green stabilises the microbial flora and chemical balance of the litter

STALOSAN F
– THE MULTIFUNCTIONAL BIOCIDE

- Stalosan F is a multifunctional biocide that provides ongoing protection against pathogens and harmful waste products during the full animal production cycle.

- The philosophy of Stalosan F is to have a composition, where all ingredients serve a specific purpose for increasing the animals' performance and productivity. This is achieved through a concentrate of more than 95% active ingredients, which lower the infection level and control the negative impact from harmful waste products and elevated pH-values in the barn environment.

- Eliminates pathogens (bacteria, viruses, fungi and parasites)

- Inhibits bacterial enzymes

- Neutralises harmful waste products such as ammonia and hydrogen sulphide

- Regains a natural low pH-value in the animal environment and therefore strengthens the animal resistance towards infections.

Stalosan F is made of fine dust particles to increase the contact surface and thereby increasing the efficacy. The fine particle size is also ensuring a high floatability and subsequently a complete coverage of treated areas. This floatability is very crucial for the effect of powder products in general, since once they are added to a surface, they will no longer be able to flow out and give a full coverage.

Stalosan hygiene powder products

Stalosan F is well-known worldwide for its high efficacy profile, proven through several independent laboratory studies and farm trials. Therefore, Stalosan F has become a product of choice when farmers are faced with uncontrollable infection levels in resting areas and subsequently poor animal performance.

The technology of Stalosan F is based on high-priced quality ingredients and approved active biocides contrary to simple limestone-based drying agents. We have introduced Stalosan Basic and Stalosan Dry to be able to supply farmers with low-cost drying agents, too. Stalosan Basic and Stalosan Dry provide extra value compared to limestone-based products, and they follow the basic chemistry of Stalosan F in terms of absorbing moisture, lowering the pH-value and breaking down harmful waste products.

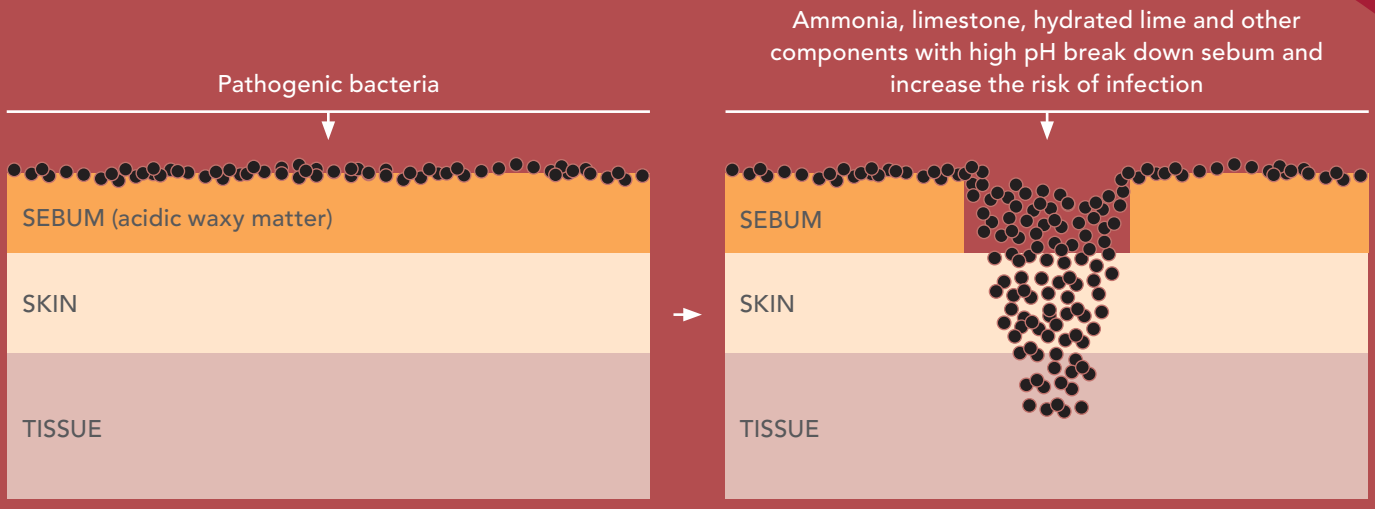
The Stalosan powder product line ranges from the highly effective biocide "Stalosan F", to the medium acidic drying agent "Stalosan Basic" through to the slightly acidic drying agent "Stalosan Dry". The product line also includes "Stalosan Green" which can be used in organic livestock production.

