

NITROGEN COMPOUND FERTILIZERS WITH DCD NITRIFICATION INHIBITOR OBTAINED BY PHYSICAL COMPACTION

The N-GOOO LINE is the range of slow-release granular nitrogen fertilizers, containing the nitrification inhibitor Dicyandiamide (DCD). The presence of DCD, which inhibits the activity of the Nitrosomonas bacteria responsible for the nitrification process, allows the gradual transformation of ammoniacal nitrogen, absorbed by soil colloids and non-washable into the nitric form, highly washable, in a period of time between 60 and 90 days. Throughout this period, nitrogen is made available to the plants gradually, reducing losses both by leaching into the soil and by volatilization in the atmosphere. This allows a dose reduction of up to 20% in fertilizing units, compared to traditional formulations.

The granular formulation of these fertilizers is obtained through compaction, a dry granulation process borrowed from the pharmaceutical industry that uses mechanical compression to agglomerate the particles of the raw materials. This allows for granules to be obtained without adding solvents, which can have a negative impact on the final solubility of the product. The granule obtained by compaction is characterized by easy and fast disintegration, ensuring a rapid assimilation of nutrients by the roots.

The efficacy of the product is also improved by the particular production process in which DCD in the microcrystalline state is mixed with the other raw materials (Nitrogen, Phosphorus, Potassium) and everything is subsequently compacted. This allows to ensure the uniform distribution of the inhibitor in the granule, improving its effectiveness and efficiency both in nutritional and environmental terms.

N-GOOO 32 is a nitrogen fertilizer from the N-GOOO LINE with an important presence of sulfur. By acting in synergy with nitrogen, sulfur improves protein synthesis enhancing crop quality. Moreover, its strong acidifying effect on the rhizosphere, improves nutrient absorption and thus plant development. N-GOOO 32 is recommended for the nutrition of cereal crops (pre- and post-sowing), fruit and horticultural crops and all crops that benefit from the constant and progressive availability of nitrogen.

CROP	TIME OF APPLICATION	DOSE/HECTARE*
Citrus, Cereal crops e Horticultural crops	Pre-transplanting/sowing fertilization, Post-transplanting/sowing fertilization	300-700 kg

COMPOSITION	
Total nitrogen (N)	32.00%
Ammoniacal nitrogen (N)	11.50%
Ureic nitrogen (N)	20.50%
Nitrogen inhibitor Dicyandiamide (DCD)	2.50%
Inhibitor content as a mass percentage of the total nitrogen	2.50%
Sulfuric anhydride (SO ₃) soluble in water	32.00%

PHYSICO-CHEMICAL FEATURES	
GRANULAR	
METHOD OF USE	
	Cover fertilization

PACKAGING: 25 KG - PALLET 1500 KG, BIG BAG 600 KG