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Anorel NV is a Belgium-based, family-owned **manufacturer and distributor of high-quality (water-soluble) fertilizers and industrial raw materials**, active for over 30 years. Our agricultural product range includes straight and compound fertilizers, tailor-made NPK fertilizers, trace elements, biostimulants, organic and organo-mineral fertilizers, PG-mixes, and a selection of products for landscaping. Our industrial product range includes raw materials used in glass, ceramics, metal treatment and other sectors. Through a strong brand, strategic partnerships and a solid distribution network, the company has expanded its reach across 5 continents, catering to a diverse range of agricultural markets and industrial sectors **worldwide**.

#### **Our Mission**

Through in-house R&D, efficient production processes and a broad, yet selective sourcing network, Anorel strives to maintain **competitive pricing** while upholding the **highest standards of product quality** and performance.

As a family-run business, we emphasize personalized service, long-term relationships, and a deep commitment to our customers' success.

#### **Our Vision**

As a **family business**, Anorel prides itself on fostering a culture of trust, dedication, and continuity. We believe in the unique advantages of being family-run. This includes making swift decisions, maintaining long-term relationships and upholding our values across generations.

Anorel is committed to **sustainability** in the fertilizer industry. Since 2020, we have been researching sustainable fertilizers to offer environmentally responsible products. We are dedicated to pioneering methods and products that minimize environmental impact while maximizing crop productivity. Our goal is to lead in sustainability, ensuring our operations and products contribute positively to the environment and society.



We have a **dynamic team** active in sales, finance, logistics, R & D and marketing.



# **International Activities**

With Anorel's global presence across five continents, we provide products worldwide through regional independent distributors.

Since 2000, Anorel has been operating with its South African-based subsidiary, **Anorel (Pty) Ltd**. In 2019, we established a permanent office and warehouse near Cape Town. Currently, with a local team of 10 staff members, Anorel (Pty) Ltd. imports through all three international ports of South Africa and covers the country with multiple strategically located warehouses.

In July 2023, Anorel (Pty) Ltd. formed a joint venture with **Manuchar**, a Belgian company specializing in maritime logistics and global distribution of chemicals. This collaboration combines Manuchar's network and resources with Anorel's fertilizer expertise enabling us to better serve the agricultural sector in the Southern African region.







### **Ash Base**

In addition to its traditional business activities, Anorel has in recent years been strongly committed to innovation and sustainability. Showcasing this is our Ash Base-project where we recover valuable nutrients from plant-based ashes to produce high value fertilizers and raw materials for industrial use. The concept of Ash Base is a database that matches key characteristics of incoming ash (such as composition, quality, and origin) with optimal production parameters. This allows us to produce fertilizers and raw materials more efficiently and precisely, tailored to the specific properties of each ash batch.



Fig 1: The timeline of Anorel's sustainability projects.

In 2021, Anorel launched a research and development project in collaboration with UGent, supported by VLAIO, to investigate whether tomato leaf waste could be fermented, the resulting digestate incinerated, and nutrients recovered as fertilizers. Early tests showed that mono-fermentation of tomato waste was technically and economically unfeasible. As a result, the focus shifted to exploring underutilized existing ash streams as alternative raw materials, leading to the launch of the follow-up project Ash Base in 2024.



Our R&D phase is complete, and so are our first successful pilot tests!

We've now kicked off construction of a brand-new pilot production site in Genk, Belgium, with commercial production set to begin in 2026.

We're excited to share that the very first product samples — made from ash — are now available;

#### • Potassium carbonate (K2CO3) solution

- o Formulated in two concentration levels: 11%  $\mbox{K}_2\mbox{O}$  and 33%  $\mbox{K}_2\mbox{O}$
- o Used as a sustainable potassium source in hydroponic systems
- o Used as a raw material for various industrial applications, including (but not limited to) surfactants/liquid detergents and soaps, glass manufacturing and food industries

#### • Organo-mineral NPK fertilizers

- o Containing varying ratios of nitrogen (N), phosphorus (P), and potassium (K)
- o Utilized as a nutrient source in open field farming to support crop growth and soil fertility

#### PG-mix

- o A tailored premix of macro- and micronutrients
- o Intended for use in potting soil substrates

This sustainable transition is founded on two pillars:

- **Ecological sustainability**, by focusing on circular raw materials, a zero-waste and energy-efficient production process, and the local sourcing of raw materials to minimize environmental impact and reduce transportation emissions.
- **Economic sustainability**, by preparing the company for a future shaped by stricter environmental regulations, and by closing local nutrient loops, thereby strengthening our self-sufficiency. In a world where supply chains are increasingly vulnerable, reducing dependence on imports is becoming more crucial than ever.

As we move toward the industrial rollout of this project, we look forward to turning underutilized streams into valuable resources, advancing sustainable innovation, and fostering meaningful partnerships throughout this journey!









## **Essential Plant Nutrients**

#### **Macro Nutrients**



### **Mitrogen**

Nitrogen promotes vegetative growth and overall plant development, with nitrate being directly absorbable for efficient nutrient uptake.



### Phosphorus

Phosphorus plays vital roles in plant growth, stimulating root development, regulating energy metabolism, and forming genetic building blocks essential for overall plant maturation.



### **Potassium**

Potassium enhances various quality aspects, such as flower formation, color, fruit development, and sugar content, while also improving overall plant resilience against stress factors.



Calcium is essential for cell division, cell wall formation, and overall plant growth and development.



#### Magnesium

Magnesium plays an essential role in the photosynthesis process and is also necessary for sugar, protein, and nucleic acid synthesis, as well as enzyme activation in the plant metabolism.



### **Sulphur**

Sulphur is vital for protein synthesis and enzyme formation and enhances chlorophyll production for efficient photosynthesis.

### **Trace Elements**



Iron is crucial for numerous metabolic processes, such as DNA synthesis, energy transfer, respiration, and photosynthesis.



### Manganese

Manganese is essential for crops throughout the growing season, aiding photosynthesis, enzyme activation in growth processes, and assisting iron in chlorophyll formation, the green pigment in leaves.



### Copper

Copper is required for many enzymatic activities in plants and for chlorophyll and seed production.



### Zinc

Zinc is essential for crops enzymes driving different metabolic processes in the plant that enhance plant growth, such as chlorophyll formation, carbohydrate and protein synthesis.



### **Boron**

Boron plays a vital role in maintaining cell wall integrity, regulating calcium transport and facilitating nitrogen and carbohydrate metabolism.



#### Molybdenum

Molybdenum is a critical component of the enzyme nitrate reductase, which is necessary for the nitrogen uptake and assimilation for overall plant growth.













Straight fertilizers, also known as primary nutrient fertilizers, consist of a single raw material that delivers the highest concentration of a specific essential nutrient. Straight fertilizers are particularly useful for precise and customisable nutrient application. They allow to adjust nutrient ratios based on the specific requirements of your plants at different stages of growth or when deficiency symptoms show.

Our standard solid straight fertilizers are available in the following packaging options:

- 25 kg bags made of either PE or LWPP quality, 1200 kg stacked per pallet.
- 1200 kg bigbags, stacked per pallet.











## **Potanit**

NPK 13.5-0-46 Potassium nitrate (NOP)

Chemical Composition		Physical Prop	erties	90
Total nitrogen (N)	>13.5%	Purity	>99%	PFORTIAGE SPEEL SP
Nitric nitrogen (NO <sub>3</sub> )	>13.5%	pH (10% solution)	5-9	approximation (25)
Potassium oxide (K <sub>2</sub> O)	46%	Solubility (in water of 20 °C)	300 g/L	
		Appearance	Crystals, pow	der











## Maganit

NPK 11-0-0 + 16 MgO Magnesium nitrate

Chemical Composit	tion	Physical Prop	erties	
Total nitrogen (N)	>11%	Purity	>98%	BADDILAN SPECIAL STATE OF THE S
Nitric nitrogen (NO <sub>3</sub> )	>11%	pH (5% solution)	3-7	25kg
Magnesium oxide (MgO)	16%	Solubility (in water of 20 °C)	2250 g/L	3
		Appearance	Flakes, prills	, granular, crystalline











## **Calanit**

NPK 15.5-0-0 + 26 CaO Calcium nitrate

Chemical Composition		Physical Prop	erties
Total nitrogen (N)	15.5%	pH (10% solution)	6
Nitric nitrogen (NO <sub>3</sub> )	14.4%	Solubility (in water of 20°C)	1212 g/L
Ammoniacal nitrogen (NH <sub>4</sub> )	1.1%	Appearance	Prills,
Calcium oxide (CaO)	26.3%		granules

MAGANIT





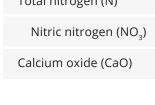




## **Tetracal**

NPK 11.7-0-0 + 23 CaO Ammonia-free calcium nitrate tetrahydrate

Chemical Composi	tion	Physical Prop	erties
Total nitrogen (N)	>11.7%	Purity	>98%
Nitric nitrogen (NO <sub>3</sub> )	>11.7%	pH (1% solution)	6
Calcium oxide (CaO)	23.4%	Appearance	Crystalline











## **Ureafos**

NPK 17-45-0 *Urea phosphate (UP)* 

Ureafos' acidic formulation boosts the availability of essential nutrients like phosphorus, calcium, magnesium, and trace elements.

