HUBER AgroSolutions

ILSA The green evolution

2024

CATALOG NUTRITION

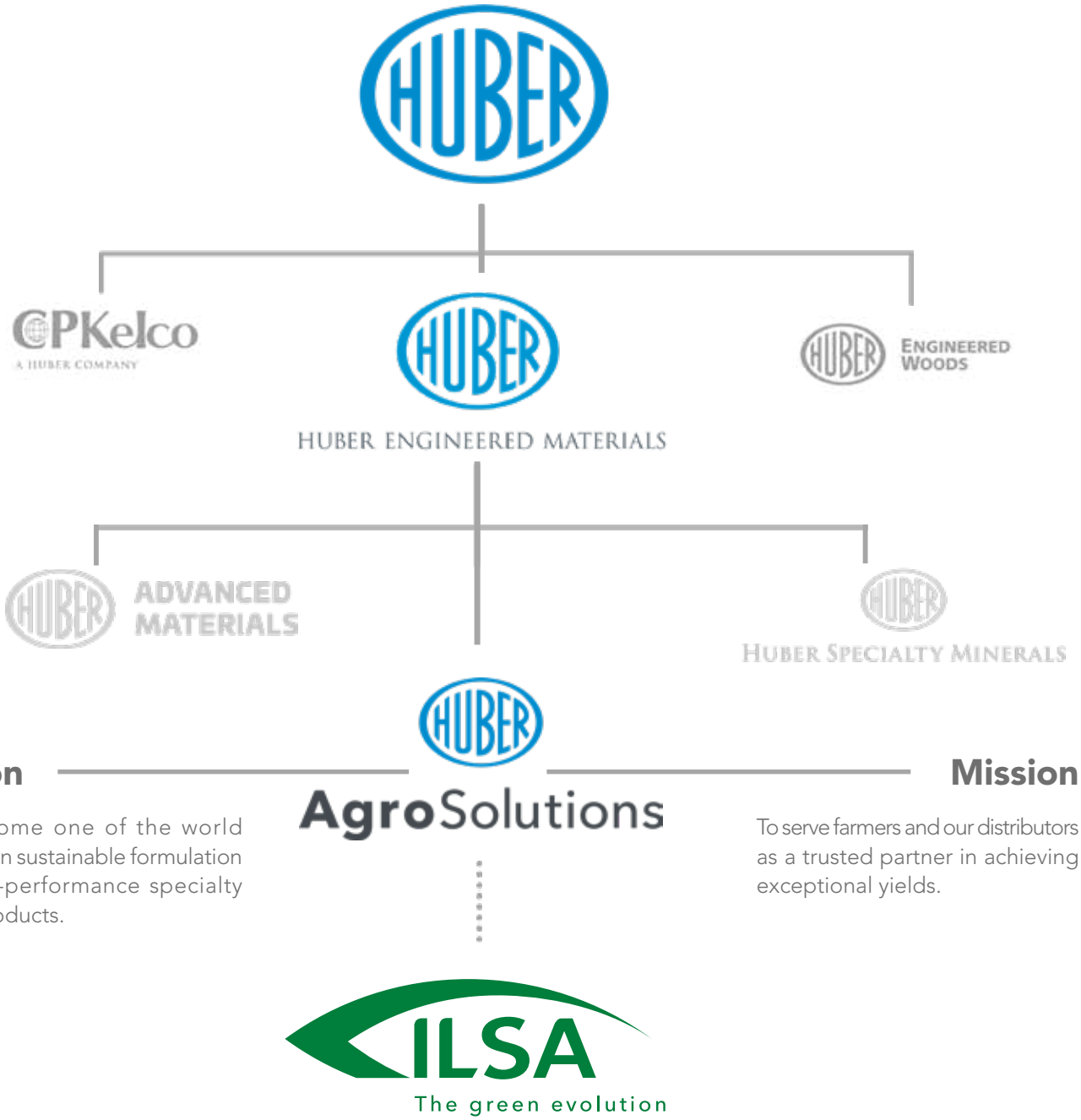
THE ILSA PROPOSAL

NUTRITION CATALOG

contains "intelligent" products able to modulate the release of nitrogen in sync with plant demand and in line with the new concepts of sustainable agriculture.

BIOSTIMULATION CATALOG

contains biostimulants and nutritional specialities with a specific action, based on molecules and natural substances able to act on plant primary and secondary metabolism, so responding to some of the plant's needs.



Vision

To become one of the world leaders in sustainable formulation of high-performance specialty crop products.

Mission

To serve farmers and our distributors as a trusted partner in achieving exceptional yields.

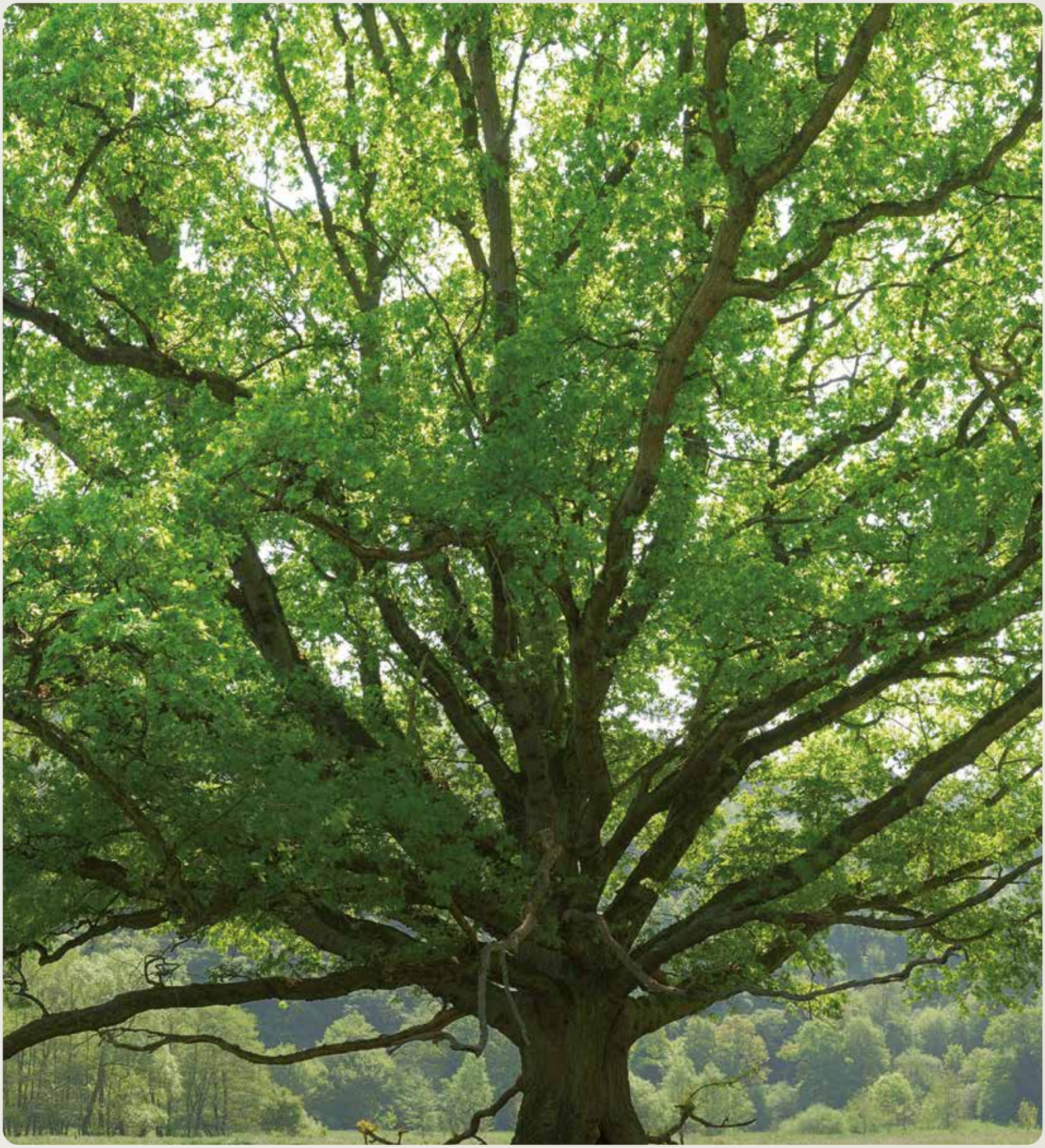
Huber Group Principles

As we continue to transform and improve products used around the world, the Huber Principles remain the foundation of our employees' business conduct. These are the core values that guide us in providing customer service, helping each other, and ensuring that the company remains a positive reality for future generations.

HUBER AgroSolutions

ILSA

What we are is due to the effort, competence and passion of many people working to a common goal:
*“**make ILSA a solid and credible company**”.*
It is the result of continuous research, constant process and product innovation, respect, care and attention towards customers. Our solidity, credibility and will of continuous improvement allow us to compete worldwide and offer our customers real chances of economic and professional growth.



PRODUCTS ALLOWED IN ORGANIC FARMING

PAG. 40

PRODUCTS ALLOWED IN ORGANIC FARMING

BIO ILSA

ILSA LIFE

ILSA TEC

ILSA TOP

ILSA AGRO

ILSA COM

ORGANIC FARMING ILSA

SOLID PRODUCTS

LIQUID PRODUCTS - WATER-SOLUBLE

SPECIFIC ACTION PRODUCTS FOR MORE ADVANCED AGRICULTURE

The IlsaTec product line contains products with very divesified characteristics and purposes, highly technological and suitable to meet the specific needs of the plant. Products studied to nourish crops and able to simulate the plants' metabolism and prevent or cure stress, like the products from the BIOSTIMULATION CATALOG. What unites them is the fact that each represents a specific and unique product of its kind.

** SFEROSOL: Esseco Srl Registered Trademark.
*** SILIFORCE: Agro-Solutions B.v. Registered Trademark.

PRODUCTS FOR SUSTAINABLE AND CONVENTIONAL AGRICULTURE

PAG. 90

PRODUCTS FOR SUSTAINABLE AND CONVENTIONAL AGRICULTURE

ILSA FERT

ILSA TEC

ILSA TOP

ILSA AGRO

ILSA COM

ALL PRODUCTS OF THE **BIOSTIMULATION CATALOG** ARE PART OF THE ILSATEC LINE:

ILSAORGAMIT-R
ILSAFITOCELL
ILSAC-ON
ILSASTIM+
ILSAMIN N90
SPLINTER NEW
ILSAPOLICOS
ILSAFORMA
ILSAGIRMA
ILSARODDER
ILSASTIMSET
ILSAGRADER
ILSAKOLORADO
ILSAVIVIDA
ILSASHAPE
ILSAVEGETUS
ILSADURADA
ILSALEVA
ILSANOBREAK
ILSAINTEGER
ILSATERMIKO
ILSADEEPDOWN

CONSULT THE **BIOSTIMULATION CATALOG** TO OBTAIN ALL TECHNICAL INFORMATION, COMPOSITIONS AND METHODS OF USE OF BIOSTIMULANT PRODUCTS.

***Acidifier:** it favours lowering the pH of the solution to be applied by leaf or fertigation.
Activated products: granules with a high molecular weight co-formulation produced by enzymatic hydrolysis with certified bio-stimulant activity.
* CALCIOCIANAMIDE: Alzchem Trostberg Gmbh Registered Trademark.

SOLID PRODUCTS

LIQUID PRODUCTS - WATER-SOLUBLE

INDEX

A PATH OF

Our history

1956

THE FIRM IS BORN IN 1956

Its founder's intuition was that of seeing in hide collagen a resource to be used to obtain nitrogen organic fertilisers. It is one of the longest-lived firms in the industry and its long history proves that ILSA has always been able to stay in the market with its products and meet through innovation the needs of an increasingly demanding and specialised agriculture.

1972

IN 1972 IT BECOMES THE MOST IMPORTANT ITALIAN MAKER OF ORGANIC FERTILISERS

Thanks to the acquisition of Ico S.p.A. and Valcoa S.p.A., it consolidates its leadership among the Italian makers of organic fertilsiers. In this same period it markets the first product with its own trademark, FERTORGANICO, still in production today.

1976

IN 1976 THE STRATEGIC CHOICE OF GIVING GREAT IMPORTANCE TO RESEARCH

The first partnership is forged with the Faculty of Agronomics of the Università Cattolica del Sacro Cuore of Piacenza, which lays the groundwork for the entire subsequent evolution of the ILSA research. Over the time new partnerships have been forged with a lot of universities and research institutes in Italy and abroad, promoting the constant improvement of production processes and the creation of new highly effective products.

1979

IN THE 1979 THE MOVE TO ARZIGNANO (VICENZA)

Being closer to the raw material from which AGROGEL® and GELAMIN®, the hydrolysed gelatins - one solid and the other fluid - for agricultural use, are obtained, means greater production capacity, greater chance of selecting the raw material itself, more efficient logistics and lesser environmental impact from transpor.

2016

IN 2016 THE SFE (SUPERCRITICAL FLUID EXTRACTION) EXTRACTION PLANT IS ACTIVATED

It is a clean process that allows extracting bioactive substances without using organic solvents and involves no heat stress. Because of its very low environmental impact, the FDA (Food and Drug Administration - U.S.) has conferred the GRAS (Generally Recognized as Safe) attribute to it. The combination between this new technology and the enzymatic hydrolysis technology has allowed the company to launch the VIRIDEM® programme, a guide to make plant-derived natural biostimulants that are efficient and can act on plant metabolism. A programme that can be summed up in a clear philosophy: «From plants for plants».

2017

IN 2017 ILSA BECAME A "LARGE COMPANY" THANKS TO THE AGREEMENT WITH BIOLCHIM SPA WHICH ACQUIRED 60% OF THE SHARE CAPITAL

The most important industrial and commercial Group at a world level in the bio-stimulant sector was established. The Group also includes the Italian company - CIFO, the Canadian company - West Coast Marine Bio Processing, producer of seaweed extracts and the Hungarian company - Matècsa, producer of peats and derivatives.

2019

CONSTRUCTION OF THE SECOND PRODUCTION PLAN IN RIO GRANDE DO SUL STATE, IN BRAZIL

Thanks to the new production plant, located just a few kilometers away from ILSA BRAZIL's one, operational since 2009, the production capacity of the company in Brazil reaches 52.000 tons.
The whole production made by Ilsa Rio Grande do Sul is currently intended for to the Central and South America markets.

2020

IN 2020 MERGER WITH ILSA MEDITERRANEO S.p.A

ESTABLISHMENT OF ILSA PCA IN EGYPT

Through a merging by acquisition process, the company ILSA MEDITERRANEO S.p.a becomes an integral part of ILSA S.p.A.

Thanks to ILSA PCA the biostimulants and special liquid fertilizers' availability doubles, and the **foundation** for a well-structured distribution network of ILSA fertilizers, in Egypt and in the COMESA's member states, is laid.

2022

J.M. HUBER CORPORATION TAKES OVER 40% OF THE SHARE CAPITAL OF ILSA S.p.A. AND THE WHOLE BIOLCHIM GROUP.

Biolchim, Cifo, ILSA, Matèsca and West Coast Marine has joined Huber Engineered Materials, becaming together with Miller Chemical and Fertilizers a key part of the business unit HUBER AGROSOLUTIONS.

GROWTH

1993

IN 1993 THE ENZYMATIC HYDROLYSIS PLANT IS ACTIVATED

The plant for the production of liquid fertilisers marks in fact the company's entry in this market and in the biotechnology sector. It confirms the company's vocation to innovation, quality and care for the environment. This plant gives birth to GELAMIN®, the fluid gelatin for agricultural use from enzymatic hydrolysis, and the plant-derived products for plant biostimulation from the VIRIDEM® programme.

2001

IN 2001 THE ILSA MEDITERRANEO S.P.A. PLANT IS INAUGURATED

The production plant located in Molfetta, in the province of Bari, is the path chosen by the company to better serve the whole area of Southern Italy and meet the growing demand for its products coming from the countries of the Mediterranean basin.

2003

SINCE 2003 QUALITY CERTIFICATIONS HAVE CONFIRMED WITH FACTS OUR OPERATIONAL PHILOSOPHY

The corporate development has always gone hand in hand with a strong sense of social responsibility; environmental protection, safety at work, product safety and transparency to the outside have always been considered as corporate priorities.

2005

IN 2005 THE C.R.A. (CORPORATE RESEARCH CENTRE) IS INAUGURATED

35+ years of close partnerships with the most important research institutes result in the creation of the C.R.A., Corporate Research Centre, provided with growth chambers and the most modern equipment, which confirm the company's attitude towards product and process innovation.

