



Granular NPK Fertilizers

Blaukorn®

NovaTec®



Blaukorn® / NovaTec® general benefits

- Premium quality granular complex compound fertilizers.
- All granules containing N, P, K, Mg, S and trace elements.
- Low chloride (potassium from SOP).
- Fast acting Nitrogen source with both ammonium and nitrate N.
- Perfect granulometry (90% granules within 2–4 mm) for even application.
- Highly available source of phosphate (>80% water-soluble).
- Low in dust and high in granule strength for best spreading properties.
- Available in common nutrient efficiency (Blaukorn®) or in enhanced nutrient efficiency (NovaTec®).
- German quality packaging.

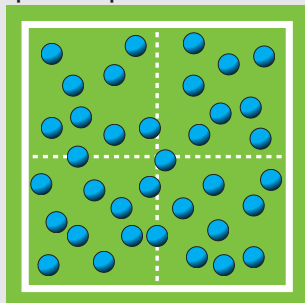
Blaukorn® physical and chemical properties

Advantages of complex compounds vs blended compounds

- No differential segregation of granules.
- Superior homogenous nutrient distribution in the field.
- More accurate spreading is possible.
- High nutrient efficiency.
- Easier and labour saving handling.
- Less storage capacity required.

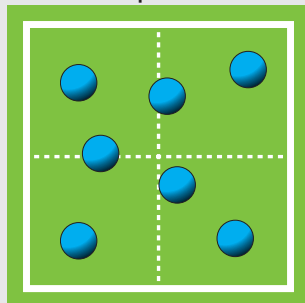
Homogenous granulometry 2–4 mm for superior distribution

special crops



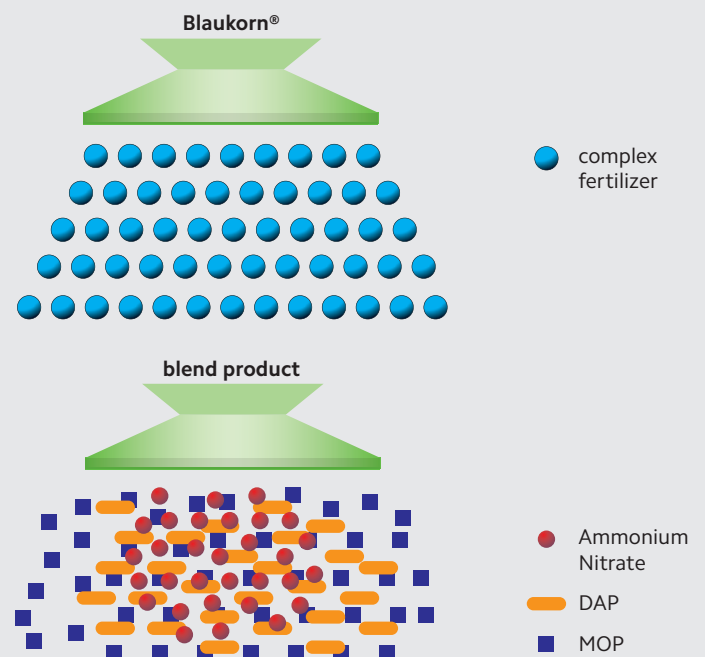
2–4 mm

extensive crops



2–5 mm

No separation during spreading

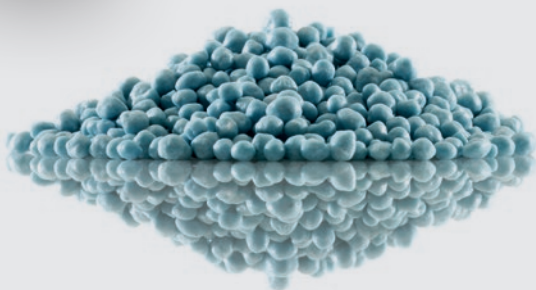


Blaukorn® / NovaTec® product range



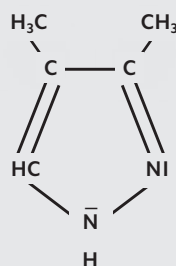
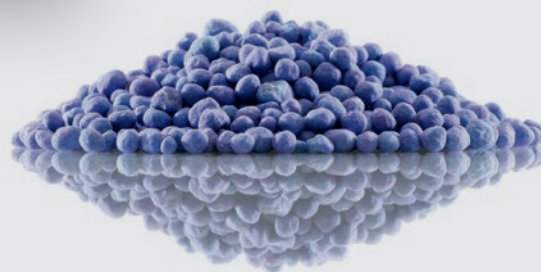
Blaukorn® range