Chemical Composition		Physical Properties		
Total nitrogen (N)	17%	Purity	>99%	
Ureic nitrogen (NH <sub>2</sub> )	17%	pH (1% solution)	1.6-2	
Phosphorus pentoxide (P <sub>2</sub> O <sub>5</sub> )	45%	Solubility (in water of 20°C)	500 g/L	
		Appearance	Crystal	













NPK 12-61-0

Mono ammonium phosphate (MAP)

Monafos is an acidic NP-fertilizer that boosts the availability of essential trace elements, calcium, and magnesium.

Chemical Composition	n		Physical Prop	erties	99
Total nitrogen (N)	12%	Purity		>98%	Septiment of the septim
Ureic nitrogen (NH <sub>2</sub> )	12%	pH (1% solut	ion)	4.35	△J& cc 25kg
Phosphorus pentoxide (P <sub>2</sub> O <sub>5</sub> )	61%	Solubility (in	water of 20°C)	355 g/L	
Moisture	<0.2%	Density	1.81g/cm <sup>3</sup>	Appearance	Crystalline















## **Kalafos**

NPK 0-52-34 Mono potassium phosphate (MKP)

Chemical Composition	on	Physical Prop	erties
Phosphorus pentoxide (P <sub>2</sub> O <sub>5</sub> )	52%	Purity	>98%
Potassium oxide (K <sub>2</sub> O)	34%	pH (1% solution)	4.4-4.8
loisture	<0.2%	Solubility (in water of 20 °C)	183 g/L
		Appearance	Crystalline

KAL/FOS

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## Kalasul

NPK 0-0-51 + 46 SO<sub>3</sub> Potassium sulphate (SOP)

Chemical Composition		Physical Prop	erties	KALASUL
Potassium oxide (K <sub>2</sub> O)	51%	Purity	>99%	90
Sulphur trioxide (SO <sub>3</sub> )	46%	pH (10% solution)	7	PSTEILER SEAMER FROM FROM FROM FROM FROM FROM FROM FRO
Moisture	<0.5%	Solubility (in water of 20°C)	110-120 g/L	全丁素 cc 25kg
		Bulk density	1 ton/m³	
		Appearance	Powder	









## Magasul

16 MgO

Magnesium sulphate heptahydrate

Chemical Composition		Physical Prop	erties	30 Week
Magnesium oxide (MgO)	16.2%	Purity	>99.5%	10 GEV (20 13) APET OF GET ALONG AND
Sulphur trioxide (SO <sub>3</sub> )	32.2%	pH (1% solution)	5-8	<b>鱼</b> 丁泰 α <b>25kg</b>
		Solubility (in water of 20 °C)	710 g/L	3
		Appearance	Crystalline	









## Magnesium sulphate 33%

33 MgO

Magnesium sulphate anhydrate

Magnesium sulphate 33% is a fertilizer with **anti-caking** properties.

Chemical Composition		Physical Prop	erties	ZANORSI. News second ast	
Magnesium oxide	33%	Purity	>98%		ZANOREL
Sulphur trioxide (SO <sub>3</sub> )	63%	pH (5% solution)	7-8	ZANOREL Nemanerel and	
		Solubility (in water of 20°C)	710 g/L		ZANORIL
		Appearance	Powder		









## Murapot

NPK 0-0-62

Potassium chloride

Chemical Composition		Physical Prop	erties	<b>D</b> :::::
Potassium oxide (K <sub>2</sub> O)	62.1%	Purity	>98.4%	STATUTE OF THE STATE OF THE STA
Moisture	<0.5%	pH (1% solution)	6-8	Concept 25kg
		Solubility (in water of 20 °C)	347 g/L	
		Bulk density	1050-1170 kg/r	$m^3$
		Appearance	Powder	









## CaCl<sub>2</sub> Tech

48 CaO

Calcium chloride anhydrate 95-97%

Calcium chloride anhydrate is a highly soluble calcium salt, offering an **exceptionally pure** source of calcium.

Chemical Composit	ion	Physical Propert		erties	1/2
Calcium oxide (CaO)	48%	Purity		95-97%	25kg
		pH (1% solution)		7	
		Solubility (in water of 20°C)		745 g/L	
		Bulk Density	2.15ton/ m <sup>3</sup>	Appearance	Prills











## **Thiacal**

8.4 CaO + 25 SO<sub>3</sub>

Calcium thiosulphate CaS,O,

Thiacal, a calcium thiosulfate, is a **liquid** calcium and sulphur fertilizer. Thiacal is suitable for both soil and soilless irrigation systems, and acts as both a soil amendment and fertilizer in soil systems. Compatible with irrigation systems and sprayers, Thiacal does not clog drip lines or nozzles, making it an excellent choice for

	-		
folia	ar ap	plication	

Chemical Composi	tion	Physical Properties		Vacable:  Vacable:  In the control of the particular make  in the particular that the particular make  in the particular that the particular the particular  interest in the particular particular  interest in particular  interest in the particular  intere
Calcium oxide (CaO)	8.4%	pH (10% solution)	7	CC ANIONS 20L
Sulphur trioxide (SO <sub>3</sub> )	25%	Density	1.25 kg/L	
		Appearance	Clear liquid	



Available in 5 L cans, 20 L cans, 200 L barrels and 1000 L IBC's.













## **Thiapot**

NPK 0-0-25 + 42.4  $SO_3$ Potassium thiosulphate  $K_2S_2O_3$ 

Thiapot, a potassium thiosulfate, is a **liquid** potassium and sulphur fertilizer. Thiapot's nitrogen- and chloride-free composition, is suitable for both soil and soilless irrigation systems. Compatible with irrigation systems and sprayers, Thiapot does not clog drip lines or nozzles, making it an excellent choice for foliar application.



Chemical Composi	tion	Physical Prop	erties
Potassium oxide (K <sub>2</sub> O)	25%	pH (10% solution)	6.8-8.5
Sulphur trioxide (SO <sub>3</sub> )	42.4%	Density at 25°C	1.47 kg/L
		Appearance	Clear liquid



Available in 5 L cans, 20 L cans, 200 L barrels and 1000 L IBC's.









## Potassium acetate 70% solution

Chemical Composition		Physical Properties		
Potassium acetate (CH <sub>3</sub> COOK)	70%	pH (10% solution)	7-8.5	
Potassium oxide (K <sub>2</sub> O)	33%	Density	1.398g/mL	
		Appearance	Colorless liquid	



Available upon request











## **Maganit liquid**

NPK 7-0-0 +10 MgO

Magnesium nitrate hexahydrate 62.5% solution

Chemical Composition		Physical Properties		
Total nitrogen (N)	7%	pH (5% solution)	3-7	
Nitric nitrogen (NO <sub>3</sub> )	7%	Density	1.35 kg/L	
Magnesium oxide (MgO)	11%	Appearance	Colorless / yellowish liquid	
		Storage temperatures	-5-40°C	



Available in cans (25kg), IBC's and bulk.











### Ash Base K

#### Potassium carbonate 48% solution

Ash Base K is a liquid fertilizer based on potassium carbonate ( $K_2CO_3$ ), containing 32%  $K_2O$ . Developed as part of Anorel's sustainability-driven innovation program, the product is derived from circular raw materials (plant-based ash) and is processed through a zero-waste, energy-efficient production method. This makes Ash Base K a sustainable alternative to conventional potassium sources, aligned with the principles of circular agriculture. Potassium carbonate (K<sub>2</sub>CO<sub>3</sub>) is a highly versatile compound with applications far beyond horticulture.

In hydroponic systems, Ash Base K serves as an effective chloride-free potassium source, essential for optimal plant growth and quality.

