

Solid fraction from pig/cattle slurry using belt press sieve and pasteurization



Keywords: Solid fraction • Manure processing • Export • Phosphate • Organic matter

Key facts:

- **Product Category:** Solid fraction from livestock manure
- **Input material:** slurry/manure from pigs and cattle
- **General appearance:** solid
- **Nutrient Content (N-P-K):** N 13; P₂O₅ 18,0; K₂O 5,1 kg/ton
- **Product market status:** Available on the market
- **Limitation of application:** Max 170 kg N/ha as livestock manure (230-250 kg N/ha for derogation dairy farms in NL)
- **MS Authority permit availability:** NL-219144
- **Geographical area:** Netherlands, North-Brabant, Northern Limburg
- **Product price:** - €15 per ton (producer pays €15 to be able to deliver the product)



Summary:

Vlako processes slurry from 95% pigs and 5% cattle or mink to produce the mineral concentrate. The slurry is separated in a solid and liquid fraction using a belt press sieve. The liquid fraction is being turned into mineral concentrate. The solid fraction is pasteurized and exported.

The solid fraction has a dry matter content between 30 and 35% and gets pasteurized by infrared. By pasteurizing the solid fraction, it is free of pathogens like salmonella and e-coli, and can therefore be used for crops which are destined for human and animal consumption. Solid fraction can be used in: cereals, grains, dry pulses, protein crops, root crops and fresh vegetables.

Solid fraction can be spread by lighter equipment and there are less tons needed to bring the same kinds of nutrients as when slurry is being brought to the fields. Where normally 6 to 10 tons of slurry is being spread, this can be replaced by using only 2 to 2,5 tons of solid fraction. This means that solid fraction is cheaper to transport and it can be spread with lighter spreaders which leads to less soil compaction.

How to use:

- **Type of farming:** conventional
- **Cultivation methods:** open field
- **Recommended crops:** cereals, grains, dry pulses, protein crops, root crops and fresh vegetables.
- **Application doses:** Depends from crop application rates. Max 170 kg N/ha as livestock manure (230-250 kg N/ha for derogation dairy farms).

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Key product features:

- Dry matter: approx. 30%
 - Organic matter: approx. 23%
 - N: 13,3 kg/ton
 - P2O5: 18,0 kg/ton
 - K2O: 5,1 kg/ton
- Due to the organic origin of the fertilizer, nutrient content may vary

Key product benefits:

- Natural product from organic source
- High organic matter content
- Contains natural trace elements
- Free from salmonella and E-coli

Competitive position and advantages:

Solid fraction gets pasteurised and is therefore free from pathogens. Solid fraction is safe to use for crops which are destined for human consumption. Solid fraction can be spread by lighter equipment and there are less tons needed to bring the same kinds of nutrients as when slurry is being brought to the fields. Where normally 6 to 10 tons of slurry is being spread can be replaced by using only 2 to 2,5 tons of solid fraction. This means that solid fraction is cheaper to transport and it can be spread with lighter spreaders which leads to less soil compaction.