

## TRAINING MATERIAL

### Title:

Ammonium nitrate/sulphate from raw digestate with "AMFER" stripping process (ID:454)

### Training:

#### **What is the product?**

The AMFER products are liquid nitrogen fertilizer as ammonium nitrate/ sulphate recovered from raw digestate by stripping process.

#### **Who is the vendor of the product?**

The company Colsen owns the IP rights for the AMFER. Colsen is an innovative family owned company, having been working on innovative solutions in the field of water, energy and the environment for 30 years.

#### **Which other product/technologies are provided by the vendor?**

Linked technology: Technology for N recovery as ammonia nitrate/sulphate from raw digestate with "AMFER" stripping process ([https://nutriman.net/farmer-platform/technology/id\\_455](https://nutriman.net/farmer-platform/technology/id_455)).

#### **Which are the advantages of the product and the problems addressed?**

The AMFER enables biogas plant owners to recover nitrogen from the digestate as a valuable fertilizer, in the meantime reuse the waste heat from biogas plant and reduce the nitrogen emission from manure storages. These recovered nitrogen products are expected to be listed as 'mineral fertilizer' from 2021 for the whole EU. On a farm level, this reduces the fertilizer purchase to a minimum.

#### **Which is the nutrient content of the product?**

Fertilizer products from the AMFER® have a high nitrogen content, e.g. Ammonium nitrate (52% dw) has a nitrogen content at 18% and Ammonium sulphate (35% dw) at 7%.

#### **Which equipment and methods can be used to apply the product?**

Application of the fertilizer is identical to liquid nitrogen fertilizers by using a sprayer bar.

#### **How to use the product?**

These nitrogen products can be applied in the 250 kg N / ha space. The recommended application doses are crop and soil depending. Depending on local situation, these fertilizers can be applied in any farming systems (conventional, organic, etc.) with nitrogen demanding crops, or Nitrogen and Sulphur demanding crops.

**Which are the authority permits and in which EU countries?**

None.

**How much does it cost?**

These produces are currently prior to market introduction. The price is approx. € 100/ton.

For more information: [https://nutriman.net/farmer-platform/product/id\\_454](https://nutriman.net/farmer-platform/product/id_454)