2014

IN 2014 ILSA RENEWS ITS TRADEMARK AND PRESENTS THE NEW PAY-OFF «THE GREEN EVOLUTION»

The ultimate frontier of the ILSA research generates a renewed corporate vision that is increasingly green and sustainable. With the launch of the new trademark, the new philosophy «the green evolution» is introduced: a prelude to the output of a new revolutionary range of products projecting the company into the future.

2010

IN 2010 IT LAUNCHES THE FIRST PLANT-DERIVED BIOSTIMULANTS

After seven years of research, following legal recognition and introduction of the Fabaceae hydrolysate in the category of products with a specific action on plants, the company presents to the market its first plant-derived biostimulant, ILSAC-ON, quickly followed by ILSASTIM+ and ILSAVIS+.

2009

IN 2009 THE ILSA BRASIL PLANT IS ACTIVATED

In the Rio Grande Do Sul state, in an area with a strong agricultural vocation, the new plant of the subsidiary ILSA BRASIL has been started to meet the growing demand for products based on AGROGEL® and GELAMIN®.

2007

THE PUBLICATION IN THE OFFICIAL GAZETTE OF THE HYDROLYSED GELATIN FOR AGRICULTURAL USE

Thanks to AGROGEL®, 16 March 2007 will always remain an important date in the history of ILSA: the hydrolysed gelatin for agricultural use is introduced in the law ruling the use of fertilisers in Italy.

HUBER

ILSA PRODUCTION PLANTS

ILSA BRASIL
PORTAO
(Porto Alegre)

ILSA Brasil

ILSA
ARZIGNANO
(Vicenza)

ILSA

ILSA
MOLFETTA
(Bari)

ILSA

ICON EXPLANATION

QUALITY CERTIFIED BY ASSOFERTILIZZANTI

The quality mark confered by Assofertilizzanti in agreement with ICQRF (Ispettorato Centrale della tutela della Qualità e Repressione Frodi dei prodotti agroalimentari - Central Inspectorate for Fraud Repression and Quality safeguarding of agri-food products) certifies the compliance of fertilizers with the label on the packaging and law regulations, by performing random sampling on marketed products. It represents an important guarantee for retailers and farmers.

ORGANIC FARMING

The "AgriCROP Biologica ILSA" logo certifies that the fertiliser can be used in organic farming.

LOW CHLORINE CONTENT

The presence of chlorine in the soil can have undesirable effects on the growth of a few root systems. Excessive amounts of chlorine can lead to salinity problems, besides being harmful to the microflora living in the circulating solutions of the soil. The "Basso Tenore di Cloro" (Low Chlorine Content) mark certifies that the fertilizer has a chlorine content below the maximum limit allowed (2%) and is no danger to crops

FOLIAR APPLICATION

Foliar Fertiliser: it highlights the products to be administered through leaves and characterised by safety of use, low molecular weight and the presence of mainly L-amino acids.

FERTIGATION

This mark highlights fertigation products characterised by purity, presence of mainly L-amino acids and easiness of use.

PLANT MATRIX

The products containing plant-derived matrices of vegetal origin obtained by enzymatic hydolysis or through super-critical CO_2 extraction, from yeasts, sugars, algae, fabaceae, etc.

VIRIDEM®

The "Powered by VIRIDEM®" trademark certifies that the product has been developed by following the VIRIDEM® programme aimed at developing plant-based natural biostimulants.

PEF/OEF

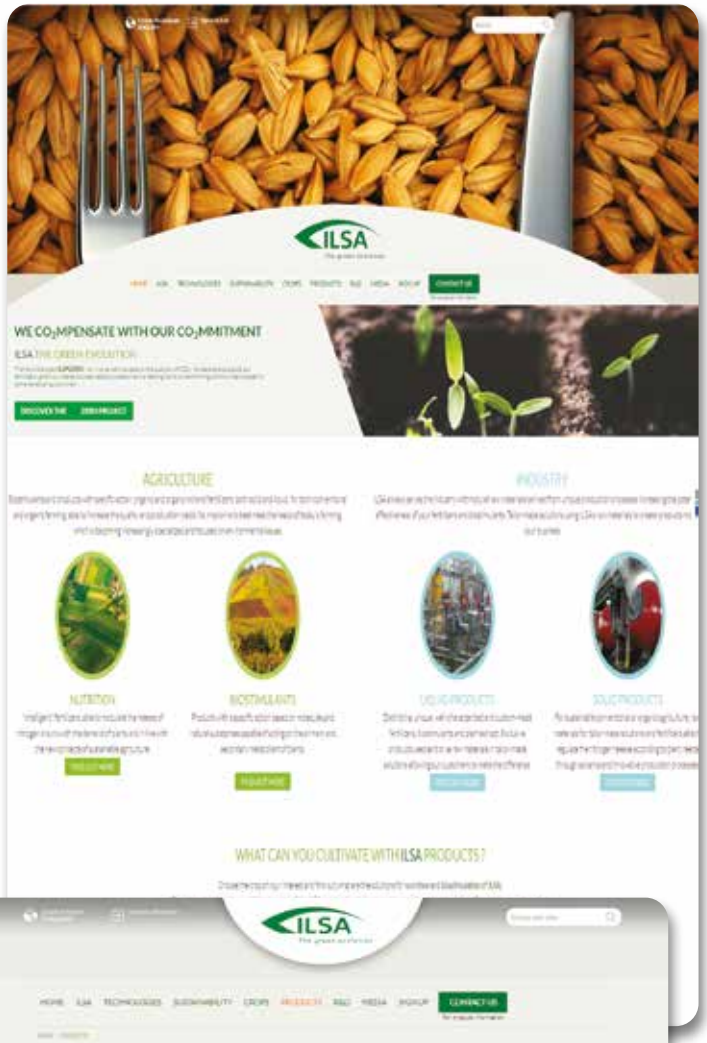
The mark indicate the study, realized by ILSA, of the environmental footprint organization, OEF (Organization Enviromental Footprint) and product, PEF (Product Environmental Footprint) .

COMMUNICATION

Transferring the knowledge heritage accumulated in many years of work is one of the social responsibilities of ILSA.

Services towards resellers and farmers

Agriculture is a dynamic and constantly evolving sector that requires specialised skills, also with regard to the introduction of new and increasingly sustainable production techniques. Making those who operate in the agricultural sector aware of their role, not only in economic terms but also in social terms and regarding health and environmental protection, is one of the priorities that ILSA pursues by organising seminars, conferences and training courses intended for traders, technicians in the industry and farmers.



ILSA employs an in-house technical structure that is focused on daily spreading of, in addition to product value, agronomic, scientific and technological knowledge, with the aim of helping customers to identify the best technical solutions.
ILSA makes demonstration fields and in-field experiments, in Italy and abroad, collaborating with the R&D area. It takes care of collecting, drafting and spreading product and use information while meeting technicians, opinion leaders, resellers and farms to promote a more efficient use of its products.

BECOME A MEMBER
on
www.ilsagroup.com
You will have exclusive access to documents such as crop dossiers, technical data sheets and more...

COMMUNICATION TOOLS

To better support its customers, ILSA has developed a series of communication tools:

Websites

www.ilsagroup.com
www.agrogel.it
www.gelamin.it
www.viridem.it

Social

Linkedin
Twitter
Youtube (video tutorial)
Facebook
Instagram

Informative newsletters

Technical Good to know

Dossier

In-depth dossiers on crops and products

Technical Notes

Explanations on product ages and methods of use

Fertilisation Plans

Customised intervention plans, for every type of crop, both organic and conventional, based on the desired agronomic goals

Results from demonstration fields, in Italy and Abroad

Results of in-field activity

Product information material

(technical data sheets, safety data sheets, fertilisation plans and application instructions, dépliant)

www.ilsagroup.com

www.gelamin.it

www.agrogel.it

www.viridem.it

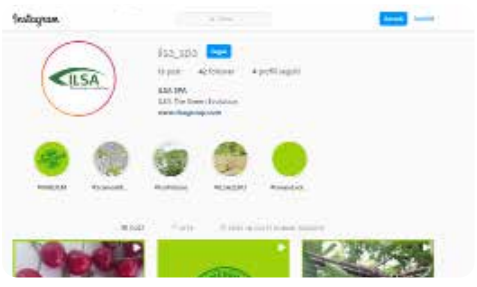
Linkedin

Canale Youtube

Twitter

Facebook

Instagram



ILSA'S NEWSLETTERS

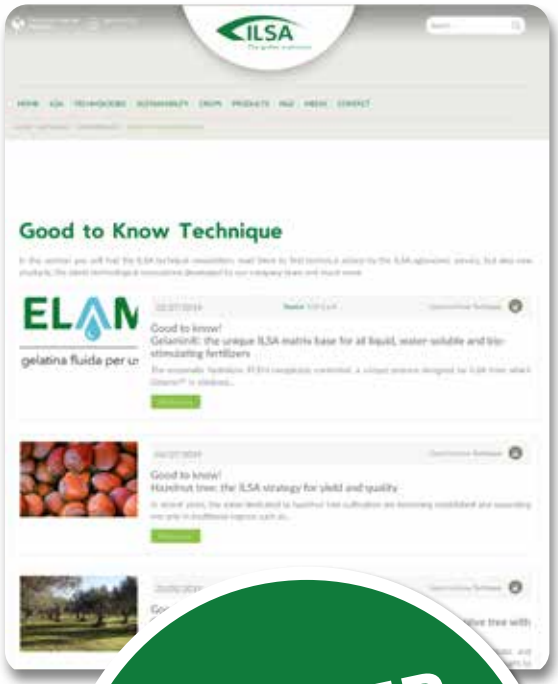
GOOD TO KNOW

The appointment with the information

The "Good to Know" newsletters are free, reserved to subscribers of the website, but also to everyone who, both curious and inetersted, want to know more about the the Business activity of a company that since 1956 works for the improvement of crops' health, quality and yield. Since they are offered in a light, easy and fast-reading manner (they also include the reading time), they provide in-depth and accessibile commercial and technical information. The recipients of these two free newsletters are those interested in the dynamics of general business and the agriculture world, that is, both Ilsa's friends and people who, out of curiousity or interest, want to find out the business core of a company that in the past 50 years has been working to improve the health and yield of crops. Our wish is to give technical and commercial information (also very in-depth) in a gentle way through easy and quick reading.

We think that science has been key in our history and believe that spreading and sharing knowledge can be the only way to continue growing. Our wish is that the "Good to know" newsletters can generate a fruitful exchange of views, having in mind an agriculture capable of overcoming business and environmental sustainability challenges as well as meeting the needs of this and future generations.

You only need to register to www.ilsagroup.com to get them.



REGISTER on **www.ilsagroup.com!** You will receive the Good to Know more suitable for you!

Editorials

Good to know!
Gelamin®: the unique ILSA matrix base for all liquid, water-soluble and bio-stimulating fertilizers

The enzymatic hydrolysis FCEH completely controlled, a unique process designed by ILSA from which Gelamin®, is obtained, ensures a much higher quality result compared with chemical hydrolysis. In Gelamin®, the fluid gelatine for agricultural use, **this process of "soft" and controlled hydrolysis**, in all its phases, **maintains intact the characteristics and functions of the amino acids it contains**, in fact **more than 80% may be found in their levorotatory form, the only one recognised by nature**.

Therefore, the raw material, collagen, and the **highly controlled and specific extraction process** allow Gelamin® to stand out in many ways from the other organic fluid matrices which also derive from similar materials of origin such as fleshings, animal leather and skins, present on the market today. The first distinctive feature is the high content of amino acids, equal to 50%, and its distribution among the different types which determines the typical

Editorials

Good to know!
Hazelnut tree: the ILSA strategy for yield and quality

In recent years, the areas dedicated to hazelnut tree cultivation are becoming established and expanding not only in traditional regions such as Piedmont and Lazio, but also in new areas such as Veneto, Tuscany and Umbria. There are many farmers in fact who concentrate on hazelnuts as a profitable and sustainable alternative to traditional cereal, fruit and wine production, relying on the high demand for raw material from the confectionery industry.

Hazelnuts in fact appear to be associated with some of the most famous Italian brands in the world. In addition, from an agronomic point of view, the hazelnut tree is a hardy plant which adapts well to almost all soils and requires limited labour compared with other crops, such as the vine, as many cultivation practices can be mechanised. This is, however, a crop that cannot be improvised.

In order to achieve adequate levels of quality, yield and income, technical skills and the use of innovative technologies are needed. Among the various technical choices to be made, that of an adequate nutrition plan is fundamental. Among the different fertilisers available, the use of organic fertilisers with modulated release such as those based on Aminos®, liquid fertilisers based on amino acids for leaf and root application based on Gelamin®, and **bio-stimulants of natural origin**, developed within the ILSA Vitamin® program, allow **to increase the efficiency of nutrition and to boost the quality and quantity of the production whilst respecting the environment**.

Editorials

Good to know!
Greater productions and tolerance to environmental stress on the olive tree with the ILSA metholodogy

With respect to olive growing, an olive grove must be maintained in such a way as to allow an economically viable management for the agricultural entrepreneur. For this reason, it is necessary that the **factors** (light, temperature, availability of nutrients and water) which influence the physiological and biological processes at the base of the vegetative and productive growths of the plant (quantity and quality) **should be optimised** and that fertilisation with **the use of natural products with a specific action on the metabolism of the plant** itself should be made possible during the crop cycle.

Environmental factors which affect fruiting, yield and oil quality are also important; in particular

Editorials

Good to know!
The importance of olive fertilisation

It is by now a well-known fact that fertilisation represents a fundamental agronomic technique to allow a correct vegetative-productive development of the olive tree and of arboreal plants in general. In recent years, the integration of **soil enrichment fertilisation** with **leaf fertilisations** is becoming increasingly important, as it allows the plant to be nourished in a balanced way even during periods in which the activity of the root system is less intense, providing essential nutrients for each phenological phase.

ILSA suggests a nutritional Method based on the use of nutritional specialties and bio-stimulants, the result of an integrated process between Research, Innovation and Selection of raw materials, fully respecting the environment and the consumers.

The use during the flowering and fruit setting phases of Boron, in association with Organic Boron, both permitted in **organic agriculture**, enables **stimulating the opening of the flower buds** and the **formation of the pollen tube**, ensuring a **good fruit set**, even in conditions of environmental stress (temperature changes, rain, late frosts, etc.).

ORGANIC FERTILIZERS ARE ALL THE SAME?

From torrefied leather to the gelatin for agricultural use

The organic fertilizers deriving from leather processing have been known for almost a century; in the last few decades, they have been the most common nitrogenous organic fertilizers on the Italian market. These fertilizers are obtained through thermal treatment of the collagen contained in the hides from the tanning and footwear industry. According to the current regulations governing the production and sale of fertilizers (Legislative Decree no. 75 of April 29, 2010), there exist six types of nitrogenous organic fertilizers deriving from this raw material:

- Torrefied leather
- Leather treated with sulfuric acid
- Fur
- Hydrolized animal epithelium (legally recognized since 1989)
- Hydrolyzed fur (legally recognized since 1997)
- Hydrolyzed gelatin for agricultural use (legally recognized since 2007)

AGROGEL
gelatina per uso agricolo

One can guess that, even though all these products come from the same matrix, they have totally different intrinsic characteristics and application efficiency.

Hides are made of collagen, a protein that is a very complex and resistant to microbial degradation. This kind of scleroproteins is turned into nitrogen available to plants only when undergoing a demolition process of its structure, which requires thermal treatment. Thanks to this chemical alteration, collagen is made vulnerable and welcome to enzymes and soil micro-organisms, under whose action it releases organic nitrogen assimilated by plant roots.

The product efficacy is also strongly affected by the type of treatment applied in the production process.

Today, there are five production plants worldwide - of which three in Italy - that transform hides into fertilizers by applying different technologies and industrial processes, which leads to products with different chemical charateristics and, above all, not the same agronomic effectiveness.

