



Manure Technology presentation template

Company name/Identification/Logo



Technology name:

Active NS

Technology description

Animal husbandry and biogas production is often associated with foul smelling due to the evaporation of ammonia during storage, distribution and, if relevant, during production of biogas. The evaporation of ammonia has several consequences: the fertilizer value for the farmer is decreased, which results in increased costs for mineral fertilizers, there is increased eutrophication to the aquatic environment and it often gives biogas producers and farmers a bad image in relation to the surroundings.

This Danish company has developed a mineral additive, which is 100 % natural and can therefore be used in organic production. The additive can be used as an additive to manure in animal production and for biogas production.

In relation to animal production the additive can be added in the slurry channels, slurry tanks and lagunes and pretanks. Apart from reducing smell and making the manure/biogas substrates more homogenous, it creates a floating crust without the use of straw during storage of the manure. Furthermore it increases the fertilizer value, since analysis has shown that the binding of nitrogen is increased with up to 1.2 kg N per m³ of manure. The increased fertilizer value will, with the correct farming practices, result in increased crop production and higher revenue for the farmer. The fact that the manure becomes more homogenous also decreases the need for stirring of the manure, when stored. In animal production the binding of ammonia can also contribute to increased welfare for the animals due to improved air quality.

In relation to biogas production, the advantage is that the binding of ammonia both increases biogas production and reduces smell during the gas production. Furthermore, when using more than one substrate for the gas production, the additive makes the biomass more homogenous, thereby increasing the gas potential. The product has been tested in several biogas plants in Denmark with an increase in gas production as a result.



The project is partly financed by the European Union - European Regional Development Fund

Disclaimer: This manure technology has not been investigated nor approved by Baltic Manure. This is a forum where business can present their technologies for inspiration, marketing, cooperation and future improvements of the sustainability of the technology



Documentation of environmental effect

Below is data from Blaahoej Energy Company AMBA. They started using Active NS in October last year and in the table below the effect of Active NS is shown as increased gas yield in the column on the right.

Month	Production Gas (m ³)	Comments	Adjusted 30 days	Additional Gas Yield
October 2011	217,368	+ Active NS	210,356	5 %
November 2011	231,160	+ Active NS	231,160	15,5 %
December 2011	217,032	+ Active NS	217,032*	8,5 %
January 2012	216,855	+ Active NS	216,855	8 %
February 2012	202,451	+ Active NS	189,390**	
March 2012	222,035	+ Active NS	222,035	11 %

* 1- day production stoppage for repair

** 29 days

www.fcsi.dk

Scientific references/studies

Scientific documentation is in progress

Certifications

Since the product is based on natural minerals it can be used in organic production.

Business references - products/plants sold

Blaahoej Energy Company AMBA

Sdr. Ommevej 38

DK – 7330 Brande

<http://firma.eniro.dk/firma/bl%C3%A5h%C3%B8j-energiselskab:639801/7330-brande>

Thorsoe Environment & Biogas Company

Kongensbrovej 10

DK – 8881 Thorsoe

www.thorsobiogas.dk

Brandstrupgaard

Brandstrup Soevej 9

DK – 8840 Roedkaersbro

www.brandstrupgaard.dk



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Company experience and business partners

FCSI has a joint venture with [Steelhead Speciality Minerals](#), who is a large producer and supplier of biological additives. The raw material for Active NS is supplied by Steelhead Speciality Minerals.

In Denmark [Vitfoss](#) has exclusive rights to distribution of Active NS.

Contact info, Web info

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