

COMPO EXPERT

EXPERTS
FOR GROWTH



Granular NPK Fertilizers

Blauk[✓]orn[®]

NovaTec[®]

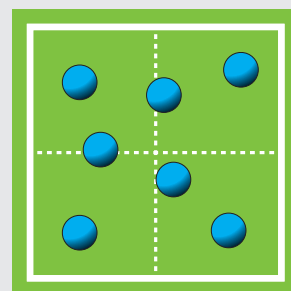
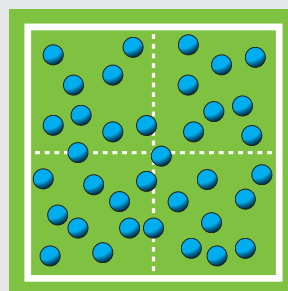




Blaukorn® / NovaTec® general benefits

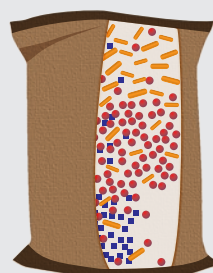
- Premium quality granular complex compound fertilizers.
- Complete analysis containing N, P, K, Mg, S and trace elements.
- Very low chloride (potassium from SOP).
- Fast acting Nitrogen source with both ammonium and nitrate N.
- Perfect granulometry (90 % granules within 2–4 mm).
- Highly available source of phosphate (80 % water-soluble).
- Industry leading granule strength and dust free.
- Available in standart release (Blaukorn®) or stabilised release (NovaTec®).
- German quality packaging and colour coded product.

More homogenous granulometry 2–4 mm for superior distribution



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.
- Blaukorn® / NovaTec® include trace elements.
- Made with SOP for safe application to chloride sensitive crops.



- Ammonium Nitrate
- DAP
- KCl



Blended NPK



Blaukorn® / NovaTec®

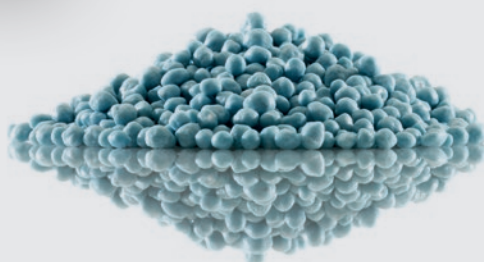
- nitrogen
- phosphate
- potassium
- complex fertilizer

Blaukorn® / NovaTec® product range



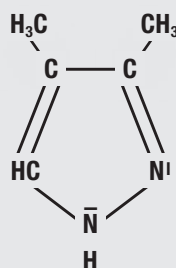
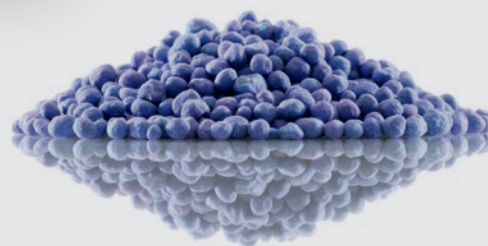
Blaukorn® range

- Blaukorn® classic 12-8-16(+3MgO+10S)
- Blaukorn® 12-12-17(+2MgO+8S)
- Blaukorn® premium 15-3-20(+3MgO+10S)
- Blaukorn® suprem 21-5-10(+3MgO+6S)
- Blaukorn® N-Max 24-5-5(+2MgO+5S)



NovaTec® range (with DMPP)

- NovaTec® classic 12-8-16(+3MgO+10S)
- NovaTec® premium 15-3-20(+3MgO+10S)
- NovaTec® suprem 21-5-10(+3MgO+6S)
- NovaTec® N-Max 24-5-5(+2MgO+5S)