The following table summarises the evolution of the productive process and indicates which industrial technologies are still used in the different companies. Furthermore, it allows us to understand that even if they are obtained transforming the same raw material, **the organic fertilisers derived from collagen are completely different form each other.**

PROCESS EVOLUTION			CHEMICAL CHARACTERISTICS AND AGRONOMIC EFFECTIVENESS	
30s	DRYING	Direct flame drying of hides at 400°: hence the term Torrefied Leather **1** plant working in India	Marketed as: Torrefied Leather On sale in India	Part of the protein is not usable Part of the protein, although torrefied, is usable by plants, but the properties of amino acids are compromise
50 - 60s	NON-CONTROLLED STATIC HYDROLYSIS	Direct flame drying of hides at 250°, giving partially hydrolized and torrefied leathers Hydrolized and torrefied leather No plant working	No longer on sale	Part of the protein is not usable Part of the protein, although torrefied, is usable by plants, but the properties of amino acids are compromised
60 - 70s	NON-CONTROLLED DYNAMIC HYDROLYSIS	Direct flame drying of hides at 250°, giving partially hydrolized and torrefied leathers Hydrolized and torrefied leather **1** plant working in Italy	Marketed as: Torrefied leather Fur Hydrolyzed fur	Part of the protein is not usable Part of the protein, although torrefied, is usable by plants, but the properties of amino acids are compromised Good production uniformity
80 - 90s	NON-CONTROLLED DYNAMIC HYDROLYSIS	Hot air drying at 100° Hydrolized leather and hides **1** plant working in Italy	Marketed as: Torrefied leather Fur Hydrolyzed fur	Good medium- and long-term availability Part of the hydrolized protein is usable by plants Part of the protein is barely usable by plants Good production uniformity
Today the FCH® process	CONTROLLED DYNAMIC HYDROLYSIS IN AUTOCLAVE: 1st stage at 100 °C for 90 minutes 2nd stage at 133 °C for 45 minutes 3rd stage at 162 °C for 5 minutes	Dehydration at 100 °C with continuous automatic control of humidity **PRODUCED ONLY BY ILSA IN ITALY AND BRAZIL**	Marketed as: **hydrolyzed Gelatin for agricultural use** AGROGEL	The whole protein is usable in the growing season of crops Nitrogen modulated release Amino acids are preserved in their characteristics, therefore keeping all their properties High production uniformity and quality High agronomic and nutritional effectiveness

The data are shown on the basis of the information in our possession

ILSA's production processes.

With "The green evolution", ILSA can count on particularly efficient production technologies for more responsible and sustainable agriculture.

These technologies are highly automated and unique of their kind because they are the only ones capable of producing modulated release solid organic fertilizers (a process called: FCH® - Fully Controlled Hydrolysis) and liquid fertilizers with predetermined molecular weight in the production phase (process called: FCEH®).

In recent years, the company has supplemented FCH® and FCEH® with the SFE® (Supercritical Fluid Extraction) extraction process.

These three technologies has been used in the food, pharmaceutical and cosmetics sectors for years.

By implementing and integrating the processes of enzymatic hydrolysis and supercritical extraction, the company has created strongly characterised and efficient biostimulants.

No other company in the world owns and uses these two technologies together to create products that enhance the performance and well-being of cultivated plants.

FULLY
CONTROLLED
HYDROLYSIS

FULLY
CONTROLLED
ENZYMATIC
HYDROLYSIS

SUPERCRITICAL
FLUID
EXTRACTION

FCH® IN 9 STEPS

THERMO-BARIC HYDROLYSIS

FULLY CONTROLLED HYDROLYSIS

1
RAW MATERIAL: COLLAGEN

2
SELECTION AND DIVISION BY SIZE

3
STERILIZATION, STABILIZATION AND FURTHER SELECTION BY SIZE

Termal Hydrolysis is chosen based on dimensions of the raw material and on the destination of the finished product. it can be brief, medium or thrust.

4
DYNAMIC ROTARY AUTOCLAVE

5
WATER VAPOR RELEASE AT CONTROLLED TEMPERATURE AND PRESSION

At 100° x 90 min. - Long-term mineralization product. Up to 8 months (*)
At 133° x 45 min. - Medium-to long-term mineralization product. Up to 5 months (*)
At 162° x 5 min. - Short-term mineralization product. Up to 40 days (*)

(*) Mineralization times verified in a control environment

6
NON-STABILIZED GELATIN

7
THE DYNAMIC STABILIZER USES VAPOR AND WORKS AT CONTROLLED TEMPERATURE AND UMIDITY

Low temperature (100°) proces to avoid product denaturation

8
AGROGEL®, AFTER APPROPRIATE EXAMINATION, IS AVAILABLE IN THREE DIFFERENT SIZES:

- POWDER
- MICROGRANULE
- GRANULE

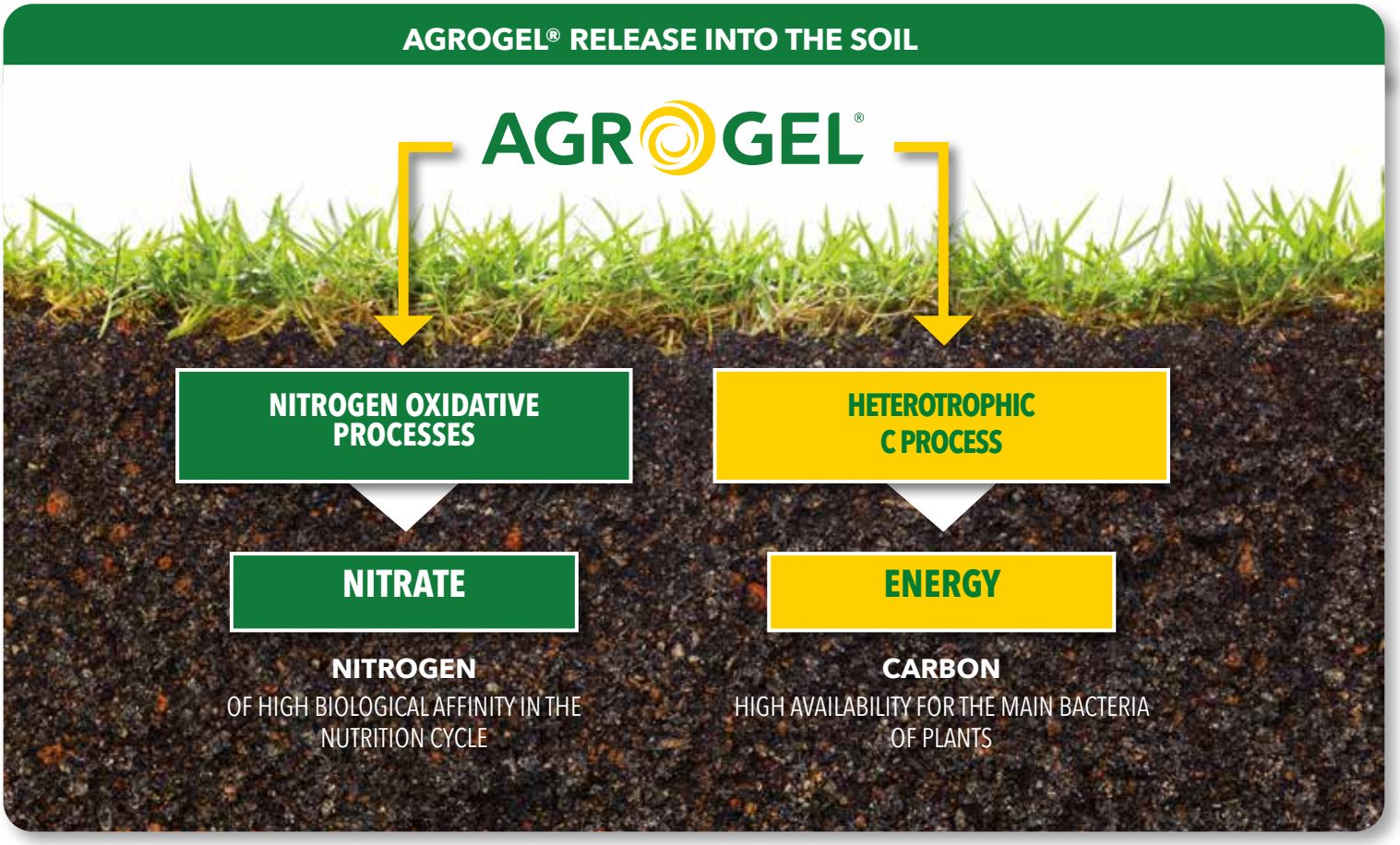
9
THE PRODUCT OBBTAINED IN THIS WAY CAN BE MIXED OR REACTED WITH OTHER RAW MATERIALS ACCORDING TO SPECIFIC RECIPES.

AGROGEL®
gelatine for agricultural use

AGROGEL®, a hydrolysed gelatine for agricultural.

BENEFITS:

- high production efficiency since all the organic carbon it contains can be extracted and therefore the organic substance contained in it is totally bioavailable for the plant-soil system, as is also the nitrogen it contains;
- high efficiency of fertilisation since there are no losses due to run-off or volatilisation as the nitrogen is contained within the protein chains;
- improvement of the chemical-physical and microbiological characteristics of the soil thanks to the contribution of valuable organic substances;
- it reduces the number of interventions thanks to the slow natural release which allows prolonging the availability of nutrients over time.



FCEH® IN 6 STEPS

ENZYMATIC HYDROLYSIS

FCEH
FULLY CONTROLLED ENZYMATIC HYDROLYSIS

1

COLLAGEN OR TISSUE OF PLANTS DERIVED FROM FABACEAE FAMILY

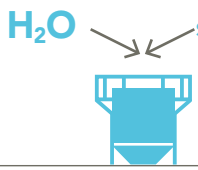
2

SELECTION AND DIVISION BY SIZE

3

STERILIZATION, STABILIZATION AND FURTHER SELECTION BY SIZE

Hydrolisis times and enzymes vary depending on the raw material and the destination of the finished product.



4

ENZIMATIC HYDROLISIS PROCESS FCEH®, FILTRATION AND DISTINCTION OF PROCESSES: RADICAL OR FOLIAR PRODUCT

Process at low temperature (60 °C) performed inside static reactors. TSR technology (TOP STIRRED REACTOR) breaks the link between amino acids according to a standardized sequence.

5

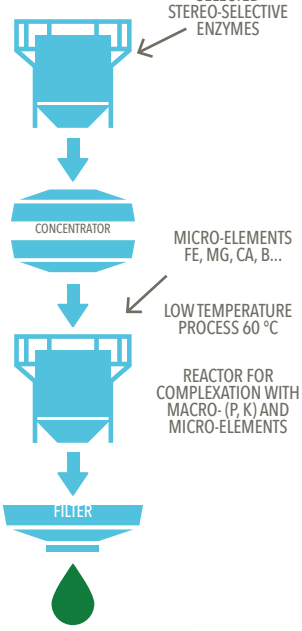
FILTRATION BY ELIMINATION OF SUSPENDED SOLIDS

6

FERTIGATOR

6

FOLIAR



GELAMIN®
fluid gelatine for agricultural use

VIRIDEM®
vegetal extracts for agricultural use

ENZYMATIC HYDROLYSIS is a production process defined as "gentile process " because it involves the use of proteolytic and cellulolytic enzymes which "cut" the target molecules at specific points and it takes place inside static reactors at low temperatures (50-55°C). This allows to obtain enzymatic hydrolysates which are characterized by the following **benefits**:

- **HIGH EFFICIENCY THANKS TO PRESERVING THE CHEMICAL AND BIOLOGICAL CHARACTERISTICS OF THE BIOACTIVE MOLECULES PRESENT IN THE RAW MATERIALS**
- **PRODUCTS WHICH ARE HOMOGENEOUS AND STABLE OVER TIME**
- **THE POSSIBILITY OF MIXING PRODUCTS WITH ANY FORMULATION DESIGNED FOR LEAF OR ROOT APPLICATION THANKS TO THE LOW SALINITY**
- **SUB-ACID PH WHICH PROMOTES ABSORPTION OF THE PRODUCTS WHICH ARE MIXED WITH THEM**

GELAMIN® is a fluid hydrolysed gelatine, from animal origin, for agricultural use which, thanks to its special characteristics, is the essential matrix of many of all ILSA's liquid and water-soluble fertilisers.

GELAMIN® is characterised by a high efficiency of use and:

- a high nutritional efficacy thanks to the high content of nitrogen and organic carbon, completely soluble and bio-available;
- a bio-stimulating action as it contains more than 50% of total amino acids in the form of polypeptides, peptides and free amino acids predominantly in levorotatory form, the only form used by plants;
- a rapid absorption through leaf and root thanks to the high purity and stability of the protein matrix;
- a rapid action in preventing any nutritional deficiencies thanks to the complexing action of the amino acids with macro, meso and micro elements.

The **ENZYMATIC HYDROLYSATE OF FABACEAE**, is obtained through the use of proteolytic and cellulolytic enzymes from plant tissues belonging to the Fabaceae family.

The **ENZYMATIC HYDROLYSATE OF FABACEAE** is characterised by:

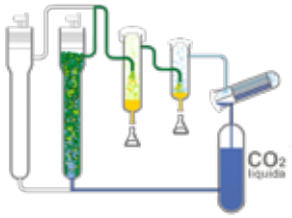
- an increase in the productivity and quality of agricultural production thanks to its bio-stimulating effect, linked to the presence of a pool of organic molecules acting directly and indirectly on the primary and secondary metabolism of plants;
- a multiple action on the plant as it increases its tolerance to stress and stimulates rooting, vegetative growth, flowering, fruit setting, the final quality of the produce and the shelf-life;
- a highly efficient use and therefore a reduced dosage.

SFE® IN 5 STEPS

SUPERCRITICAL CO_2 EXTRACTION

SUPERCRITICAL FLUID EXTRACTION

1
RAW MATERIAL:
PLANTS DERIVED
FROM FABACEAE FAMILY



2
SUPERCRITICAL CO_2
EXTRACTION

3
ROUGH VEGETAL EXTRACT

4
MIXING AND
STANDARDIZATION

5
VEGETAL EXTRACT
IN SUSPENSION

VIRIDEM®
vegetal extracts for agricultural use

THE PLANT EXTRACT PROCESS: SFE®

The process called SUPERCRITICAL FLUID EXTRACTION allows extracting bioactive substances from plant matrices and is performed by using Carbon Dioxide (CO_2) as extraction fluid, in supercritical conditions.

SUPERCRITICAL FLUID EXTRACTION

The extraction of bioactive substances from plant matrices is performed by using Carbon Dioxide (CO_2) as extraction fluid, in supercritical conditions.
The solvent power of CO_2 can be regulated by increasing or diminishing pressures and/or temperatures.
By adequately modifying pressure (which can reach 1.000 bar) and temperature (never over 80 °C) conditions, such process allows creating very selective unique extractions with different levels of oils, waxes and desirable extracts.
The plant raw materials, suitably dried and ground, are introduced into the plant and Carbon Dioxide (CO_2), a gas that under specific environmental conditions (temperature of 31.1 °C and pressure of 73.8 bar) is found in a supercritical stage, is brought to the desired temperature and pressure, so starting the extraction stage.
Once the extraction is completed, the operating pressure is reduced and CO_2 loses its solvent force, releasing the substances extracted, which are available in a concentrated form.
The extracts obtained are microbiologically stable and do not need preservatives. Differently from conventional procedures, the selectivity of the ILSA extraction process does not entail heat stress in raw materials or require using organic solvents.
Because of its very low environmental impact, the FDA (Food and Drug Administration - U.S.) has conferred the GRAS (Generally Recognized as Safe) attribute to this industrial process.

The ILSA products with a specific action can act on plant metabolism to respond to specific qualitative and quantitative needs like, for example, size increase and uniformity, stimulation of flowering, sprouting and vegetative growth, fruit set and reduction of premature fruit drop, photosynthesis and vegetative growth, plant biomass increase, rooting, internode shortening, higher Brix level, resistance to fruit cracking and rot and shelf-life increase. They increase plant tolerance to abiotic stresses and support plants even under adverse conditions such as excessive soil salinity, temperature leaps and heat and water stresses. They reduce nitrate accumulation in leaves and support plants in stress situations caused by the application of agrochemicals. Last, they can foster plant nutrition by facilitating the assimilation of macro- and micro-elements.

VIRIDEM®
PROGRAMME

ILSA has been engaged for years in a programme called VIRIDEM®, aimed at developing natural plant-based biostimulant products with a clear philosophy:

«From plants to plants.»

With VIRIDEM® «The green evolution» takes one more important step forward.

VIRIDEM®

vegetal extracts for agricultural use

VIRIDEM® is the ILSA programme that brings together the company's scientific heritage to develop its plant-derived biostimulants.
Through the VIRIDEM® programme, ILSA embraces the philosophy of creating products for plants by starting from the plants themselves.
Thanks to years of research, this work programme sums up the most advanced knowledge in molecular biology, applied microbiology, proteomics, metabolomics, physiology, chemistry and bioprocesses.
VIRIDEM® comes from the identification of bioactive substances inside different plant species, extracted with low environmental impact technologies and made available to plants in their full potential.
The result is a complete range of natural and efficient products acting on plant metabolism: specifically targeted fertilisers improving plant physiological processes and making plants vigorous, more productive and responsive to environmental stresses.
VIRIDEM® also represents the ILSA proposal to create conservative agricultural techniques aiming at preserving soil functions, protecting soil to improve its adaptation to climate changes with water saving solutions, and allowing using fertilisers in a more and more efficient, sustainable and integrated manner.
VIRIDEM® is all of this: observing nature, understanding its mechanisms and extracting its essence to help it with its own tools.