LOW pH-VALUE IN RESTING AREAS IS CRUCIAL FOR THE ANIMAL DEFENCE SYSTEM AGAINST INFECTION

In general, pathogenic bacteria perform poorly in acidic environments. The animal's protection mechanism is to excrete a sticky acidic substance (sebum) that covers the skin, leading to an inhibition of harmful bacteria. Therefore it is regarded an important first line defence against disease causing bacteria.

FIGURE 2:

EFFECT OF ALKALINE PRODUCTS ON THE SKIN

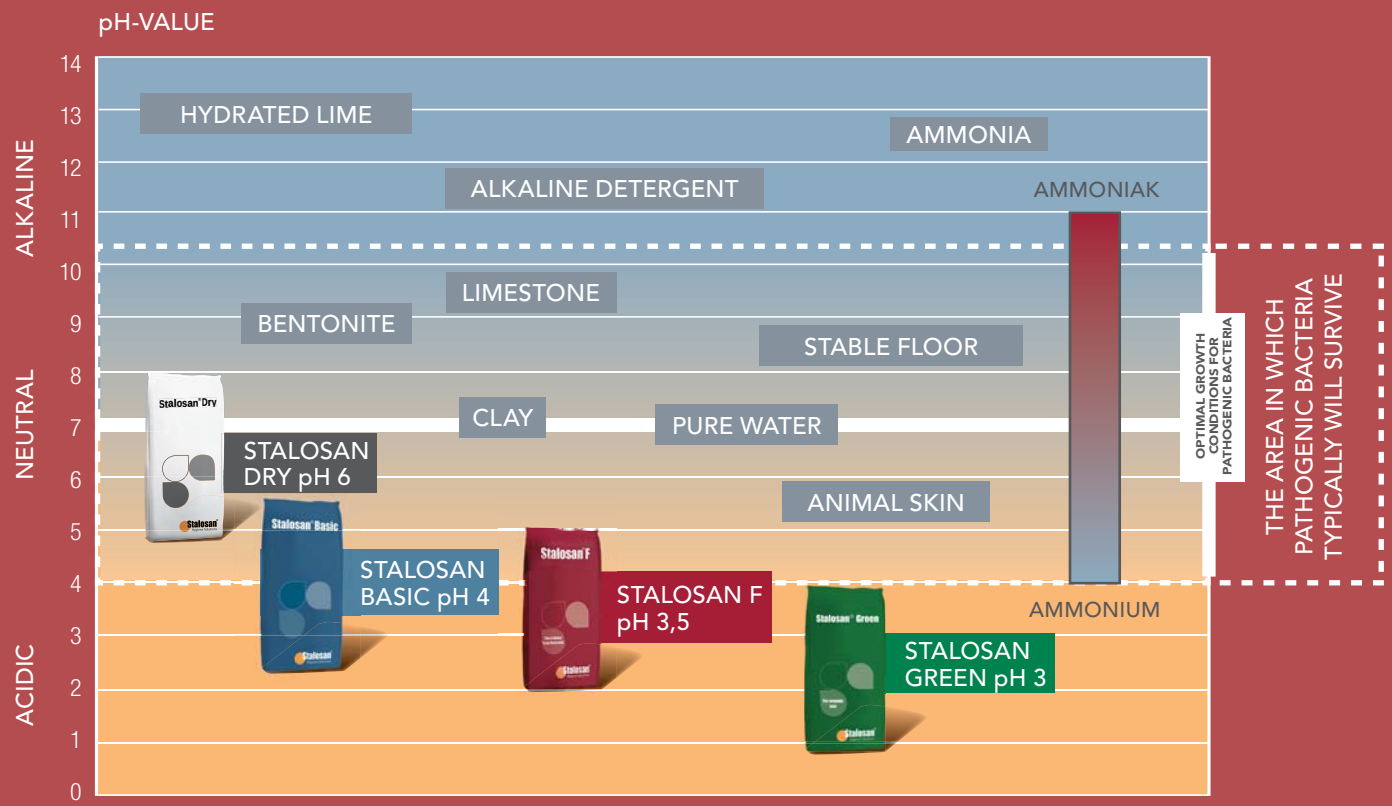


Sebum consists of wax, fatty acids and beneficial non-pathogenic bacteria. Sebum keeps skin moist and flexible, and possesses antimicrobial activity through acidity, enzyme activity and symbiosis with beneficial bacteria.

Ammonia, limestone, hydrated lime and other alkaline products break down sebum on the skin and provokes infection by pathogenic bacteria.

FIGURE 3:

GRAPHIC SCHEME SHOWING THE pH-VALUES OF THE STALOSAN PRODUCTS, LIMESTONE AND OTHER COMMON COMPONENTS IN ANIMAL BUILDINGS



Ammonia from slurry builds up in the animal environment and generates alkaline conditions with elevated pH-values. This compromises animal skin and mucosal tissue, leading to an increased risk of infection and diseases. Stalosan neutralises ammonia and adjusts the pH-value down to the natural conditions on skin at 4,5-5,5. At this pH level, skin has a high resistance towards infections.

Ammonia from animal waste products has a pH-value of 13. This creates an alkaline animal environment that breaks down sebum and skin, compromising the animals' defence system and increasing the risk of infection (See figure 2).

Typical powder hygiene agents for resting areas are alkaline with a pH-value between 9 and 13 due to the high content of limestone or hydrated lime (See figure 3). This will compromise the skin defence system even more and is not advisable to use in animal housing.

It is crucial to counteract the high pH-value in animal facilities by using a powder bedding product with a low pH-value.