- Blaukorn® classic 12-8-16 (+3+TE)
- Blaukorn® 12-12-17 (+2+TE)
- Blaukorn® premium 15-3-20 (+3+TE)
- Blaukorn® suprem 21-5-10 (+3+TE)
- Blaukorn® N-Max 24-5-5 (+2+TE)
- Blaukorn® pro 14-7-17 (+2+TE)



NovaTec® range (with DMPP)

- NovaTec® classic 12-8-16 (+3+TE)
- NovaTec® 12-12-17 (+2+TE)
- NovaTec® premium 15-3-20 (+3+TE)
- NovaTec® suprem 21-5-10 (+3+TE)
- NovaTec® N-Max 24-5-5 (+2+TE)
- NovaTec® pro 14-7-17 (+2+TE)



- H₃PO₄ = Dimethylpyrazolophosphate = DMPP

Blaukorn® / NovaTec® application guidelines

Crop	Annual demand Blaukorn® / NovaTec® (kg/ha)	Application frequency per year	
		Blaukorn®	NovaTec®*
Greenhouse vegetables	800–2000	3–4	2–3
Brassicae	1600–2500	3–4	2–3
Lettuce, carrots, onions	700–1200	2	1–2
Strawberries	700–1000	2	1
Fruit trees	300–800	2	1
Soft fruits	600–1100	2	1
Grapevines	300–600	2	1
Potatoes	500–1200	2–3	1–2

For detailed recommendation please contact your local Blaukorn® / NovaTec® dealer/agent.

* For superior performance and results, NovaTec® should be used in place of Blaukorn® particularly under any of the following conditions.

- Free draining soil
- Close proximity to water courses or sensitive habitats.
- Sparse/shallow rooting system (e.g. potatoes, lettuce)
- High soil pH

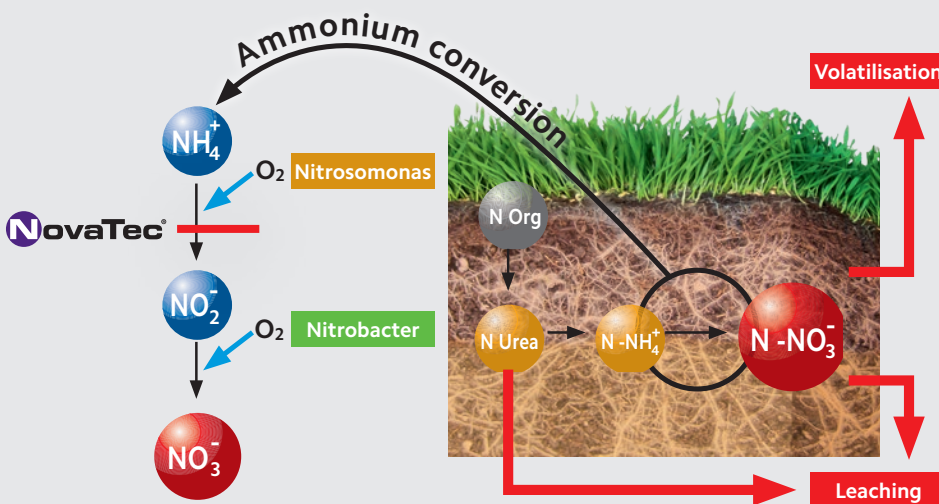
What is NovaTec®

- NovaTec® is the COMPO EXPERT innovation in granular compound NPK-fertilizer stabilized with DMPP (3.4 Dimethylpyrazolophosphate).
- DMPP protects Ammonium-N from quick conversion into Nitrate-N.
- NovaTec® will ensure constant supply of both forms of Nitrogen (ammonium and nitrate).