"FROM PLANTS TO PLANTS"

The ILSA products with a specific action can act on plant metabolism to respond to specific qualitative and quantitative needs like, for example, size increase and uniformity, stimulation of flowering, sprouting and vegetative growth, fruit set and reduction of premature fruit drop, photosynthesis and vegetative growth, plant biomass increase, rooting, internode shortening, higher Brix level, resistance to fruit cracking and rot and shelf-life increase. They increase plant tolerance to abiotic stresses and support plants even under adverse conditions such as excessive soil salinity, temperature leaps and heat and water stresses. They reduce nitrate accumulation in leaves and support plants in stress situations caused by the application of agrochemicals. Last, they can foster plant nutrition by facilitating the assimilation of macro- and micro-elements.


PHOTOSYNTHESIS AND VEGETATIVE DEVELOPMENT


TOLERANCE TO THERMIC AND WATER STRESS


SALINITY TOLERANCE


SHELF-LIFE

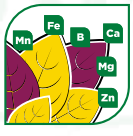

CRACKING AND ROT


FLOWERING AND FRUIT SET


ROOTING

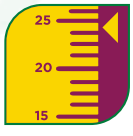

UNIFORMITY IN COLOUR AND RIPENING


SIZE



NUTRITION AND NUTRIENT UP-TAKE


PLANT BIOMASS



DEGREES BRIX

VIRIDEM® PROGRAMME IN 12 STEPS

STUDY AND ANALYSIS

1

IDENTIFICATION OF THE PLANT MATRIX

2

IDENTIFICATION OF THE COMPOUNDS (TARGET SUBSTANCES)

3

IDENTIFICATION OF THE STAGE IN THE PHENOLOGICAL CYCLE WHERE THE PLANT PRODUCES MOST COMPOUNDS (TARGET SUBSTANCES)

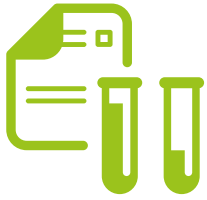
IMPLEMENTATION AND LAUNCH

12

PACKAGING AND PRODUCT LAUNCH

11

LAUNCH PLAN APPROVAL AND INDUSTRIAL START-UP



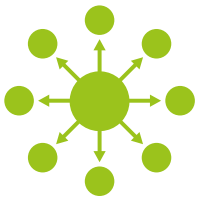
10

IDENTIFICATION OF EFFECTS, DOSES AND BENEFITS OF THE FINAL PRODUCT

VIRIDEM®

vegetal extracts for agricultural use

DEVELOPMENT



4

CHEMICAL AND PHYSICAL CHARACTERISATION OF THE MATRIX AND OF SUBSTANCES

5

TUNING OF PARAMETERS AND OF THE MOST EFFICIENT AND EFFECTIVE EXTRACTION PROCESS IN PRESERVING THE INTEGRITY OF COMPOUNDS (TARGET SUBSTANCES)

TEST AND VERIFICATIONS

6

LAB TEST AND PROTOTYPE CHARACTERISATION

7

TEST IN GROWTH CHAMBER

8

TEST IN CONTROLLED ENVIRONMENT OR IN GREENHOUSE

9

TEST IN OPEN FIELD

ILSA MANIFESTO ON AGRICULTURAL SUSTAINABILITY

1 TO GIVE LESS AND PRODUCE MORE

We make efficient products that at low doses allow increasing quality and production yields per hectare even in stress situations, improve agricultural soil fertility and promote a rational use of water resources while fully respecting the environment and the people living in it.

2 RENEWABLE SOURCES

To make our biostimulants and fertilisers we mainly use natural raw materials coming from renewable sources (from animal and vegetal source).

3 PRODUCT INNOVATION

The C.R.A. (Corporate Research Centre) applies «white» biotechnologies that, through the use of enzymes, allow developing products obtained by transforming natural raw materials that contain bioactive substances for plants.

4 PROCESS INNOVATION

By using industrial processes generally recognised as having low environmental impact, we make products while drastically reducing emissions into the atmosphere and waste production. We are constantly analysing and monitoring the Product Environmental Footprint (PEF) and the Organisation Environmental Footprint (OEF*).*

5 TRAINING AND DISCLOSURE

The correct use of products and the reduction of the environmental impact from their use also depend on good training and information activities addressed to the distribution system and to end-users.

* *PEF:* Product Environmental Footprint
* *OEF:* Organization Environmental Footprint

ORGANIC CERTIFICATIONS

Organic farming employs cultivation techniques that avoid over-exploiting natural resources, in particular soil, water and air.

ILSA has a wide range of organic and organic-mineral fertilisers, both solid and liquid, used by organic farms, in Italy and all over the world. The company is regularly subjected to inspections on part of specific accredited certification bodies to determine the compliance and allowance of ILSA's technical means in organic farming. The products allowed are distinguished by the brand **"ILSA Organic Farming".**

Below is the list of certification bodies to which ILSA refers by submitting the controls required by their protocols for the use in organic farming.

MEZZI TECNICI AIAB

FiBL

KIWA BCS ÖKO-GARANTIE GMBH

CONTROL UNION SERVICES

OMRI

ILSA IS BRILLIANT COMPANY

The only one in the agricultural sector, ILSA is among the 30 Brilliant Companies of Italy selected by Kotler Publishing and Weevo.

An award that comes directly from the father of modern marketing for innovation in modular green biotechnologies, capable of solving the environmental problem of tanned leather trimmings in tanning clusters worldwide and producing highly efficient fertilisers and biostimulants for sustainable agriculture.

Do you want to find out why ILSA became Brilliant?
Go to www.ilsagroup.com

30 brilliant company

THE FIRST AWARD FOR SUSTAINABLE COMPANIES THAT GIVE VALUE TO ITALY AND TO GREEN BIOTECHNOLOGIES


AMONG THE 30 BRILLIANT ITALIAN COMPANIES
ILSA
The green evolution
BRILLIANT
ITALIAN
COMPANY
2022
Kotler
impact
Never Stop
ILSA

BIO ILSA

ORGANIC AND ORGANO-MINERAL FERTILISERS THAT CAN BE USED IN ORGANIC FARMING

It is a complete line of organic and organo-mineral fertilisers that are characterised by a high content of organic nitrogen of protein origin with modulated release.
All the organic raw materials used are previously subjected to thermal hydrolysis processes. The products of the Bioilsa line are dry, stable over time, do not generate unpleasant odours and are so effective that they are also normally used in conventional agriculture.

ILSA LIFE

SOIL IMPROVERS, ORGANIC FERTILISERS AND ORGANO-MINERAL FERTILISERS BASED ON NITROGEN AND MESOELEMENTS

The ILSALife line includes natural products capable of improving the chemical, physical, biological and mechanical characteristics of soils.
They are organic soil improvers of plant origin, organic fertilisers and organo-mineral fertilisers based on nitrogen and mesoelements that nourish the plants while increasing soil fertility and improving its structure and pH and the availability of nutrients.

ILSA AGRO

PROFESSIONAL ORGANIC AND ORGANO-MINERAL FERTILISERS FOR TURFGRASS NUTRITION AND CARE

Public and private turfgrass areas in urban environments are receiving increasing attention because of their importance in improving the quality of life.
Turfgrass is the main component of urban greenery and its care requires specific and environmentally friendly fertilisers, such as those of the IlsaAgro line.
They are suitable for all types of turfgrasses, whether they are of high aesthetic quality or intensively used sports fields.

ILSA COM

QUALITY PRODUCTS MARKETED BY ILSA

Carefully selected to complete the range offered by ILSA to its customers.

ILSA TEC

PRODUCTS WITH A SPECIFIC ACTION FOR THE MOST ADVANCED AGRICULTURE

The IlsaTec line includes products with very different characteristics and purposes, highly technological and suited to meet the specific needs of the plant.
Products to nourish, and products that stimulate plant metabolism and prevent or treat stress, such as the products contained in the **BIOSTIMULATION CATALOGUE.**
What they have in common is the fact that each one is a specific and unique product.

ILSA TOP

LIQUID AND WATER-SOLUBLE FERTILISERS FOR FERTIGATION AND FOLIAR APPLICATION

It is a complete line of products to be applied by foliar and/or root application in order to promote the healthy and abundant growth of all crops.
The exclusive ILSA industrial process called FCEH® guarantees the high quality standard and stability of the products over time. In particular, low molecular weight products are suitable for foliar applications and are characterised both by the high availability of laevorotatory amino acids and by their ease of penetration into the leaves. Higher molecular weight products are characterised by their purity, their ability to meet the nutritional needs of the crop at different stages of vegetative development and, above all, their ability to help overcome stressful situations.

BIO ILSA


BIOILSA ECO
5-10-10
BIOILSA
CONCIME ORGANICO AZOTATO N11
BIOILSA 777
export
CONCIME ORGANO MINERALE NPK
BI.OTTO
CONCIME ORGANICO AZOTATO N8
ENNEKAPPA
CONCIME ORGANO MINERALE NK (SO³)
BIOFRUTTETO KS
BIOILSA VITE
CONCIME ORGANO-MINERALE NPK 5-5-10
BIOILSA VITANOVA
CONCIME ORGANICO AZOTATO N6
BIO ILSA

777 EXPORT

NPK 7.7.7 BASED ON AGROGEL®

What is it?

777 EXPORT is a pellet organo-mineral fertilizer produced by the reaction between the organic matrix **AGROGEL®** characterising by a stimulating action and mineral components characterising by an extreme purity. The fertilizer can guarantee balanced nutrition by promoting a balanced vegetative-productive development of cultivated crops (horticultural, fruit and tree crops, etc.).

777 EXPORT provides "**AGROGEL®**" an organic matter rich in polypeptides and organic carbon in a form bioavailable to soil microorganisms. Moreover, **AGROGEL®** in combination with Phosphorus and Potassium promotes a gradual release of nutrients avoiding losses in the soil (leaching and/or volatilization). The presence of Sulfur in the fertilizer favours the acidification of the rhizosphere allowing greater availability of nutrients to crops.

25 kg

500 kg

Formulation: pellet - 3,5 mm

How to use?

777 EXPORT is suitable for all fruit, tree and vegetable crops, which require Phosphorus, Potassium and Sulfur to increase the organoleptic characteristics of the final yield (fruits and/or vegetables).

Which benefits does it bring?

- High nutritional efficiency;
- activates the soil microorganisms;
- allows balanced and gradual nutrition in the soil;
- no leaching no volatilization.

COMPOSITION

Total Nitrogen (N)	7%	Potassium Oxide (K_2O) soluble in water	7%
of which: organic Nitrogen (N)	7%	Sulphur Trioxide (SO_3) soluble in water	5%
Total Phosphorus Pentoxide (P_2O_5)	7%	Organic Carbon (C)	25%

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	kg/ha
Citrus	Vegetative restart	Top dressing or bury into the soil	800-1000
Eggplant	Pre-sowing or pre-transplanting	Top dressing or bury into the soil	600-1000
Olive tree	Vegetative restart	Top dressing or bury into the soil	500-1000
Potato	Pre-sowing or pre-transplanting	Top dressing or bury into the soil	600-1000
Tomato	Pre-sowing or pre-transplanting	Top dressing or bury into the soil	600-1000
Table grape, Wine grape	Vegetative restart	Top dressing or bury into the soil	500-1000

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

AGROGEL

L.C.C. LOW CHLORINE CONTENT

BI.OTTO

N 8 NITROGEN ORGANIC FERTILIZER

25 kg

500 kg

Formulation: pellet - 4.0 mm

What is it?

BI.OTTO is a pellet organic nitrogen fertilizer based on organic Carbon, Calcium and Magnesium characterised by a high availability for both microorganisms and plants. The fertilizer can ensure a gradual release of nutrients in line with the specific needs of crops. The fertilizer stimulates the activity of the soil microflora, releases Nitrogen, Magnesium and Calcium in the soil in a gradual way and it promotes plant development, photosynthesis and thickening of tissues underway formation (leaves and fruits) even in abiotic stress.

How to use?

BI.OTTO is dry, odourless and stable over time and it is indicated for vegetable and industrial crops and new orchards (fruit, arboreal, vine). **BI.OTTO** can be distributed in pre-sowing or pre-transplanting of vegetable crops; in pre-sowing of industrial crops or at restart vegetative growth and/or in post-harvest of fruit crops.

Which benefits does it bring?

- Organic nitrogen with slow-release in the soil;
- stimulates photosynthesis and biosynthesis of carbohydrates;
- favours the thickening of the tissue (leaves and fruits);
- increases the fertility of the horizon explored by the roots.

COMPOSITION

Total Nitrogen (N)	8%	Organic Matter	50%
of which: organic Nitrogen (N)	8%	pH	6.7
Organic Carbon (C)	28%	Salinity	0.9 dS/m

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	DOSAGE
Citrus	Vegetative growth and / or post-harvest	Top dressing or bury into the soil	800-1000 kg/ha
Stone fruit, Pome fruit, Actinidia (Kiwi)	Vegetative growth and / or post-harvest	Top dressing or bury into the soil	600-1000 kg/ha
Olive tree	Vegetative growth and / or post-harvest	Top dressing or bury into the soil	700-800 kg/ha
Tomato, Salad, Radicchio, Strawberry, Melon, Watermelon and other Vegetables cultivated in the open field	Pre-sowing or pre-transplanting or on top in advance	Top dressing or bury into the soil	800-900 kg/ha
Vegetables cultivated in greenhouses	Pre-sowing or pre-transplanting	Top dressing or bury into the soil	80-100 kg/1000 m^2
Wheat, Corn, Barley and other Cereals	Pre-sowing or broadcasting	Top dressing or bury into the soil	700-1000 kg/ha
Industrial and Fodder Crops	Pre-sowing or broadcasting	Top dressing or bury into the soil	700-1000 kg/ha
Table and Wine Grapes	Vegetative growth and / or post-harvest	Top dressing or bury into the soil	800-1000 kg/ha

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

BIOFRUTTETO KS

NPK 5.10.15 BASED ON AGROGEL®

What is it?

BIOFRUTTETO KS is a new concept pellet organo-mineral fertilizer characterised by high nutritional efficiency. The fertilizer is rich in nitrogen (from protein source), phosphorus, potassium and calcium with slow-release in the soil.

BIOFRUTTETO KS contains, in the right ratios, mineral elements complexed by **AGROGEL®** derived from a fully controlled thermobaric hydrolysis process (**FCH®**). This allows for a modulated release of the elements over time, even in hard edaphic conditions, reducing the phenomena of leaching and retrogradation and making the nutritional elements available during fruit swelling and fruit ripening.

25 kg

500 kg

Formulation: pellet - 4,0 mm

How to use?

BIOFRUTTETO KS can be used both in basic fertilisation or in enrichment fertilisation on crops demanding a high amount of potassium (stone fruit, pome fruit, grapevine, small fruits, solanaceous, cruciferous, etc.), allowing to increase the final yields and the quality of the crops.

Which benefits does it bring?

- A high content of Potassium ideal for potash crops;
- ideal for basic and enrichment nourishing fertilizations;
- increases the organoleptic characteristics of fruits and vegetables;
- no leaching no volatilization.

COMPOSITION

Total Nitrogen (N)		5%
of which: organic Nitrogen (N)	5%	
Total Phosphorus Pentoxide (P_2O_5)		10%
Potassium Oxide (K_2O) soluble in water		15%

Sulfur trioxide (SO_3) soluble in water	13%
Total Calcium Oxide (CaO)	13%
Organic Carbon (C)	18%

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	DOSAGE
Citrus	Vegetative restart	Top dressing or bury into the soil	800-1000 kg/ha
Stone fruits, Pome fruits, Actinidia, Small fruits	Vegetative restart or post-harvest	Top dressing or bury into the soil	500-1000 kg/ha
Industrial crops	Pre-sowing	Top dressing or bury into the soil	500-1000 kg/ha
Olive tree	Vegetative restart	Top dressing or bury into the soil	500-1000 kg/ha
Potato	Pre-sowing	Top dressing or bury into the soil	800-1000 kg/ha
Tomato, Pepper, Aubergine, Melon and other vegetables in open field	Pre-transplanting	Top dressing or bury into the soil	600-1000 kg/ha
Tomato, Pepper, Aubergine, Melon and other vegetables in greenhouse	Pre-transplanting	Top dressing or bury into the soil	60-100 kg/1000 m^2
Table and Wine Grape	Vegetative restart or post-harvest	Top dressing or bury into the soil	500-1000 kg/ha

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

BIOILSA

N 11 ORGANIC NITROGEN FERTILISER

What is it?

