



Product Catalogue

We provide the best nutritional solutions thanks to our fertilization programs adapted to the specific soil and crop needs.

Together we cultivate the future.





About Us

Fertinagro Biotech belongs to a group of companies of the Tervalis Group. Since its origin in Teruel (Spain) in 1986, it looks to the future with the objective to lead the sector, in which it specializes, without losing its identity, passion and commitment. While achieving its objective, the Group grows continuously and sustainably. Its consolidation and driving force are based on human resources, with about 1500 employees on different continents. **Research and innovation** activities supported by an annual investment of three million euros, makes competitive this pillar of the group.

Fertinagro is the division dedicated to the production and commercialization of **plant nutrients** with the established subsidiaries in different countries. We continue to grow in quality and production to be present in all possible countries of the world in the coming years. We already occupy the top positions in

R&D+i at the European level, with 44 patents at the moment.

Fertinagro Biotech's commercial vision has led us to continuous growth in the international market, through alliances or through our 20 own subsidiaries on different continents.

At Fertinagro Biotech we have acquired **know-how over more than 30 years** that we want to export to all corners of the planet.

For this we have a technical and **commercial team**, distributed throughout the different geographical areas, which adapts our product catalog to the requirements of each crop and country, while identifying the real needs of the market and seeking solutions with our R+D department.



Large industrial capacity

- 28 factories with production of more than 2 M Tons/year.
- Europe's largest microbial biostimulant plant.
- Largest Spanish manufacturer of agricultural amino acids.



The most complete catalogue

- More than 800 sustainable nutritional references.
- Products adaptable to each region and crop.
- 500 agricultural technicians working with the farmer.



Sustainable agriculture

- Increased yields with fewer fertilizer units
- Reduction of the CO₂ footprint with sustainable solutions
- Optimization of resources promoting a circular economy



International presence

- 22 subsidiaries with a presence in more than 80 countries.
- Priority partner of the OCP Group.
- More than 300 thousand tons exported every year.





R+D+i

For almost four decades our main objective is to stay one step ahead, explore new paths, innovate and be different. For this reason, research, development and innovation are for us a commitment to the future. A bet that tries to solve the main problems that affect the agri-food sector and therefore our society.

Thanks to a large annual investment in research and our professionals in the R&D department, at Fertinagro Biotech we can boast of already having almost 150 technological patents registered nationally and internationally, while we continue to develop fundamental projects for the adaptation of the farmer to the new regulatory frameworks.

These projects focus on the development of new products and processes that minimize the use of economic resources used in agriculture, placing special emphasis on the development of efficient fertilizers that increase crop yields using renewable resources.



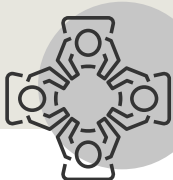
5 MILLION EUROS OF ANNUAL INVESTMENT IN R+D+I



>20 ONGOING RESEARCH PROJECTS



60 COLLABORATIONS WITH RESEARCH CENTERS



147 NATIONAL AND INTERNATIONAL PATENTS





CATALOGUE Content



Micro-Granular

- 9 • Agristart Micro



Granular Tech

- 11 • Renovation Fuerza - Novophos
- 14 • Durasop
- 15 • Multiphos
- 16 • Duramon Nitrozinc



Blending solutions

- 17 • Durablend
- 18 • Dura-P
- 19 • Dura-U
- 20 • Blendcoat



Biostimulants

- 22 • Efisoil Superbia (SHC)
- 23 • Aminovit Fortibion (SHC)
- 24 • Aminovit Vigorion
- 25 • AZO-N



Soil regenerators

- 27 • Organia Revitasoil (SHC)
- 28 • Efisoil Renovation (SHC)
- 29 • Efisoil Humus (SHC)
- 30 • Gepavit extrahúmico (SHC)



Nutritional correctors

- 32 • Microquel Topiron (SHC)
- 33 • Bioquel Ferrum (SHC)
- 34 • Microquel Mix
- 35 • Microquel Aminomagnum
- 36 • Microquel Amin Durafruit
- 37 • Microquel Amin Supercoctel
- 38 • Microquel Amin Yield
- 39 • Microquel Amin Cuaje
- 40 • Microquel Amin B-Mo (SHC)
- 41 • Microquel Amin Topcal
- 42 • Microquel Amin Ziman (SHC)
- 43 • Microquel Amin Copper (SHC)



Phenological activators

- 45 • Efisoil Blackpot
- 46 • Whitepot Solution (SHC)
- 47 • Rhizoactive Germinador



Technological foliar NPK

- 49 • Folitop Amino



Organominerals

- 51 • Organia Biofuerza (SHC)
- 52 • Organia Humi Fertak



Water-soluble fertilizers

- 54 • Fer Cristal Flow
- 55 • Fer Cristal Summum
- 56 • Fer Cristal Kaliphos 0-40-40
- 57 • Fer Cristal Special One



Liquid fertilizers

- 59 • Organia Biofuerza líquido (SHC)
- 60 • Renovation Fuerza líquido



Conditioners

- 62 • Efisoil Nitroshoot
- 63 • Efisoil Gepasal
- 64 • Neutrafol pH



FERTINAGRO BIOTECH
TECHNOLOGIES



Microgranular

Enhancers from the initial
phase of crop development.

Micro Agristart



MICRO AGRISTART

RECOMMENDED DOSES



Cereals
30-60 Kg/Ha



Sugarbeet
25-50 Kg/Ha



Oilseed rape
25-50 Kg/Ha



Maize
30-60 Kg/Ha



Soybean
25-50 Kg/Ha



Sunflower
30-40 Kg/Ha

Consult with a Fertinagro technical advisor to adjust the dose according to the specific conditions of your crop.

Highly technological microgranular fertilizers with microelements for seedbed application.

Microgranular fertilizers of high efficiency for precision application with seeds. Specially developed to provide a balanced nutrient supply to the crop from the beginning.

The technologies incorporated in Agristart are in accordance with the concept of Good Agricultural Practices. Improving the crop nutrition processes allows to achieve a greater profitability through high productivity and to take care the environment.

A complex microgranular formulation ensures uniform distribution and differential access of the crop to the provided nutrients. Moreover, application next to the seeds decreases the nutrient/soil interaction and improves an uptake by the crop.

DECLARED CONTENT	AGRISTART COMPLET	AGRISTART MULTIPHOS	AGRISTART FORCE	AGRISTART MAGNUM	AGRISTART RHIZOTECH	AGRISTART PULSE
Total Nitrogen- (N)	12,0 %	12,0 %	8,0 %	10,0 %	15,0 %	6%
Phosphorus pentoxide (P ₂ O ₅) soluble in water and neutral ammonium citrate	30,0 %	25,0 %	40,0 %	48,0 %	20,0 %	40%
Potassium oxide (K ₂ O) soluble in water	8,0 %	6,0 %	5,0 %		5,0 %	4%
Total Magnesium oxide (MgO)		2,2 %				
Sulphur trioxide (SO ₃) soluble in water	15,0 %	5,0 %	10,0 %		10,0 %	8%
Total Manganese (Mn)		0,2 %				
Total Zinc (Zn)	0,3 %		0,1 %	1,0 %	0,3 %	1,5%
Total Copper (Cu)					0,1 %	
Free Aminoacids					2,0 %	

Granulometry: 98% between 1 and 1.5 mm

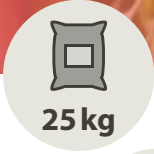


Granular Tech

NPK fertilizers designed with the latest technologies to achieve high yields in different production environments

Renovation Fuerza • Multiphos • Durasop • Duramon Nitrozinc





RENOVATION FUERZA Plus

RECOMMENDED DOSES



Cereals

200-400 Kg/Ha



Oilseeds

200-400 Kg/Ha



Vegetables

400-600 Kg/Ha



Berries

250-500 Kg/Ha

Consult with a Fertinagro technical advisor to adjust the dose according to the specific conditions of your crop.

Granular Tech NPK fertilizers furnished with the most advanced technologies to achieve efficient plant nutrition

RENOVATION FUERZA PLUS: Complex, technological and sustainable fertilizers, high efficiency and respect for the environment, designed for use as base fertilizers for all kinds of crops. Its technological level maximizes the profitability of the crop by:

RENOVATION FUERZA MAXIMA: It is a complex, technological and sustainable fertilizer, with high efficiency and respect for the environment, designed for use as a bottom fertilizer. Thanks to its low salt index, it guarantees the quality of the crops produced. It is formulated with noble raw materials that guarantee the use of mineral nutrients and guarantee the profitability of the crop. Low in chlorides: it avoids risks derived from an increase in salinity that harm the adequate production of the crop.

The high nutritional efficiency of both families lies in the contribution of:

AMINOVIT® Complex: stimulates the plant as well as all the physiological processes that it performs, increasing their ability to respond to stressful situations.

ACTIBÓN® Complex: stimulates the production of hormones that affect development vegetative growth of the crop and ensures the solubility of the nutrients supplied to obtain the best possible use of the product.

N-PRIMER® technology: of natural origin, it helps to stabilize the nitrogen supplied maximizing its consumption by the plant and reducing its loss.

PROLIFE® technology: affects the soil microbiome to take advantage of its fertility potential, thereby guaranteeing optimal crop yields. maximizing its consumption by the plant and reducing its loss.

RENOVATION FUERZA PLUS - MAXIMA	RF PLUS 20-5-5	RF PLUS 6-8-18	RF PLUS 10-5-15	RF MAXIMA 2-1-3	RF MAXIMA 113	RF MAXIMA 311
Total Nitrogen (N)	20,0 %	6,0 %	10,0 %	8,0%	5,0%	15,0 %
Phosphorus pentoxide (P ₂ O ₅) soluble in water and neutral ammonium citrate	5,0 %	8,0 %	5,0 %	5,0%	5,0%	5,0 %
Potassium oxide (K ₂ O) soluble in water	5,0 %	18,0 %	15,0 %	15,0%	15,0 %	5,0 %
Calcium oxide (CaO) soluble in water	-	-	-	2,0%	2,0%	2,0 %
Total Magnesium oxide (MgO)	2,0 %	2,0 %	2,0 %	2,0%	2,0%	2,0%
Sulphur trioxide (SO ₃) soluble in water	8,0 %	10,0 %	10,0 %	15,0%	20,0%	15,0 %
Total Boron (B)	0,1 %	0,1 %	0,1 %	0,01 %	0,01 %	0,01 %
Total Zinc (Zn)	0,1 %	0,1 %	0,1 %	0,1 %	0,1 %	0,1 %
				Low in Chlorine		

NOVOPHOS

THE SMARTEST PHOSPHORUS TECHNOLOGY

The newest smart technology NOVOPHOS provides the crop with adequate and balanced phosphate nutrition throughout its whole development stages.

With the combination of three different technological phosphorus plus the traditional one NOVOPHOS offers four available phosphorus to cover the whole real nutritional demands of the crops.