Ash Base K is particularly beneficial during periods of high potassium demand, such as fruit setting and ripening, and is suitable for use in both open-field and soilless cultivation systems. Its alkaline character helps neutralize acidic solutions, supporting a more stable pH in the nutrient mix. Beyond agriculture, K₂CO₃ is widely used across various industrial sectors, including the soap and detergent industry, metal treatment, paints and coatings, textiles, glass manufacturing, and even in food and wine production as a processing aid.



Chemical Composition		Physical Properties	
Phosphorus pentoxide (P <sub>2</sub> O <sub>5</sub> )	1.5%	Bulk density (ton/m³)	1.5
Potassium oxide (K <sub>2</sub> O)	32%	рН	12
Carbon dioxide (CO <sub>2</sub> )	15%	Appearance	Yellowish transparant liquid







Compound fertilizers are categorised into complex and blended types, depending on their production method.

- **Complex granular** fertilizers contain the nutrients in the desired proportions in the same granule.
- **Formulated crystalline** fertilizers are physical mixtures. The individual nutrients remain separate and are not chemically bonded together.

Our compound fertilizers are available in the following packaging options:

- 25 kg bags made of either PE or LWPP quality, 1200 kg stacked per pallet.
- 1200 kg bigbags, stacked per pallet.













### **Triafos**

NPK 0-52-40 **Polyphosphates** 

Triafos is a **formulated crystalline**, polyphosphate fertilizer, with almost the same nutrient formulation as MKP.

#### Triafos's benefits:

- Triafos can be replaced one-on-one by MKP.
- Polyphosphates ensures a sustained, plant-available nutrient supply by releasing phosphates and redissolving precipitated cations.
- Triafos helps cleaning out residues in tanks and irrigation pipes.
- Triafos is **very easy to use**, with no need to additionally acidify the nutrient solution.

Chemical Composition		Physical Prop	金丁参 « 25kg	
Total phosphorus (P <sub>2</sub> O <sub>5</sub> )	>52%	pH (5% solution)	5-6	
Polyphosphates	34%	Solubility (in water of 20°C)	>180 g/L	
Potassium oxide (K <sub>2</sub> O)	>40%	Appearance	Powder	













## **Pomag**

NPK 10-0-35 + 8 MgO

Potassium nitrate + magnesium sulphate anhydrate

Pomag is a formulated crystalline, uncakeable fertilizer obtained through a physical reaction between potassium nitrate and magnesium sulphate anhydrates. This process results in a non-oxidizing, therefore non-hazardous product, making Pomag subject to fewer restrictions on trade and transportation.

Chemical Composit	tion	Physical Properties		△ T ★ ‹‹
Total nitrogen (N)	>10%	Appearance	Powder	
Nitric nitrogen (NO <sub>3</sub> )	>10%	Moisture	0.2%	
Potassium oxide (K <sub>2</sub> O)	>35%			
Magnesium oxide (MgO)	>8%			
Sulphur trioxide (SO <sub>3</sub> )	>15			



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POM G









### Anas 26

#### NPK 26-0-0

### Ammonium nitrate + ammonium sulphate

Anas 26 is a urea-free, **complex granular** fertilizer obtained through a controlled reaction between ammonium nitrate and ammonium sulphate. This process results in a **non-hazardous** product, making Anas 26 subject to fewer restrictions on trade and transportation.

The combination of nitrate nitrogen and ammoniacal nitrogen provides an exceptionally high nitrogen content available to plants over an extended period. Anas 26 is an ideal choice for crops with high nitrogen requirements, particularly during phenological stages.

			the Petil June	25kg
Chemical Composition		Physical Prop	erties	
Total nitrogen (N)	26%	pH (1% solution)	5	
Ammoniacal nitrogen (NH <sub>4</sub> )	19%	Moisture	0.3%	
Nitric nitrogen (NO <sub>3</sub> )	7%	Appearance	Granules (3-5mm)	
Sulphur trioxide (SO <sub>3</sub> )	32.5%	Solubility	>99%	











## **Nitafos**

NPK 28-14-0

### Ammonium nitrate + mono ammonium phosphate

Nitafos is a **complex granular** NP-fertilizer obtained through a controlled reaction between ammonium nitrate and monoammonium phosphate. This process results in a non-hazardous product, making Nitafos subject to fewer restrictions on trade and transportation. Nitafos's combination of nitrate nitrogen and ammoniacal nitrogen provides an exceptionally high nitrogen content available to plants over an extended period. Nitafos is an ideal choice for crops with high nitrogen requirements, particularly during phenological stages

Chemical Composition		Physical Properties		ANOREL
Total nitrogen (N)	28%	pH (1% solution)	3.8	
Ammoniacal nitrogen (NH <sub>4</sub> )	15%	Moisture	0.3%	
Nitric nitrogen (NO <sub>3</sub> )	13%	Appearance	Prills	
Phosphorus pentoxide (P <sub>2</sub> O <sub>5</sub> )	14%			













## **Calamag**

NPK 13.6-0-0 + 16 CaO + 6 MgO Calcium nitrate + magnesium nitrate

Calamag is a **complex granular** fertilizer, obtained through a controlled reaction between calcium nitrate and magnesium nitrate. With a balanced calcium-to-magnesium ratio, it prevents nutrient uptake competition. Suitable for foliar, fertigation, and spreadable **applications**, Calamag is available with or without boron.

Chemical Composition		Physical Properties		CENTON CREATED  THE CONTROL OF THE C
Total nitrogen (N)	13.6%	Purity	>99%	金寸素 cc 25kg
Ammoniacal nitrogen (NH <sub>4</sub> )	0.6%	pH (10% solution)	neutral	
Nitric nitrogen (NO₃)	13%	Solubility (in water of 20°C)	>710 g/L	
Calcium oxide (CaO)	16%	Bulk density	0.94 ton/m <sup>3</sup>	
Magnesium oxide (MgO)	6%	Appearance	Granules (1-4	mm)
Sodium (Na)	<0.1%			
Chlorine (Cl)	<0.1%			













### Calakal

NPK 13-0-4 + 25 CaO

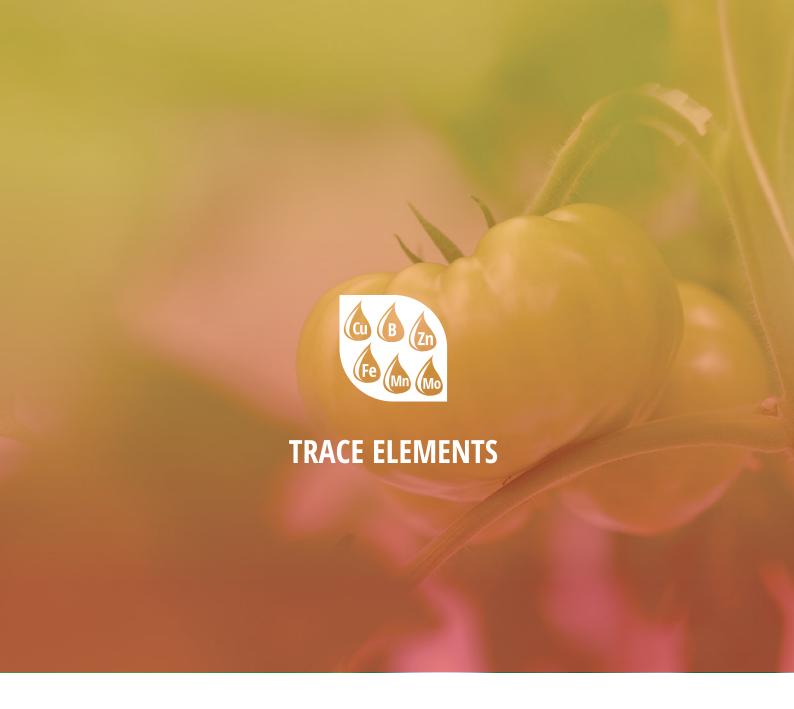
Calcium nitrate + potassium nitrate

Calakal is a **complex granular** fertilizer obtained through a controlled reaction between calcium nitrate and potassium nitrate. Calakal is free of ammonium, which helps maintain the balance between generative and vegetative growth in your crops.

Only mixed in the A fertilizer tank.

Chemical Composition		Physical Properties		25kg
Total nitrogen (N)	13%	Purity	99.7%	
Nitric nitrogen (NO <sub>3</sub> )	13%	Bulk density	1040 kg/m³	
Potassium oxide (K <sub>2</sub> O)	4%	Appearance	Granules (2mr	n)
Calcium oxide (CaO)	25%			

CAL AMAG





Trace elements, or micronutrients, are essential nutrients required in smaller quantities to each serve their unique functions within plants, particularly in physiological processes such as photosynthesis, cell replication, and osmoregulation. Consistent monitoring and timely application can help prevent both deficiencies and toxicity problems of each micronutrient, promoting optimal plant health and growth.