BIOILSA is an organic fertiliser in pellets based on Nitrogen, Carbon from organic origin, Calcium and Magnesium, highly available to both microorganisms and plants. The fertiliser guarantees a gradual release of nutrients in line with the specific needs of the plant.
The fertiliser stimulates the activity of soil microflora, releases Nitrogen, Magnesium and Calcium into the soil gradually and promotes plant development, photosynthesis and the thickening of vegetative tissues during formation (leaves and fruits) even in conditions of abiotic stress.

How to use?

BIOILSA, is dry, odourless and stable over time and it is suitable for vegetable and industrial crops and for new orchards (fruit, trees, vines).
BIOILSA can be distributed during the pre-sowing/transplanting of vegetable crops, during the pre-sowing of industrial crops or during the vegetative growth or post-harvesting of tree crops.

Which benefits does it bring?

- It slowly releases organic Nitrogen into the soil;
- it stimulates photosynthesis and carbohydrate production;
- it promotes the thickening of vegetative tissues (leaves and fruits);
- it increases the fertility of the horizon explored by the roots.

Formulation: pellet - 3,5 mm

25 kg

500 kg

COMPOSITION

Total Nitrogen (N)	11%	Organic Carbon (C)	40%
of which: organic Nitrogen (N)	11%	Organic Matter	70%

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	DOSAGE
Actinidia (kiwi)	Growth recovery and/or post-harvest	Covering or underground	400-600
Citrus	Growth recovery and/or post-harvest	Covering or underground	400-600
Stone fruits	Growth recovery and/or post-harvest	Covering or underground	400-600
Durum and Common Wheat, Corn, Barley, Rice	Pre-sowing	Covering or underground	400-500
Olive tree	Growth recovery and/or post-harvest	Covering or underground	400-500
Vegetables in open field	Pre-sowing or pre-transplanting	Incorporate into the soil	400-600
Greenhouse vegetables	Pre-sowing or pre-transplanting	Incorporate into the soil	100-150 kg/1000 m²
Potato	Pre-sowing or pre-transplanting	Incorporate into the soil	400-600
Pome fruits	Growth recovery and/or post-harvest	Covering or underground	400-600
Table and Wine Grapes	Growth recovery	Covering or underground	500-600

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

BIOILSA ECO

NPK 5.10.10 BASED ON AGROGEL®

What is it?

BIOILSA ECO is a pellet fertilizer rich in nitrogen (from protein), Phosphorus, Potassium, Calcium, Magnesium and Sulphur characterised by slow-release in the soil. **BIOILSA ECO** contains Macro and Meso-elements complexed by a protein matrix named "**AGROGEL®**", this allows a modulated release of nutrient in the soil, reducing leaching and retrogradation and making the nutrients available during the whole crop cycle.
Besides, the fertilizer stimulates root development, vegetative growth and increases the qualitative characteristics of fruits and vegetables (°Brix, flavour, aroma, and firmness, etc.).

How to use?

BIOILSA ECO can be used during the vegetative restart of fruit and tree crops and in pre-sowing or pre-transplantation of vegetable and cereal crops.

Which benefits does it bring?

- Supplies Macro and Meso-elements with slow-release action;
- increases the qualitative characteristics of fruits and vegetables;
- regulates the pH of the rhizosphere;
- improves the biological fertility of the soil.

25 kg

500 kg

Formulation: pellet - 4,0 mm

COMPOSITION

Total Nitrogen (N)	5%
of which: Organic Nitrogen (N)	5%
Total Phosphorus Pentoxide (P_2O_5)	10%
Potassium oxide (K_2O) soluble in water	10%
Calcium Oxide (CaO)	15%
Magnesium Oxide (MgO)	2%

Total Sulfur trioxide (SO_3)	10%
of which: soluble sulfur trioxide (SO_3) in water	8%
Organic Carbon (C)	20%
Organic matter	34%
pH	6.6
Salinity	3.8 dS/m

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	DOSAGE
Wheat, Corn, Barley and other Cereals	Pre-sowing	Bury into the soil	800-1000 kg/ha
Industrial crops and fodder crops	Pre-sowing	Bury into the soil	800-1000 kg/ha
Apple, pear and kiwi	Vegetative restart	Top dressing or bury into the soil	500-1000 kg/ha
Cherry, Peach and other stone fruits	Vegetative restart	Top dressing or bury into the soil	500-1000 kg/ha
Olive	Vegetative restart	Bury into the soil	500-1000 kg/ha
Table and wine grapes	Vegetative restart	Bury into the soil	500-1000 kg/ha
Tomato, Potato, Melon, and other Vegetables in the open field	Pre-sowing/pre-transplantation	Bury into the soil	600-1000 kg/ha
Vegetables in the Greenhouse	Pre-sowing/pre-transplantation	Bury into the soil	60-100 kg/1000m²

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

BIOILSA VITANOVA

N 6 ORGANIC NITROGEN FERTILIZER

25 kg

500 kg

Formulation: pellet - 4,0 mm

What is it?

BIOILSA VITANOVA is a pellet organic fertilizer containing totally organic nitrogen and carbon. The quality of the raw material, the production process, and the presence of sulfur allows it to have an effective action, both in terms of nutritional support for plants and increasing soil fertility.
The slow-release organic nitrogen in **BIOILSA VITANOVA** also promotes optimal vegetative balance and effective accumulation of nutritional reserves, with no excesses or deficiencies and zero loss by leaching. Finally, the very low moisture content makes **BIOILSA VITANOVA** a dry, odorless and stable product over time, so with zero storage and preservation problems.

How to use?

BIOILSA VITANOVA is an organic fertilizer allowed in organic farming and ideal for winter and post-harvest fertilization of fruit trees, vines, olive trees and other tree crops. **BIOILSA VITANOVA** can also be applied in pre-sowing or pre-transplanting of horticultural crops and in pre-sowing of cereals and other extensive crops.

Which benefits does it bring?

- Provides nitrogen to plants and improves soil fertility;
- favors the accumulation of nutritional reserves;
- dry, stable but fast dissolving in soil;
- zero nitrogen loss by leaching.

COMPOSITION

Total Nitrogen (N)	6%	Sulfur Trioxide (SO_3) soluble in water	12%
of which: Organic Nitrogen (N)	6%	Organic Carbon (C)	20%

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	kg/ha
Kiwi, Citrus	Post-harvest	Top dressing or bury into the soil	600-800
Stone fruits, Pome fruits, Olive tree	Post-harvest	Top dressing or bury into the soil	600-700
Tomato, Pepper, Melon, Courgette, Strawberry	Soil preparation	Top dressing or bury into the soil	800-1000
Artichoke, Fennel and other Vegetables	Soil preparation	Top dressing or bury into the soil	700-900
Cereals, Legumes and other Industrial crops	Pre-sowing	Top dressing or bury into the soil	500-600
Table and Wine grapes	Post-harvest	Top dressing or bury into the soil	600-800
Mango tree, Avocado, Banana and other Tropical crops	Post-harvest	Top dressing or bury into the soil	600-700

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

BIOILSA VITE

NPK 5.5.10 BASED ON AGROGEL®

25 kg

500 kg

Formulation: pellet - 4,0 mm

What is it?

BIOILSA VITE is a pellet organo-mineral fertilizer that is characterized by a balanced content of organic nitrogen, phosphorus, potassium, calcium, magnesium and sulfur bound to the protein matrix **AGROGEL®**, which prolongs its availability over time and allows efficient release throughout the crop cycle thus increasing yield and final quality. The high presence of organic carbon allows **BIOILSA VITE** to increase the microbiological fertility of the soil and also make other elements brought in by green manure or by burying crop residues more available to plants.

How to use?

The specific ratio of nutrients makes **BIOILSA VITE** suitable for vines and, in general, for all tree and horticultural crops, even in mixture with other nitrogen sources. It is ideal for applications in post-harvest or at vegetative restart of wine and table grapevines, fruit trees, and in pre-sowing/transplanting of open-field and greenhouse horticultural crops. The nature of the raw materials and the quality of the production process allow **BIOILSA VITE** to be used in organic farming.

Which benefits does it bring?

- Complete and prolonged nutrition;
- reduction of soil interventions;
- increased yield and final quality;
- very high economic efficiency.

COMPOSITION

Total Nitrogen (N)	5%	Total Calcium Oxide (CaO)	15%
of which: Organic Nitrogen (N)	5%	Total Magnesium Oxide (MgO)	4%
Total Phosphorus Pentoxide (P_2O_5)	5%	Sulphur Trioxide (SO_3) soluble in water	9%
Potassium Oxide (K_2O) soluble in water	10%	Organic Carbon (C)	20%

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	kg/ha
Table and Wine grape	Vegetative restart or post-harvest	Top dressing or bury into the soil	600-900
Kiwi, Citrus	Vegetative restart or post-harvest	Top dressing or bury into the soil	600-1000
Stone fruits, Pome fruits, Olive tree, Blueberry, Raspberry	Vegetative restart or post-harvest	Top dressing or bury into the soil	600-1000
Tomato, Pepper, Melon, Courgette, Strawberry	Pre-sowing or pre-transplanting	Top dressing or bury into the soil	600-900
Asparagus, Artichoke, Cabbages and other Vegetables	Pre-sowing or pre-transplanting	Top dressing or bury into the soil	600-800
Mango tree, Avocado, Banana and other Tropical crops	Vegetative restart or post-harvest	Top dressing or bury into the soil	500-800

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

AGROGEL

ORGANIC FARMING ILSA

L.C.C. LOW CHLORINE CONTENT

ILSA

ELENNE MICRO BIO

NPK 8.5.5 BASED ON AGROGEL®

What is it?

ELENNE MICRO BIO is a pellet organomineral fertilizer allowed in organic farming, based on **AGROGEL®**, designed for tree and horticultural crops with high nitrogen demand but providing, in a balanced manner, also the main macro- and meso-elements needed by plants.
The complexation between organic matter, phosphorus, sulfate potassium, calcium and magnesium allows for the progressive availability of all elements, so as to support crops according to their nutritional needs and improve soil fertility. The presence of the organic component in **ELENNE MICRO BIO** allows a synergistic nutritional effect with the nutrient elements increasing the effectiveness of the product.

How to use?

ELENNE MICRO BIO has a nutrient ratio that is particularly suitable for olive and specific fruit crops, such as Stone Fruits, Kiwi, and Small Fruits. It is also suitable for applications at vegetative restart or during the crop cycle of Pome fruits, Citrus fruits, and Fruit vegetables such as Solanaceae, Cucurbitaceae, and Strawberry.

Which benefits does it bring?

- Efficient nutrition based on macro- and mesoelements;
- enhances fruit development;
- ideal for applications at the beginning or during the cycle;
- zero loss of nitrogen and other nutrients.

Formulation: pellet - 4,0 mm

25 kg

500 kg

AGROGEL

L.C.C.
LOW CHLORINE CONTENT

COMPOSITION

Total Nitrogen (N)	8%	Total Calcium Oxide (CaO)	11%
of which: Organic Nitrogen (N)	8%	Total Magnesium Oxide (MgO)	2%
Total Phosphorus Pentoxide (P_2O_5)	5%	Sulphur Trioxide (SO_3) soluble in water	6%
Potassium Oxide (K_2O) soluble in water	5%	Organic Carbon (C)	27%

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	kg/ha
Olive tree, Cherry, Peach, Apricot, Plum, Blueberry, Raspberry	Vegetative growth and/or after fruit-setting	Top dressing or bury into the soil	600-800
Citrus, Kiwi, Pome fruits	Vegetative growth and/or after fruit-setting	Top dressing or bury into the soil	600-1000
Tomato, Pepper, Potato, Eggplant and other Solanaceae	Pre-sowing/transplanting or after fruit-setting	Top dressing or bury into the soil	600-800
Melon, Courgette, Cucumber, Watermelon, Strawberry	Pre-sowing/transplanting or after fruit-setting	Top dressing or bury into the soil	700-900
Table and Wine grapes	Vegetative growth and/or after fruit-setting	Top dressing or bury into the soil	600-900
Mango tree, Avocado, Banana and other Tropical crops	Vegetative growth and/or after fruit-setting	Top dressing or bury into the soil	500-700

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

ENNEKAPPA

NK 7.0.21 BASED ON AGROGEL®

25 kg

500 kg

Formulation: pellet - 6,0 mm

What is it?

ENNEKAPPA is a pellet fertilizer rich in Potassium and Nitrogen with slow-release action in the soil, designed to increase the quality and commercial standards of the final yield. **ENNEKAPPA**provides "**AGROGEL®**" an organic matrix rich in polypeptides and organic carbon both bioavailable for soil microorganisms and plants. Besides, **AGROGEL®** in combination with potassium characterized by high quality promotes a gradual release of the element in line with the periods of maximum plant's need. The presence of Sulfur in the fertilizer favours the acidification of the rhizosphere allowing greater availability of nutrients to plants.

How to use?

ENNEKAPPA is suitable for all fruit and tree crops and can be distributed during the vegetative restart or post-harvest. **ENNEKAPPA** is an eco-sustainable fertilizer characterized by a high nutritional efficiency because in a single distribution we satisfy the plant' needs, in this way, we reduce the treatment costs, the number of treatments and environmental pollution.

Which benefits does it bring?

- Rich in Potassium complexed by **AGROGEL®** with slow-release action;
- high nutritional efficiency;
- increases the quality of the final production;
- activates the soil microorganisms.

COMPOSITION

Total Nitrogen (N)	7%	Sulphur Trioxide (SO_3) soluble in water	18%
of which: organic Nitrogen (N)	7%	Organic Carbon (C)	22%
Potassium Oxide (K_2O) soluble in water	21%	Organic matter	38%

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	kg/ha
Actinidia	Vegetative restart	Top dressing or bury into the soil	500-700
Citrus	Post-harvest	Top dressing or bury into the soil	500-800
Corn	Pre-sowing	Bury into the soil	400-500
Hazelnut Tree	End of summer or vegetative restart	Top dressing or bury into the soil	300-500
Table Grape	End of summer or vegetative restart	Top dressing or bury into the soil	500-700
Wine Grape	End of summer or vegetative restart	Top dressing or bury into the soil	500-700
Ornamental and Forest Nurseries	Soil preparation or vegetative restart	Top dressing or bury into the soil	500-800

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

AGROGEL

L.C.C. LOW CHLORINE CONTENT

FERTIL

N 12.5 **100% AGROGEL®**

What is it?

FERTIL is a pellet fertilizer with high organic nitrogen (from protein source), organic carbon and organic substance characterized by a modulated release in the soil.

FERTIL stimulates the soil microorganism's proliferation, promotes the absorption of nutrients present in the rhizosphere and supports the vegetative growth of the crops during the whole crop cycle.

How to use?

FERTIL is suitable for all crops and can be distributed during the vegetative restart or post-harvest of fruit and tree crops or pre-sowing or pre-transplantation of vegetable, cereal and industrial crops.

Which benefits does it bring?

- A high content of organic nitrogen with slow-release action;
- supports the vegetative-productive growth of the plant;
- activates the soil microflora;
- increases soil fertility.

25 kg

500 kg

Formulation: pellet - 4,5 mm

COMPOSITION

Total Nitrogen (N)	12.5%	Extractable organic Carbon (C) / Total organic Carbon (C)	95%
of which: soluble organic Nitrogen (N)	5%	pH	5,5
Organic Carbon (C)	40%	Organic matter	70%

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	kg/ha
Citrus	Post-harvest	Top dressing or bury into the soil	500-700
Gralic and Scallion	Pre-sowing or pre-transplanting	Top dressing or bury into the soil	600
Apricot tree, Cherry tree, Almond tree, Peach tree, Plum tree	Post-harvest	Top dressing or bury into the soil	500-700
Oat, Spelt, Barley	Pre-sowing	Top dressing or bury into the soil	400-600
Forage crops	Pre-sowing	Top dressing or bury into the soil	400-700
Durum and Common Wheat, Rice	Pre-sowing or tillering	Top dressing or bury into the soil	400-600
Corn	Hoeing	Top dressing or bury into the soil	500-700
Olive tree	Post-harvest	Top dressing or bury into the soil	500-700
Leafy vegetables	Pre-sowing or pre-transplanting	Top dressing or bury into the soil	500-700
Potato	Pre-sowing or pre-transplanting	Top dressing or bury into the soil	500-800
Lawns	Pre-sowing	Top dressing or bury into the soil	400-500
Asparagus, Beetroot, Carrot, Cucumber/Gherkin, Onion, Watermelon, Fennel, Strawberry, Eggplant, Melon, Pepper, Tomato, Processing Tomato, Leek, Turnip, Radish,Celery, Courgette	Pre-sowing or pre-transplanting	Top dressing or bury into the soil	600-800
Tabel and Wine Grapes	Vegetative restart	Top dressing or bury into the soil	600-800

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

FERTIL 10

N 10 **70% AGROGEL®**

25 kg

500 kg

Formulation: pellet - 4,5 mm

What is it?