Benefits

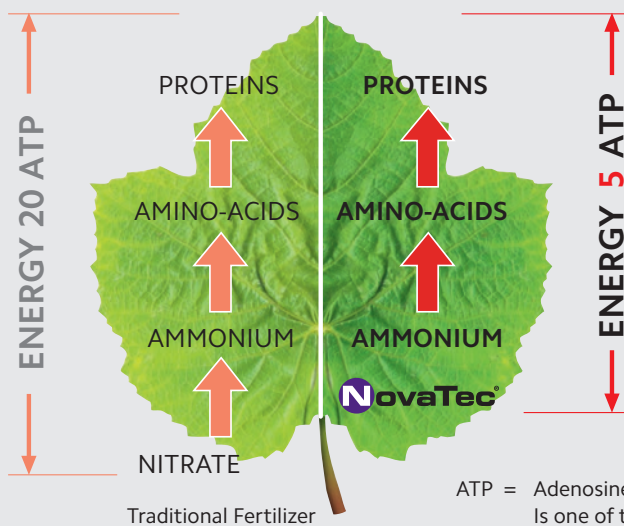
- Lower N losses from leaching and volatilisation.
- Reduced number of applications required.
- Improved yield and quality due to extended N supply and increased ammonium nutrition.
- Positive pH effect in the root zone (acidification of the rhizosphere gives superior P and micronutrient availability).
- Crops develop and ripen more evenly due to a stabilised N supply.
- Can help to reduce free nitrate levels in fresh mass.

Ammonium-based fertilization with nitrification inhibitor



- NovaTec® delays the 1st step of nitrification (Oxidation of ammonium (NH_4^+) to nitrate (NO_3^-)).
- NovaTec® leads to a more efficient NH_4^+ -based N-nutrition.
- Environmental benefits: lower emission of greenhouse gases and reduction of nitrogen leaching.

NovaTec® – ammonium nutrition



- Energy savings by Ammonium-N-nutrition (no biological reduction of nitrate required).
- Enhanced flowering (ammonium promotes synthesis of phytohormones and polyamines).
- Ammonium nutrition favours root growth.
- Ammonium based nutrition can help to reduce nitrate levels in fresh produce.
- Use of NovaTec® results in deeper green colouring in leafy salads and vegetables.

Trial results

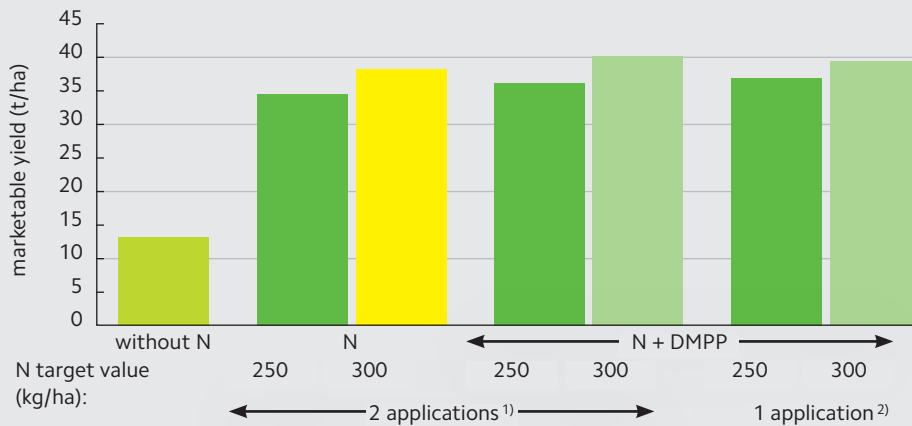
Effect of NovaTec® on yield of fruits and vegetables

During the past twenty years many trials have been conducted on agricultural and horticultural crops to evaluate the benefit of NovaTec®. In fruits and vegetable trials with crops like salads, cauliflower, cabbage, onions, apple, peach, citrus, potatoes, grapes, etc.. NovaTec® showed an increase of marketable yield, often combined with reduced nitrate level in the biomass.

