

## EIP-AGRI practice abstract

### Short title:

Liquid and solid (dried) fraction digestate from manure and energy maize by "Agrogas" process

### Summary:

Compared to the initial feedstock the digestate is homogenised, mostly hygienised, and has a higher nutrient replacement value due to a partial transfer of the organically bound N to ammonium nitrogen. Given separate treatment lines at Agrogas (B) the digestate can be supplied as an animal manure-status or a non-animal manure-status. Agrogas further differentiates digestate by separating, and drying - reducing volume and transport cost per ton NPK and organic carbon and increasing product shelf life. The liquid fraction of the digestate is a dark and thick liquid-like fertiliser with particularly NK-levels of respectively up to 9,9% N and 8,9% K<sub>2</sub>O (of dry matter by weight). The dried digestate (dry matter 80-90%) is a dry, dark, coagulated or powdery end product that has fertilising and soil improving qualities, with NPK-levels of respectively up to 3,1% N, 5,5% P<sub>2</sub>O<sub>5</sub> and 4,2% K<sub>2</sub>O (dm) as well as around 40% organic carbon (dm). Other macro-elements (MgO, SO<sub>3</sub>, CaO) are equally present. Application doses vary around 30 t/ha for liquid fraction and 2t/ha for dried solid fraction digestate, depend on country, region, soil, season and crop. In the new Fertiliser Regulation dried digestate can be categorized as PFC 1 A (solid organic fertiliser) or PFC 3 A (organic soil improver) (or in blend). Both liquid and dried digestate fractions are compliant with strict requirements (ARC (Flanders) and/or Fertiliser (EU)) as to organic and inorganic/physical contaminants. Digestates have low prices of per ton nutrient, partly depending on NPK-content and the animal manure status, with highest prices for dried digestate ranging up to 35-40€/ton (dry matter percentage >85%).

For more information: [https://nutriman.net/farmer-platform/product/id\\_264](https://nutriman.net/farmer-platform/product/id_264)