

EXPERTS FOR GROWTH



**COMPO
EXPERT®**

Blaukorn® / NovaTec®
Granular NPK Fertilizers

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.



No separation during spreading

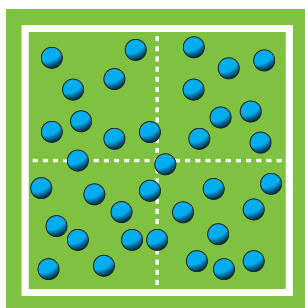
Blaukorn® physical and chemical properties

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.

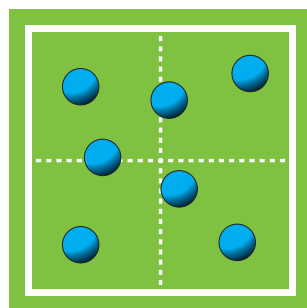
Homogenous granulometry 2–4 mm for superior distribution

special crops



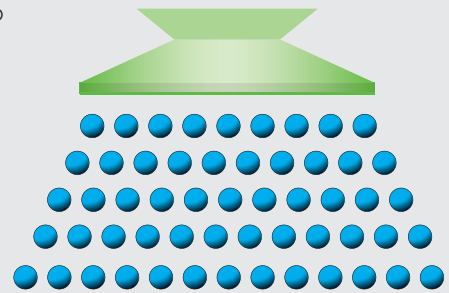
2–4 mm

extensive crops



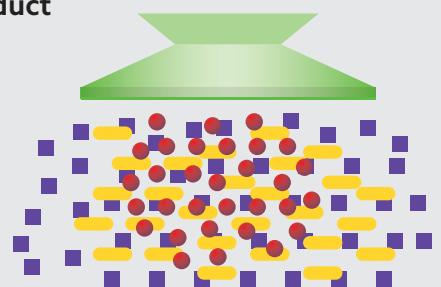
2–5 mm

Blaukorn®



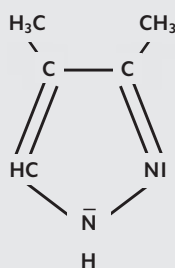
● Complex fertilizer

Blend product



● Ammonium Nitrate
 ■ DAP
 ■ MOP

Product range



- H_3PO_4 = Dimethylpyrazol phosphate = DMPP



Blaukorn® range

- Blaukorn® Classic 12-8-16 (+3+TE)
- Blaukorn® 12-12-17 (+2+TE)
- Blaukorn® Pro 14-7-17 (+2+TE)
- Blaukorn® Premium 15-3-20 (+2+TE)
- Blaukorn® Suprem 21-5-10 (+3+TE)
- Blaukorn® N-Max 24-5-5 (+2+TE)



NovaTec® range (with DMPP)

- NovaTec® Classic 12-8-16 (+3+TE)
- NovaTec® 12-12-17 (+2+TE)
- NovaTec® Pro 14-7-17 (+2+TE)
- NovaTec® Premium 15-3-20 (+2+TE)
- NovaTec® Suprem 21-5-10 (+3+TE)
- NovaTec® N-Max 24-5-5 (+2+TE)

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®

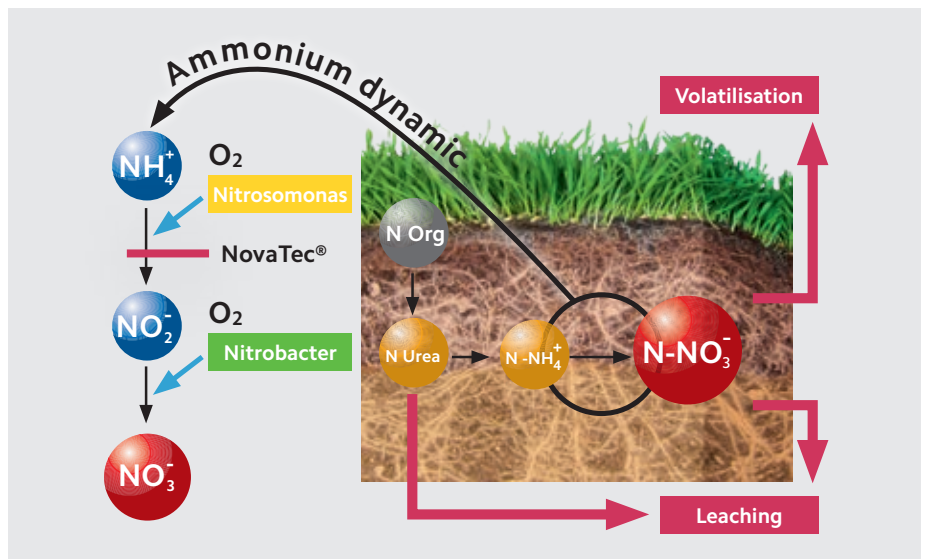
- NovaTec® is the COMPO EXPERT innovation in granular compound NPK-fertilizer stabilized with DMPP (3,4 Dimethylpyrazolophosphate).
- DMPP protects Ammonium-N from quick conversion into Nitrate-N.
- NovaTec® will ensure constant supply of both forms of Nitrogen (ammonium and nitrate).

