

NPK organic fertilizer from poultry droppings with "SECONOV" dehydration process

Keywords: dried poultry effluents • ternary fertiliser • biobased fertiliser • recycled nutrient

Key facts:

- **Product Category:** PFC1A1 – solid organic fertilizer. It's a ternary fertilizer according to regulation UE 2019/1009.
- **Input material:** poultry droppings from the farm EARL La Vallée.
- **General appearance:** spherical pellet 1.5 cm diameter
- **Nutrient Content (N-P-K %):** 4,6 – 3 – 2,9
- **Product status:** available on the market
- **Limitation of application:** if use in an area sensitive to nitrogen or phosphorus, according to the local regulation from directives 2000/60/CE and 91/676/CEE.
- **Permit availability:** French standard NF U42-001
- **Geographical area:** France
- **Price range:** 125€/ha (average cost)



Summary:

Instead of the common practice of spreading raw effluents, the farm EARL La Vallée decided to set up the means to treat the effluents into standardized fertilisers proposing the three major nutrients NPK.

With the process SECONOV, the poultry droppings are collected on treadmills in the hen houses and brought to a drying tunnel. There is no specific electricity consumption: the system uses the animal heat collected by the ventilation of the air in the hen houses. Only the winter period requires more consumption due to drying. The transformed poultry droppings are brought with a conveying tunnel in storage to be mixed and homogenized and to be stocked.

This process ensures the stabilization of the organic matter by eliminating the free water, with decrease of the odours, conservation of the product by stop of the fermentation and concentration of nutrients.

How to use:

- **Type of farming :** low input, conventional
- **Cultivation methods:** open field, greenhouse
- **Recommended crops:** Wheat, Barley, Corn, Rape, Sunflower, potatoes, fruit trees, Grapes.
- **Application doses :** according to the harvest objectives, from 1 to 4 t/ha

Contact

Name: Christophe RICHARD

Company: EARL La Vallée

Web:

e-mail: lavalleeavicole@hotmail.fr

NPK organic fertilizer from poultry droppings with "SECONOV" dehydration process

Key product features:

- Ternary fertiliser : N, P and K inputs.
- Biological fertiliser with low water content.
- Fertiliser with a high organic carbon content but a low C/N ratio.
- Cu content : 112 mg/kg DM (<300)
- Zn content : 469 mg/kg DM (<800)

Key product benefits:

- Product from recycled effluents.
 - Organic nitrogen and phosphorus with high bioavailability.
- Fertiliser with low element traces content.

Competitive position and advantages:

Why this product is best for solving nutrient recovery problems?

The dehydrated poultry droppings are a fertilizer obtained with a simple thermal treatment without chemical inputs and with low energy consumption - recycling of animal heat. The agricultural origin of this product ensures a high ability to be recycled in the soil but with real properties to feed the crops and not only an input of organic matter. Its balance between the three major elements allows to cover the main crops needs.