FERTIL 10 is a pellet fertilizer rich in organic nitrogen (from protein source), magnesium and calcium characterized by slow-release action in the soil.

FERTIL 10 contains "**AGROGEL®**" a protein matrix rich in nitrogen organic and organic carbon both bioavailable for soil microflora and plants. Nutritional elements, such as Nitrogen, Magnesium and Calcium are complexed by "**AGROGEL®**". This allows a modulated release into the soil, promoting vegetative growth, photosynthesis and thickening of the vegetative tissue's underway formation.

How to use?

FERTIL 10 is suitable for all crops and can be distributed during the vegetative restart or post-harvest of fruit and tree crops or pre-sowing or pre-transplantation of vegetable and cereal crops.

Which benefits does it bring?

- A high content of organic nitrogen with slow-release action;
- supports the vegetative-productive growth of the plant;
- activates the soil microflora;
- improves the biological fertility of the rhizosphere.

COMPOSITION

Total Nitrogen (N)	10%	Total Calcium Oxide (CaO)	8%
of which: soluble organic Nitrogen (N)	5%	Total Magnesium Oxide (MgO)	3%
Organic Carbon (C)	40%	Total iron (Fe)	0,2%
Extractable organic Carbon (C) /		pH	7
Total organic Carbon (C)	90%	Salinity	1.1 dS/m
Organic Matter	70%		

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	kg/ha
Actinidia (Kiwi), Citrus	Vegetative growth or post-flowering	Top dressing or bury into the soil	500-800
Stone and Pome fruits	Vegetative growth and / or post-harvest	Top dressing or bury into the soil	500-800
Common/durum wheat, Rice	Pre-sowing or tillering	Top dressing or bury into the soil	400-600
Fodder crops	Pre-sowing	Top dressing or bury into the soil	500-700
Corn	Pre-sowing / or broadcasting	Top dressing or bury into the soil	500-800
Olive tree	Vegetative growth and / or post-harvest	Top dressing or bury into the soil	500-800
Leafy vegetables	Pre-sowing or pre-transplanting	Top dressing or bury into the soil	400-800
Tomato, Potato, Eggplant, Pepper, Courgette	Pre-sowing or pre-transplanting	Top dressing or bury into the soil	500-800
Strawberry, Melon, Cucumber, Watermelon	Pre-sowing or pre-transplanting	Top dressing or bury into the soil	600-800
Other vegetables	Pre-sowing or pre-transplanting	Top dressing or bury into the soil	400-800
Table and Wine Grapes	Vegetative growth and / or post-harvest	Top dressing or bury into the soil	600-900

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

FERTIL SUPERNOVA

N 12.5 **96% AGROGEL®**

What is it?

FERTIL SUPERNOVA is a pellet fertilizer rich in organic carbon and nitrogen (from protein source) characterized by a gradual release in the soil.

How to use?

FERTIL SUPERNOVA based in an organic matrix rich in organic carbon bioavailable for soil microorganisms. The fertilizer promotes the improvement of the fertility of the rhizosphere and the proliferation of the root system. Furthermore, the presence of high content of organic nitrogen characterized by slow-release guarantees balanced nutrition, increasing both the vegetative development and the final yield. Thanks to the slow-release action of nutrients in the soil, the fertilizer is not subjected to leaching and/or volatilization.

FERTIL SUPERNOVA is appropriated for all crops and it can be distributed during the vegetative restart or in post-harvest of fruits and trees or pre-sowing or pre-transplantation of vegetable crops and pre-sowing of cereal and industrial crops.

25 kg

500 kg

Formulation: pellet - 3,5 mm

Which benefits does it bring?

- Protein matrix with slow-release action in the soil;
- activates the soil microflora;
- improves the fertility of the rhizosphere;
- supports the vegetative and productive development of the plant.

COMPOSITION

Total Nitrogen (N)	12.5%	pH	4.5
of which: soluble organic Nitrogen (N)	5%	Organic matter	70%
Organic Carbon (C)	40%		
Extractable organic Carbon (C) / Total organic Carbon (C)	95%		

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	DOSAGE
Citrus	Post- harvest	Top dressing or bury into the soil	500-700 kg/ha
Actinidia	Vegetative restart	Top dressing or bury into the soil	600-800 kg/ha
Oat, Splet, Durum and Common Wheat, Barley	Pre sowing or tillering	Top dressing or bury into the soil	500-700 kg/ha
Ornamental and Floral crops	First vegetative development	Top dressing or bury into the soil	100 kg/1000 ^{2}
Stone Fruits	Vegetative restart	Top dressing or bury into the soil	600-800 kg/ha
Grasslands, Pasture lands	Vegetative restart	Top dressing or bury into the soil	400-500 kg/ha
Olive tree	Post- harvest	Top dressing or bury into the soil	500-700 kg/ha
Fruits Vegetables	Pre-sowing or pre-transplanting	Top dressing or bury into the soil	100 kg/000 m^2
Leafy Vegetables	Pre-sowing or pre-transplanting	Top dressing or bury into the soil	100 kg/000 m^2
Pome Fruits	Vegetative restart	Top dressing or bury into the soil	600-800 kg/ha
Table and Wine Grapes	Vegetative restart	Top dressing or bury into the soil	600-800 kg/ha

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

FERTORGANICO

N 11 **100% AGROGEL®**

What is it?

FERTORGANICO is a flake fertilizer with a high content of organic nitrogen (from protein source), organic carbon and organic substance characterized by a slow-release in the soil. The fraction of soluble organic nitrogen present in **FERTORGANICO** is released in the first weeks after distribution, while the residual protein fraction is gradually released in the following months.

How to use?

FERTORGANICO is appropriated for all crop characterized by long-cycle. It can be distributed during the vegetative restart or post-harvest of fruit and tree crops or in pre-sowing or pre-transplantation of cereal and industrial crops.

Which benefits does it bring?

- A high content of organic nitrogen with slow-release action;
- a high nutritional efficiency;
- activates the soil microflora;
- supports the vegetative-productive growth of crops (long-cycle).

25 kg

500 kg

Formulation: flake 2/5 mm

COMPOSITION

Total Nitrogen (N)	11%	pH	4.5
of which: soluble organic Nitrogen (N)	5%	Organic matter	70%
Organic Carbon (C)	40%		
Extractable organic Carbon (C) / Total organic Carbon (C)	95%		

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	kg/ha
Actinidia	Post-harvest	Top dressing or bury into the soil	800-1000
Citrus	Autumn-winter	Top dressing or bury into the soil	500-700
Apricot tree, Cherry tree, Almond tree, Peach tree, Plum tree	Autumn-winter	Top dressing or bury into the soil	700-1000
Strawberry	Soil preparation	Top dressing or bury into the soil	700-1000
Durum and Common Wheat	From pre-sowing to tillering	Top dressing or bury into the soil	400-700
Olive tree	Post-harvest	Top dressing or bury into the soil	500-700
Potato	Pre-sowing	Top dressing or bury into the soil	500-700
Pome fruits	Autumn-winter	Top dressing or bury into the soil	700-1000
Tomato	Pre-sowing or pre-transplanting	Top dressing or bury into the soil	500-700
Rice	From pre-sowing to tillering	Top dressing or bury into the soil	700-800
Table grape	Vegetative restart and/or post-harvest	Top dressing or bury into the soil	800-1000
Wine grape	Vegetative restart and/or post-harvest	Top dressing or bury into the soil	400-600
Garlic and Scallion, Asparagus, Onion, Watermelon, Fennel, Melon, Processing Tomato, Turnip, Radish, Courgette	Pre-sowing or pre-transplanting	Top dressing or bury into the soil	600-800
Other Vegetables	Soil preparation	Top dressing or bury into the soil	600-800

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

GRANOSANO EVO

NP 6.16 BASED ON AGROGEL®

What is it?

GRANOSANO EVO is a pellet fertilizer technically positioned to act with a "Starter Effect" stimulating the first vegetative development. **GRANOSANO EVO** provides "**AGROGEL®**" an organic matrix rich in polypeptides and organic carbon in a form bioavailable to soil microflora. Moreover, the fertilizer is rich in organic phosphorus and nitrogen (from protein source) to stimulate the development of absorbent rootlets, apical meristems and to favour the thickening of vegetative tissues underway formation.

The presence of "**AGROGEL®**" complexes and preserves the Phosphorus from phenomena of retrogradation in the soil and makes it available to plants in the early stages, in which the plant's need for Phosphorus is maximum.

Formulation: pellet - 4.0 mm

How to use?

GRANOSANO EVO can be distributed in pre-sowing of cereal crops (autumn-winter cycle) and pre-sowing or pre-transplanting of vegetable crops.

Which benefits does it bring?

- A high content of Phosphorus available for plants;
- stimulates a fast root development;
- activates the soil microflora;
- support the root proliferation after the transplanting stage.

COMPOSITION

Total Nitrogen (N)	6%	Organic Carbon (C)	20%
of which: organic Nitrogen (N)	6%	Organic matter	37%
Total Phosphorus Pentoxide (P_2O_5)	16%		

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	kg/ha
Stone fruit, Pome fruit, Wine and table grapes, Olive tree	Vegetative growth	Bury into the soil	400-600
Other Vegetables	Pre-sowing or pre-transplanting	Bury into the soil	400-700
Beetroot	Soil preparation	Bury into the soil	600-800
Industrial Crops	Pre-sowing	Bury into the soil	500-700
Fodder crops	Pre-sowing	Bury into the soil	500-700
Durum and Soft Wheat, Barley, Rice and other Cereals	Pre-sowing	Bury into the soil	300-500
Grain legumes	Pre-sowing	Bury into the soil	300-400
Corn, Sorghum	Pre-sowing	Bury into the soil	400-600
Melon, Watermelon, Courgette, Aubergine, Industrial Tomato and Pepper	Pre-sowing or pre-transplanting	Bury into the soil	400-700
Tomato, Potato	Soil preparation	Bury into the soil	500-800
Ornamental and Forest-Tree Nurseries	Soil preparation	Bury into the soil	400-700

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

PROGRESS MICRO

NPK 6.5.13 BASED ON AGROGEL®

25 kg

500 kg

Formulation: pellet - 4,0 mm

What is it?

PROGRESS MICRO is a pellet fertilizer rich in organic Nitrogen, Phosphorus, Potassium and Magnesium with modulated release into the soil. **PROGRESS MICRO** provides "**AGROGEL®**" an organic matrix rich in polypeptides and organic carbon in a form bioavailable to soil microorganisms.

The presence of "**AGROGEL®**" and the high quality of the selected and complexed raw materials favour a modulated release of nutrients into the soil, reducing the phenomena of leaching and retrogradation and making available nutrients during the whole crop cycle.

How to use?

PROGRESS MICRO can be distributed at vegetative restart or in post-harvest of fruit and tree crops and pre-sowing or pre-transplantation of vegetable crops with high-quality standards.

Which benefits does it bring?

- A high Potassium content suitable for high-income crops;
- increases the organoleptic characteristics of fruits and vegetables;
- improves biological soil fertility;
- no losses by leaching and/or volatilization.

COMPOSITION

Total Nitrogen (N)		6%
of which: organic Nitrogen (N)	6%	
Total Phosphorus Pentoxide (P_2O_5)		5%
Water soluble Potassium Oxide (K_2O)		13%

Total Magnesium Oxide (MgO)	2%
Water soluble Sulphur Trioxide (SO_3)	10%
Organic Carbon (C)	18%
Organic matter	43%

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	kg/ha
Actinidia	Vegetative restart	Top dressing or bury into the soil	600-800
Citrus	Vegetative restart and/or post-harvest	Top dressing or bury into the soil	800-1000
Apricot tree, Peach tree, Nectarine, Plum tree	Vegetative restart	Bury into the soil	500-1000
Other vegetables	Pre-sowing or pre-transplanting	Top dressing or bury into the soil	500-800
Cherry tree	Vegetative restart	Bury into the soil	500-800
Strawberry	Soil preparation	Top dressing or bury into the soil	500-800
Almond tree	Vegetative restart	Top dressing or bury into the soil	500-1000
Melon, Watermelon	Pre-sowing or pre-transplanting	Top dressing or bury into the soil	500-800
Olive tree	Vegetative restart	Top dressing or bury into the soil	500-700
Potato	Pre-sowing or pre-transplanting	Top dressing or bury into the soil	800-1000
Pome fruits	Vegetative restart	Top dressing or bury into the soil	500-1000
Tomato, Pepper, Eggplant	Pre-sowing or pre-transplanting	Top dressing or bury into the soil	600-800
Table Grape	Vegetative restart	Top dressing or bury into the soil	700-900
Wine Grape	Vegetative restart	Top dressing or bury into the soil	500-800
Forage Crops	Vegetative restart	Top dressing or bury into the soil	400-700

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

AGROGEL

L.C.C. LOW CHLORINE CONTENT

A matrix, the result of research

AGROGEL.

AGROGEL® is an organic matrix of ILSA, which is completely natural. The result of innovative processes, continuous research and experimentation, it is the basis for a great number of organic fertilizers and solid mineral organics.
It is an intelligent tool to constantly nourish soils and plants, with extraordinary agronomic effectiveness, without waste and dispersion. Give less to get more, benefiting the environment, agricultural production and farmers.

AGROGEL® is a matrix that makes every fertilizer unsurpassed.

ILSA LIFE


ILSALife
AMMENDANTE COMPOSTATO VERDE
ILSA LIFE
ILSALife
PLUS FERRO
CONCIME ORGANICO AZOTATO CONTENENTE FERRO E ZOLFO
PESO NETTO 25 kg
ILSA LIFE

ILSALIFE

SOIL AMENDMENT BASED ON GREEN COMPOST

What is it?

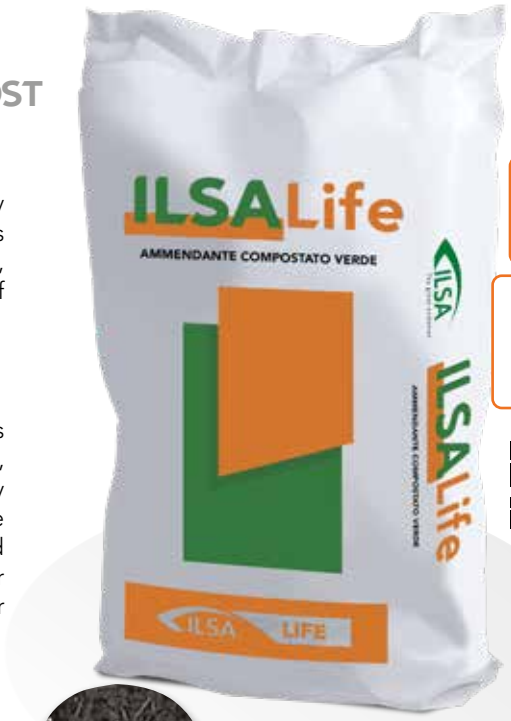
ILSALife is a pellet soil amendment characterized by high versatility in use and high contents of organic matter, humic and fulvic carbon. It is obtained by-products from the vegetal origin which, in the final treatment, are dried at a low temperature. The low humidity (15%) allows storage of the product in the warehouse, without fermentation problems.

How to use?

ILSALife is a suitable soil amendment for any type of soil, it increases the organic matter content and improves the soil porosity and structure, stimulating a balanced development of roots and plants. It is particularly suitable for preparing the seedbed or transplanting vegetables and for the winter fertilization of olives, vineyards, and orchards. It is also recommended to use it for extensive crops such as renewal crops. It is also suitable for the preparation of substrate mixtures. it must be buried into the soil after its application.

Which benefits does it bring?

- Improves the soil structure and facilitate tillage operation;
- provides organic matter and activates the soil microorganisms;
- does not contain industrial sludge or environmental pollutants;
- increases the water and nutrients availability for crops.