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.

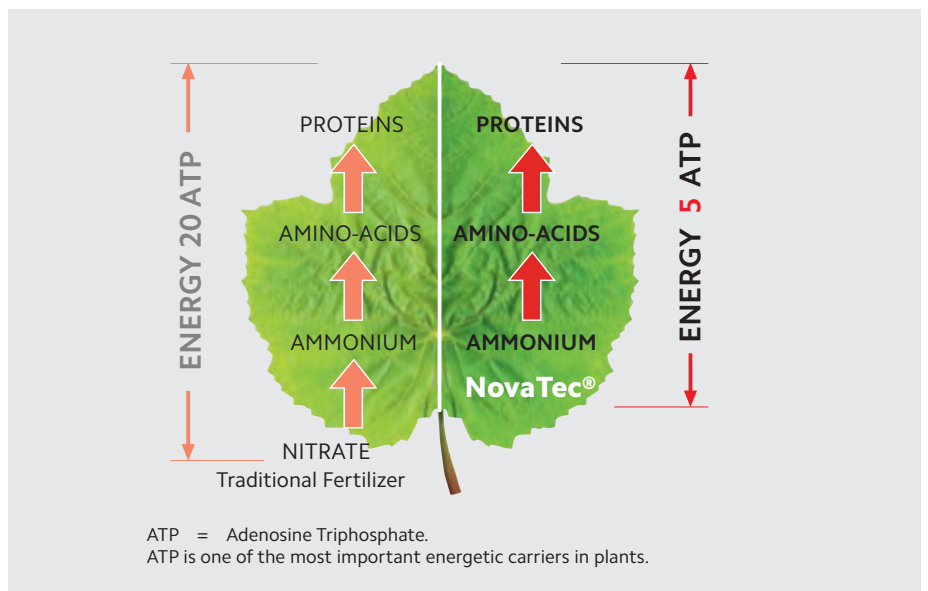
Ammonium-based fertilization with nitrification inhibitor

- NovaTec® delays the 1st step of nitrification –oxidation of ammonium (NH_4^+) to nitrite (NO_2^-).
- NovaTec® leads to a more efficient NH_4^+ -based N-nutrition.
- Environmental benefits: 50% reduced emission of greenhouse gases and reduction of nitrate leaching.



NovaTec® – ammonium nutrition

- Energy savings by Ammonium-N-nutrition (no biological reduction of nitrate required).
- Enhanced flowering (ammonium promotes synthesis of phyto-hormones 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

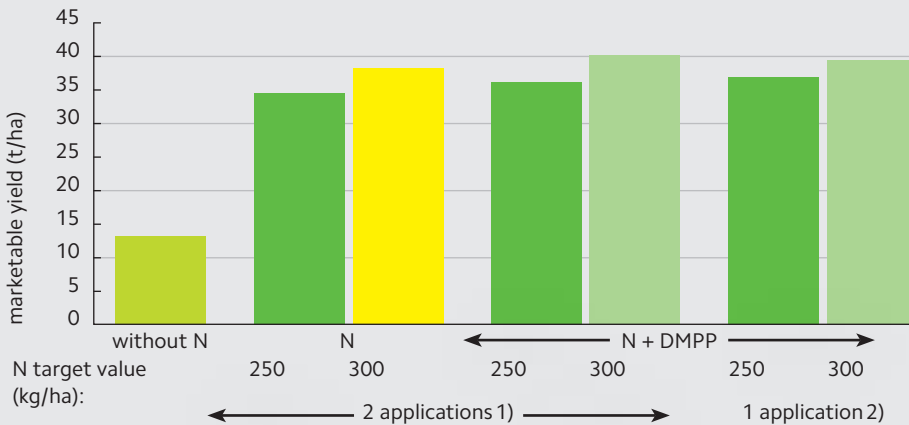
Effect of NovaTec® on yield of fruits and vegetables