NovaTec® improves the Nitrogen Use Efficiency (NUE): Use Less and achieve more!



Stabilized fertilizers in cauliflower



There is a positive effect of DMPP treatment on yield compared with standard NPK-application (2 applications). And even with only one application containing DMPP the yield is still higher than with standard NPK-application (2 applications). The nitrate concentration in the plants is significantly lower in the DMPP treatment compared to standard treatment.

¹⁾ 50% at planting + 50% at GS 17/19

²⁾ 100% at planting



NovaTec® NPK

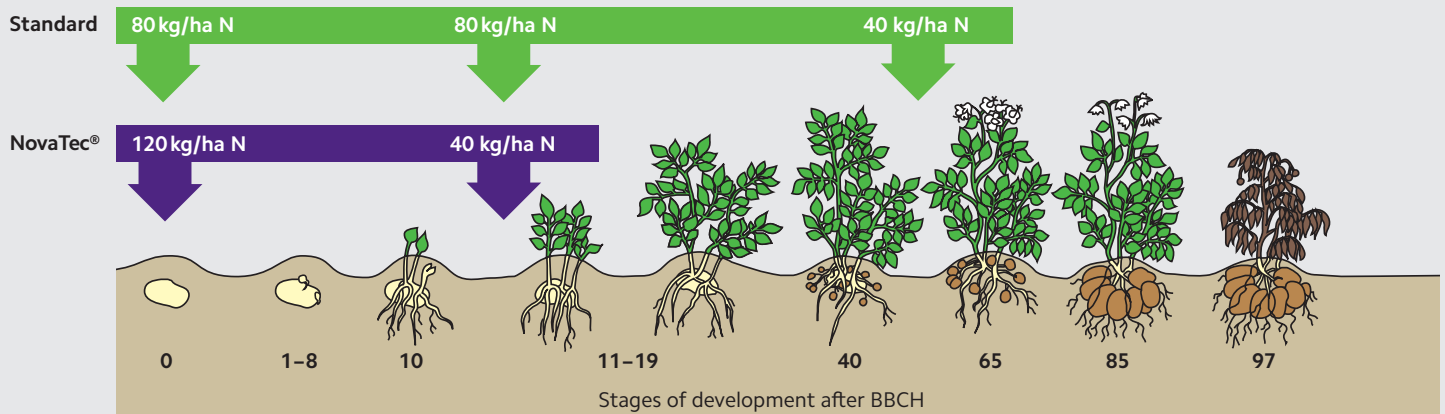
traditional NPK

Growth of lettuce when fertilized with NovaTec®



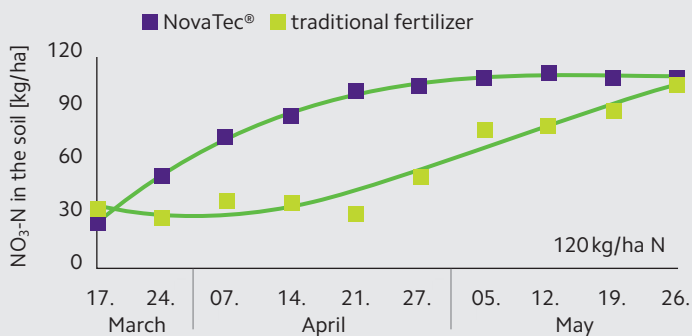
- Compact growth.
- Better storability and shelf life.

Application in potatoes



NovaTec®: ensures the N supply, even when applying in early growth stages.

NovaTec®: nitrate supply on demand







NovaTec® controls the transformation of ammonium to nitrate. The stabilizing effect is diminished under hot weather conditions. Nitrate is supplied in accordance to plant demand.