- H_3PO_4 = 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

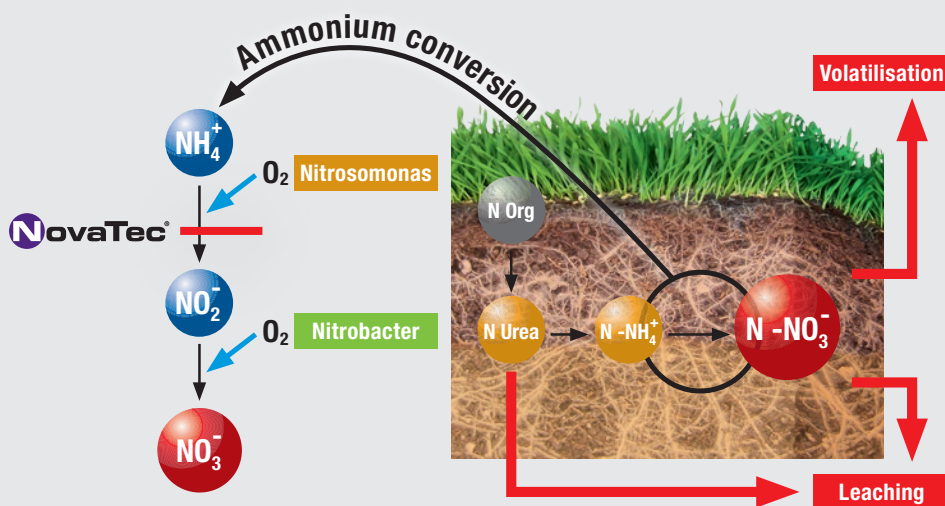
What is NovaTec®

- 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

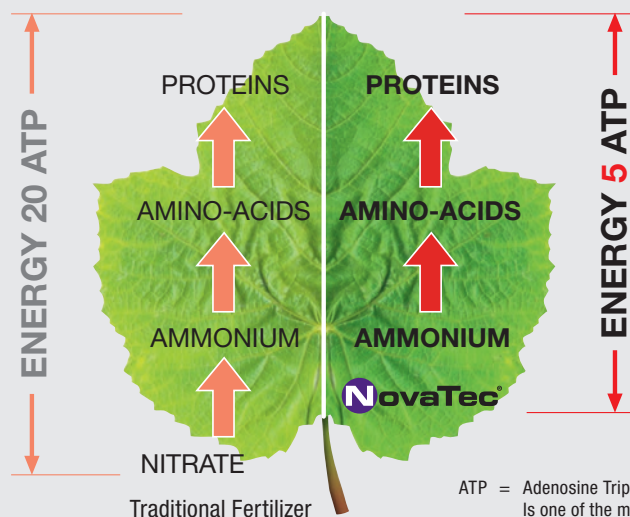
- Lower N losses from reduced leaching and volatilisation.
- Reduced number of applications required.
- Improved yield and quality due to extended -N supply and increased ammonium nutrition.
- Positive pH effect in the rootzone (acidification of the rhizosphere gives Superior P and micronutrient availability).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