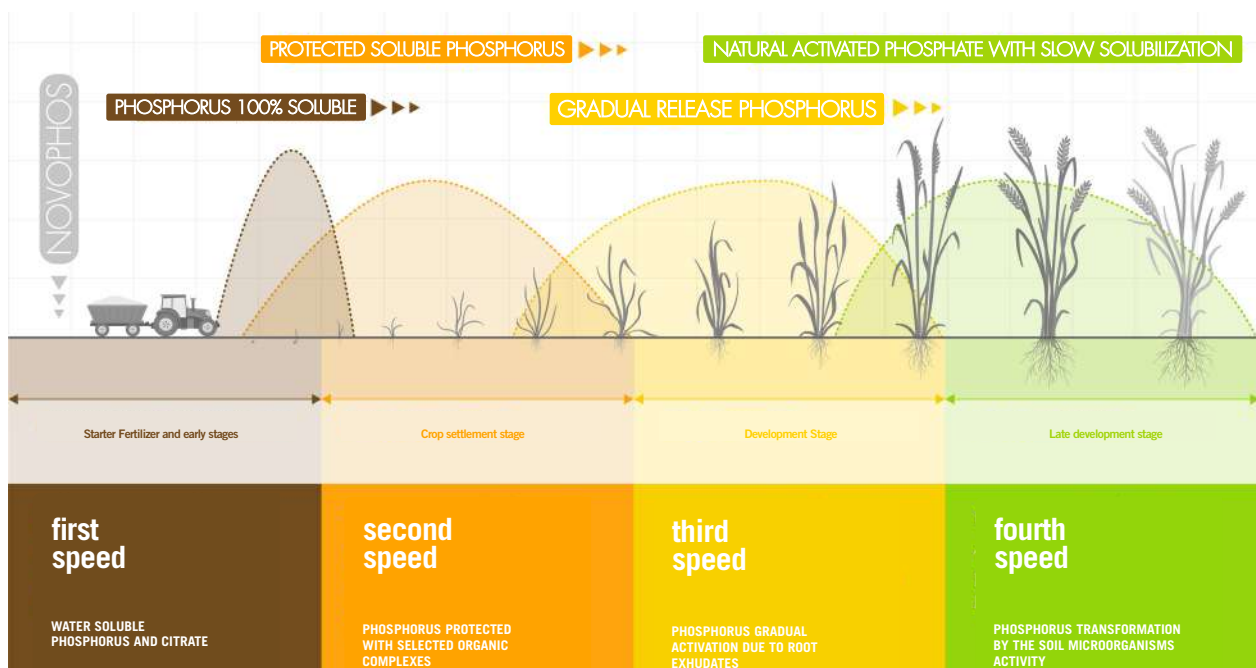
From yesterday to today, we evolved from chemistry to biology. Evolving from a chemical processed phosphorus only for industrial benefit and with a low efficiency, to a smartest phosphorus which activates the natural processes in the crops involved in its transformation. Facilitating the phosphorus availability in every phenological stage of the crops, to increase the quality and yields.

The first speed starts in the implementation phase of the crop with the contribution of traditional soluble phosphorus, but in the appropriate doses, without excesses, avoiding economic losses and environmental pollution.

The second speed is achieved by providing once more traditional phosphorus but this time protected with selected organic carbon. This allows it not to be lost in the soil and to be available when the traditional phosphorus has been assimilated by the plant.

The third speed, making use of the plant's own natural resources, is activated when the root of the crop has already developed and begins to exude organic acids. Acids generated by the plant are responsible for transforming a third type of phosphorus that has been technologically treated to remain in reserve until that moment into assimilable.

The fourth speed, and perhaps the most interesting, comes into play in the final phases the Phosphoactive technology patented by Fertinagro, and awarded in the USA. A set of organic acids and exclusive micronutrients activate the improved microorganisms in the soil so that they are the ones that work and naturally transform the phosphorus, until now insoluble, making it bioavailable and usable by the crop.









RENOVATION FUERZA Actibion

NOVOPHOS

RECOMMENDED DOSES

 Cereals 200-300 Kg/Ha	 Oilseeds 200-300 Kg/Ha
 Vegetables 350-600 Kg/Ha	 Berries 200-400 Kg/Ha

Consult with a Fertinagro technical advisor to adjust the dose according to the specific conditions of your crop.

High-efficiency technological and sustainable fertilizers with root growth enhancers and soil microbiome activators

RENOVATION FUERZA ACTIBION N: They are complex, technological and sustainable fertilizers designed for use as background fertilizers in all types of crops. The high nutritional efficiency of Renovation Fuerza Actibión fertilizers lies mainly in the contribution of:

ACTIBÓN® Complex: stimulates the production of hormones that affect development vegetative growth of the crop and ensures the solubility of the nutrients supplied to obtain the best possible use of the product.

N-PRIMER® technology: of natural origin, it helps to stabilize the nitrogen supplied maximizing its consumption by the plant and reducing its loss.

PROLIFE® technology: affects the soil microbiome to take advantage of its fertility potential, thereby guaranteeing optimal crop yields. mizing its consumption by the plant and reducing its loss.

NOVOPHOS® offers phosphorus with four different speeds of availability achieving complete nutrition during all phases of crop development.

MAIN BENETS OF RENOVATION FUERZA ACTIBIÓN:

Availability of nutrients: By inuencing soil microorganisms, it helps to stabilize the nutrients provided, avoiding possible losses.

Activation of plant growth: It generates the production of plant hormones that stimulate root development and generate adequate vegetative vigor, providing precocity to the crop.

Gradual nutrition: With NOVOPHOS® technology, the needs of the crop are covered from start to nish, conferring early implantation and meeting the demand of the crop in the owering and fruit set phases.

	BALANCES	TECHNOLOGIES
Renovation Fuerza Actibion N-021	PK (Mg-S) 0-12-6 (2-10)	N-primer, Actibion, Prolife, Novophos + Zinc
Renovation Fuerza Actibion N-022	PK (Mg-S) 0-8-10 (2-15)	N-primer, Actibion, Prolife, Novophos + Zinc
Renovation Fuerza Actibion N-106	NPK (Mg-S) 12-10-6(2-14)	N-primer, Actibion, Prolife, Novophos + Zinc
Renovation Fuerza Actibion N-121	NPK (Mg-S) 7-10-6 (2-14)-	-N-primer, Actibion, Prolife, Novophos + Zinc
Renovation Fuerza Actibion N-814	NPK (Ca-Mg-S) 8-14-5s (5-2-14)	N-primer, Actibion, Prolife, Novophos + Zinc
Renovation Fuerza Actibion N-861	NPK (Mg-S) 8-6-14 (2-15)	N-primer, Actibion, Prolife, Novophos + Zinc
Renovation Fuerza Actibion UNICA	NPK (Mg-S) 15-5-5 (2-15)	N-primer, Actibion, Prolife + Zinc








GRANULAR TECH Durasop



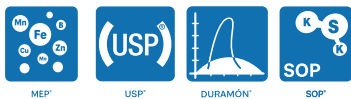
Highly efficient complex NPK fertilizers made of potassium sulphate and enriched with microelements.

The incorporation of various technologies inside the granule enforced with the coating "Bi-cote" technology allows efficient use of Durasop family as a base and/or cover fertilizer. The gradual nitrogen release, protected phosphorus and complexed micronutrients permit to achieve high productivity, while taking care of environment.

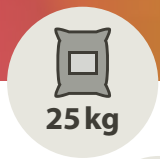
The different formulations presented below offer flexible options for an appropriate nutrition depending on phenological stage of the crop development.

RECOMMENDED DOSES		
		
Cereals 200-400 Kg/Ha	Vegetables 400-600 Kg/Ha	Potato 650-1200 Kg/Ha
		
Fruit and olive trees 300-600 Kg/Ha	Tobacco 500-700 Kg/Ha	

Consult with a Fertinagro technical advisor to adjust the dose according to the specific conditions of your crop.



DECLARED CONTENT	DURASOP 20-5-10	DURASOP 15-15-15	DURASOP 12-12-17
Total Nitrogen (N)	20,0 %	15,0 %	12,0 %
Phosphorus pentoxide (P ₂ O ₅) soluble in water and neutral ammonium citrate	5,0 %	15,0 %	12,0 %
Potassium oxide (K ₂ O) soluble in water	10,0 %	15,0 %	17,0 %
Total Magnesium oxide (MgO)	2,0 %	2,0 %	2,0 %
Sulphur trioxide (SO ₃) soluble in water	15,0 %	15,0 %	18,0 %
Total Boron (B)	0,1 %	0,1 %	0,1 %
Total Zinc (Zn)	0,1 %	0,1 %	0,1 %
Granulometry: 98% between 2.7 and 4.7 mm			



25 kg



GRANULAR TECH Multiphos

Specific fertilizers with high phosphorus content for acid soils

Family of granular fertilizers with elevated phosphorus content and no acidity that do not react with urea or other raw materials during physical mixing, storage or direct application.

Multiphos technology provides phosphorus available in different chemical forms, for maximum use. Each granule contains monocalcium, dicalcium and tricalcium phosphate.

Monocalcium phosphate, soluble in water, quickly absorbed by the roots. Dicalcium phosphate for a medium-term use. Tricalcium phosphate ensures the availability of phosphorus in the last phases of the crop cycle.



RECOMMENDED DOSES



Cereals

200-400 Kg/Ha



Vegetables

400-800 Kg/Ha



Soybean

250-400Kg/Ha



Potato

400-500 Kg/Ha



Maize

400-600 Kg/Ha

Consult with a Fertinagro technical advisor to adjust the dose according to the specific conditions of your crop.

DECLARED CONTENT	MULTIPHOS 0-35-0	MULTIPHOS 0-25-0	MULTIPHOS 10-25-0
Total Nitrogen (N)			10,0%
Total phosphorous pentoxide (P ₂ O ₅)	35,0%	25,0%	25,0%
Total calcium oxide (CaO)	30,0%	20,0%	20,0%
Total magnesium oxide (MgO)		3,0%	2,0%
Sulfur trioxide (SO ₃)	5,0%	10,0%	6,0%
Total zinc (Zn)	0,1 %	0,1%	0,1%
Granulometry: 98% between 2.7 and 4.7 mm			



GRANULAR TECH Nitrozinc



Complex nitrogen fertilizer that provides gradual nitrogen release and contains sulphur, magnesium and zinc

Complex nitrogen fertilizer with an optimal nitrogen-sulphur ratio that also contains magnesium and zinc in its formulation.

It is an excellent option for efficient basic or dressing application of nitrogen fertilizer.

Formulation with Duramon technology allows efficient gradual release of applied nitrogen throughout the entire crop cycle, being present at times of greatest energy demand by avoiding possible nitrogen losses in the environment.



MEP



DURAMON



ACTIBION

RECOMMENDED DOSES



Cereals

150-300 Kg/Ha



Vegetables

400-800 Kg/Ha



Potato

400-500 Kg/Ha



Sugarcane

250-300 Kg/Ha



Maize

300-500 Kg/Ha

Consult with a Fertinagro technical advisor to adjust the dose according to the specific conditions of your crop.

DECLARED CONTENT

Total Nitrogen (N)	30,0 %
Total Magnesium oxide (MgO)	2,0 %
Sulphur trioxide (SO ₃) soluble in water	20,0 %
Total Zinc (Zn)	0,3 %
Granulometry: 98% between 2.7 and 4.7 mm	





BLENDING SOLUTIONS Durablend

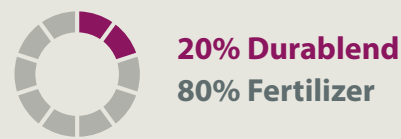
Granular formulations designed to enrich nutritional composition of conventional fertilizers or blends.

Durablend is a family of fertilizers designed to improve conventional fertilizers or blending mixtures with additional nutrients. It is an excellent option to get balanced macro and micronutrients blends. It perfectly suits for mixing with phosphate fertilizers for base application and with traditional nitrogen sources for dressing application.

- MEP technology incorporates protected essential micronutrients.
- Availability of different formulations adjusted for particular needs.
- Option to incorporate Protect technology.