We provide both chelated and non-chelated trace elements. Additionally, we can create **custom trace element** mixes upon request to suit your specific needs.

Our solid, chelated trace elements are available in the following packaging options:

- 1 kg PE bags
- 5 or 10 kg buckets, depending on the product
- 25 kg PE bags or WPP-PE bags

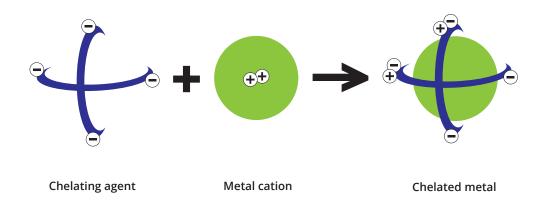
## What are chelates?

Chelates are stable compounds comprising a metal cation and a large organic molecule called a chelating agent or ligand. This ligand forms a protective ring structure around the cation, shielding it from external influences.

In agriculture and horticulture, chelates are used primarily on micronutrients like iron, zinc, manganese and copper. These microelements, without the complexation to a chelating agent, can precipitate caused by pH fluctuations or phosphate salts, rendering them insoluble and inaccessible for plant uptake. Chelates ensure that the microelements remain soluble and available to plants, maximising nutrient uptake efficiency.

#### Chelate benefits:

- Maintain their structure over a wide pH range.
- Compatible with standard plant protection and foliar fertilizers.
- Trace-elements are 100% plant-available.
- Suitable for organic farming!



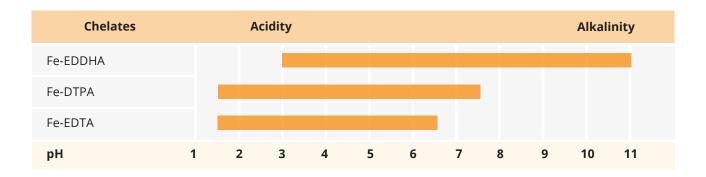


Fig 4: pH stability range among ion chelates.

## Solid chelated trace elements









## **Anafer Red & Anafer Green**

Fe-EDDHA 6%

Various ortho-ortho isomers of EDDHA are available:

- Anafer Green contains 2% ortho-ortho EDDHA,
- Anafer Red contains 4.8% ortho-ortho EDDHA.

EDDHA iron chelates' efficiency relies on their form, with ortho-ortho EDDHA being most stable due to its molecular symmetric structure. Products with higher ortho-ortho content provide more effectively iron to plants, compared to the orthopara formation. As a result, Anafer Red, is recommended when crops are sensitive to iron deficiency and particularly in calcareous and highly alkaline soil conditions. Anafer Green is best suited for fertigation.



Chemical Composition		Physical Properties		
Anafer Red		pH (1% solution)	7.5+/- 0.5	
Water-soluble iron (Fe), chelated by EDDHA	6%	Appearance	Red microgranule	
Ortho-ortho EDDHA	4.8%	Bulk density	0.8-1 ton/m <sup>3</sup>	
Anafer Green		Solubility (in water of 20°C)	300 g/L	
Water-soluble iron (Fe), chelated by EDDHA	6%			
Ortho-ortho EDDHA	2%			









## **Anafer 11**

Fe-DTPA 11%

Chemical Composition		Physical Prope	erties	The Continue of the Continue o
Water-soluble iron (Fe),	11%	pH (1% solution)	2-4	25kg
chelated by DTPA		Solubility (in water of 20°C)	150 g/L	
		Appearance	Yellow powd	er









## **Anafer 13**

Fe-EDTA 13%

Chemical Composi	tion	Physical Proper	ties	90	IRÓN CRELATE FR-BSIG TIN OU MICH STORM OU MICH STORM OU PER STORM OU P
Water-soluble iron (Fe),	13%	pH (1% solution in water of 25°C)	3.8-6	P. Australia	12
chelated by DTPA		Volumetric density	800-1000 kg/m <sup>3</sup>	金丁类"	25kg
		Appearance	Yellow powder		









## Anacop 14.5

Cu-EDTA 14.5%

Chemical Composition	on	Physical Pro	perties	Continues of the contin
Water-soluble copper (Cu)	14%	pH (1% solution)	5.8 +/-0.5	<b>全丁</b> 泰 (4)
chelated by EDTA		Solubility (in water of 20°C)	120 g/L	
		Appearance	Blue crystalline p	oowder









## **Anaman 13**

Mn-EDTA 13%

Chemical Composi	tion	Physical Pro	Committee Commit	
Water-soluble manganese,	12.5-13.5%	pH (1% solution)	5.8 +/-0.5	<b>△ 丁米</b> (c
chelated by EDTA		Solubility (in water of 20°C)	120 g/L	3
		Appearance	Light pink microg	ranular









## **Anazin 15**

Zn-EDTA 15%

Chemical Composition		Physical Pro	perties
Water-soluble zinc (Zn),	15%	pH (1% solution)	6.3+/-0.5
chelated by EDTA		Solubility (in water of 20°C)	940 g/L
		Appearance	White powder



**ANAFER13** 

ANACOP14

ANAMAN13







## TE-mix

Customized options with:

Chelated TE: maximum nutrient availability

Sulphates TE: Cost-efficient

Example formulation: TE-mix chelates 1500

Chemical Composition		Physical Properties		
Magnesium oxide (MgO)	1.1%	pH (5% solution)	4	
Sulphur trioxide (SO <sub>3</sub> )	11%	Solubility (in water of 20°C)	150g/L	
Water-soluble iron (Fe),		Appearance	Brown powder	
chelated by DTPA	3.67%			
Water-soluble manganese (Mn),				
chelated by EDTA	1.83%			
Water-soluble zinc (Zn),				
chelated by EDTA	1.83%			
Boron (B)	1.84%			
Molybdenum (Mo)	0.20%			



## **Liquid chelated trace elements**











## **Anafer 6**

Fe-DTPA 6%

Fe DTPA is increasingly recognized as the standard source of iron in fertigation because in the cultivation of most crops, the pH value stays below 6.5. This ensures that iron-DTPA remains stable and available to the plant.

Anafer 6 is easy to store and handle, and most importantly, Anafer 6, Fe-DTPA 6%, is low in sodium content and other contaminants.





Available in 25 kg cans, 250 kg barrels or 1250 kg IBC's.

Chemical Composition		Physical Prop	erties
Water-soluble iron (Fe),	6%	pH (1% solution)	7-8
chelated by DTPA		Density	1.28 kg/L
		Appearance	Dark brown/red liquid



## Solid non-chelated trace elements







Non-chelated trace elements are bound as chemical salts. As a result, they contain high concentrations of the relevant trace elements. However, these salt structures are more susceptible to chemical influences and are only stable within a limited pH range.



Our non-chelated trace elements are available in the following packaging options:

- 1 kg PE bags
- 25 kg bags
- 50 x 19 g box (copper sulphate)
- 50 x 12 g box (sodium molybdate)



## Manganese sulphate

Manganese sulphate monohydrate

Chemical Composition		Physical Prop	erties	
Manganese (Mn)	31.8%	Purity	98%	TO IN COLUMN TWO IS NOT THE OWNER.
		pH (10% solution)	4-6	
		Appearance	Light pink	crystal powder



**Zinc sulphate** Zinc sulphate monohydrate

Chemical Composition	nposition Physical Properties			
Zinc (Zn)	35.5%	Purity	98%	
Moisture	0.05%	pH (10% solution)	4-6	
		Appearance White		wder



## **Copper Sulphate**

Copper sulphate pentahydrate

Chemical Composition		Physical Prop	erties	
Copper (Cu)	25%	Purity 98%		CE VIEW NO MAN AND AND AND AND AND AND AND AND AND A
		pH (10% solution)	4-5	
		Solubility (in water of 20°C)	320 g/L	
		Bulk density	2.286 ton/r	n³
		Appearance	Blue crysta	lline powder



## **Borax**

Borax decahydrate

Chemical Composition		Physical Properties		
Borontrioxide (B <sub>2</sub> O <sub>3</sub> )	36.47%	Purity	99%	The state of the s
		pH (1% solution)	8-10	
		Solubility (in water of 20°C)	31 g/L	
		Appearance	White micr	oprills



