



Reduces
smell



Better homogeneity



Easy and
secure manure
handling



Easy to use

SeoFoss

– Eases everyday routines and
ensures financial growth

Vitfoss | VILOFOSS[®]
part of | 

SEOFOSS

SeoFoss is a slurry additive comprising a carefully selected mixture of special minerals providing an excellent ion-exchange effect. The ingredients in SeoFoss have the finest particle sizes in the market, which provides an excellent effect by enlarging the particles' surface area and enhancing ion exchange. SeoFoss works by exchanging negatively and positively charged ions. This binds the ammonia in the slurry. In doing so, the product serves as a buffer in the slurry and minimises fertilizer leaching. The high ion-exchange effect also limits the odour of slurry and in doing so limits the amount of ammonia vapour. SeoFoss also has an excellent effect on the slurry by giving it a more homogeneous mass.

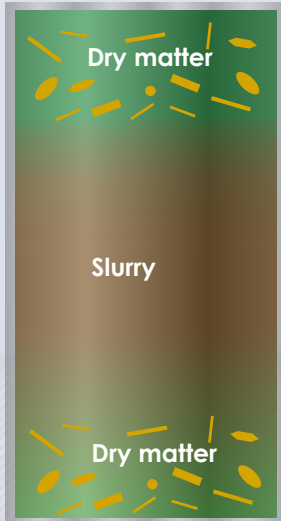
The product has already been tried and tested in several pig herds and cattle herds with excellent results in terms of homogeneity, odour and ammonia-binding qualities. Our product has also been included in SEGES' nationwide trials in Denmark where SEGES is studying the product's nitrogen-binding properties and seeing whether it can increase crop yield per hectare.

The particle surface area of SeoFoss is larger than other products, which improves the homogenisation effect.

- Easy and secure handling of slurry
- Better homogeneity
- Binds N
- Reduces smell
- Easy to use
- Floating crust on slurry tanks
- Facilitates work processes



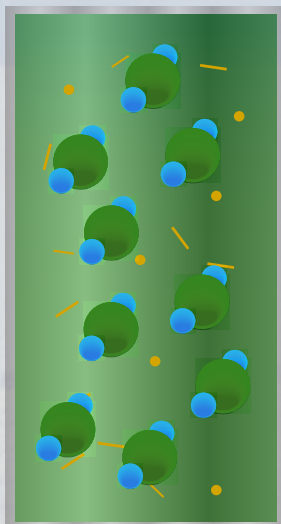
SEOFOSS IMPROVES HOMOGENEITY



It is difficult for the slurry to mix up with dry matter because of the surface tension in the slurry. This means a reduced homogeneity.



SeoFoss®



Uniform and homogeneous slurry where dry matter and slurry are mixed up.

WHY USE SEOFOSS

There are many good reasons for using SeoFoss. You are going to obtain up to 1.4 kg more total N in the slurry by using SeoFoss all year round in the animal housing. SeoFoss makes the slurry more homogeneous and thus providing a better flow in the channels. The smell is also markedly reduced, because ammonia is bound to the slurry. Furthermore the slurry is much easier to handle, which provides labour savings.

- SeoFoss binds nitrogen in the slurry and thus providing a better fertilizer value
- SeoFoss makes the slurry more homogeneous and the crops are therefore supplied with a consistent slurry
- SeoFoss reduces odour nuisances by binding nitrogen to the slurry. This results in a better environment outdoor as well as indoor for the benefit of both animals and humans
- SeoFoss provides labour savings

Start now and make money on your slurry

Start dosing SeoFoss in your housing unit and ammonia will soon start binding to the slurry. In this way a perfect flow in the channels is ensured, as well as easier handling of the slurry tank and last but not least; more nitrogen for your crops.



TESTIMONIAL

Lizette Pilegaard, manager for Claus Clausen in Vojens, Denmark, states:

"We use SeoFoss because it eases our slurry-processing workload. The slurry is more homogeneous and easier to manage and it has improved our indoor climate. Now, we use SeoFoss wherever we know there are problems, and we will keep on doing this.

In recent years we have given the slurry a little 'push' by flushing each slurry channel with a pressure washer. The slurry was so thick that it could not move by itself. This is partly due to the straw we use in the farrowing unit, which caused the slurry to dry out and become more compact.