Examples of blending ratio:

Consult with a Fertinagro advisor to optimize the blending ratio according to the local conditions, crop requirements and particular case



DECLARED CONTENT	DURABLEND Zn	DURABLEND Zn+B	DURABLEND 3E	DURABLEND 5E	DURABLEND Mg	DURABLEND Ca
Calcium oxide (CaO)	25,0 %	25,0 %	25,0 %			40,0 %
Magnesium oxide (MgO)	4,0 %	4,0 %	3,0 %	10,0 %	16,0 %	4,0 %
Sulphur trioxide (SO ₃)	40,0 %	40,0 %	40,0 %	28,0 %	35,0 %	
Manganese (Mn)				0,5 %		
Boron (B)		0,5 %		0,05 %		
Zinc (Zn)	2,5 %	2,0 %		0,05 %		
Granulometry: 98% between 2.7 and 4.7 mm						

Final ratios:	N	P ₂ O ₅	CaO	MgO	SO ₃	Zn	B
20 % Durablend Zn+B + 80% MAP	9 %	42 %	5 %	0,8 %	8 %	0,4 %	0,1 %
30 % Durablend Zn+B + 70% MAP	8 %	37 %	7,5 %	1,2 %	12 %	0,6 %	0,15 %
40 % Durablend Zn+B + 60% MAP	7 %	31 %	10 %	1,6 %	16 %	0,8 %	0,2 %



Granular formulation designed for mixing with conventional phosphate fertilizers to enrich its nutritional formula and protect the contained phosphorus in the blend.

Dura P is designed to enrich nutritionally conventional phosphate fertilizers or NPK blends for base or dressing applications. The technologies utilized in the formulation improve the efficient use of the contained phosphorus and provide an optimal nutrition to the crop.

Protect Technology incorporates humic substances that stabilize the phosphorus in the fertilizer and decrease its retrogradation. Actibion Technology provides humic substances with high content of thioesters that activate the crop development through greater root growth and better translocation of nutrients.

Examples of blending ratio:

Consult with a Fertinagro advisor to optimize the blending ratio according to the local conditions, crop requirements and particular case.



20% Dura-P
80% DAP/MAP



30% Dura-P
70% DAP/MAP



40% Dura-P
60% DAP/MAP

DECLARED CONTENT	
Calcium oxide (CaO) soluble in water	2,0%
Magnesium oxide (MgO) soluble in water	10,0%
Sulphur trioxide (SO ₃) soluble in water	25,0%
Total Boron (B)	0,1%
Total Zinc (Zn)	0,1%
Granulometry: 98% between 2.7 and 4.7 mm	



Final ratios:	N	P ₂ O ₅	CaO	MgO	SO ₃	Zn	B
20 % Dura-P + 80% MAP	9 %	42 %	0,4 %	2 %	5 %	0,02 %	0,02 %
30 % Dura-P + 70% MAP	8 %	37 %	0,6 %	3 %	7,5 %	0,03 %	0,03 %
40 % Dura-P + 60% MAP	7 %	31 %	0,8 %	4 %	10 %	0,04 %	0,04 %



DURAMON TECHNOLOGY

The MCDHS molecule acts by inhibiting the urease enzyme and modifying the conditions in the soil that slows down the passage of ureic nitrogen to ammonia and nitric nitrogen:

- Improvement of Nitrogen use efficiency;
- Decrease of nitrate leaching;
- Sustainable environmental management.

Examples of blending ratio: Dura U + Urea



20% Dura-U
80% Urea



30% Dura-U
70% Urea



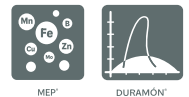
40% Dura-U
60% Urea

Consult with a Fertinagro advisor to optimize the blending ratio according to the local conditions, crop requirements and particular case.

Granular formulation designed for blending purposes that contains Duramon technology and provides nutritional balance to the final mix.

Granular fertilizer with Duramon technology designed to be mixed with conventional nitrogenous fertilizers for base or dressing applications. It provides an optimal nutritional mix.

Dura U improves the properties of the various N sources. The Duramon technology acts on the ureic and ammoniacal forms, increasing the efficiency of the use of the applied nitrogen. Soluble S and Mg complement the supply of nutrients. Given formulation seeks to maximize productivity and enrich the final blend, ensuring a more complete fertilization.



DECLARED CONTENT	
Total Nitrogen (N)	6,0%
Total Calcium oxide (CaO)	4,0%
Total Magnesium oxide (MgO)	14,0%
Sulphur trioxide (SO ₃)	35,0%
Total Manganese (Mn)	0,1%
Total Zinc (Zn)	0,1%
Granulometry: 98% between 2.7 and 4.7 mm	

Final ratios:	N	CaO	MgO	SO ₃	Mn	Zn
20 % Dura-U + 80% Urea	38 %	0,8 %	3 %	7 %	0,0,2 %	0,02 %
30 % Dura-U + 70% Urea	34 %	1,2 %	4 %	10 %	0,0,3 %	0,03 %
40 % Dura-U + 60% Urea	30 %	1,6 %	6 %	14 %	0,0,4 %	0,0,4 %



BLENDING SOLUTIONS Blendcoat



Coating for physical mixtures that protects and preserves the quality of the final blend.

Physical coating to obtain an anti-dust and anti-caking effect. It protects the final mix during storage and transportation. Moreover, it integrates a phosphorus stabilization technology.

Product is presented in two forms: fully water-soluble powder and liquid version (Renokohat) that guarantee an excellent distribution and coverage of treated granules.

In cases of blends with traditional phosphate fertilizers for base applications, the Protect technology improves the efficiency of phosphorus use by lowering the probability of retrogradation. Contained total humic extract improves the structure of the soil. Characteristic black color of the granules after coating shows homogeneity of the final product.

Recommendation for use

Dilute Blendcoat in water at concentration of 10% (for example, 5 Kg of Blendcoat in 50L of water).

Spray 3-5 L of the Blendcoat solution to 1 ton of the final blend.



**3-5 L of solution
of Blendcoat or
Renokohat
1 T Fertilizer**



DECLARED CONTENT BLENDCOAT

Total humic extract	40,0 %
Fulvic acids	35,0 %
Humic acids	5,0 %
Potassium oxide (K ₂ O) soluble in water	15,0 %
pH	10,0

DECLARED CONTENT RENOKOHAT

	w/w	w/v
Total humic extract	22,5 %	22,5 %
Fulvic acids	13,5 %	13,5 %
Humic acids	9,0 %	9,0 %
Potassium oxide (K ₂ O) soluble in water	3,0 %	3,0 %
pH	10,0	





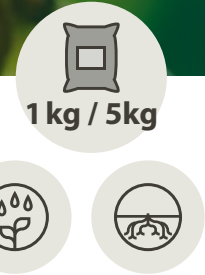
Biostimulants

Products designed to improve physiological processes in plants and increase its performance and tolerance against stress conditions.

Efsoil Superbia • Aminovital Plus • Aminovit Vigorion • Aminovit Fortibion



efisoil SUPERBIA



Physio-stimulating activator

Ecological biostimulant that activates the physiological processes inside the plants starting from the rooting. It provides bioactive substances of natural origin with polystimulating, physioprotective and complexing properties.

Apart from reinforcing the crop nutrition, this physioactivator establishes synergy between plant and essential soil microorganisms in rhizosphere. It revitalizes the root environment and enhances the plant's response to any stress situation, either biotic or abiotic origin (temperature, humidity, salinity, pests, diseases, etc.).

Its timely application, in the moments of elevated energy demand (during sprouting, flowering and fruit setting) notably improves the yield.

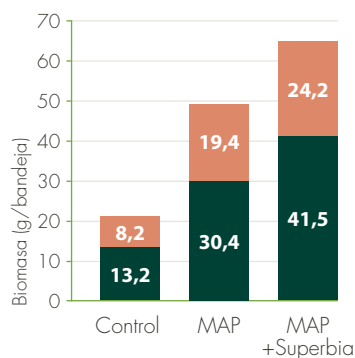
In foliar application its speed of action is remarkable, while in drip irrigation, it enhances root development, improves the assimilation of nutritive elements and reinforces the beneficial microflora in the soil.



Biostimulating effect of Efisoil Superbia on vegetative development of the crop

(Source: Foundation for agricultural development Dr. César E. Quintero "Trail with MAP and Superbia in soybean")

— Root biomass
— Aerial biomass



RECOMMENDED DOSES



Cereals

Foliar application: 0,5-1,5 kg/Ha



Vegetables

Foliar application: 1,5-2 kg/Ha
Root application: 2-4 kg/Ha



Fruit trees

Foliar application: 1,5-2,5 kg/Ha
Root application: 3-5 kg/Ha



Vineyard

Foliar application: 1,5-2 kg/Ha
Root application: 2-4 kg/Ha



Citrus

Foliar application: 1,5-2,5 kg/Ha
Root application: 3-5 kg/Ha

Consult with a technical advisor of Fertinagro to adjust the dose according to the specific conditions and crop requirements.

DECLARED CONTENT

Free L - Aminoacids	55,0%
Total Nitrogen (N)	10,0%
Organic Nitrogen (N)	9,0%
Ammoniacal Nitrogen (N)	1,0
pH: 5	
Aminogram: Ala, Arg, Asp, Cys, Gly, Glu, Hyp, His, Iso, Leu, Lys, Met, Phe, Pro, Set, Tyr, Thr, Val	



1L / 5L / 20L



AMINOVIT Fortibion

RECOMMENDED DOSES



Vegetables
10-15 L/Ha



Citrus
15-20 L/Ha



Berries
10-20 L/Ha



Fruit trees
10-15 L/Ha

Root application with drip irrigation (can be applied during entire crop cycle, especially at the moments of stress and high energy demand).

Liquid biostimulant with free-aminoacids designed for root application.

Liquid stimulant with organic matter and fast assimilating free aminoacids enhances plant response to any biotic or abiotic stress situation.

Its application in the moments of maximum energy demand by the crop improves plant development. Direct application by drip irrigation stimulates radicular system through improved assimilation of nutritive elements.

Aminovit Fortibion is certified for use in organic farming.



PRODUCT CERTIFIED FOR ORGANIC FARMING


DECLARED CONTENT	w/w	w/v
Free aminoacids	6,0%	7,5%
Total Nitrogen (N)	2,0%	2,5%
Organic Nitrogen (N)	2,0%	2,5%
pH: 6,5		
Aminogram: Ala, Arg, Asp, Cys, Gly, Glu, Hyp, His, Iso, Leu, Lys, Met, Phe, Pro, Set, Tyr, Thr, Val		





AMINOVIT Vigorion




1L / 5L / 20L



Liquid foliar biostimulant with high concentration of free aminoacids.

Liquid physioactivator of rapid action at foliar applications. It is rich in organic matter and free L-aminoacids of broad aminogram.

Aminovit Vigorion stimulates plant development in general and flowering and fruit setting processes in particular. It helps to recover stressed and weakened plants and to obtain higher yields.

Application together with phytosanitary products increases their efficacy and allows fast recovery of crops from the pesticide stress.

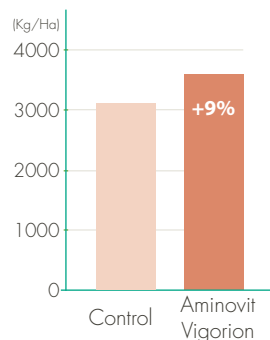
The presence of proline in the product aminogram increases tolerance of the crops to hydric and temperature stress, because this aminoacid regulates water balance inside the plant cell.

Formulated with Efilol Technology, the product improves the efficiency and durability of foliar treatments by increasing adherence and contact surface, as well as favoring entry through the cuticle



Average yield increase of wheat after application of Aminovit Vigorion.

(Source: Trials carried out on wheat during 2019 by technical team of Fertinagro Biotech in Spain)



RECOMMENDED DOSES



Cereals
1-2 L/Ha



Fruit trees
2-3 L/Ha



Legumes
1-2 L/Ha



Vegetables
2-3 L/Ha



Oil crops
1-2 L/Ha

Consult with a technical advisor of Fertinagro to adjust the dose according to the specific conditions and crop requirements.

