

EIP-AGRI practice abstract

Short title:

Ammonium sulphate from pig manure or digestate with VP-Hobe Manure Valorisation system

Summary:

Ammonium sulphate is produced with the VP-Hobe Manure Valorisation system, using flotation, belt press sieve, reverse osmosis, evaporator and stripper technology. The input is pig manure or digestate. The ammonia in the incoming liquid is removed from the product flow by stripping and scrubbing the vapour coming out of the evaporator with sulphuric acid into ammonium sulphate (7% N).

Key product features:

- Liquid nitrogen fertilizer
- N (NH₄): 70 g/kg
- P₂O₅: 0 g/kg
- K₂O: 0 g/kg
- S: 76 g/kg
- Potential RENURE fertilizer
- Natural product
- Low in phosphate
- Free from salmonella and E-coli

The production and usage of RENURE fertilizers allows farmers to process their (excess) livestock manure into a RENURE fertilizer. This product is a potential RENURE fertilizer which means that application will no longer be defined as livestock manure in the Nitrates Directive. This means application will no longer be limited to 170 kg N/ha.

Because the N and K are separated in two fractions optimal N/K balance can be achieved using precision fertilizing techniques using biobased fertilizers.

Costs for farmers will be approximately €0 per ton ex works.

Application can be done using liquid manure injection systems. Low emission application techniques are compulsory to prevent ammonia volatilization.

For more information: https://nutriman.net/farmer-platform/product/id_1529