So we tried using SeoFoss. We quickly saw that the product started working, and half of the old, dry slurry was gone three weeks later. It used to take all morning to get rid of the slurry, but now the only time we spend is on opening the plugs. This also means that the slurry is easier to manage because we do not have to bother using pressure washers.

We tried out SeoFoss in the climate-controlled unit, mainly to focus on increasing the slurry's nitrogen content. The nitrogen content rose by 300 grams of nitrogen per m^3 in the climate-controlled unit and by 1 kg per m^3 in the farrowing unit. We are tempted to use it throughout the barn, if we need to focus on raising the nitrogen level.

Once the pigs are in the barn, we dilute SeoFoss by mixing it with water in a water jug. This makes it easy for us to pour it into the channels without getting the pigsty slats wet. If a pigsty is empty, we scatter some SeoFoss on the slats in places where we know the slurry is a bit thicker."



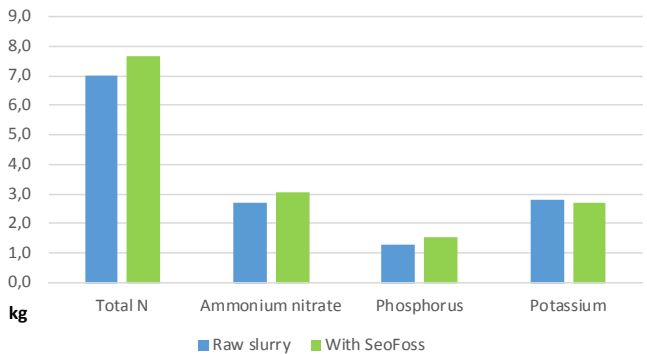


TEST RESULTS

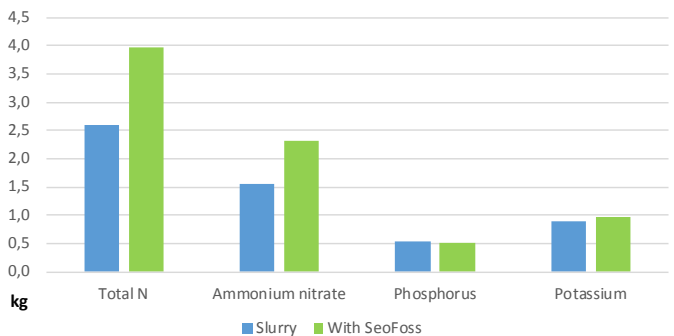
The illustrations below show the results from slurry analysis from both piglet slurry and sow slurry.

The blue columns show analysis of the slurry before adding and the green columns show the analysis results 21 days after adding of SeoFoss.

Claus Clausen piglets 7-30 kg



Claus Clausen sows



The conclusion of the illustrations above shows an extra content of up to 1.4 kg extra total N and 700 g extra ammonium nitrate.

EFFECT IN BIOGAS PLANTS

SeoFoss – essential in the biogas plant

- Assisting the bacteria function – thus increasing the gas production
- Easier stirring in the tanks and thus saving energy
- Helps avoiding floating crust
- Reduces and binds ammonia
- Improves the plant finances
- 100% natural product
- Harmless for humans, biogas plants and environment

Homogenising of the slurry

SeoFoss works like a surfactant on the slurry by enhancing the binding of organic molecules to water. This makes the slurry more homogeneous and, thus, easier to manage.

SeoFoss ensures a stable, high level of biogas production

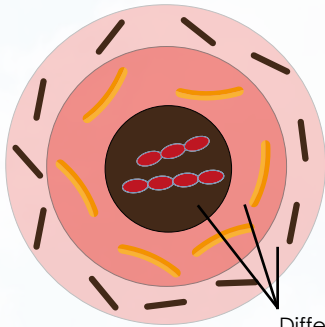
Biogas bacteria live in small, protected, layered colonies comprising different types of bacteria. The top bacterial layer hydrolyses and breaks down organic material to release substrates containing energy. The next bacterial layer is responsible for fermenting the substrates containing energy. Volatile fatty acids are formed in this layer and broken down by the innermost bacterial layer into acetic acid, which then decomposes into methane gas.