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

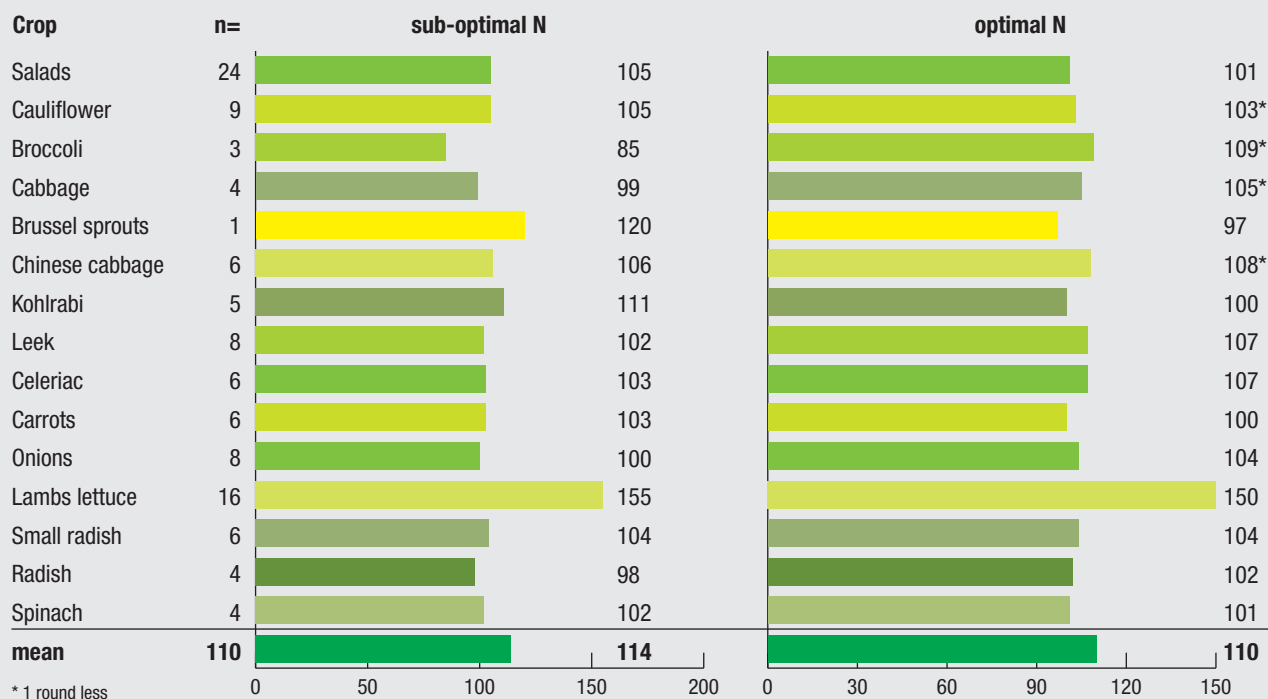


ATP = Adenosine Triphosphate.
Is one of the most important energetic carriers in plants.

- 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 vegetables (1998–2002; 100 % = marketable yield without NovaTec®)



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



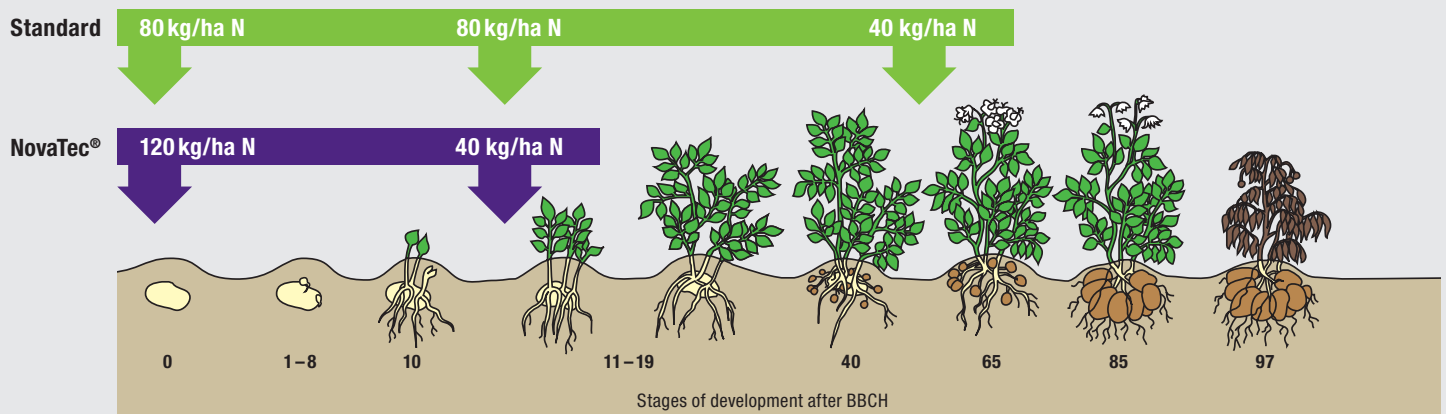
Growth of lettuce when fertilised with NovaTec®



- Compact growth.
- Better storability and shelf life.