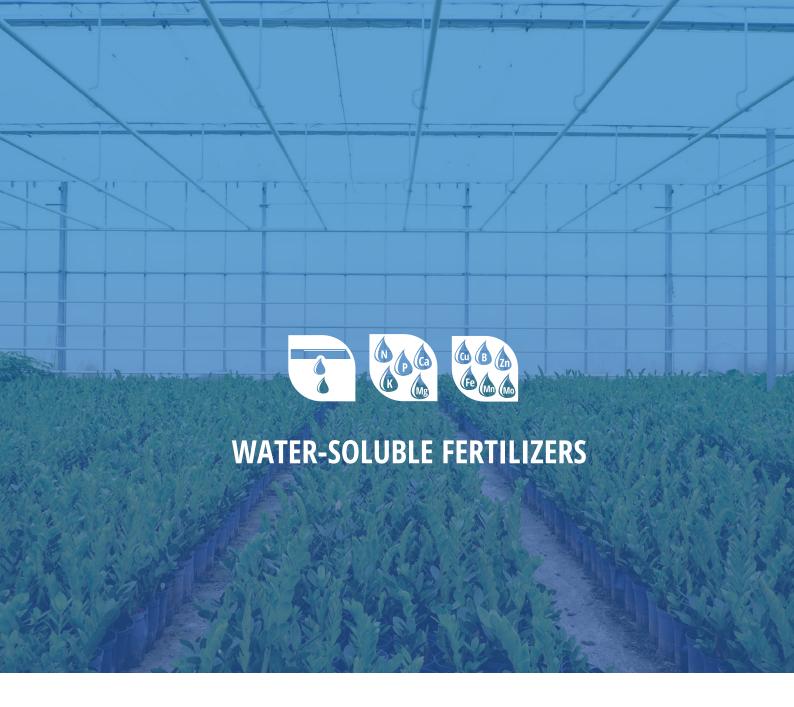
## **Boric acid**

Chemical Composition		Physical Properties		**************************************
Boric oxide (B <sub>2</sub> O <sub>3</sub> )	56.3%	pH (10% solution)	3.5-6	CC V The State of
Boron (B)	17.4%	Solubility (in water of 20°C)	47.2 kg/L	
		Bulk density	1.435 ton/r	n³
		Appearance	White power	der



# **Sodium molybdate**Sodium molybdate dihydrate

Chemical Composition		Physical Properties		
Molybdenum	39.5%	pH (10% solution)	7.5-10	CONTROL OF THE PARTY NAMED IN
		Solubility (in water of 20°C)	730 g/L	
		Bulk density	3.78 ton/m <sup>2</sup>	3
		Appearance	White power	der





## **Water-soluble NPK fertilizers**

NPK fertilizers contain three essential nutrients: nitrogen, phosphorus and potassium. These are combined in various ratios to meet the needs of specific crops and soil conditions. They offer a balanced, convenient and efficient way to supply nutrient, avoiding errors in mixing different fertilizers, saving time and labor.

Our water-soluble NPK fertilizers are competitively priced with the option of including our standard trace element mix and biostimulants.

Upon request, we use plant-based colorants added to the products, instead of artificial ones.

## **Polyamix**

Anorel's Polyamix offers a wide range of NPK formulations for different crop types and seasonal requirements, including a balanced NPK blend for all-season use, high-nitrogen formulas during phenological stages, a phosphorus-rich formula ideal for the beginning of the season, and maturation-focused formulas. Our **standard micronutrient mix** ensures comprehensive plant nutrition throughout growth cycles.

Our Polyamix range includes formulations based on **three** different nitrogen sources. Some examples of our standard formulations are found below:



	WITH AMMONIUM-NITRATE	WITH UREA
Benefits:	<ul><li>provides immediately available nitrogen</li><li>enhanced nitrogen uptake</li></ul>	<ul><li>offers higher nitrogen content</li><li>competitively priced</li></ul>
Formulations:	NPK 24-10-10 + 1.5 MgO + TE NPK 14-30-14+ 2 MgO + TE NPK 10-10-36 + 2 MgO +TE NPK 18-18-18 + 1 MgO + TE	NPK 25-15-15 + 1 MgO + TE NPK 11-40-11 + 2 MgO + TE NPK 12-12-34 + 2 MgO + TE NPK 20-20-20 + 0.5 MgO + TE



- 1 kg, 2 kg, and 10 kg PE bags.
- 25 kg bags made of either PE or LWPP quality, 1200 kg stacked per pallet.
- 1200 kg bigbag, stacked per pallet.

### **Tailor made NPK'S**

Looking for a fertilizer with **specific NPK content, packaging or branding**? We'll help you find the suitable formulation to create a product that perfectly matches your requirements.

#### **Tailor-made formulations**

While our standard **NPK fertilizers** and **TE mixtures** offer a balanced nutrition under typical conditions, specific crops and conditions might not be optimal. Anorel works closely with you to develop the most suitable formulation, leveraging our extensive experience collaborating with farmers worldwide.

#### **Production**

We source only the finest raw materials for our NPK fertilizers, partnering with producers worldwide. Our strict control mechanisms and proactive issue resolution ensure top-quality production. Our NPK fertilizers are produced in Belgium and the Netherlands using fully automated processes, ensuring uniform and high quality products that meet your specific needs.

#### Flexibility and branding

Our fertilizers are available in a wide range of packaging options:

- 1 and 2 kg pouches
- 10, 15, or 25 kg bags in PE or LWPP quality
- 1000 or 1200 kg big bags

Our NPK products are standardly sold under **the Fertilikers** and **PolyAmix** brands. However, alternative logos, labels, or packaging can be provided **upon request**.

## **Unibag & Anobag**

A fertigation system with A and B tanks can be labor-intensive, requiring significant time and effort to manually add 25 kg fertilizer bags. Unibags and Anobags streamline this process by providing a customised, ready-to-use solution based on your fertigation advice. Each bigbag is tailored to your specific requirements, ensuring complete solubility, the precise quantity and nutrient composition for each tank. This user-friendly system **saves growers time and labor** by eliminating the need to manually prepare fertilizer mixes, and **reduces plastic waste** by not cutting plastic bags.

#### **Specifications**

The bigbags hold 250 kg to 1200 kg of our fertilizers, generating approximately 10,000L of nutrient solution in one single action. We customize bag weights according to your needs, eliminating the hassle of weighing and calculating the quantity of each specific fertilizer for the A/B tanks.

#### **Flexibility**

For the **Belgian market** we can produce and deliver Unibags & Anobags on short notice, allowing growers to adjust quickly to new fertigation advices.

For **international markets** logistics become slightly more complex, resulting in minimum quantities and longer delivery times for only Unibags.





Unibag	Anobag
Guaranteed 5-year anti-caking warranty (Fertilizers remain free-flowing, long lasting stability).	Adapted to most recent crop advice, to use within 3 months.
More expensive fertilizers.	Cost-efficient fertilizers.
Mixed composition of fertilizers, ensuring analyzability, and avoids using up the entire content of the Unibag all at once.	Layered composition of fertilizers; the entire Anobag all at once must be emptied inside fertilizer tank.
Ideal for large fertilizer tanks.	Ideal for small deliveries or smaller fertilizer tanks.
Belgian and international market.	Only Belgian market, delivery within a short 2-day timeframe.





Modern horticulture demands high yields, increased resistance, and improved quality from its crops. As the use of crop protection agents becomes more restricted due to EU regulations, optimal plant nutrition is essential to meet these demands. Biostimulants can provide an additional advantage by stimulating plant metabolism independently of nutrient value, ultimately improving stress resistance and crop quality.

Discover our range of biostimulants, available in different types of packaging, dependent on the product.













## Silacon

### NPK 2-3-11 +14.7 SiO<sub>2</sub> + hydrolysed seaweed

Silacon enhances crop health and resilience while improving fruit quality and shelf life. Silacon contains silicon, directly absorbable by the plant roots, which provides protection against abiotic stress by forming a physical barrier in plants. As a high-potassium fertilizer, Silacon supports various quality aspects, such as flower formation and fruit sugar content and enhances the resistance to drought. Additionally, hydrolysed seaweed in Silacon contain natural plant growth regulators that stimulate root growth and nutrient uptake.

Moreover, Silacon has been granted derogations, which means that both Anorel and independent testing centers have proven the effectiveness of Silacon and its application methods.



Chemical Composition		Physical Properties		
Total nitrogen (N)	2.3%	Bulk density (ton/m³)	1.28	
Ureic nitrogen (NH <sub>2</sub> )	2.3%	pH (10% solution)	11.6	
Potassium oxide (K <sub>2</sub> O)	11%	Appearance	Brown liquid	
Phosphorus pentoxide (P <sub>2</sub> O <sub>5</sub> )	3%			
Silicon dioxide (SiO <sub>2</sub> )	14.7%			
Hydrolysed seaweed	0.75%			



Available in 1 L cans, 5 L cans, 20 L cans, 200 L barrels and 1000 L IBC's.