All Stalosan products are unique in composition by having a high concentration of acidic minerals with low pH-values (See figure 3). The mineral acids prevent the breakdown of skin and protect the animals.

Are you looking for a multifunctional biocide or a limestone based drying agent?

Most hygiene powder products on the market are primarily made of limestone. This makes these products less expensive but also limits the efficacy profile to a minor drying effect.

Stalosan F is a complex mixture of carefully selected active ingredients that makes it a multifunctional biocide. Those functions include elimination of disease causing microorganisms, inhibition of bacterial metabolism, breakdown of harmful waste products, regaining a natural low pH-value in the animal environment and water absorption.

Drying Agent
TYPICAL HYGIENE
POWDER PRODUCT
Product composition:
Fragrance
Inactive Limestone

Stelosan - September 2018 | We reserve the right to changes and printing errors.

Vilofoss is one of the world's most productive, competitive, resource efficient and sustainable agricultural productions. Our knowledge and experience is obtained through work with nutrition for all animal groups in animal production for more than 80 years.

Vilofoss create value-adding solutions for the globally competitive farmer through customized farm mixes for the animal production. In addition to our vitamin- and mineral compounds we have a wide range of supplementary products, e.g. milk replacers for cows and pigs, veterinary products, welfare products, products for disinfection and other unique trouble shooters.

In Vilofoss we focus on being trustworthy, value-creating and ambitious.

Find more informations, videos, trials, ect, on www.stalosan.com

B18099

Distributed by:

VILOFOSS®

Vilofoss United Kingdom
Tel: 01263 586666

Email: orders-uk@vilofoss.com
www.vilofoss.com/uk