The vigorous stirring process at a biogas plant destroys the bacterial colonies and can possibly eliminate the innermost bacterial layer, which produces the methane gas. This could lower the overall production of biogas. SeoFoss has a very large surface area with many cavities.

The cavities give these sensitive bacteria a protected growth environment where the layered bacterial colonies can grow without being destroyed by the stirring process.

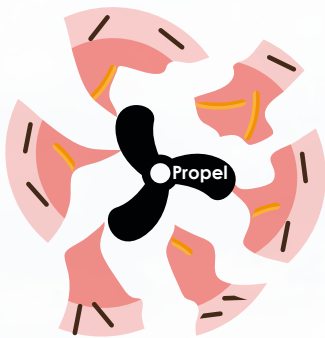


SEOFLOSS PROTECTS THE PRODUCTIVE BACTERIA

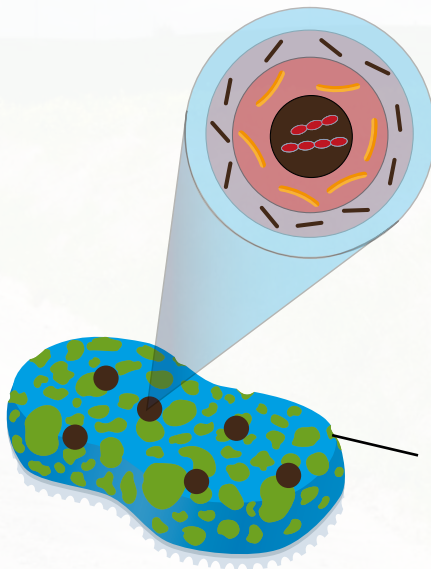


Biogas producing bacteria are encased by different types of bacteria in colonies providing nutrition and protection. This symbiosis maintains a maximum biogas production.

Different bacteria colonies



Vigorous stirring destroys the bacteria colonies leading to reduced biogas production.



SeoFoss protects the bacteria colonies from the vigorous stirring and destruction and thus a maximum biogas production is maintained.

SeoFoss - particle

USE

Use in housings

The amount of SeoFoss to dispense is 20 g per m³ slurry.

Calculating the application volume:

Storage volume (including slurry channels and pipes) [m³] x 20 g SeoFoss

Application of SeoFoss:

Full channels/tanks:

Dissolve the calculated volume of SeoFoss in ample water and spread it over the slatted floor and/or put SeoFoss into the slurry tank. Mix thoroughly; the slurry tank should be stirred at 4 different points.

Empty channels/tanks:

Dissolve the calculated volume of SeoFoss in ample water and spread it over the slatted floor and/or put SeoFoss into the slurry tank. Distribution will be effected automatically as a result of the inflow of slurry.

Recommendations:

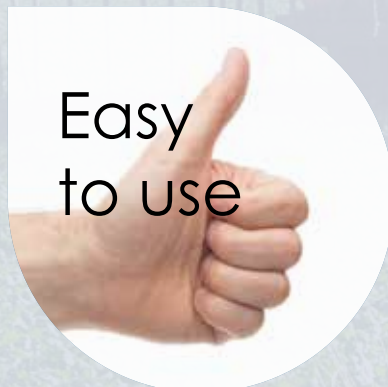
Quantity of water for dissolution: for every 1-4 kg SeoFoss, use 10 litres of water.

Before applying onto fields, give the slurry a single, thorough stir.

After slurry has been drawn off, a fresh dose will be necessary.

Use in biogas plants

Daily application: use 20 g Seofoss per m³ biomass in the pretank.



ADVISING AND START-UP

If you require further advice about the product, assistance with start-up or if you have other questions in connection with SeoFoss you are welcome to contact our special consultant Jesper Jacobsen by mobile or by email.

Jesper is always available with good advice. He has a past in primary agriculture and has worked with sales and advising of slurry additives for several years.



Jesper Jacobsen

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Vilofoss is the new international face in the area of vitamin- and mineral premixes.

It is based on already known and strong brands, namely Deutsche Vilomix, Vitfoss, Calcialiment and Fodermix.

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