Blaukorn®: Complex NPK-fertilizer with potassium sulfate (SOP), magnesium and micronutrients. For basal and complementary dressing in chloride sensitive crops and on salt-affected soils; in horticulture and special crops outdoor and under glass.

NovaTec®: Complex NPK-fertilizer with nitrification inhibitor DMPP (3.4-dimethylpyrazolophosphate). Reduces N-leaching and increases N-efficiency. During the active phase of DMPP (4 to 10 weeks, depending on soil temperature and soil humidity) the transformation of ammonium to nitrate is delayed. As a result N-availability is further adapted to the plants requirements and N-efficiency is increased. Fertilizer based on SOP, for usage in chloride sensitive crops and on salt-affected soils.

	Product	Composition	Use
	Blaukorn®/NovaTec® classic 12-8-16 (+3+TE) Granule size: 2–4 mm	12% N 5% nitrate-nitrogen (NO ₃ -N) 7% ammonium-nitrogen (NH ₄ -N) 8% P ₂ O ₅ 6.4% water soluble P ₂ O ₅ 16% K ₂ O 3% MgO 2.4% water soluble MgO 10% S 0.02% B 0.06% Fe 0.01% Zn	For detailed recommendations please contact your local COMPO EXPERT dealer / agent.
	Blaukorn®/NovaTec® 12-12-17 (+2+TE) Granule size: 2–5 mm	12% N 5% nitrate-nitrogen (NO ₃ -N) 7% ammonium-nitrogen (NH ₄ -N) 12% P ₂ O ₅ 9.6% water soluble P ₂ O ₅ 17% K ₂ O 2% MgO 1.6% water soluble MgO 8% S 0.02% B 0.06% Fe 0.02% Zn	
	Blaukorn®/NovaTec® pro 14-7-17 (+2+TE) Granule size: 2–5 mm	14% N 6% nitrate-nitrogen (NO ₃ -N) 8% ammonium-nitrogen (NH ₄ -N) 7% P ₂ O ₅ 5.6% water soluble P ₂ O ₅ 17% K ₂ O 2% MgO 1.6% water soluble MgO 9% S 7.2% water soluble S 0.02% B 0.06% Fe 0.01% Zn	
	Blaukorn®/NovaTec® premium 15-3-20 (+3+TE) Granule size: 2–4 mm	15% N 7% nitrate-nitrogen (NO ₃ -N) 8% ammonium-nitrogen (NH ₄ -N) 3% P ₂ O ₅ 2.4% water soluble P ₂ O ₅ 20% K ₂ O 2% MgO 1.6% water soluble MgO 10% S 0.02% B 0.06% Fe 0.01% Zn	



		Product	Composition	Use
 		Blaukorn®/NovaTec® suprem 21-5-10(+3+TE) Granule size: 2–4 mm	21% N 10% nitrate-nitrogen (NO ₃ -N) 11% ammonium-nitrogen (NH ₄ -N) 5% P ₂ O ₅ 4% water soluble P ₂ O ₅ 10% K ₂ O 3% MgO 2.4% water soluble MgO 6% S 0.02% B 0.3% Fe 0.02% Zn	For detailed recommendations please contact your local COMPO EXPERT dealer / agent.
 		Blaukorn®/NovaTec® N-Max 24-5-5(+2+TE) Granule size: 2–4 mm	24% N 11% nitrate-nitrogen (NO ₃ -N) 13% ammonium-nitrogen (NH ₄ -N) 5% P ₂ O ₅ 4% water soluble P ₂ O ₅ 5% K ₂ O 2% MgO 1.6% water soluble MgO 5% S 0.02% B 0.06% Fe 0.01% Zn	

Bag:
 25 kg
 50 kg
 600 kg big bag (for truck delivery)
 1,000 or 1,200 kg big bag (truck or container)

Pallet size:
 25 kg x 42 = 1,050 kg
 50 kg x 25 = 1,250 kg
 50 kg x 24 = 1,200 kg

Container:
 20 x 1,050 kg = 21 t/container
 16 x 1,250 kg = 20 t/container
 20 x 1,200 kg = 24 t/container