#### **Dose and instructions:**

- Irrigation: 8-10L/ha, apply every 14 days from bud formation (+/- 4 applications in total).
- Fertigation: Continuous feed of 240ml in 1000L water (240ppm), recommended in a C fertilizer tank.



Do not mix in concentrated fertilizer solutions, or with crop protecting agents that have a low pH. Silacon has a pH increasing effect and can precipitate in combination with pH lowering fertilizers in concentrated form.

FOLIAR APPLICATION					
Crop	Dosage	Application			
Lettuce	1,5L/ha (diluted in 500L water	Every 7 days, start at planting			
Capsicum (pepper)		Every 14 days, start at budding			
Tomato		Every 14 days, start at budding			
Cucumber, melon, squash, zucchini		Before flowering, during flowering and after developing fruiting primordia every 10-14 days			
Fruit trees (apple, pear)		Every 10-14 days from bud formation			
Stone fruit		Every 10-14 days from bud formation			
Strawberries		Every 6-12 days during leaf develpoment, beginning of fruit development, every 14-21 during fruiting period			
Banana (Musa)	2L/ha (diluted in 500L water	Monthly appllication during vegetative growth, continue during flowering depending on needs			
Potato		Every 10-14 days from leaf development			
Padi (rice)		At tillering, stem elongation, end of booting and beginning of panicle emergence			
Grain		At tillering, stem elongation and after blooming			
Sugarcane		Between tillering and crop maturation, every 10-14 days (+/-5 applications in total)			
Ginger		Monthly application during vegetative growth, continue during flowering depending on needs			











## **Algaprills**

### NPK 0.5-3-26 + hydrolysed seaweed

Algaprills is a fresh seaweed extract rich in Plant Growth Regulators, or natural plant hormones, that improve plant growth, health, and resistance to pests and diseases. Alginic acid in Algaprills enhances soil health and structure. Suitable for various crops, landscaping, and organic production, Algaprills are non-toxic and environmentally friendly. Algaprills are easy to use and effective in highly concentrated nutrient solutions due to its neutral pH.



#### Algaprills benefits:

- Increases resistance to biotic and abiotic stress
- Improves yield and shelf life of fruit
- Stimulates (root) growth
- For application in soil and soil-less irrigation systems

Chemical Composition			Physical Pro	operties
Organic matter	30%	Solubility		200 g/L
Total nitrogen (N)	0.5%	Density		0.35-0.45 kg/
Potassium oxide (K <sub>2</sub> O)	26%	рН		6-7.5
Phosphorus pentoxide (P <sub>2</sub> O <sub>5</sub> )	3%	Moisture		1%
Calcium (Ca)	0.5%	Appearance		Brown microprills
Magnesium (Mg)	0.5%			
Alginic acid	8%			
PGR	1500 mg/kg			

#### Dose and instructions:

#### Root drenching trees and container plants

Soak the soil around the tree or plant in a container with a dilution of 500g Algaprills per 1000L water/solution.

#### **Hydroponics**

Mix 200g of Algaprills to 1000L of the nutrient solution. Apply this mixture to the B tank.

#### Turf

Use 4 kg Algaprills per ha. Dissolve in water. Apply every 3 to 4 weeks. It is recommended to use Algaprills during spring to minimize the risk of leaching.

#### Replanting

Use 2 g Algaprills per 10cm radius around the stem. Dissolve in water. Apply every 3 to 4 weeks.



Available in 3 kg buckets and 15 kg bags.











## **Algafit**

### NPK 3-27-18 + hydrolysed seaweed

Algafit is an easy-to-use biostimulant, containing **monopotassium phosphite**. Algafit enhances plant resistance against fungal attacks of Peronospora spp., Botrytis spp., and soil-borne pathogens such as Phytophthora spp. and Pythium spp. Algafit uses a dual mode of action: By improving root development and resilience, Algafit reduces the susceptibility to infections. Additionally, Algafit initiates the **plants' defense response**, neutralizing the pathogen's ability to cause infections.



Chemical Composition		Physical Properties	
Total nitrogen (N)	3%	pH (10% solution)	4.45
Ureic nitrogen (NH <sub>2</sub> )	3%	Solubility (in water of 20°C)	100%
Phosphorous pentoxide (P <sub>2</sub> O <sub>5</sub> )	27%	Density	1.41kg/L
Potassium oxide (K <sub>2</sub> O)	18%	Appearance	Brown liquid
Hydrolysed seaweed	0.1%		

#### Dose and instructions:

**Irrigation:** 4 treatments between planting and harvesting at 8-10 L/ha per application.

Foliar feeding: 3-4 treatments at 2 L/ha from flower/leaf formation to harvest. We have recommendations for foliar application for selected crops.

**Fertigation:** Final concentration of 20-25 ppm in fertigation water. Add 1L of Algafit in a 100% concentrated stock solution. **Root drenching:** Dip the roots until the base of the stem in a 1% solution for 20 minutes.



Available in 1 L cans, 5 L cans, 20 L cans and 1000 L IBC's.



Please note that this product is exclusively available for export to countries outside the E.U.

		FOLIAR APPLICATION
Crop	Dosage	Application
Capsicum (pepper)	2L/ha, 2-4 foliar applications	(I) 8–9 or more leaves unfolded on the main shoot (BBCH 18–19); (II) 9 or more flower buds visible until beginning of flowering (BBCH 59–61); (III) beginning of fruit development, 1–3 fruit have reached typical size and form (BBCH 71–73); (IV) fruit development, 4–6 fruit have reached typical size and form (BBCH 74–76).
Lettuce	2L/ha, 2-3 applications	(I) 9 or more true leaves unfolded (BBCH 19); (II) Heads begin to form: the two youngest leaves do not unfold (BBCH 41); (III) 40% of the expected head size reached (BBCH 44).
Tomato	1-2L/ha, 2-5 applications	(I) 8-9 or more leaves unfolded on the main shoot (BBCH 18–19); (II) 1-3 inflorescences visible (BBCH 51–53); (III) first flowers open on 1–3 inflorescences (BBCH 61–63); (IV) first fruit has reached typical size on 1 cluster (BBCH 71); (V) first fruit has reached typical size on 2–3 clusters (BBCH 72–73).
Cucumber	1-2L/ha, 3-6 applications	(I) 3-5 true leaves unfolded on the main stem (BBCH 13–15); (II) 6-9 or more leaves unfolded on the main shoot (BBCH 16–19); (III) formation of primary side shoots (BBCH 21–29); (IV) 1-2 flower initials with elongated ovary visible on the main stem (BBCH 51–52); (V) 6-7 flower initials with elongated ovary visible on the main stem (BBCH 56–57); (VI) first fruit on the main stem has reached typical size and form (BBCH 71).
Padi (rice)	2L/ha, 1-4 applications	(I) tillering (BBCH 21–29); (II) beginning of stem elongation (BBCH 30–32); (III) end of booting (BBCH 47–49); (IV) beginning of panicle emergence (BBCH 51–53).
Stone fruit	1-2L/ha, 1-6 applications	(I) green bud stage (BBCH 55); (II) white bud stage (BBCH 57–59); (III) flowers fading, majority of petals fallen until end of flowering (BBCH 67–69); (IV) fruit reaches 50–60% of typical size (BBCH75–76); (V) fruit colouring advanced (BBCH 85).
Oil palm seedlings	1-2L/ha, 3-6 applications	(I) Appearance of the first open lanceolate leaf (BBCH 102); (II) five or more lanceolate leaves (BBCH 109); (III) first leaf with bifurcation at the apex (BBCH 121); (IV) leaf 12 with indentations partially dividing the blade (BBCH 131); (V) fully pinnate leaf 18, closed spear leaf (BBCH 141); (VI) leaf 18 fully pinnate and spear leaf 7% open (BBCH 149).
Strawberries	1-2L/ha, Summer-bearing varieties: 3-4 applications, Everbearing varieties: 5-8 applications	(I) leaf development: 2 treatments every 6-12 days; (II) beginning of the first fruit development; (III) development and ripening of the first fruit; (IV) fruiting period: 2-4 treatments every 14-21 days.
Banana (Musa)	2-3L/ha 3-4 applications	(I) During vegetative growth period, monthly application. Dependent on crop needs, continue during flowering.
Ginger	2L/ha, 2-4 applications	(I) Monthly application during the vegetative growth period, dependent on the needs of the crop.
Potato	2L/ha, 4-5 applications	4-5 applications between leaf development and tuber development / ripening.
Sugarcane	2L/ha, 4-5 applications	Apply between tillering and crop maturation, depending on the needs of the crop.