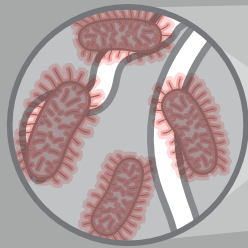
DECLARED CONTENT	w/w	w/v
Free aminoacids	12,0%	14,4%
Total Nitrogen (N)	8,0%	9,6%
Organic Nitrogen (N)	2,5%	3,0%
Ureic Nitrogen (N)	5,5%	6,6%
pH: 5		
Aminogram: Ala, Arg, Asp, Cys, Gly, Glu, Hyp, His, Iso, Leu, Lys, Met, Phe, Pro, Set, Tyr, Thr, Val		

AZO-N

EFFECT 1

MICROBIOTA ACTIVATION

The supply of prebiotics activates the populations of *Azotobacter*, *Pseudomonas* and *Bacillus* microorganisms, both at foliar and edaphic levels, and increases their diversity.



EFFECT 4

PROTECTION AGAINST STRESS

AZO-N® technology is enriched with the phytoalexin precursor that enhances the synthesis of this molecule by plants and acts as the plant's natural defense against stress situations, at the same time that the exudates generated by bacterial activity have effects fungistatic and nematostatic.

EFFECT 2

ATMOSPHERIC NITROGEN FIXATION

Activation of *Azotobacter* achieves a fixation and assimilation effect of atmospheric nitrogen both at the foliar and root levels.



EFFECT 3

MOVILIZACIÓN DE P Y K BLOQUEADOS

Stimulation of *Pseudomonas* and *Bacillus* naturally unlocks and solubilizes large amounts of phosphorus and potassium present in the soil, transforming these units into assimilable by cultivation

AZO-N® TECHNOLOGY - INFINITE NATURAL NUTRITION

AZO-N® provides a set of life-inducing prebiotics capable of stimulating the microorganisms present in the soil and plant so that they work and manage to fix and solubilize the nutrients present in a natural way in our environment. This is how AZO-N® products allow us to reduce the dose of fertilizer to be added, improving at the same time the yield of the crops

AZO-N®, thousands of millions of microorganisms working for you.

Products formulated with AZON Technology:





SOIL **Regenerators**

Range of products designed to recover and improve the physical and biological properties of soils.

Organia Revitasoil • Efisoil Renovation • Efisoil Humus • Gepavit Extrahúmico





5L



20 kg



ORGANIA
Revitasoil

RECOMMENDED DOSES



Vegetables

600-3000 Kg/Ha



Citrus

600-3000 Kg/Ha



Fruit trees

1500-3000 Kg/Ha



Berries

1200-3000 Kg/Ha



Tropical crops

1500-3000 Kg/Ha



Olive

1200-3000 Kg/Ha

Consult with a technical advisor of Fertinagro to adjust the dose according to the formulation, specific conditions and crop requirements.

Edaphic regenerator designed to improve the physical, chemical and biological properties of soils.

Product is rich in organic matter and contains free amino acids that facilitate a rapid response of the plants to any stress situation, caused either by biotic or abiotic factors. Its formulation improves soil characteristic, positively affecting the implantation processes in the beginning of the crop cycle.

The contribution of aminoacids in the moments of high demand by the crop serves as an additional source of energy supply. The product enhances root development and improves the assimilation of nutritive elements.

It is recommended to apply the product at the last moments of soil preparation before planting. Otherwise, it should be applied locally in the area of the root bulb.

Organia revitasoil is certified to be used in organic farming.



PRODUCT CERTIFIED FOR ORGANIC FARMING

DECLARED CONTENT	OR PLUS	OR CALCIUM	OR LIQUIDO
Free aminoacids	2,1 %	2,1 %	2,0 %
Total Nitrogen(N)	0,8 %	1,0 %	0,5 %
Calcium oxide (CaO)	6,0 %	10,0 %	12,0 %
Magnesium oxide (MgO)	2,0 %	2,0 %	0,5 %
pH	7	7	4
Appearance	powder / pellet	powder / pellet	Liquid (w/w)
Aminogram Ala, Arg, Asp, Glu, Gly, Hip, His, Ile, Leu, Lys, Met, Phe, Pro, Ser, Tyr, Thr, Trp, Val			



EFISOIL Renovation



Biological regenerator of soils and enhancer of the activity of beneficial edaphic microorganisms

Product with high quality humic substances with a soil regenerating effect. Elevated content of humic and fulvic acids improves the soil structure, increases the water retention capacity and favors the root development. Moreover, it forms stable complexes with microelements that facilitate their protection, mobilization and assimilation by the crops.

Efisoil Renovation acts directly on the chemical and biological processes in the rhizosphere having root stimulating and plant growth effect.

Prolife technology provides the essential molecules for the development of beneficial microorganisms in the rhizosphere. It stimulates the growth and renewal of root hairs, increases the soil fertility and the nutrient retention capacity.

Efisoil Renovation is certified to be used in organic farming.



RECOMMENDED DOSES



Vegetables
10-15 kg/Ha



Berries
10-15 kg/Ha



Olive
10-20 kg/Ha



Ornamental
10-15 kg/Ha



Tropical crops
10-20 kg/Ha



Fruit trees
10-20 kg/Ha

Consult with a technical advisor of Fertinagro to adjust the dose according to the specific conditions and crop requirements..

DECLARED CONTENT

Total humic extract	75,0 %
Humic acids	30,0 %
Fulvic acids	45,0 %
Potassium oxide (K ₂ O) soluble in water	10,0 %
pH	10



PRODUCT CERTIFIED FOR ORGANIC FARMING



RECOMMENDED DOSES

 Vegetables 10-15 Kg/Ha	 Citrus 15-20 l/Ha	 Fruit trees 10-20 kg/Ha
 Ornamental 10-15 kg/Ha	 Berries 10-15 kg/Ha	 Tropical crops 10-20 kg/Ha

Consult with a technical advisor of Fertinagro to adjust the dose according to the specific conditions and crop requirements..

Fully water-soluble humic substances

Humic substances soluble in water obtained from potassium humate. Elevated content of humic acids improves the soil structure, increases the water retention capacity and favors the root development. Moreover, it forms stable complexes with microelements that facilitate their protection, mobilization and assimilation by the crops.

Efisoil Humus contains an organic complex based on lignites with high percentages of thioesters (sulphur containing substances) that enhance the action of humic acids.

Apart from maximum solubility in all types of waters, the product buffers the pH and the conductivity values of irrigation water

Efisoil Humus is certified to be used in organic farming.

DECLARED CONTENT	
Total humic extract	66,0 %
Humic acids	57,0 %
Fulvic acids	9 %
Potassium oxide (K ₂ O) soluble in water	15,0 %
pH	9,8





GEPAVIT Extra-Húmico




1L / 5L / 20L



Liquid soil regenerator with humic substances.

Liquid solution with a high content of humic and fulvic acids that improve soil structure, water retention capacity and root formation.

Product increases the absorption of mineral nutrients by the roots while improving the physical-chemical properties of the soil and cationic exchange capacity.

Gepavit Extrahumico is certified to be used in organic farming.

RECOMMENDED DOSES		
 Vegetables 60-80 L/Ha	 Berries 60-80 L/Ha	 Olive 80-100 L/Ha
 Ornamentals 60-80 L/Ha	 Tropical crops 80-100 L/Ha	 Fruit trees 80-100 L/Ha

Consult with a technical advisor of Fertinagro to adjust the dose according to the specific conditions and crop requirements.



PRODUCT CERTIFIED FOR ORGANIC FARMING



DECLARED CONTENT	w/w	w/v
Total humic extract	25,0 %	31,2 %
Humic acids	10,0 %	12,5 %
Fulvic acids	15,0 %	18,75 %
Potassium oxide (K ₂ O)	6,0 %	7,5 %
pH: 11		



NUTRITIONAL **Correctors**

Products with chelated
microelements and amino acids
for the prevention and correction
of nutritional deficiencies.

**Microquel Topiron • Bioquel Ferrum • Microquel Mix • Microvit Aminomagnum
Microquel Amin Durafruit • Microquel Amin Supercotcel • Microquel Amin Yield
Microquel Amin Cuaje • Microquel Amin B-Mo • Microquel Amin Topcal
Microquel Amin Ziman • Microquel Amin Copper**



MICROQUEL Topiron




Ecological corrector of iron deficiency with a long-term effect

Topiron contains 6% of water-soluble iron, 100% of which is complexed by SLHA – a highly effective molecule for the correction of iron chlorosis via the root canal, especially on calcareous soils. In addition, the product enhances the mechanisms for solubilization and mobilization of nutrients in the soil and the activity of the Fe-reductase enzyme.

The availability of the nutrients depends to a great extent on the pH of the soil that makes necessary to protect them for a correct assimilation by the plants. TOPIRON® is able to keep iron in a stable form in a wide pH range (3-12). The formulation of Topiron in the form of a dispersible microgranule makes easy to handle and dose the product, compared to formulations in powder form. It has maximum and immediate solubility in all types of waters.

RECOMMENDED DOSES

 Vegetables 1-5 g/plant	 Olive tree 10-100 g/plant	 Fruit trees 10-100 g/plant
 Berries 1-5 g/plant	 Vineyard 5-25 g/plant	 Ornamentals 1-5 g/m ²

Consult with a technical advisor of Fertinagro to adjust the dose according to the specific conditions and crop requirements.



DECLARED CONTENT	
Iron (Fe) soluble in water	6 %
Iron (Fe) complexed with humic substances	6 %
Interval of pH stability	3-12

pH ranges in which iron chelates are stable (Wresemann et al., 1998)

pH	1	2	3	4	5	6	7	8	9	10	11
Microquel Topiron	■	■	■	■	■	■	■	■	■	■	■
FeEDDHMA	■	■	■	■	■	■	■	■	■	■	■
FeEDDHA	■	■	■	■	■	■	■	■	■	■	■
FeHEDTA	■	■	■	■	■	■	■	■	■	■	■
FeDTPA	■	■	■	■	■	■	■	■	■	■	■
FeEDTA	■	■	■	■	■	■	■	■	■	■	■

Functions of SLHA molecule

- Protection of Fe to avoid its blocking in the soil and to make it available to the plant.
- Transportation of Fe, keeping it interchangeable, mobile and accessible in the soil.
- Stimulation the growth of roots and aerial part, by enhancing the mechanisms for the solubilization and mobilization of nutrients.
- Acidifying property and facilitating the solubilization of blocked Fe in the soil.
- Increase of the beneficial microbial population and the activity of the Fe-reductase enzyme (reduction of iron from Fe³⁺ + to Fe²⁺ + assimilable form).




1 kg / 5 kg



BIOQEL
Ferrum

RECOMMENDED DOSES



Vegetables
1-5 g/m²



Olive tree
15-100 g/plant



Fruit trees
5-60 g/plant



Tropical crops
5-60 g/plant



Vineyard
3-10 g/plant



Ornamentals
1-5 g/m²

For foliar applications use concentration no more than 0,1% (100 g of the product in 100 liters of water), if necessary applying in several applications. Consult with a technical advisor of Fertinagro to adjust the dose according to the specific conditions and crop requirements.

Advantages of Bioqel Ferrum

Curative Effect: Application of complexed iron allows its use both as a preventive and as a curative against the symptoms of iron deficiency (iron chlorosis) in the crops.

Nutritional Efficiency: Increases the efficiency and assimilation of provided iron to the plant, also improves the solubilization of Fe³⁺ available in soils.

Better Rooting: Stimulation of the radicular growth of plants, favoring the development of secondary roots and hairs.

Ecological corrector with complexed iron and biostimulant action.

Bioqel Ferrum is a highly efficient ecological iron chlorosis corrector thanks to the stimulating molecules and complexes incorporated in its formulation. Provided iron is maximally adsorbed by crops. The product has biostimulating effect on plants. It shows a great stability in a wide range of soil pH (3-12), remaining assimilable by plants.

