

Nutrient Management and Nutrient Recovery Thematic Network www.nutriman.net

EIP-AGRI practice abstract

Short title:

Ammonium nitrate from liquid fraction of manure, digestate or other waste stream by "Detricon" process

Summary:

The Detricon stripping/scrubbing process recovers ammonia from the liquid fraction of manure, digestate or other liquid waste streams with more than 0.1% ammonia nitrogen. The technology produces a technical pure-end product, ammonium nitrate, which can be used to enhance the growth of corn, grass, vegetables in conventional farming. Stripping/scrubbing by Detricon is energy efficient and economic interesting technology to produce a pure nitrogen fertilizer locally without other nutrients. It is an example of circular economy.

The produced liquid ammonium nitrate has a ratio of 50/50 ammonia and nitrate. The N-P-K (%) ratio is 18-0-0 or 10-0-0. This pure technical product is odourless and colourless and suitable for replacing mineral fertilizer in agriculture. Ammonium nitrate from Detricon technology can be used in open field crops or greenhouse crops, such as corn, grass, vegetables, with an application dose of 0.5-1 t/ha. Special attention goes to the foliar application: spraying can give leaf damage. Therefore it is recommended to inject it directly into the soil.

The price varies between 0.65-0.75 euro/kg N.

https://nutriman.net/farmer-platform/product/id 295