25 kg

500 kg

Formulation: pellet – 4,0 mm

COMPOSITION

Total Nitrogen (N)	2%
of which: Organic Nitrogen (N) on dry	2%
Total Phosphorus Pentoxide (P_2O_5) on dry	1%
Soluble Potassium Oxide (K_2O) on dry	1,5%
Calcium Oxide (CaO)	5%
Magnesium Oxide (MgO)	2%
Iron (Fe)	1%
Organic Carbon (C) on dry	28,5%

Humic and fulvic carbon (C) on dry	16,7%
C/N	12,7
Organic matter	49%
Humidity	15%
pH	8,4
Salinity	1,1 dS/m
Total Na on dry	826 mg/kg

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	kg/ha
Citrus, Pome Fruits, Stone Fruits,	Autumn-Winter	Bury into the soil	1.500-5.000
Cereals	Soil preparation	Bury into the soil	1.500-5.000
Olive tree	Autumn-Winter	Bury into the soil	1.500-5.000
Vegetables	Soil preparation	Bury into the soil	1.500-5.000
Table and Wine Grapes	Autumn-Winter	Bury into the soil	1.500-5.000

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

ILSALIFE PLUS FERRO

N+Fe 4+(7,5) BASED ON AGROGEL®

What is it?

ILSALIFE PLUS FERRO is a pellet organic fertilizer based on **AGROGEL®**, Iron and Sulphur. It is characterized by a high iron content and for the quality of the organic component, which guarantees a gradual release of organic Nitrogen, Iron, and sulphur, increasing their availability for plants. **ILSALIFE PLUS FERRO** allows a continuous release of nutrients during vegetative development when the photosynthetic process must be maximum. The product' composition allows limiting the iron chlorosis on the most sensitive crops, especially in soils where the pH and salinity conditions limit the absorption of iron.

How to use?

ILSALIFE PLUS FERRO is recommended for applications at the end of winter on citrus, kiwi, olive trees, wine grape and table grape and, for all tree and vegetable crops, cultivated both in open fields or greenhouses, as well as on soil characterised by the limited availability of iron.

Which benefits does it bring?

- High content in Iron and organic Nitrogen;
- prevents iron chlorosis on tree and vegetable crops;
- increases photosynthetic process and the final yield and quality;
- supplies organic matter improving soil fertility.

25 kg

500 kg

Formulation: pellet – 4,0 mm

COMPOSITION

Total Nitrogen (N)	4%	Organic Carbon (C)	22%
of which: water soluble organic Nitrogen (N)	4%	Organic matter	37%
Water soluble Sulphur Trioxide (SO_3)	11%	pH	6
Total Iron (Fe)	7,5%	Salinity	2,7 dS/m

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	kg/ha
Citrus, kiwi	End of Winter - Early Spring	Bury into the soil	500-1.000
Pome Fruits, Stone Fruits	End of Winter - Early Spring	Bury into the soil	500-700
Strawberry, Melon, Watermelon, Cucumber	Soil preparation	Bury into the soil	600-800
Lettuce, Spinach and other Leafy Vegetables	Soil preparation	Bury into the soil	500-700
Tomato, Potato, Pepper, Aubergine	Soil preparation	Bury into the soil	600-800
Table and Wine Grapes, Olive tree	End of Winter - Early Spring	Bury into the soil	500-700

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

ILSALIFE PLUS ZOLFO

$N+SO_3$ 5+(30) BASED ON AGROGEL®

What is it?

ILSALIFE PLUS ZOLFO is a pellet organic fertilizer based on **AGROGEL®** and a high sulphur content. The presence of Calcium, Magnesium and Iron and the high content of organic carbon make this fertilizer suitable for all type of soils, particularly for alkaline and/or saline soils. **ILSALIFE PLUS ZOLFO** supplies organic matter in a way completely bioavailable for soil. The high presence of sulphur, in combination with **AGROGEL®**, guarantees both a gradual release of sulphur, nitrogen and other nutrients and the absorption of these nutrients even in unfavourable soil conditions.

How to use?

ILSALIFE PLUS ZOLFO is suitable for all vegetable and fruit crops, particularly for those crops that need sulphur to improve their organoleptic characteristics. **ILSALIFE PLUS ZOLFO** can distribute it during soil preparation and in the late winter or early spring or pre-sowing / transplanting of vegetable crops.

Which benefits does it bring?

- High content in sulphur and organic nitrogen;
- stimulates crops development even in soils characterised by high pH;
- increases the final yield and improves the final qualitative characteristics;
- nourishes the plants and improves the soil characteristics.

25 kg

500 kg

Formulation: pellet – 4,0 mm

COMPOSITION

Total Nitrogen (N)	5%	Iron (Fe)	1%
of which: organic Nitrogen (N)	5%	Organic Carbon (C)	25%
Total Sulfur Trioxide (SO_3)	30%	Organic matter	>40%
Calcium Oxide (CaO)	8%	pH	6
Magnesium Oxide (MgO)	3%		

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	DOSAGE
Citrus, kiwi	End of Winter - Early Spring	Bury into the soil	600-1.000 kg/ha
Brassicacee, Artichoke, Garlic, Onion	Soil preparation	Bury into the soil	600-800 kg/ha
Pome Fruits, Stone Fruits	End of Winter - Early Spring	Bury into the soil	600-900 kg/ha
Strawberry, Melon, Watermelon, Cucumber	Soil preparation	Bury into the soil	600-1.000 kg/ha
Lettuce, Spinach and other Leafy Vegetables	Soil preparation	Bury into the soil	600-800 kg/ha
Tomato, Potato, Pepper, Aubergine	Soil preparation	Bury into the soil	700-800 kg/ha
Table and Wine Grapes, Olive tree	End of Winter - Early Spring	Bury into the soil	700-1.000 kg/ha

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

ILSALIFE START

NP 4-8+20 CaO+5 MgO BASED ON AGROGEL®

What is it?

ILSALIFE START is a pellet organic fertilizer based on **AGROGEL®**, Iron and Sulphur. It is characterized by a high iron content and for the quality of the organic component, which guarantees a gradual release of organic Nitrogen, Iron, and sulphur, increasing their availability for plants. **ILSALIFE START** allows a continuous release of nutrients during vegetative development when the photosynthetic process must be maximum. The product' composition allows limiting the iron chlorosis on the most sensitive crops, especially in soils where the pH and salinity conditions limit the absorption of iron.

How to use?

ILSALIFE START is particularly suitable for calcium-loving plants, such as potato, tomato, strawberry, apple, and grapevine. The product' composition makes the fertilizer suitable for the pre-sowing/transplanting stage of all vegetable crops or during the vegetative restart of tree crops and new planting of orchards.

Which benefits does it bring?

- Increases soil fertility and photosynthesis process;
- improves the thinking of fruits and enhances the final quality;
- allows an optimal vegetative start of vegetable crops;
- it is suitable for new orchards and applications at the vegetative restart of fruit trees.

Formulation: pellet – 4,0 mm

COMPOSITION

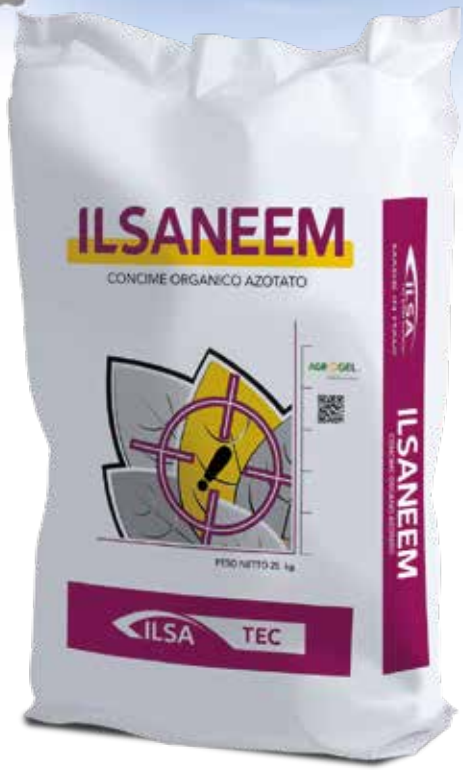
Total Nitrogen (N)	4%	Iron (Fe)	0,5%
of which: organic Nitrogen (N)	4%	Organic Carbon (C)	18%
Total Phosphorus Pentoxide (P_2O_5)	8%	Organic matter	31%
Calcium Oxide (CaO)	20%	pH	7
Magnesium Oxide (MgO)	5%		

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	DOSAGE
Potato, Tomato and other solanaceae	Pre-sowing or Pre-transplanting	Bury into the soil	600-900 kg/ha
Strawberry, Melon, Watermelon, Cucumber	Pre-sowing or Pre-transplanting	Bury into the soil	500-800 kg/ha
Apple tree, Pero, Kiwi	Vegetative restart	Bury into the soil	700-900 kg/ha
Cherry, Peach and other Drupaceae	Vegetative restart	Bury into the soil	500-800 kg/ha
Olive tree	Vegetative restart	Bury into the soil	700-800 kg/ha
Table and Wine Grapes	Vegetative restart	Bury into the soil	800-1.000 kg/ha
New tree plants	Pre-transplantation	In the hole, mixed with the soil	20-50 grams/plant
		On the soil, post-transplantation	150-300 grams/plant

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

ILSA TEC



ILSANEEM **PAG. 67**

ILSANEEM

AGROGEL® 80%
NEEM PANEL 20%

Formulation: pellet - 4,0 mm

What is it?

ILSANEEM is a pellet fertilizer produced by a reaction between **AGROGEL®**, (protein matrix with stimulating action) and Azadirachta Indica (Neem, vegetal panel) to promote healthy, vigorous, and plants development cultivated in exhausted soils. **ILSANEEM** provides "**AGROGEL®**" a protein matrix rich in polypeptides and organic carbon, totally bioavailable for soil microflora and plants. **ILSANEEM** stimulates the multiplication of useful microorganisms contrasting the proliferation of soil pathogens, as well as promotes the uptake of nutrients by plant and ensures a good rooting development. Moreover, the Neem panel has a good action as a repellent against soil insects, nematodes and fungi and it promotes healthy and regular growth of plants, especially in exhausted and poor soils (monoculture, etc.)

How to use?

ILSANEEM can be distributed in pre-sowing or pre-transplanting of vegetable crops with high-income horticultural crops and during the vegetative restart of fruit and tree crops.

Which benefits does it bring?

- Repellent action against soil insects and pathogens;
- activates the useful soil microorganisms for soil restoration;
- improves the biological fertility of exhausted soils;
- supports the vegetative-productive growth of crops.

COMPOSITION

Total Nitrogen (N)		11%
of which: organic Nitrogen (N)	11%	
Nitrogen (N) from AGROGEL®		10.3%
Nitrogen (N) from Neem oilcake		0.7%

Organic Carbon (C)	41
Organic matter	72%

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	DOSAGE
Vegetables	Sowing	Localized placement	200-500 kg/ha
Vegetables in greenhouse	Sowing	Localized placement	50-100 kg/1000 m²
Table and Wine Grape	Vegetative restart	In soil mixtures	400-500 kg/ha
Ornamental and Floral crops	At the beginning of the vegetative growth	Top dressing application/ bury into the soil	150 kg/1000 m²

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.


ILSA
TOP
ILSAMIN
CALCIO
ILSAMIN
BORO
ILSAMIN
MULTI
ILSA DRIP
Extra
ILSA DRIP
Ferro
ILSA DRIP
Forte
GELAMIN
ILSA TOP

ETIXAMIN

N 14 **100% GELAMIN®**

5 kg

20 kg

Formulation: hydrosoluble powder

What is it?

ETIXAMIN is a nutritional speciality in water-soluble powder, created by the ILSA's R&D department, to maximize the effectiveness of organic nitrogen derived from **GELAMIN®** (fluid gelatin for agricultural use) and to increase the final production and quality of the cultivated crops. **ETIXAMIN** supplies organic nitrogen and amino acids (in free form and under peptides form) with a rapid action mechanism, thanks to the presence of free amino acids which act as "carrier" of nutrients present in the final solution. Besides, free amino acids produced from the enzymatic hydrolysis process support the translocation of nutrients into the plant and stimulate the plant's resistance mechanisms to overcome abiotic stress.

How to use?

ETIXAMIN can be used by fertirrigation and by the foliar application during the vegetative development and/or during the fruits or vegetables swelling stage.

Which benefits does it bring?

- High nutritional efficiency;
- stimulates the plant's vegetative-productive development;
- increases the plants' tolerance to abiotic stress;
- enhances the treatment's efficacy.

COMPOSITION

Total Nitrogen (N)	14%	Total amino acids	90%
of which: soluble organic Nitrogen (N)	14%	pH	5.7 ± 0.5
Organic Carbon (C)	40%	Conductivity	1.60 ± 0.20 dS/m

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	DOSAGE
Actinidia, Apricot	Every 10-15 days from the early vegetative stages to formed fruits	Fertigation	10-15 kg/ha
Other horticultural crops	2-4 applications, every 8-10 days, during full vegetative development	Fertigation	10-15 kg/ha
Artichoke	Every 7-15 days during the head formation and vegetative growth	Fertigation	15-20 kg/ha
Cherry, Peach, Nectarine, Plum, Olive, Almond	Every 10-15 days from pre-flowering to veraison	Fertigation	10-15 kg/ha
Flower and Ornamental Crops	2-4 applications, every 8-10 days, during full vegetative development	Fertigation	5-10 kg/ha
Strawberry	From post-transplantation to ripening, every 12-15 days	Fertigation	15-20 kg/ha
Durum and Soft Wheat	From the stem elongation to the boot stages	Fertigation	15-20 kg/ha
Corn	2-4 applications, every 8-10 days, during full vegetative development	Fertigation	10-15 kg/ha
Fodder Crops, Melon, Cucumber	2-4 applications, every 8-10 days, during full vegetative development	Fertigation	10-15 kg/ha
Pepper, Tomato, Aubergine, Watermelon	Every 8-10 days from transplantation to the full production stage	Fertigation	10-15 kg/ha
Ornamental and Forest-Tree Nurseries	2-4 applications, every 8-10 days, starting from 10 days after transplantation	Fertigation	5-10 kg/ha
Table and Wine Grapes	Every 10-15 days from pre-flowering to veraison	Fertigation	10-20 kg/ha
Courgette	Every 12-15 days from vegetative growth to the first harvest	Fertigation	10-15 kg/ha
Seeds	Bath of untreated seeds	Soaking in a solution of water and fertilizer	0.5 (kg/t of seeds) diluted in 10 litres of water

Foliar application: 2-3 kg / ha, for 2-3 applications every 12-15 days, to increase fruit size and ripening.
*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.
For the total solubility of the product, it is recommended to add it gradually (preferably first, in case of mixtures) at a maximum concentration of 200-250 grams per liter of water and stirring the solution continuously.

ETIXAMIN BIO-K

NK 9.0.18 **BASED ON GELAMIN®**

10 kg

Formulation: hydrosoluble powder

What is it?

ETIXAMIN BIO-K is a nutritional speciality in water-soluble powder with a high percentage of potassium complexed by free amino acids obtained from the enzymatic hydrolysis process (**FCHE®**). The product is created to improve the qualitative features of fruits and vegetables. **ETIXAMIN BIO-K** supplies Potassium and Amino acids (in free form and peptides form). Amino acids rapidly convey the complexed potassium towards the fruits or vegetables, improving the formation of sugars, the biosynthesis of the precursors essential for flavour and aromas and the biosynthesis of the anthocyanins responsible for the rind colour. Moreover, the presence of a pool of free amino acids activates the plant's resistance mechanisms to abiotic stress (high temperatures during the summer season, jump in temperature, drought, etc.) and supports the fruits and vegetables ripening stage.

How to use?

ETIXAMIN BIO-K can be applied by fertigation or by the foliar application during the ripening fruits and/or vegetables or in post-harvest on fruit trees to increase the nutrients accumulation on the hibernating buds.

Which benefits does it bring?

- Enhances fruits or vegetables ripening uniformity;
- increase qualitative features (colour, sugar content, etc.);
- improves nutrients accumulations on the hibernating buds;
- increases the plants' tolerance to abiotic stress.