In addition, Bioqel Ferrum is a 100% sustainable and natural product, which provides a quick and effective solution to iron chlorosis problems that affect many crops

Bioqel Ferrum is certified to be used in organic farming.



PRODUCT CERTIFIED
FOR ORGANIC FARMING

DECLARED CONTENT

Free aminoacids	10,0 %
Total Nitrogen (N)	5,0 %
Organic Nitrogen (N)	3,0 %
Ammoniacal Nitrogen (N)	2,0 %
Iron (Fe) soluble in water	6,0 %
Iron (Fe) complexed by LS	6,0 %
pH: 4	
Aminogram: Ala, Arg, Asp, Cys, Gly, Glu, Hyp, His, Iso, Leu, Lys, Met, Phe, Pro, Ser, Tyr, Thr, Val	



Multiple microelement deficiency corrector

Soluble atomized complex of microelements for radicular or foliar application to prevent and correct the most common deficiencies. The product can be used in hydroponic systems.

Microelements chelated with EDTA, which provides protection against retrogradation and blockage in the soil. Additionally, they are complexed by Lignosulfonates with a stimulating effect. Complexing substances enhance the growth of the root hairs, which increase the absorption of micronutrients.

Great stability in a wide range of pH (3-10) increases the permanence of microelements in the soil, remaining in assimilable form to the plant for a longer time.

BIOQUEL MIX is formulated with selected raw materials that have similar characteristics to those used in Organic farming..

RECOMMENDED DOSES



Vegetables
1,5-2 Kg/Ha



Olive tree
2-3 Kg/Ha



Fruit trees
2-3 Kg/Ha



Berries
1,5-2 kg/Ha

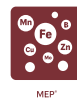


Vineyard
2-3 Kg/Ha



Ornamentals
1,5-2 Kg/Ha

Consult with a technical advisor of Fertinagro to adjust the dose according to the specific conditions and crop requirements.



DECLARED CONTENT			
Boron (B) soluble in water	0,7 %	Manganese (Mn) soluble in water	3,3 %
Copper (Cu) soluble in water	0,5 %	Manganese (Mn) chelated by EDTA	2,0 %
Copper (Cu) chelated by EDTA	0,5 %	Manganese (Mn) complexed by LS	1,3 %
Iron (Fe) soluble in water	7,5 %	Molybdenum (Mo) soluble in water	0,2 %
Iron (Fe) chelated by EDTA	4,5 %	Chelating agent: EDTA	30 %
Iron (Fe) complexed by LS	3,0 %	Stability of chelated fraction in pH range	3-10
Zinc (Zn) soluble in water	0,6 %	Complexing agent: Lignosulfonic acid	
Zinc (Zn) chelated by EDTA	0,6 %		



1L / 5L / 20L



MICROQUEL AMINOMagnum

Magnesium deficiency corrector with aminoacids

Liquid corrector-stimulator, rich in Magnesium and concentrated in fast assimilation free aminoacids, for foliar spraying or application with irrigation water.

Supply of free aminoacids together with soluble magnesium enhances the synthesis of chlorophyll, transport of phosphorus, formation of sugars and the absorption and transport of magnesium in the plant.

The product has a notable rapid action and advances the development of the crop and the maturation of generative organs.



ERISOIL

RECOMMENDED DOSES



Cereals

Foliar application: 2-3 L/Ha



Vegetables

Foliar application: 2-4 L/Ha
Root application: 4-6 L/Ha



Fruit trees

Foliar application: 3-6 L/Ha
Root application : 4-8 L/Ha



Vineyard

Foliar application: 2-4 L/Ha
Root application: 2-4 L/Ha



Olive tree

Foliar application: 3-6 L/Ha
Root application: 4-8 L/Ha



Tropical crops

Foliar application: 3-6 L/Ha
Root application: 4-8 L/Ha

Consult with a technical advisor of Fertinagro to adjust the dose according to the specific conditions and crop requirements.

DECLARED CONTENT	w/w	w/v
Free aminoacids	10,0 %	12,0 %
Total Nitrogen (N)	3,0 %	3,6 %
Organic Nitrogen (N)	2,0 %	2,4 %
Ureic Nitrogen (N)	1,0 %	1,2 %
Magnesium oxide (MgO) soluble in water	4,0 %	4,8 %
pH: 5		
Aminogram: Ala, Arg, Asp, Cys, Gly, Glu, Hyp, His, Iso, Leu, Lys, Met, Phe, Pro, Ser, Tyr, Thr, Val		



MICROQUEL AMIN Durafruit




1L / 5L / 20L



Improver of the conservation of the harvested fruits

Product is designed to apply before harvest for better conserving and handling of the harvested fruits. This is achieved by slowing down the oxidation processes. On the one hand, the formulation provides a biostimulant effect, due to the presence of fast-absorbing free aminoacids and, on the other, it efficiently corrects calcium deficiency.

The Oxistop property reduces oxidation/senescence processes (by slowing down ethylene emission), increases the turgor of the cell structure and consistency of the fruit. This improves the quality of the fruits and prolongs the shelf-life.



DECLARED CONTENT	w/w	w/v
Free aminoacids	6,0 %	7,2 %
Total Nitrogen (N)	2,0 %	2,4 %
Organic Nitrogen (N)	1,0 %	1,2 %
Calcium oxide (CaO) soluble in water	6,0 %	7,2 %
Zinc (Zn) soluble in water	1,0 %	1,2 %
Aminogram: Ala, Arg, Asp, Cys, Gly, Glu, Hyp, His, Iso, Leu, Lys, Met, Phe, Pro, Ser, Tyr, Thr, Val.		

RECOMMENDED DOSES



Vegetables
6-8 L/Ha



Fruit trees
4-6 L/Ha



Berries
6-8 L/Ha



Vineyard
5-6 L/Ha



Citrus
4-5 L/Ha

Consult with a technical advisor of Fertinagro to adjust the dose according to the specific conditions and crop requirements.





MICROQUEL AMIN Supercocel

RECOMMENDED DOSES



Vegetables
2-6 Kg/Ha



Fruit trees
2-6 Kg/Ha



Berries
2-4 Kg/Ha



Vineyard
2-4 Kg/Ha



Citrus
2-6 Kg/Ha

Consult with a technical advisor of Fertinagro to adjust the dose according to the specific conditions and crop requirements.

Multiactivator, biostimulant and physiological catalyst

Universal fertilizer with NPK, micronutrients chelated by EDTA and high content of free aminoacids. Foliar corrector of multiple deficiencies in crops.

Exclusive formulation, presented as a powerful "cocktail", is based on substances that activate vital physiological processes. It provides the essential elements demanded in numerous metabolic processes in plants.

The product also activates the physiological processes related to resistance to stress conditions caused by biotic and abiotic factors. It has a powerful biostimulant effect, improves the photosynthesis and fulfils nutritional requirements of the plant, meanwhile proportionally stimulating the formation of roots via foliar application.



DECLARED CONTENT

Free aminoacids	12,0%	Manganese (Mn) chelated by EDTA	0,5 %
Total Nitrogen (N)	6,0 %	Iron (Fe) soluble in water	0,65 %
Organic Nitrogen (N)	1,0 %	Iron (Fe) chelated by EDTA	0,65 %
Ammoniacal Nitrogen (N)	5,0 %	Iron fraction (Fe) chelated by EDTA	100 %
Phosphorus pentoxide (P ₂ O ₅) soluble in water and neutral ammonium citrate	18,0 %	Molybdenum (Mo) soluble in water	0,04 %
Potassium oxide (K ₂ O) soluble in water	18,0 %	Zinc (Zn) soluble in water	0,65 %
Boron (B) soluble in water	0,2 %	Zinc (Zn) chelated by EDTA	0,65 %
Copper (Cu) soluble in water	0,2 %	Stability of chelated fraction in pH range	4-8
Copper (Cu) chelated by EDTA	0,2 %	pH	5
Manganese (Mn) soluble in water	0,5 %	Aminogram: Ala, Arg, Asp, Cys, Gly, Glu (58%), Hyp, His, Iso, Leu, Lys, Met, Phe, Pro, Ser, Tyr, Thr, Val	



MICROQUEL AMIN Yield



Crop cycle finisher rich in potassium and free amino acids

Potassium supply in stages of high nutritional requirements of the crop to reach high productivity and better fruit quality. The contribution of aminoacids improves the efficiency of the applied nutrients.

The product increases the quantity and quality of the yield, facilitates the accumulation of sugars and improves the organoleptic properties of the fruits. Moreover, it enhances the resistance of the plants to biotic and abiotic stress factors (pests, diseases, drought, etc).



DOSIS RECOMENDADAS



Fruit trees
2-4 L/Ha



Vegetables
2-4 L/Ha



Vineyard
2-4 L/Ha



Potato
1-3 L/Ha

Consult with a technical advisor of Fertinagro to adjust the dose according to the specific conditions and crop requirements.

DECLARED CONTENT	w/w	w/v
Free aminoacids	2,0 %	2,5 %
Total Nitrogen (N)	4,0 %	5,0 %
Ureic Nitrogen (N)	3,7 %	4,625 %
Organic Nitrogen (N)	0,3 %	0,375 %
Potassium oxide (K ₂ O) soluble in water	25,0 %	31,2 %
pH	12	
Aminogram: Glu 100%		




1 kg / 5 kg



MICROQUEL AMIN Cuaje

DOSIS RECOMENDADAS



Oil crops

Foliar application: 1,5-2,5 Kg/Ha



Vegetables

Foliar application: 1,5-2,5 Kg/Ha
Root application: 3-6 Kg/Ha



Fruit trees

Foliar application: 2-3 Kg/Ha
Root application: 3-6 Kg/Ha



Berries

Foliar application: 1,5-2,5 Kg/Ha
Root application: 3-5 kg/Ha



Vineyard

Foliar application: 1-3 Kg/Ha
Root application: 3-5 kg/Ha

Consult with a technical advisor of Fertinagro to adjust the dose according to the specific conditions and crop requirements.

Enhancer of the flowering and fruit setting processes

Water-soluble formulation, specially designed for application at pre-flowering, flowering and fruit setting stages. It contains Aminovit Technology, which improves the assimilation of provided nutrients, catalyses the metabolic processes and it is also involved in the formation of proteins.

Advantages:

- Phosphorus: Increases number of inflorescences and its fertility.
- Molybdenum: Enhances the use of nitrogen inside the plant.
- Boron: Improves the flower setting processes and its subsequent development



DECLARED CONTENT

Total Nitrogen (N)	6,0 %
Ammoniacal Nitrogen (N)	6,0 %
Phosphorus pentoxide (P ₂ O ₅) soluble in water	30,0 %
Boron (B) soluble in water	8,0 %
Molybdenum (Mo) soluble in water	2,0 %



MICROQUEL AMIN B-Mo




1L / 5L / 20L



Biostimulating corrector of Boron and Molybdenum deficiencies

The product has a biostimulating effect, due to the presence in its formulation of free aminoacids. It prevents and notably corrects boron and molybdenum deficiencies.

Efifol® technology, containing the substances of organic origin, significantly improves the efficiency of foliar application by providing a surfactant, penetrating and persistent properties.

DECLARED CONTENT	w/w	w/v
Free aminoacids	5,0 %	6,0 %
Total Nitrogen (N)	4,0 %	4,8 %
Organic Nitrogen (N)	4,0 %	4,8 %
Boron (B) soluble in water	9,0 %	10,8 %
Molybdenum (Mo) soluble in water	0,1 %	0,12 %
pH: 7		
Aminogram: Ala, Arg, Asp, Cys, Gly, Glu, Hyp, His, Iso, Leu, Lys, Met, Phe, Pro, Ser, Tyr, Thr, Val		



PRODUCT CERTIFIED FOR ORGANIC FARMING



RECOMMENDED DOSES



Cereals

Foliar application: 1-2 L/Ha



Vegetables

Foliar application: 2-3 L/Ha



Oil crops

Foliar application: 2-3 L/Ha



Vineyard

Foliar application: 1,5-2,5 L/Ha



Citrus

Foliar application: 2-3 L/Ha

Consult with a technical advisor of Fertinagro to adjust the dose according to the specific conditions and crop requirements.