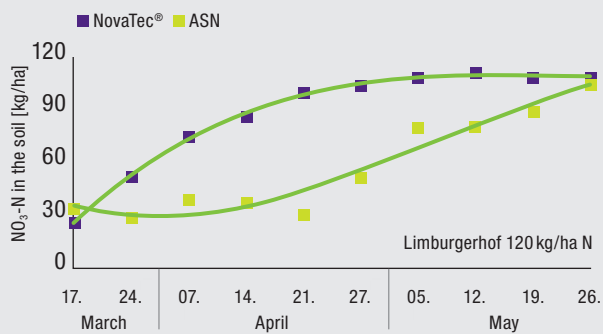
D 410/02/11; Kochendorf; 150 kg/ha N

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.

Product	Composition	Characteristics	Packing	Use
  <p>Blaukorn®/NovaTec® classic 12-8-16(+3+10)</p>	<p>12% N 5% nitrate-nitrogen (NO₃-N) 7% ammonium-nitrogen (NH₄-N) 8% P₂O₅ 6.4% water soluble P₂O₅ 16% K₂O 3% MgO 2.4% water soluble MgO 10% S 0.02% B 0.06% Fe 0.01% Zn</p>	<p>Blaukorn®: Complex NPK-fertilizer with potassium sulphate (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.</p> <p>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.</p> <p>Granule size: 2–4 mm</p>	<p>Bag: 25 kg/50 kg/ 600 kg big bag</p> <p>Pallet size: 40 x 25 kg = 1,000 kg 21 x 50 kg = 1,050 kg 1 x 600 kg</p> <p>Container: 20 x 1.00 mt (20 mt) 20 x 1.05 mt (21 mt) 10 x 0.6 mt (6 mt)</p>	<p>For detailed recommendations please contact your local Blaukorn®/NovaTec® dealer/agent.</p>
 <p>Blaukorn® 12-12-17(+2+8)</p>	<p>12% N 5% nitrate-nitrogen (NO₃-N) 7% ammonium-nitrogen (NH₄-N) 12% P₂O₅ 9.6% water soluble P₂O₅ 17% K₂O 2% MgO 1.6% water soluble MgO 8% S 0.02% B 0.06% Fe 0.02% Zn</p>			
  <p>Blaukorn®/NovaTec® premium 15-3-20(+3+10)</p>	<p>15% N 7% nitrate-nitrogen (NO₃-N) 8% ammonium-nitrogen (NH₄-N) 3% P₂O₅ 2.4% water soluble P₂O₅ 20% K₂O 3% MgO 2.4% water soluble MgO 10% S 0.02% B 0.06% Fe 0.01% Zn</p>			
  <p>Blaukorn®/NovaTec® suprem 21-5-10(+3+6)</p>	<p>21% N 10% nitrate-nitrogen (NO₃-N) 11% ammonium-nitrogen (NH₄-N) 5% P₂O₅ 4% water soluble P₂O₅ 10% K₂O 3% MgO 2.4% water soluble MgO 6% S 0.02% B 0.3% Fe 0.02% Zn</p>			



Product	Composition	Characteristics	Packing	Use
 	Blaukorn®/NovaTec® N-Max 24-5-5(+2+5) 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	<p>Blaukorn®: Complex NPK-fertilizer with potassium sulphate (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.</p> <p>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.</p> <p>Granule size: 2–4 mm</p>	<p>Bag: 25 kg/50 kg/ 600 kg big bag</p> <p>Pallet size: 40 x 25 kg = 1,000 kg 21 x 50 kg = 1,050 kg 1 x 600 kg</p> <p>Container: 20 x 1.00 mt (20 mt) 20 x 1.05 mt (21 mt) 10 x 0.6 mt (6 mt)</p>	<p>For detailed recommendations please contact your local Blaukorn® /NovaTec® dealer/agent.</p>