

EIP-AGRI practice abstract

Short title:

High NP pelletized digestate from animal manure and organic waste digestate by "Arbio and NPirriK-project" process

Summary:

The NPirriK-dried digestate from Arbio (B) has an animal manure status, is free of pathogens, insect larvae and weed seeds, and can be pelleted to result in an easy to distribute fertiliser-pellet with a much higher density (700 kg/m³ instead of 350 kg/m³). Due to its high OC content the pellets from it furthermore have excellent soil improving capacities protecting soils against droughts. Most importantly it has, compared to a regular dried digestate, an optimised (higher) N/P-content - 5,5% N (TN) of which 50% mineral N -, and 2,8% P₂O₅. Dried digestate (pellets) can be categorized as PFC 1 A (solid organic fertiliser) or PFC 3 A (organic soil improver)(or in blend). Furthermore products with Vlado-certificate should be eligible to be categorised as Component Material Category (CMC) 5. At the end of 2019 the full industrial scale of the NPirriK post-treatment flow can realise about 1500 tonnes/y of the high N/P-pellets. The market price for the pellets is estimated to rise due the optimised post-treatment add-on from 25€/ton to 45€/ton. The second RO-stream - water - can under certain conditions be either discharged into surface water, used as process water or, in case of drought, be used to irrigate nearby agricultural plots. The dried digestate is to be used depending on crop needs (vegetables, grapes, grasslands, permanent crops,...), season and soil characteristics with an average of 4 t/ha.

For more information: https://nutriman.net/farmer-platform/product/id_270