

## 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 40 is a nitrogen fertilizer of the N-GOOO LINE whose formula is completed by the presence of sulfur, magnesium and zinc, essential for a balanced plant metabolism.

Sulfur, acting in synergy with nitrogen, improves protein synthesis thus enhancing crop quality. Moreover, its strong acidifying effect on the rhizosphere, improves nutrient absorption and plant development. The magnesium content makes N-GOOO 40 suitable for preventing all physiological plant disorders related to the lack or poor availability of this mesoelement. The presence of zinc gives N-GOOO 40 the ability to act as an activator of auxin metabolic processes, intervening on plant hormonal balance.

N-GOOO 40 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	300-600 kg

COMPOSITION	
Total nitrogen (N)	40.00%
Ammoniacal nitrogen (N)	2.00%
Ureic nitrogen (N)	38.00%
Nitrogen inhibitor Dicyandiamide (DCD)	2.50%
Magnesium oxide (MgO) total	2.00%
Sulfuric anhydride (SO <sub>2</sub> ) soluble in water	5.00%
Zinc (Zn) total	0.10%

PHYSICO-CHEMICAL FEATURES	
GRANULAR	
METHOD OF USE	 Cover fertilization

**PACKAGING: 25 - 600 KG**