1L / 5L / 20L



MICROQUEL AMIN Topcal

RECOMMENDED DOSES



Citrus

Foliar application: 4-5 L/Ha
Aplicación radicular: 6-10 L/Ha



Vegetables

Foliar application: 3-4 L/Ha
Aplicación radicular: 5-8 L/Ha



Fruit trees

Foliar application: 4-5 L/Ha
Aplicación radicular: 6-10 L/Ha



Vineyard

Foliar application: 4-5 L/Ha
Aplicación radicular: 6-10 L/Ha



Potato

Foliar application: 4-5 L/Ha
Aplicación radicular: 6-10 L/Ha

Consult with a technical advisor of Fertinagro to adjust the dose according to the specific conditions and crop requirements.

Calcium deficiency corrector

Microquel Amin Topcal contains soluble calcium complexed with free aminoacids, providing greater efficiency in the corrective applications.

Triple effect of free L-aminoacids: complexing, penetrating and transporting. With an exceptional nutritional value and a remarkable stimulating effect, the product prevents cracks, necrotic spots, blossom end rot in fruits and other physiological disorders related to calcium deficiency.

Calcium is a fundamental element in the strengthening of plant tissues and influencing the quality of fruits. It plays a crucial role in plant development, reduces apical and foliar necrosis and reduces cracking of fruits.

It is advisable to apply Topcal preventively to avoid the consequences of calcium deficiency.



DECLARED CONTENT	w/w	w/v
Free aminoacids	6,0 %	7,2 %
Total Nitrogen (N)	2,0 %	2,4 %
Organic Nitrogen (N)	1,2 %	1,44%
Calcium oxide (CaO) soluble in water	10,0 %	12,0 %
pH: 4		
Aminogram: Ala, Arg, Asp, Cys, Gly, Glu, Hyp, His, Iso, Leu, Lys, Met, Phe, Pro, Ser, Tyr, Thr, Val.		





MICROQUEL AMIN Ziman




1L / 5L / 20L



Biostimulating corrector of Zinc and Manganese deficiencies

Product, on the one hand, has a biostimulating effect, due to the presence in its formulation of fast-absorbing free aminoacids, and on the other, it efficiently prevents and corrects zinc and manganese deficiencies.

The role of Mn and Zn is very important in the development of crops. Manganese participates in the metabolism of nitrogen and carbohydrates, assimilation of carbonic anhydride in photosynthesis and in the formation of carotenes, riboflavin and ascorbic acid. Zinc is involved in auxin metabolism, starch and protein formation, seed development and RNA synthesis.

The combination of these two microelements together with the incorporation of free aminoacids form aminoates. This complex increases the efficiency of the formulation by providing better penetration, nutritional supply and by having stimulating effect on the plant.

DECLARED CONTENT	w/w	w/v
Free aminoacids	8,0 %	9,6 %
Total Nitrogen (N)	2,0 %	2,4 %
Organic Nitrogen (N)	2,0 %	2,4 %
Manganese (Mn) soluble in water	4,0 %	4,8 %
Zinc (Zn) complexed by aminoacids	4,0 %	4,8 %
pH: 4		
Aminogram: Ala, Arg, Asp, Cys, Gly, Glu, Hyp, His, Iso, Leu, Lys, Met, Phe, Pro, Ser, Tyr, Thr, Val		

RECOMMENDED DOSES



Cereals
Foliar application: 2-3 L/Ha



Vegetables
Foliar application: 3-4 L/Ha



Fruit trees
Foliar application: 3-4 L/Ha



Oil crops
Foliar application: 2-3 L/Ha



Citrus
Foliar application: 3-4 L/Ha

Consult with a technical advisor of Fertinagro to adjust the dose according to the specific conditions and crop requirements.



PRODUCT CERTIFIED FOR ORGANIC FARMING



1L / 5L / 20L







MICROQUEL AMIN Copper

Copper solution complexed with aminoacids

This liquid formulation prevents and corrects copper deficiencies, by providing Cu complexed with aminoacids.

Copper is an important element, as it catalyses respiration processes and participates in the formation of proteins. It is also a fundamental part of chlorophyll and enzymes.

Application of Copper accompanied by Aminovit technology, provides its effective penetration inside the plant. Also formulation has a protective effect against the diseases caused by fungi and bacteria. Additionally, this technology minimizes the risks of foliar burns and ensures the stability of the formulation.

RECOMMENDED DOSES	
 Citrus Foliar application: <u>2-3 L/Ha</u>	 Vegetables Foliar application: <u>2-3 L/Ha</u>
 Fruit trees Foliar application: <u>2-3 L/Ha</u>	 Vineyard Foliar application: <u>2-3 L/Ha</u>

Consult with a technical advisor of Fertinagro to adjust the dose according to the specific conditions and crop requirements.



DECLARED CONTENT	w/w	w/v
Free Amino Acids	5,0%	5,5%
Total Nitrogen (N)	1,2%	1,32 %
Organic Nitrogen (N)	1,2%	1,32 %
Copper (Cu) soluble in water	5,0%	5,5%

Aminograma: Ala, Arg, Asp, Cys, Gly, Glu, Hyp, His, Iso, Leu, Lys, Met, Phe, Pro, Ser, Tyr, Thr, Val





PHENOLOGICAL **Activators**

Fertilizers designed to foster
certain phenological phases.

Efsoil Blackpot • Whitepot Solution • Rhizoactive Germinador




1 kg / 5 kg



RECOMMENDED DOSES



Berries
Root application: 6-12 Kg/Ha



Vegetables
Root application: 5-7 Kg/Ha



Fruit trees
Root application: 8-15 L/Ha



Vineyard
Root application: 6-12 Kg/Ha



Citrus
Root application: 8-15 Kg/Ha

Consult with a technical advisor of Fertinagro to adjust the dose according to the specific conditions and crop requirements.

Enhancer of fruit quality and size

Special powder fertilizer with a high concentration of potassium, in a totally water-soluble and assimilable form, with atomized humic and fulvic acids. It ensures the total use of the units provided, the mobilization of potassium already present in the soil and the stimulation of certain physiological processes.

The product supports the fruit ripening, notably improving the following quality aspects such as: sugar content, color, flavor, size and consistency. It also significantly improves the development and quality of tuber crops (potatoes, onions, beets, carrots, etc.).

In addition to being a product designed to improve the quality and quantity of yield, it increases the resistance of the crop to certain types of abiotic stress such as drought and cold.



DECLARED CONTENT

Total humic extract	12,0 %
Humic acids	5,0 %
Fulvic acids	7,0 %
Total Nitrogen (N)	3,0 %
Ureic Nitrogen (N)	3,0 %
Potassium oxide (K ₂ O) soluble in water	52,0 %
pH: 9	





SOLUTION Whitepot



Ecological potassium solution

Solution concentrated in potassium, specially designed to optimize the quality of crops. Additionally, it increases the resistance of plants to pests and diseases.

Potassium plays role in the opening of stomata, being essential part of transpiration processes, therefore it helps plants to overcome the water and thermal stress.

The formulation contains Tricarboxylic Acids that serve as conditioner of the bio-chemical processes taking place in the area of application.

Whitepot is certified to be used in organic farming.



PRODUCT CERTIFIED
FOR ORGANIC FARMING

RECOMMENDED DOSES



Berries

Foliar application: 3-5 L/Ha



Vegetables

Foliar application: 3-5 L/Ha



Fruit trees

Foliar application: 4-6 L/Ha



Vineyard

Foliar application: 3-5 L/Ha



Citrus

Foliar application: 3-4 L/Ha



Cereals

Foliar application: 2-3 L/Ha

Consult with a technical advisor of Fertinagro to adjust the dose according to the specific conditions and crop requirements.

DECLARED CONTENT	w/w	w/v
Potassium oxide (K ₂ O) soluble in water	23,0 %	30,0 %



1L / 5L / 20L



GERMINADOR Rhizoactive

RECOMMENDED DOSES



Maize

3-4 L/T of seeds



Cereals

3-4 L/T of seeds



Sunflower

4-5L/T of seeds



Potato

3-4 L/T of seeds

MODE OF USE: Mix the seeds evenly with the product, making sure it is completely impregnated. It is compatible to be used during seed treatment with pesticides.

Consult with a technical advisor of Fertinagro to adjust the dose according to the specific conditions and seed type.

Stimulator of the germination processes

Enzyme complex designed to increase the percentage of seed germination and accelerate the growth of plants at early stages.

Enzymes contained in the formulation catalyse the mobilization of reserves inside the seed and activate the physiological mechanisms that naturally induce the germination.

The formulation also is enriched by free L-aminoacids that provide necessary energy to support germination processes and advance vegetative cycle from the beginning..



DECLARED CONTENT	w/w	w/v
Free aminoacids	6,0 %	6,6 %
Total Nitrogen (N)	2,0 %	2,2 %
Organic Nitrogen (N)	1,0 %	1,1 %
pH	5	
Aminogram: Ala, Arg, Asp, Cys, Gly, Glu, Hyp, His, Iso, Leu, Lys, Met, Phe, Pro, Ser, Tyr, Thr, Val		



TECHNOLOGICAL **Foliar NPK**

NPK fertilizers for foliar application with microelements and biostimulating effect.

Folitop Aminonitro • Folitop Aminofoszinc • Folitop Aminokualium


1 kg / 5 kg



**FOLITOP
AMINO**

RECOMMENDED DOSES



Vegetables
3-5 Kg/Ha



Berries
3-5 Kg/Ha



Cereals
3-5 Kg/Ha



Soybean
3-5 Kg/Ha



Fruit trees
3-6 Kg/Ha



Citrus
3-6 Kg/Ha

Consult with a technical advisor of Fertinagro to adjust the dose according to the specific conditions and crop requirements.

Water-soluble NPK fertilizers with microelements and a physio-stimulating properties for foliar application

Folitol brings together in a single product the technologies for an efficient foliar application, with protected nutrients accompanied by free aminoacids. Three formulations provide an excellent response to the physio-nutritional requirements of the crop at each developmental stage.

Efifol technology incorporated into the formulation allows the fertilizer to act properly at the level of the Philosphere (leaf surface), by facilitating the rapid entry of nutrients and enhancing efficacy of foliar applications.



DECLARED CONTENT	AMINONITRO	AMINOPHOSZINC	AMINOKALIUM
Free aminoacids	5,5 %	2,0 %	5,5 %
Total Nitrogen (N)	25,0 %	11,0 %	10,0 %
Phosphorus pentoxide (P ₂ O ₅) soluble in water and neut. ammon. citrate	5,0 %	57,0 %	5,0 %
Potassium oxide (K ₂ O) soluble in water	10,0 %		30,0 %
Magnesium oxide (MgO) soluble in water	2,0 %		2,0 %
Boron (B) soluble in water	0,03 %		0,03 %
Copper (Cu) soluble in water	0,03 %		0,03 %
Copper (Cu) chelated by EDTA	0,03 %		0,03 %
Iron (Fe) soluble in water	0,1 %		0,1 %
Iron (Fe) chelated by EDTA	0,1 %		0,1 %
Manganese (Mn) soluble in water	0,075 %		0,075 %
Manganese (Mn) chelated by EDTA	0,075 %		0,075 %
Molybdenum (Mo) soluble in water	0,005 %		0,005 %
Zinc (Zn) soluble in water	0,1 %	1,0 %	0,1 %
Zinc (Zn) chelated by EDTA	0,1 %	1,0 %	0,1 %
pH	pH 5	pH 5	pH 5

Aminogram: Ala, Arg, Asp, Cys, Gly, Glu, Hyp, His, Iso, Leu, Lys, Met, Phe, Pro, Ser, Tyr, Thr, Val



ORGANO **Minerals**

Organomineral NPK family for
conventional and organic farming.