# Fitaliq P

PK 30-20

## Potassium phosphite 50%

Fitaliq P uses a dual mode of action: By improving root development and resilience, Fitaliq P reduces the susceptibility to infections. Additionally, Fitaliq P initiates the plants' defense response, neutralizing the pathogen's ability to cause infections.

Chemical Composition		Physical Properties		
Phosphorus pentoxide (P <sub>2</sub> O <sub>5</sub> )	30%	pH (10% solution)	4.45	
Potassium oxide (K <sub>2</sub> O)	60%	Bulk density	1.4 g/L	



Please note that this product is exclusively available for export to countries outside the E.U.







# **Organic and organo-mineral fertilizers**

Today's agriculture has to feed an ever-growing world population, increasing the demand for sustainable solutions. To tackle this issue, Anorel developed a range of organic and organo-mineral fertilizers for field crops. Organic and organo-mineral fertilizers are fully or partially composed of natural sources, resulting in more renewable and eco-friendly fertilizers. Combining organic and mineral components creates balanced plant nutrition, ensuring a consistent nutrient supply to meet your crops' needs. Additionally, organic and organo-mineral fertilizers enhance soil structure, improve water retention capacity and CEC, and support biodiversity.

Our organic and organo-mineral fertilizers are available in the following packaging options:

25 kg bags made of either PE or LWPP quality,
 1200 kg stacked per pallet.











# **Phoenix**

NPK 7-6-14 + 4 MgO

Phoenix is a granulated organic-mineral fertilizer with nitrogen, phosphorus, potassium, magnesium, and micronutrients in balanced proportions. Reflected to our commitment to sustainability, Phoenix contains recycled plant-based ashes, rich in silicon for enhanced resistance to biotic and abiotic stress. Phoenix's combination of fast-acting and organically bound nitrogen results in controlled and balanced nutrient release. Moreover, Phoenix stimulates soil microbial activity, improves soil structure, water retention, and permeability, ultimately supporting optimal root development.

#### Phoenix's benefits:

- Higher yields compared to similar organic fertilizers.
- Good price-to-quality ratio.

#### **Dose and instructions:**

Apply between 0.8 and 1.6 tonnes per ha, depending on soil fertility and crop type.



Chemical Composition		Trace Eleme	ents	Physical Cor	nposition
Total nitrogen (N)	7%	Silicon oxide (SiO <sub>2</sub> )	3%	Dry matter	Min 88%
Nitric nitrogen (NO <sub>3</sub> )	2.7%	Sulphate (SO <sub>4</sub> )	1.5%	Humidity	Max 12%
Ammoniacal nitrogen (NH <sub>4</sub> )	1%	Iron (Fe)	1700 mg/kg	Organic matter	Min 39%
Ureic nitrogen (NH <sub>2</sub> )	0.3%	Manganese (Mn)	240 mg/kg	Bulk density	750-800 kg/m <sup>3</sup>
Organic nitrogen (N <sub>org</sub> )	3%	Zinc (Zn)	230 mg/kg	pH (10% solution)	6-7
Phosphorus pentoxide (P <sub>2</sub> O <sub>5</sub> )	6%	Copper (Cu)	60 mg/kg	Pellet diameter	4-5 mm
Potassium oxide (K <sub>2</sub> O)	14%	Boron (B)	10 mg/kg		
Magnesium oxide (MgO)	4%	Molybdenum (Mo)	2 mg/kg		
Calcium oxide	4.3%				













# **Biomagic**

## Organic NPK 4-3-3

Biomagic is a granulated organic NPK fertilizer, obtained from fermented plant materials and chicken manure. The 4 mm granules are well fit for mechanical spreading and form ideal product for a well-balanced agricultural system. Biomagic's high organic matter content ensures easy absorption by the soil and promotes root development. The organic particles are converted into soil humus, effectively enriching nutrient-poor soils, enhancing their structure, water retention capacity, and fostering biodiversity.

#### Biomagic's benefits:

- No leaching, hence environmentally friendly.
- Provides a gradual release of nutrients, which results in a long-lasting effect.
- No additives, no harmful effects on humans, animals or the environment. Conform with strict Belgian standards.

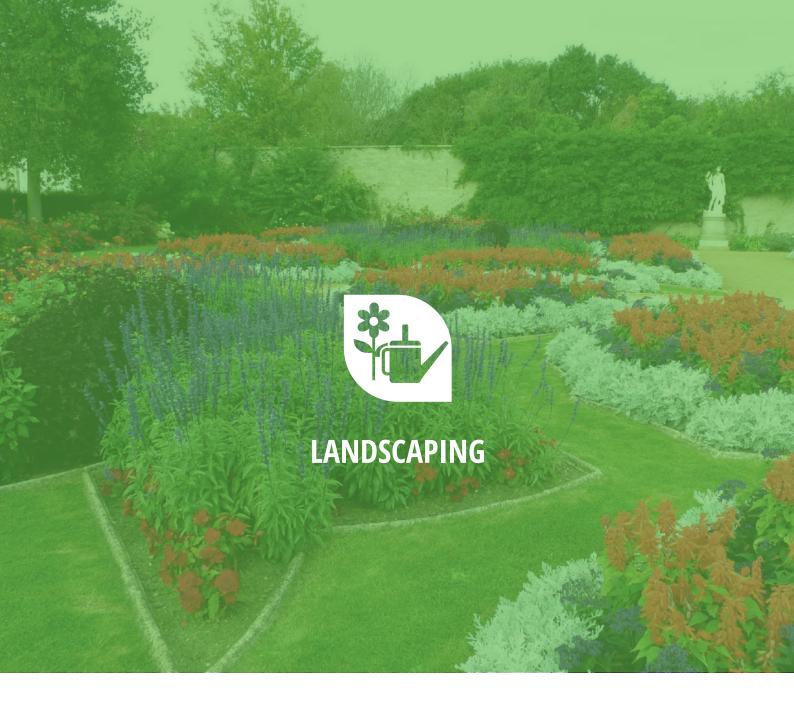


1-2 ton/ha, the frequency of application is dependent on soil and crop type.

PLANORE		000
BIC	MA	GIC
<b>&amp;</b>	160mg	BEACH SALES
Posing		

Chemical Composition		Trace Elements		Physical Composition		
Total nitrogen (N)	4%	Iron	800 mg/kg	Dry matter		Min 88%
Ammoniacal nitrogen (NH <sub>4</sub> ) (mineral)	0.4%	Manganese	350 mg/kg	Organic mat	ter	Min 65%
Organic nitrogen (N <sub>org</sub> )	3.6%	Zinc	340 mg/kg	Pellet diame	ter	4-5 mm
Phosphorus pentoxide (P <sub>2</sub> O <sub>5</sub> )	4%	Copper	80 mg/kg	Density	725-	-800kg/m³
Potassium oxide (K <sub>2</sub> O)	4%	Boron	32 mg/kg	pH (10% solu	ution)	6.9
Calcium oxide (CaO)	8%	Molybdenum	9 mg/kg			
Magnesium oxide (MgO)	1%					







In addition to our extensive range of horticultural products, we also offer a limited selection of landscaping products. Our focus for these products lies in creating sustainable compositions.









## **Feraway**

NPK 6-0-4 + 2% Fe

Feraway is a liquid NK-fertilizer with iron (Fe), providing indirect action against moss, for a dense, deep green lawn.

#### Feraway's benefits:

- Fertilizer with indirect action against moss
- Easy to use and works immediately
- Sustainable product based on biodegradable iron chelate
- Safe for children and pets
- Does not stain stones and other non-porous surfaces
- Does not acidify the soil



#### **APPLICATION PERIOD**

JAN	FEB	MAR	APR	MAY	JUN
JUL	AUG	SEP	ОСТ	NOV	DEC

#### **Application conditions**

Use on dry, short-cut grass when the outdoor temperature is 5°C or higher for better results.

#### **Application method**

Apply with a hand sprayer, pressure sprayer, or backpack sprayer, using coarse droplets.

#### **Dosage**

Dilute 0.5-1L of Feraway in 10L of water for a 100m<sup>2</sup>.



Available in 5L bottles, 20L bottles, 200L barrels and 1000L IBC's.





