

TRAINING MATERIAL

Title:

Struvite from digestate and manure by "REVAWASTE" process (ID:250)

Training:

What is the product?

Struvite obtained from digestate

Who is the vendor of the product?

Fundación CARTIF.

CARTIF is a horizontal, private and non-profit technology center. Its mission is to offer innovative solutions to companies to improve their processes, systems and products, improving their competitiveness and creating new business opportunities.

CARTIF develops R&D projects, directly funded by companies or public funds raised through competitive calls for national and international level. CARTIF also advises public authorities (municipalities and regional governments) in the planning and development of innovative projects with high economic returns.

Which other products are provided by the vendor?

Microalgae based biofertilisers from wastewater by heterotrophic microalgae process.

Pelletized digestate from mixture of pig manure, poultry manure and straw by "MIX-FERTILIZER" process.

Digestate from the co-digestion of vegetable oils waste and pig manure by "VALUVOIL" process.

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

Due to its slow release properties, the dosage of nutrients is carried out gradually and the plant consumes them according to its requirements, thus avoiding the leaching of these nutrients and their arrival to the water masses, as can occur when synthetic fertilizers are applied. It is therefore required less frequency of application and there is no burning of the plant, even at high rates of application (Figure 1).

Which is the nutrient content of the product?

N-P-K (%): 5-28-0

Mg (%): 10

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

The product is presented as powder or little solid particles (Figure 1), which can be dosed with the agricultural machinery used for traditional fertilizers.

How to use the product?

Dosage: 0.140 t/ha

Cultivation methods: open field or greenhouse

Recommended crops: permanent grassland, cereals for the production of grain, root crops and plants harvested green from arable land by area. It is recommended to make only one dosage during sowing.

Which are the authority permits and in which EU countries?

Complies with EU Fertilizer Regulations. In the absence of approval of the framework for the new facultative European regulation on fertilizing products. In many countries, struvite cannot currently be used as a biofertilizer, as it is classified as waste. So far, the product is accepted as a fertilizer in the UK and the Netherlands.

How much does it cost?

The cost of manufacturing the product depend on the amount of digestate to be treated.



Figure 1. REVAWASTE Process Struvite

For more information: https://nutriman.net/farmer-platform/product/id_250