Organia Biofuerza • Organia Fertak



ORGANIA BIOFUERZA







Ecological NPK biofertilizer

Ecological biofertilizer in pellet or powder form, based on precursor substances for the development of beneficial microorganisms in the soil. The product enhances the physiological processes that push crop development and ensures agronomically, economically and ecologically successful production, without environmental contamination.

Bio stimulant effect on crops and soils, enhancing energy supply and activity of soil microbiota. The product increases the capacity for retention and mobilization of nutrients and improves the fertility of soils, enhancing its productive potential.

Organia Biofuerza is certified to be used in organic farming.

RECOMMENDED DOSES

 Vegetables <u>500-1000 Kg/Ha</u>	 Tropical crops <u>1,5-2 Kg/Plant</u>	 Fruit trees <u>1,5-2 Kg/Plant</u>
 Berries <u>1,5-2 kg/plant</u>	 Vineyard <u>500-1000 Kg/Ha</u>	 Cereals <u>250-350 Kg/Ha</u>

Consult with a technical advisor of Fertinagro to adjust the dose according to the specific conditions and crop requirements.



DECLARED CONTENT	BIOFUERZA 6-6-3	BIOFUERZA 3-12-5	BIOFUERZA 5-5-10
Total Nitrogen (N)	6,0 %	3,0 %	5,0 %
Phosphorus pentoxide (P ₂ O ₅)	6,0 %	12,0 %	5,0 %
Potassium oxide (K ₂ O) soluble in water	3,0 %	5,0 %	10,0 %
Organic Matter (OM)	43,0 %	34,5 %	34,5 %
Humic acids	4,5 %	4,5 %	4,5 %









Organomineral NPK complex fertilizer in pellet form

Family of complete organomineral NPK fertilizers, with adapted formulations depending on the target crop and soil type.

Fertak increases the concentration of organic matter in the nutrient exchange zones that facilitates vigorous crop development and higher final production. The formulation in pellet form enhances the efficacy of application.

Contribution of selected and conditioned carbon with a high isohumic coefficient increases the quantity and quality of organic matter, provides an essential energy source for the soil/plant interaction processes and improves the nutrient retention capacity.



RECOMMENDED DOSES		
 Vegetables <u>600-1200 Kg/Ha</u>	 Tropical crops <u>1,5-2 Kg/plant</u>	 Fruit trees <u>1,5-2 Kg/plant</u>
 Berries <u>450-600 Kg/Ha</u>	 Vineyard <u>600-1200 Kg/Ha</u>	 Cereals <u>250-400 Kg/Ha</u>
<p>Consult with a technical advisor of Fertinagro to adjust the dose according to the specific conditions and crop requirements.</p>		

DECLARED CONTENT	FERTAK 32	FERTAK 38	FERTAK 54
Total Nitrogen (N)	5,0 %	6,0 %	5,0 %
Phosphorus pentoxide (P ₂ O ₅)	14,0 %	10,0 %	8,0 %
Potassium oxide (K ₂ O) soluble in water	5,0 %	10,0 %	15,0 %
Organic Matter (OM)	24, %	24,0 %	24,0 %
Humic acids	1,5 %	1,5 %	1,5 %



WATER-SOLUBLE **Fertilizers**

Family of highly soluble crystalline NPK fertilizers, with formulations adapted to each growing phase and microelements to achieve complete nutrition.

Fercristal Flow • Fercristal Summum • Fercristal Kaliphos 0-40-40 • Fercristal Special One





Water-soluble crystalline NPKs with “Flow” properties and microelements

Fercristal Flow is a range of balanced and complete water-soluble NPK fertilizers, enriched with microelements of maximum solubility in all types of water.

Various NPK balances adapted to each stage of plant growth. The formulation has negligible amount of chlorine and sodium (harmful elements for some crops). It minimally changes the conductivity of the irrigation water after the incorporation of the fertilizer.

Flow Technology prevents the formation of harmful salts and toxicity, keeping the pH of the mother solution slightly acidic. These properties are essential for a good management of fertigation, avoiding retrogradation and precipitation of certain elements. In addition, a minimum variation in the conductivity of the irrigation water, after incorporation of the fertilizer, allows to apply a greater amount of nutrients without increasing the salinity of the root bulb.

PROPERTIES



Low Conductivity



Decrease of conductivity



Low in chlorine

Stock solution: For the preparation of the stock solution, it is recommended to dilute in water between 10-20 Kg per 100 liters of water. This ratio may vary depending on the quality of the water and the characteristics of the installation.

Nutritive solution: The ideal nutritive concentration should be between 0.2-0.5 gr/L, depending on the type of crop, phenological stage and water quality.



MEP*

DECLARED CONTENT	FLOW 19-6-6	FLOW 13-40-13	FLOW 15-5-30	FLOW 18-18-18	FLOW 20-20-20
Total Nitrogen (N)	19,0 %	13,0 %	15,0 %	18,0 %	20,0 %
Ammoniacal Nitrogen (N)	16,0 %	7,2 %	5,5 %	1,0 %	
Ureic Nitrogen (N)	3,0 %	5,8 %	2,2 %	17,0 %	20,0 %
Nitric Nitrogen (N)			7,3 %		
Phosphorus pentoxide (P ₂ O ₅) soluble in water	6,0 %	40,0 %	5,0 %	18,0 %	20,0 %
Potassium oxide (K ₂ O) soluble in water	6,0 %	13,0 %	30,0 %	18,0 %	20,0 %
Boron (B) soluble in water	0,02 %	0,02 %	0,02 %	0,02 %	0,02 %
Manganese (Mn) soluble in water	0,05 %	0,05 %	0,05 %	0,05 %	0,05 %
Molybdenum (Mo) soluble in water	0,005 %	0,005 %	0,005 %	0,005 %	0,005 %
Zinc (Zn) soluble in water	0,05 %	0,05 %	0,05 %	0,05 %	0,05 %
Low in chlorine					



PROPERTIES

Decrease of conductivity

Biostimulant effect

Rhizospheric activation

Algóvital + TCA

Stock solution: For the preparation of the stock solution, it is recommended to dilute in water between 10-20 Kg per 100 liters of water. This ratio may vary depending on the quality of the water and the characteristics of the installation.

Nutritive solution: The ideal nutritive concentration should be between 0.2-0.5 gr/L, depending on the type of crop, phenological state and water quality.

Water-soluble crystalline NPK fertilizers with biostimulant properties and chelated microelements

Fercristal Summum is a line of special water-soluble products for fertigation, formulated with raw materials that provide maximum solubility and a stable pH. Product generates a slightly acid reaction that prevents precipitates and lowers conductivity.

Fercristal Summum provides all the necessary nutrients for complete nutrition, thanks to different NPK balances, enriched with E.D.T.A. chelated microelements.

The product enhances the exchange between the rhizosphere and root, ensuring an optimal assimilation of the applied mineral nutrients. It provides a biostimulating effect that strengthens plants against pests and diseases and helps plants to recover after abiotic stress situations (e.g. sudden changes in temperature and/or humidity).



MEP

DECLARED CONTENT	SUMMUM +N	SUMMUM +P	SUMMUM +K	SUMMUM NPK
Total Nitrogen (N)	18,0 %	12,0 %	12,0 %	15,0 %
Ammoniacal Nitrogen (N)	18,0 %	12,0 %	2,0 %	11,4 %
Nitric Nitrogen (N)			10,0 %	3,6 %
Phosphorus pentoxide (P ₂ O ₅) soluble in water	5,0 %	40,0 %	5,0 %	15,0 %
Potassium oxide (K ₂ O) soluble in water	5,0 %	6,0 %	40,0 %	15,0 %
Boron (B) soluble in water	0,03 %	0,03 %	0,03 %	0,03 %
Copper (Cu) chelated by EDTA	0,03 %	0,03 %	0,03 %	0,03 %
Iron (Fe) chelated by EDTA	0,1 %	0,1 %	0,1 %	0,1 %
Manganese (Mn) soluble in water	0,075 %	0,075 %	0,075 %	0,075 %
Molybdenum (Mo) soluble in water	0,005 %	0,005 %	0,005 %	0,005 %
Zinc (Zn) chelated by EDTA	0,1 %	0,1 %	0,1 %	0,1 %
Low in chlorine	Stability of chelated fraction in pH range 4-8			



FERCRISTAL Kaliphos 0-40-40

Water-soluble complex PK fertilizer 0-40-40

Water-soluble fertilizer with a high content of phosphorus and potassium. An optimal interaction between both nutrients makes this product an excellent option for crops in critical stages of yield formation and maintaining a high quality of production.

Kaliphos has anti-caking properties, i.e. high water and moisture retention capacity without compaction (see below comparative table of the behavior of different substances). The formulation is highly valued in industrial use, because it can be utilized to achieve high quality NPK formulations, without adding other PK sources.

DECLARED CONTENT	w/w
Phosphorus pentoxide (P ₂ O ₅) soluble in water	40,0 %
Potassium oxide (K ₂ O) soluble in water	40,0 %
pH (solution 1%)	4,47
ADDITIONAL INFORMATION	
EC (1 g / L a 25 ° C)	1,418 mS/cm
Turbidity (solution 10%)	91,13 NTU
Bulk density	1,16 Kg/L
Free CaCO ₃	2,20 % (p/p)
Solubility at 20°C	277,3 g/L

PROPIEDADES



Anti Caking
Effect



pH
Control



Low
conductivity



Rhizospheric
activation

- **Rhizospheric Activation:** Through the acidification of microzones close to the rhizosphere, the availability of nutrients for crop increases
- **pH Control:** acidifying effect thanks to acid reaction prevents the clogging of drippers and pipes of fertigation system.

Recommendation for use

Stock solution: For the preparation of the mother solution, it is recommended to dilute in water between 10-20 Kg per 100 liters of water. This ratio may vary depending on the quality of the water and the characteristics of the installation.

Nutritive solution: The ideal nutritive concentration should be between 0.2-0.5 gr/L, depending on the type of crop, phenological state and water quality.

COMPACTION COMPARISON 25°C - 30% Humidity	Average weight of pills	Maximum breaking force 1 (N/cm)	Maximum breaking force 2 (N/cm)	Maximum breaking force 3 (N/cm)	Maximum breaking force 4 (N/cm)
Potassium Nitrate	0,344	18,55	12,7	16,55	15,93
Urea	0,352	15,65	15,55	19,8	17,00
MAP	0,366	8,3	8,9	7,35	8,18
Kaliphos 0-40-40	0,301	1,35	1,42	1,29	1,35



FERCRISTAL Special One

PROPERTIES



**Low
in chlorine**



**Rhizospheric
activation**



Aminovit®

Recommendation for use

Stock solution: For the preparation of the stock solution, it is recommended to dilute in water between 10-20 Kg per 100 liters of water. This ratio may vary depending on the quality of the water and the characteristics of the installation.

Nutritive solution: The ideal nutritive concentration should be between 0.2-0.5 gr/L, depending on the type of crop, phenological state and water quality

Water-soluble fertilizers with aminoacids

The Special One family are water-soluble fertilizers, low in chlorine, which offer NP, NK and NPK balances, designed to be used at every moment of crop development.

The formulation with free aminoacids contribute properties that significantly increase the efficiency of the nutrients provided, facilitating the absorption, availability and translocation processes.

Offered NPK formulas also contain chelated microelements for complete nutrition. Product is especially recommended for use, where crops are cultivated on saline and exhausted soils or grown under stress conditions.