## **Manamos**

#### Moss remover

#### Manamos's benefits:

- Efficient long-lasting effect against liverworts, silvergreen bryum moss and lichens.
- Preventive and cleaning effect.
- Can be used on trees, container plants and pavements.
- Harmless to children and pets when used correctly.
- Easy to use.

#### **Effect and composition**

Manamos forms a suffocating physical barrier for mosses and therefore has a preventive and cleaning effect. Due to the presence of essential oils, the product will penetrate deeply and have a long-lasting effect.

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#### **Applications**

#### 1. Tree trunk cleaner

- a. After 4 days, lichens on the bark will die off.
- b. Penetrates deep into the bark, resulting in a very long-lasting effect (2 years).
- c. When applied to the trunk, the tree will not be affected.

#### 2. Container cleaner

- a. After 2-3 days the liverwort will have died off.
- b. Long-lasting effect that keeps the pot clean for a long time.
- c. With targeted application, the container plant will not be affected.

#### 3. Stone cleaner

- a. After 3-4 days, the lichen and liverworts will die off.
- b. Does not leave stains on paving or natural stone.

#### Dosage and instructions:

- Shake well before use and then apply the product as soon as possible to avoid loss of efficiency due to phase separation.
- To be applied with a hand sprayer, knapsack sprayer, field sprayer or watering can
- 1L in 10L of water for 100 m<sup>2</sup>. Cover the moss thoroughly with Manamos.
- Can be used all year round at outside temperatures of 10°C and above. Avoid use during or before rainy conditions.
- Manamos can be used on leaf-bearing plants. It is advisable to avoid contact with the leaf as much as possible. This applies especially to young leaves and on sunny days.
- It is recommended to first apply to a test area in case of new crops.
- Harmless to children and pets when used correctly. As a precaution, keep the product out of the reach of children and animals.



Available in 1L bottles and 5L spray bottles, 10L spray bottles and 20L spray bottles.











In the potting soil industry, various methods are used to cultivate plants in containers, pots, and tubs. The right combination of raw materials is essential for creating an optimal nutrient composition in potting soil, tailored to each crop's specific needs. Anorel offers PG mixes, which are added to diverse substrates to achieve premium potting soil. These PG mixes are blended NPK fertilizers with trace elements, formulated to meet the specific requirements of different crops, pot sizes, irrigation systems, and cultivation periods. Anorel's PG-mixes prevent clumping, ensuring even distribution in the potting soil.

Sustainability being a core value, we've completed initial pilot tests for our 'Ash Base' R&D project. We've developed the Ash PG-mix using recycled ashes derived from plant waste, creating a circular, plant-based, and mineral nutrient source.

Our PG mixes are available in the following packaging options:

- 25 kg bags in PE or LWPP quality
- 1000 or 1200 kg big bags

Alternative nutrient compositions, logos, labels, or packaging can be provided **upon request**.





Anorel leverages on its extensive network of reliable production partners established over the last 30 years to source a broad array of raw materials that are used in various industries. Below is a limited selection of industrial products we currently offer. Please do not hesitate to contact us for any other requirements you may have.

# **Phosphoric acid**

Orthophosphoric acid is an inorganic acid with the chemical formula  $H_3PO_4$ . When dissolved in water, it ionizes to form dihydrogen phosphate ions ( $H_2PO_4$ ) and hydrogen ions ( $H^+$ ), reflecting its acid properties. Phosphoric acid is primarily used in the production of fertilisers and detergents, and in smaller quntities, it is used as an acidulant in soft drinks.

Product	Composition	Packaging type	Stacked per pallet
Phosphoric acid 59%	42.5% P <sub>2</sub> O <sub>5</sub>	25 kg cans	800 kg
Phosphoric acid 59%	42.5% P <sub>2</sub> O <sub>5</sub>	1420kg IBC	1420 kg
Phosphoric acid 75%	54% P <sub>2</sub> O <sub>5</sub>	1500 kg IBC	1500 kg
Phosphoric acid 85%	61% P <sub>2</sub> O <sub>5</sub>	1600 kg IBC	1600 kg

## Potassium bicarbonate

KHCO<sub>3</sub>

Chemical Composition		Physical Properties		
Potassium oxide (K <sub>2</sub> O)	46%	Purity		>98%
		pH (10% solution)		8.8
		Moisture		<0.5%
		Appearance		White powder

Different applications include its use as a pH regulator or as a fire extinguishing agent.



Available in 25 kg bags and 1000 kg bigbags.

# Monoammonium phosphate

 $NH_4H_2PO_4$ 

Monoammonium phosphate is mainly used in fertilizers and as a component of the powder in fire extinguishers.



Available in 25 kg bag, 1100 kg bigbags, 1200 kg bigbags.



## **Disodium EDTA**



Available in bags of 25 kg.



# **Potassium nitrate**

KNO<sub>3</sub>

Potassium nitrate is a major source of potassium and nitrate used in fertilizers. It is also commonly used for glass tempering and metal treatment.

#### **Physical Properties**

Purity - 99%

Appearance - prills or crystalline, with or without AC



Available in 25kg PE/LWPP bags or bigbags.



## **Sodium Nitrate**

NaNO<sub>3</sub>

Due to its oxidizing and fluxing properties, Sodium Nitrate is used in various industries, including chemicals, ceramics/glass, metal treatment and solar power.

#### **Physical Properties**

Purity - 99%, 99.7%

Appearance - prills or crystalline, without AC



Available in 25kg PE/LWPP bags or bigbags.



# **Sodium Hydroxide / Caustic Soda**

NaOH

Sodium hydroxide, or caustic soda, is commonly used in soaps/detergents, surfactants, oil and gas drilling and chemical manufacturing.

#### **Physical Properties**

Purity - 98 +- 1%

Appearance - prills, flakes



Available in 25kg LWPP bags.

# Calcium chloride anhydrate

CaCl<sub>2</sub>

Calcium chloride is an ionic compound of calcium and chlorine. It is used in metal treatment, oil and gas drilling, water/metal treatment and other applications. Anhydrous CaCl<sub>2</sub> is highly hygroscopic (absorbs water) and exothermic (releases heat when dissolved In water), offering numerous advantages for certain applications.

### **Physical Properties**

Purity - 95-97%

Appearance - prills



Available in 25 kg LWPP bags or bigbags.

## **Calcium nitrate**

 $(Ca(NO_3)_2)$ 

Calcium nitrate is used in fertilizers, water treatment, building materials and other industries.

## **Physical Properties**

Appearance - solid (prills) or liquid (51% or 45%)



Available in 25kg LWPP bags, bigbags or IBC.



CaCl, Anhydrate

## **Potassium carbonate**

K<sub>2</sub>CO<sub>3</sub>

Chemical Composition		Physical Properties		
Potassium oxide (K <sub>2</sub> O)	68%	Purity	>98%	
		pH (5% solution)	11.5-12.5	
		Moisture	<0.2%	
		Solubility		
		Appearance	White crystalline	

Potassium carbonate is primarily used in the production of soap and glass.



Available in 25 kg bags.









## Ash Base K

Potassium carbonate 48% solution

Ash Base K is a liquid fertilizer based on **potassium carbonate** (K<sub>2</sub>CO<sub>3</sub>), **containing 32% K<sub>2</sub>O**. Developed as part of Anorel's sustainability-driven innovation program, the product is derived from circular raw materials (plant-based ash) and is processed through a zero-waste, energy-efficient production method. This makes Ash Base K a sustainable alternative to conventional potassium sources, aligned with the principles of circular agriculture. Potassium carbonate (K<sub>2</sub>CO<sub>3</sub>) is a highly versatile compound with applications far beyond horticulture.

In hydroponic systems, Ash Base K serves as an effective chloride-free potassium source, essential for optimal plant growth and quality.

Ash Base K is particularly beneficial during periods of high potassium demand, such as fruit setting and ripening, and is suitable for use in both open-field and soilless cultivation systems. Its alkaline character helps neutralize acidic solutions, supporting a more stable pH in the nutrient mix. Beyond agriculture, K<sub>2</sub>CO<sub>3</sub> is widely used across various industrial sectors, including the soap and detergent industry, metal treatment, paints and coatings, textiles, glass manufacturing, and even in food and wine production as a processing aid.



Chemical Composition		Physical Properties			
Phosphorus pentoxide (P <sub>2</sub> O <sub>5</sub> )	1.5%	Bulk density (ton/m³)	1.5		
Potassium Oxide (K <sub>2</sub> O)	32%	рН	12		
Carbon dioxide (CO <sub>2</sub> )	15%	Appearance	Yellowish transparant liquid		





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