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



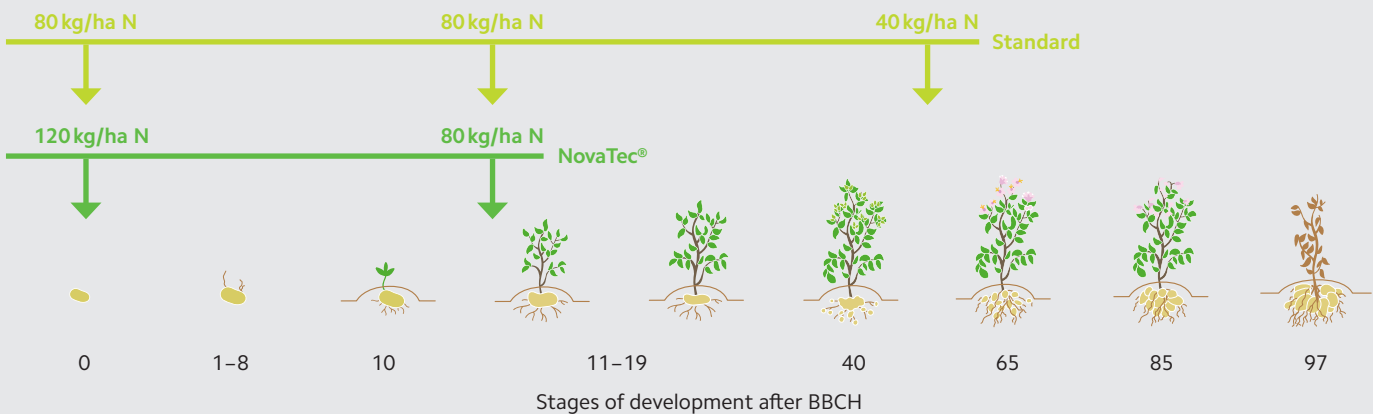
traditional NPK

Growth of lettuce when fertilized with NovaTec®



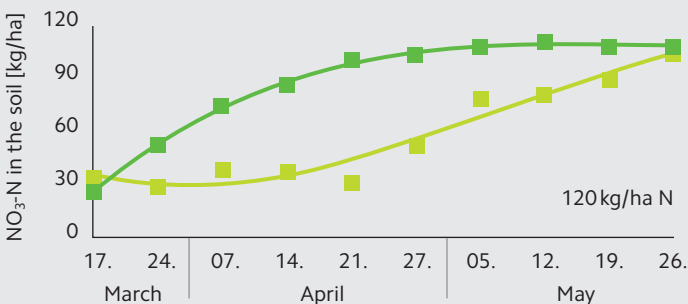
- Compact growth.
- Better storability and shelf life.

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.

- NovaTec®
- traditional fertilizer

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.

Blaukorn® / NovaTec® product range

		Product	Composition	Packaging
		Blaukorn®/NovaTec® Classic Granules, 90% < 4 mm	12-8-16 (+3+23) and trace elements NPK (MgO, SO ₃) complex fertilizer 12-8-16 (+3+23) with micronutrients	
		Blaukorn®/NovaTec® 12-12-17 Granules, 90% < 5 mm	12-12-17 (+2+21) and trace elements NPK (MgO, SO ₃) complex fertilizer 12-12-17 (+2+21) with micronutrients	Bag: 25 kg Pallet: 25 kg x 42 = 1,050 kg Container: 20 x 1,050 kg = 21 t Bag: 50 kg Pallet: 50 kg x 25 = 1,250 kg Container: 16 x 1,250 kg = 20 t or Pallet: 50 kg x 24 = 1,200 kg Container: 20 x 1,200 kg = 24 t
		Blaukorn®/NovaTec® Pro Granules, 90% < 5 mm	14-7-17 (+2+23) and trace elements NPK (MgO, SO ₃) complex fertilizer 14-7-17 (+2+23) with micronutrients	Big bag: 600 kg for truck delivery 1,000 kg or 1,200 kg truck or container
		Blaukorn®/NovaTec® Premium Granules, 90% < 4 mm	15-3-20 (+2+23) and trace elements NPK (MgO, SO ₃) complex fertilizer 15-3-20 (+3+23) with micronutrients	

For detailed information on application data please get in touch with your local supplier.



Blaukorn® / NovaTec® product range



Product	Composition	Packaging
Blaukorn®/NovaTec® Suprem Granules, 90% < 4 mm	21-5-10 (+3+15) and trace elements NPK (MgO, SO ₃) complex fertilizer 21-5-10 (+3+15) with micronutrients	Bag: 25 kg Pallet: 25 kg x 42 = 1,050 kg Container: 20 x 1,050 kg = 21 t Bag: 50 kg Pallet: 50 kg x 25 = 1,250 kg Container: 16 x 1,250 kg = 20 t or Pallet: 50 kg x 24 = 1,200 kg Container: 20 x 1,200 kg = 24 t
Blaukorn®/NovaTec® N-Max Granules, 90% < 5 mm	24-5-5 (+2+11) and trace elements NPK (MgO, SO ₃) complex fertilizer 24-5-5 (+2+11) with micronutrients	Big bag: 600 kg for truck delivery 1,000 kg or 1,200 kg truck or container

For detailed information on application data please get in touch with your local supplier.