DECLARED CONTENT	SPECIAL ONE MAP	SPECIAL ONE OPTIMUM	SPECIAL ONE QUALITAS	SPECIAL ONE SPRINT
Free aminoacids	2,0 %	2,0 %	2,0 %	2,0 %
Total Nitrogen (N)	12,0 %	10,0 %	8,0 %	28,0 %
Phosphorus pentoxide (P ₂ O ₅) soluble in water	58,0 %	15,0 %		8,0 %
Potassium oxide (K ₂ O) soluble in water		35,0 %	40,0 %	8,0 %
Microelements (B, Cu, Fe, Mn, Mo, Zn)		Microelements		Microelements

Aminogram: Ala, Arg, Asp, Cys, Gly, Glu, Hyp, His, Iso, Leu, Lys, Met, Phe, Pro, Tyr, Thr, Val.





LIQUID **Fertilizers**

Liquid NPK fertilizers formulated with essential macro-, meso- and microelements in search of greater nutritional efficiency.

Organia Biofuerza Liquid • Renovation Fuerza Liquid



RECOMMENDED DOSES



Vegetables

200-600 Kg/Ha



Berries

200-600 Kg/Ha



Fruit trees

150-400 Kg/Ha



Extensive crops

150-300 Kg/Ha



Vineyard

100-200 Kg/Ha



Citrus

200-600 Kg/Ha

Consult with a technical advisor of Fertinagro to adjust the dose according to the specific conditions and crop requirements.

Liquid stimulating nutritional complex

Liquid nutritional complex furnished with enzyme activators. Formulation is suitable for use in organic farming and in areas vulnerable to nitrate contamination.

PRIMER® technology allows to increase the assimilation of nutrients present in the soil. It generates synergies in the soil-plant system, activating beneficial microorganisms that contribute to more efficient nutrition.

The formulation helps to overcome any stress situation and enhances crop development in all phenological stages (sprouting, flowering, fruit setting, fattening), thanks to its stimulating content and induction of natural mechanisms of plant growth



PRODUCT CERTIFIED FOR ORGANIC FARMING

DECLARED CONTENT	GROWTH PLUS		STABILITY		QUALITY	
	w/w	w/v	w/w	w/v	w/w	w/v
Total Nitrogen (N)	4,0 %	4,8 %	3,0 %	3,45 %	0,0 %	0,0 %
Phosphorus pentoxide (P ₂ O ₅) soluble in water	2,0 %	2,4 %	3,0 %	3,45 %	0,0 %	0,0 %
Potassium oxide (K ₂ O) soluble in water	2,0 %	2,4 %	3,0 %	3,45 %	15,0 %	18,0 %
Free aminoacids	10,0 %	12,0 %	2,0 %	2,3 %		
Total Humic Extract					6,0 %	7.2 %
pH	pH 6		pH 7		pH 11	



Liquid technological fertilizers

Liquid fertilizers formulated with the most advanced Fertinagro technologies, which provide high nutrient use efficiency values.

PRIMER® technology allows to increase the assimilation of nutrients present in the soil. It generates synergies in the soil-plant system, activating beneficial microorganisms that contribute to more efficient nutrition.

In addition, the processes of nitrogen leaching, evaporation and denitrification are reduced thanks to incorporated N-Primer technology. This allows to increase reserves of organic nitrogen.

RECOMMENDED DOSES		
Vegetables 300-600 Kg/Ha	Berries 200-600 Kg/Ha	Fruit trees 150-450 Kg/Ha
Extensive crops 100-300 Kg/Ha	Vineyard 100-200 Kg/Ha	Citrus 300-700 Kg/Ha

Consult with a technical advisor of Fertinagro to adjust the dose according to the specific conditions and crop requirements.



DECLARED CONTENT	STARTER		MEGATONIC		PRODUCTION		FORCE	
	w/w	w/v	w/w	w/v	w/w	w/v	w/w	w/v
Total Nitrogen (N)	4,0 %	4,8 %	20,0 %	24,0 %	3,0 %	3,6 %	11,0 %	13,2 %
Phosphorus pentoxide (P ₂ O ₅) soluble in water	16,0 %	19,2 %			4,0 %	4,8 %	4,0 %	4,8 %
Potassium oxide (K ₂ O) soluble in water					10,0 %	12,0 %	6,0 %	7,2 %
Manganese (Mn) complexed by LS	0,1 %	0,12 %	0,1 %	0,12 %	0,1 %	0,12 %	0,1 %	0,12 %
Zinc (Zn) soluble in water	0,05 %	0,06 %	0,05 %	0,06 %	0,05 %	0,06 %	0,05 %	0,06 %



CONDITIONERS

Compounds that optimize
chemical imbalances.

Efisoil Nitroshoot • Efisoil Gepasal • Neutrafol pH





EFISOIL Nitroshoot

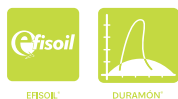
Root bulb activator

Nitrogen solution with secondary elements and micronutrients, which acts as a chemical activator and desalination agent in the root bulb.

The product is formulated to improve the chemical conditions of the soil to facilitate adequate nutrition processes in the rhizosphere.

Triple action:

- Acidifies root bulb to mobilize blocked elements and optimize chemical environment that is essential for proper nutrition.
- Displaces salts and recovers the structure of saline soils.
- Contains Technology for gradual nitrogen release (Duramon®).



RECOMMENDED DOSES



Vegetables
7-12 L/Ha



Fruit trees
20-25 L/Ha



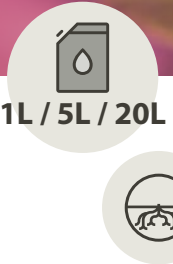
Vineyard
12-14 L/Ha



Citrus
20-25 L/Ha

Consult with a technical advisor of Fertinagro to adjust the dose according to the specific conditions and crop requirements.

DECLARED CONTENT	w/w	w/v
Ureic Nitrogen (N)	6,0 %	7,2 %
Sulphur trioxide (SO ₃) soluble in water	18,0 %	21,6 %
Iron (Fe) soluble in water	3,0 %	3,6 %
Manganese (Mn) soluble in water	0,15 %	0,18 %
Zinc (Zn) soluble in water	0,01 %	0,02 %
Low in biuret		



EFISOIL
Gepasal

RECOMMENDED DOSES



Vegetables
100-150 L/Ha



Fruit trees
80-150 L/Ha



Berries
70-90 L/Ha



Citrus
80-150 L/Ha

Consult with a technical advisor of Fertinagro to adjust the dose according to the specific conditions and crop requirements.

Liquid soil desalinator with complexed calcium

Liquid formulation for application with irrigation water that rapidly corrects saline and saline-sodium imbalances in the soil, rebuilds its physical structure and recovers drainage.

It is characterized by being able to exchange the calcium ion for the sodium ion of the micelles of the clay-humic complex. Consequently, this improves the soil structure, eliminates harmful salts and frees out various microelements, while improving the cation exchange capacity and promoting microbial life.

Triple action:

- Corrector of saline and sodium imbalances.
- Nutritional effect from abundant supply of active calcium.
- Activating effect of organic substances.



DECLARED CONTENT	w/w	w/v
Calcium oxide (CaO) soluble in water	12,0 %	14,4 %
Calcium oxide (CaO) complexed by lignosulfonic acid	12,0 %	14,4 %
Interval of pH stability of complexed fraction: 3-10		





NEUTRAFOL pH



pH Regulator

Liquid pH regulator for pesticide working solutions, in order to buffer pH, increase the stability of the active ingredients and minimize the possibility of alkaline reactions. The product enhances the penetration of active ingredients.

The product has a high wetting capacity that increases the effectiveness of the treatments. It improves the compatibility of pesticide mixtures.

Neutrafol pH is formulated as a regulator and not as an acidifier. Among its properties, the buffering power is the most valuable. This property prevents the uncontrolled acidifying action that preserves the active ingredients of the accompanying products.

Neutrafol pH contains a colorimetric indicator of pH change that facilitates its use. The color changes from yellow to pink depending on the pH variation of the spraying solution



DECLARED CONTENT	w/w	w/v
Total Nitrogen (N)	3,0 %	3,6 %
Phosphorus pentoxide (P ₂ O ₅) soluble in water	17,0 %	20,4 %
Negligible content of piuret		

RECOMMENDED DOSES		
INITIAL WATER pH	FINAL pH OF SOLUTION	DOSE
pH 7,5	pH 6	60 c.c./100L
pH 8	pH 6	70 c.c./100L
pH 9,5	pH 6	100 c.c./100L
pH 10	pH 6	120 c.c./100L

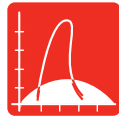
Consult with a technical advisor of Fertinagro to adjust the dose according to the specific conditions and crop requirements.





FERTINAGRO Technologies

N



Duramón®

Gradual nitrogen release technology that acts on soil processes and inhibits the activity of the urease enzyme, slowing down the passage of ammoniacal N to nitrates and improving the efficiency of nitrogen use throughout the crop cycle.



USP®

Technology that facilitates the gradual release of nitrogen through the encapsulation process of urea. It also increases the availability of phosphorus, fostering its solubility and activating the phosphorus already present in the soil.



N Primer®

Technology that incorporates a specific natural inhibitor, which slows down the hydrolysis of urea and the oxidation to nitrates. The efficiency of nitrogen use is significantly improved thanks to the reduction of N losses due to volatilization, denitrification and leaching.

P



Protect®

Organic complex that improves the availability of phosphorus in the soil by protecting provided P in the fertilizer from blocking and retrogradation.



Actibión®

Technology incorporates specific organic molecules in the fertilizer formulation to stimulate root development, especially root hairs, that increase nutrient absorption, especially enhancing phosphorus uptake.



Triphos®

Technology designed to provide phosphorus to the crop in different chemical forms that improve its availability in acidic soils, achieving its gradual release and avoiding retrogradation problems.



P Primer®

Technology that facilitates the activation of phosphoactive microorganisms, making available a soil-fixed phosphorus to the crops.

NOVOPHOS

Novophos®

With the combination of three different technological phosphorus plus the traditional one Novophos offers four available phosphorus to cover the whole real nutritional demands of the crops.

K



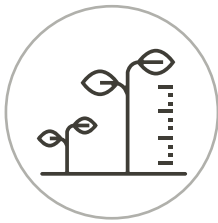
SOP®

Technology that provides totally soluble potassium sulphate of high quality, which does not increase soil conductivity and mitigates the salinity problems. Very important for use on chlorine sensitive crops.



K Primer®

Technology that stimulates and activates beneficial microorganisms capable of solubilizing structurally fixed potassium in the soil. It increases the reserves of available potassium for the crop.



Effol®

Specific formulation of biopolymers that optimizes the efficacy of foliar applications by increasing adherence and contact with the leaf surface. It facilitates entry of nutritive compounds and elements through the cuticle and enhances the durability of the treatment.



Aminovit®

Comprehensive energy activator that stimulates the plant and beneficial microbial flora, increasing crop responsiveness to stressful situations and improving metabolic processes.



MEP®

Contribution of protected micronutrients by complexation, which ensure a more complete and efficient nutrition throughout the entire crop cycle.



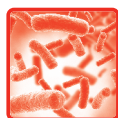
S.L.H.A.

Iron protection technology based on activated humic substances with a high complexing power. It facilitates the mobilization and stability of iron and other micronutrients in the soil, meanwhile stimulating the root growth.



Efisoil®

Complex of specific organic substances that improve the rhizospheric interaction between the root and soil. It forms stable chelates with nutritive elements, improves nutrient absorption and activates soil microorganisms.



Prolife®

Selection of complexed nutrients to stimulate beneficial microorganisms and activate soil microbiota. It induces nutrient solubilization and increases its availability thanks to activated microorganisms.

For additional information, please, contact with a Fertinagro technical advisor.



Website

Catalogue