COMPOSITION

Total Nitrogen (N)	9%	Organic Carbon (C)	25%
of which: organic Nitrogen (N)	9%	pH	6.0 ± 0.5
Water soluble Potassium Oxide (K_2O)	18%	Conductivity	5.50 ± 0.30 dS/m
Water soluble Sulphur Trioxide (SO_3)	15.5%		

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	kg/ha
Actinidia (Kiwi), Citrus	Every 12-15 days, from swelling to fruit ripening	Fertigation	15-20
Cherry, Peach and other Stone Fruits	Every 12-15 days, from swelling to fruit ripening	Fertigation	10-15
Apple, Pear	Every 12-15 days, from swelling to fruit ripening	Fertigation	10-15
Strawberry, Melon, Courgette	From first flowering, every 10-12 days	Fertigation	10-15
Tomato, Pepper, Aubergine, Potato	From first flowering, every 10-12 days	Fertigation	15-20
Olive tree	2-3 applications, every 15-20 days, starting from the oil formation stage (end of August)	Fertigation	15-20
Flower and Ornamental Crops	Throughout the cycle, every 10-12 days	Fertigation	5-10
Table and Wine Grapes	3-4 applications every 10-15 days from formed berries	Fertigation	15-20

Foliar application: 2-3 kg / ha, for 2-3 applications every 12-15 days, to increase fruit size and ripening.
*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.
For the total solubility of the product, it is recommended to add it gradually (preferably first, in case of mixtures) at a maximum concentration of 200-250 grams per liter of water and stirring the solution continuously.

ETIXAMIN DF

N 16 **100% GELAMIN®**

What is it?

ETIXAMIN DF is a nutritional speciality in water-soluble powder, created by the ILSA's R&D department, to maximize the effectiveness of organic nitrogen derived from **GELAMIN®** (fluid gelatin for agricultural use).

ETIXAMIN DF is based on a high percentage of organic nitrogen and amino acids (in free form and peptides form) obtained from the enzymatic hydrolysis process (**FCHE®**). Amino acids act as "carries" conveying nutrients into the plant cells.

How to use?

ETIXAMIN DF can be used by fertirrigation or by the foliar application during vegetative growth and throughout swelling fruits and/or vegetables.

Whi Which benefits does it bring?

- Enhances the photosynthetic process, improving greater vegetative development;
- stimulates the fruits and vegetables swelling;
- increases the plants' tolerance to abiotic stress;
- enhances the treatment's efficacy.

10 kg

20 kg

Formulation: hydrosoluble microgranules

COMPOSITION

Total Nitrogen (N)	16%	Total amino acids	90%
of which: soluble organic Nitrogen (N)	16%	pH	5.5 ± 0.5
Organic Carbon (C)	44%	Conductivity	1.70 ± 0.20 dS/m

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	DOSAGE
Actinidia	Every 10-15 days from the early vegetative stages to formed fruits	Fertigation	10-15 kg/ha
Other vegetables	2-4 applications, every 8-10 days, during full vegetative development	Fertigation	10-15 kg/ha
Artichoke	Every 7-15 days during the head formation and growth stages	Fertigation	10-20 kg/ha
Cabbage, Lettuce and other Leafy Vegetables	2-4 applications, every 8-10 days, starting from 10 days after transplantation	Fertigation	10-15 kg/ha
Stone fruit, Pome fruit, Olive	Every 10-15 days from pre-flowering to veraison	Fertigation	10-20 kg/ha
Melon, Watermelon, Courgette, Cucumber	2-4 applications, every 8-10 days, during full vegetative development	Fertigation	10-15 kg/ha
Industrial Tomatoes	Every 8-10 days from transplantation to the full production stage	Fertigation	15-20 kg/ha
Tomato, Aubergine, Pepper	Every 8-10 days from transplantation to the full production stage	Fertigation	10-15 kg/ha
Table and Wine Grapes	Every 10-15 days from pre-flowering to veraison	Fertigation	10-15 kg/ha
Ornamental and Forest-Tree Nurseries	2-4 applications, every 8-10 days, during full vegetative development	Fertigation	5-10 kg/ha
Courgette, Cucumber	Every 12-15 days from vegetative growth to the first harvest	Fertigation	10-15 kg/ha
Seeds	Untanned seed bath	Soaking in a solution of water and fertilizer	0.5 (kg/t of seeds) diluted in 10 litres of water

Foliar application: 2-3 kg / ha, for 2-3 applications every 12-15 days, to increase fruit size and ripening.
*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.
For the total solubility of the product, it is recommended to add it gradually (preferably first, in case of mixtures) at a maximum concentration of 200-250 grams per liter of water and stirring the solution continuously.

ILSADRIP EXTRA

N 8 **100% GELAMIN®**

What is it?

ILSADRIP EXTRA is a highly standardized fluid organic nitrogen fertilizer with constant nitrogen content and high purity and homogeneity. It is obtained by enzymatic hydrolysis process and contains organic nitrogen, organic carbon and amino acids in the form of oligo-peptides with very low molecular weight.

ILSADRIP EXTRA is characterized by high nutritional efficiency due to its organic nitrogen content that is completely soluble in water and therefore readily available to plants. The amino acids have a complexing function towards other elements by increasing their mobility and limiting the risk of deficiency for plants.

20 kg

250 kg

1200 kg

Formulation: liquid

How to use?

ILSADRIP EXTRA should be applied in fertigation also in mixture with other formulations due to its special characteristics such as low salinity, sub-acid pH, high solubility and perfect miscibility. It represents a source of organic nitrogen and amino acids for all crops and can be applied throughout the crop cycle and also in post-harvest for the production of nutritional reserves.

Whi Which benefits does it bring?

- High nutritional efficiency;
- high solubility and miscibility with other fertilizers;
- increases availability of nitrogen and other mixed elements;
- increases yield and vegetative health.

COMPOSITION

Total Nitrogen (N)		8%
of which: Organic Nitrogen (N)	8%	
Organic Carbon (C)		22%
Total Amino acids		>50%

pH	5,5 ± 0,5
Density	1,22 ± 0,02 kg/dm^3
Conductivity	0,85 ± 0,20 dS/m

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	kg/ha
Kiwi, Citrus, Stone fruits, Pome fruits	Every 10-15 days from the early vegetative stages to formed fruits	Fertigation	20-25
Tomato, Pepper, Melon, Courgette, Strawberry	Every 8-10 days from transplant to the full production stage	Fertigation	15-30
Lettuce, Spinach and other Leafy vegetables	Every 6-8 days from the first real leaves	Fertigation	15-20
Artichoke, Fennel and other Vegetables	Every 12-15 days from vegetative growth to the first harvest	Fertigation	15-20
Olive tree	Every 10-15 days from pre-flowering to veraison	Fertigation	20-30
Cereals, Legumes and Industrial crops	Every 10-20 days as required	Fertigation	5-15
Table and Wine grape	Every 10-15 days from the early vegetative stages to formed fruits	Fertigation	20-30
Flower and Ornamental crops	Throughout the cycle, every 10-12 days	Fertigation	10-20
Mango tree, Avocado, Banana and other Tropical crops	Every 10-15 days from the early vegetative stages to formed fruits	Fertigation	10-15

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

GELAMIN

ORGANIC FARMING ILSA

FERTIGATION

ILSADRIP FERRO

N+Fe 4(5) **45% GELAMIN®**

What is it?

ILSADRIP FERRO is a nutritional speciality based on Iron complexed by free amino acids derived from an enzymatic hydrolysis process (**FCHE®**). The product prevents and resolves the leaf yellowing induced by an iron deficiency. Free Amino acids act as a "carrier" favouring the assimilation and translocation of iron within the plant. Crops treated with **ILSADRIP FERRO** are greener, vigorous, and more productive thanks to the presence of Iron complexed which catalyses the formation of chlorophyll, activates the photosynthesis process and stimulates carbohydrate biosynthesis.

20 kg

250 kg

1200 kg

Formulation: liquid

How to use?

ILSADRIP FERRO can be used by fertigation during the vegetative-productive development of fruit, tree, and vegetable crops.

Which benefits does it bring?

- Fast assimilation and rapid plant greening;
- prevents and resolves leaf yellowing;
- iron is more stable and is not subjected to degradation;
- increases the plant's tolerance to abiotic stress.

COMPOSITION

Total Nitrogen (N)	4%	Total amino acids	>25%
of which: soluble organic Nitrogen (N)	4%	pH	4.0 ± 0.5
Soluble Iron (Fe)	5%	Density	1.26 ± 0.02 kg/dm^3
Organic Carbon (C)	15%	Conductivity	1.70 ± 0.20 dS/m

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	kg/ha
Actinidia (kiwi)	2-4 applications, every 8-10 days, during full vegetative development	Fertigation	15-30
Citrus fruits	3-4 applications, every 10-15 days, starting from pre-flowering	Fertigation	20-40
Asparagus, Carrot and Parsnip, Tomato, Watermelon	Every 8-10 days from transplant to the full production stage	Fertigation	15-35
Artichoke	Every 7-15 days during the head formation and growth stages	Fertigation	20-40
Flower and Ornamental Crops	Every 5-10 days from transplanting to full vegetative development	Fertigation	15-50
Stone Fruit	Every 10-15 days from pre-flowering to veraison	Fertigation	15-30
Fennel	Every 10-15 days after transplanting or after emergence and during full vegetative development	Fertigation	15-40
Strawberry	Every 7-12 days from post-transplant to swelling	Fertigation	20-30
Melon	Every 7-12 days from post-transplant to swelling	Fertigation	15-30
Olive tree	3-4 applications, every 10-15 days, starting from pre-flowering	Fertigation	20-40
Pepper	Every 8-10 days from transplant to the full production stage	Fertigation	15-35
Pome fruit	Every 10-15 days from pre-flowering to veraison	Fertigation	15-30
Celery	Every 8-10 days from transplant to the full production stage	Fertigation	15-40
Table and Wine Grapes	2-4 applications, every 8-10 days, during full vegetative development	Fertigation	15-30
Ornamental and Forest-Tree Nurseries	2-4 applications, every 8-10 days, starting from 10 days after transplanting	Fertigation	15-20

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

ILSADRIP FORTE

N 9 **100% GELAMIN®**

What is it?

ILSADRIP FORTE is a nutritional speciality in a liquid formulation rich in organic nitrogen, free amino acids and peptides. Technically the product is positioned by fertigation to stimulate rooting and vegetative development. **ILSADRIP FORTE** supplies "**GELAMIN®**", a protein matrix rich in organic nitrogen and free amino acids essential for plant metabolism. The fertilizer stimulates root development, photosynthesis process and plant resistance to abiotic stress. Besides, the presence of organic nitrogen increases the vegetative growth and the development of new shoots. In the end, the "complexing and carrier" action of amino acids improves the absorption and translocation of nutrients into the plant.

20 kg

250 kg

1200 kg

Formulation: liquid

How to use?

ILSADRIP FORTE is indicated for tree, fruit and vegetable crops by fertigation in post-transplantation and/or during the whole crop cycle (also in association with commodities).

Whi Which benefits does it bring?

- High nutritional efficiency;
- fast assimilation and rapid vegetative development (root and foliar);
- allows a reduction in the dosages of mineral fertilizers;
- increases the plants' tolerance to abiotic stress.

COMPOSITION

Total Nitrogen (N)	9%
of which: soluble organic Nitrogen (N)	9%
Organic Carbon (C)	24.5%
Total amino acids	>50%

pH	5.5 ± 0.5
Density	1.22 ± 0.02 kg/dm^3
Conductivity	0.85 ± 0.20 dS/m

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	kg/ha
Actinidia, Citrus, Stone Fruits, Pome Fruits	Every 10-15 days from pre-flowering to veraison	Fertigation	10-20
Other Vegetables	Every 6-8 days from the first real leaves	Fertigation	10-30
Cauliflower, Cabbages, Lettuce and other Leafy Vegetables	Every 6-8 days from the first real leaves	Fertigation	10-15
Cereals	From the stem elongation to the boot stages	Fertigation	5-10
Ornamental and Floral Crops	2-4 applications, every 8-10 days, during full vegetative development	Fertigation	10-20
Strawberry	Every 7-12 days from post-transplantation to swelling	Fertigation	10-20
Melon, Cucumber	2-3 applications, every 8-10 days, during the early stages	Fertigation	20-30
Olive tree	2-4 applications, every 8-10 days, during full vegetative development	Fertigation	20-30
Industrial Tomato	2-4 applications, every 8-10 days, during full vegetative development	Fertigation	10-30
Table and Wine Grapes	Every 10-15 days from pre-flowering to veraison	Fertigation	10-30
Ornamental and Forest Nurseries	2-4 applications, every 8-10 days, starting from 10 days after trans-plantation	Fertigation	10-20
Courgette	Every 12-15 days from vegetative growth to the first harvest	Fertigation	20-30
Asparagus, Watermelon, Carrot, Pepper, Eggplant, Tomato	Ogni 8-10 giorni dal trapianto alla fase di piena produzione	Fertigation	10-30
Vegetable	Pre-trapianto bagno delle piantine	Immersion	10 l/100 l water

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

ILSAMIN BIO-K

NK 5,5.0.2,5

What is it?

ILSAMIN BIO-K is a nutritional speciality in a liquid formulation rich in organic nitrogen, amino acids, and potassium. The fertilizer is positioned by fertigation to stimulate vegetative growth.

ILSAMIN BIO-K provides organic nitrogen, amino acids, potassium, and polysaccharides essential for vegetative development and, for soil fertility, as well as the organic molecules, increase the plant tolerance against abiotic stress.

How to use?

ILSAMIN BIO-K is indicated by fertigation on the tree, fruit, and vegetable crops at the first vegetative growth and during the whole crop cycle. Using the product after fruit harvest enhances the nutrients accumulation into the sinks (buds, roots, stem, etc.).

Which benefits does it bring?

- High nutritional efficiency;
- stimulates the plant's vegetative-productive development even the abiotic stress;
- increases the plants' tolerance to abiotic stress;
- enhances soil fertility and nutrients availability.

20 kg

250 kg

1200 kg

Formulation: liquid

COMPOSITION

Total Nitrogen (N)	5.5%
of which: organic Nitrogen (N)	5.5%
Water soluble Potassium Oxide (K_2O)	2.5%
Organic Carbon (C)	21%

Total amino acids	> 28%
pH	6.5 ± 0.5
Density	1.25 ± 0.02 kg/dm^3
Conductivity	2.00 ± 0.20 dS/m

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	kg/ha
Actinidia (Kiwi), Citrus	Every 10-15 days from pre-flowering to veraison	Fertigation	30-35
Stone and Pome fruits	Every 10-15 days from pre-flowering to veraison	Fertigation	20-30
Strawberry, Melon, Courgette	From post-transplantation to ripening, every 12-15 days	Fertigation	25-30
Tomato, Pepper, Aubergine, Potato	From first flowering, every 10-12 days	Fertigation	25-30
Cauliflower, Turnip and other Cabbages	From post-transplantation to ripening, every 12-15 days	Fertigation	20-25
Garlic, Onion, Carrot	During bulb/rhizome swelling, every 15 days	Fertigation	20-25
Lettuce, Spinach and other Leafy Vegetables	After transplantation, throughout the cycle, every 10 days	Fertigation	20-25
Olive tree	From post-flowering to the start of veraison, every 20 days	Fertigation	25-30
Table and Wine Grapes	Every 10-15 days from pre-flowering to veraison	Fertigation	25-30
Flower and Ornamental Crops	Throughout the cycle, every 10-12 days	Fertigation	500 g/100 l water

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

ILSAMIN BORO

N+B 4(5) **45% GELAMIN®**

What is it?

ILSAMIN BORO is a nutritional speciality in a liquid formulation based on Boron complexed by free amino acids to promote the flowering and fruit set process and to prevent physiopathies due to boron deficiency.

ILSAMIN BORO contains Boron complexed by amino acids (in free form and oligopeptides) obtained by an enzymatic hydrolysis process (**FCEH®**). Free amino acids act as a "carrier" favouring the assimilation and translocation of Boron within the plant.

How to use?

ILSAMIN BORO is indicated by foliar applications for fruits, trees, vegetables in pre-flowering, during the flowering stage and to prevent physiopathies due to Boron deficiency.

Whi Which benefits does it bring?

- High foliar absorption and assimilation;
- favours the pollen tube development;
- prevents the comparison of physiopathies due to Boron deficiency;
- increases the plant's tolerance to abiotic stress.

1 kg
5 kg
20 kg

Formulation: liquid

COMPOSITION

Organic Nitrogen (N)	4%	Total amino acids	>25%
of which: soluble organic Nitrogen (N)	4%	pH	8.5 ± 0.5
Water soluble Boron (B)	5%	Density	1.26 ± 0.02 kg/dm^3
Organic Carbon (C)	15%	Conductivity	1.35 ± 0.20 dS/m

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	kg/ha
Watermelon, Aubergine, Cauliflower	2-4 applications, every 8-10 days, during full vegetative development	Foliar	1-1.5
Stone and Pome fruits	Pre-, mid- and post-flowering	Foliar	2-3
Strawberry	Every 10-15 days from pre-flowering to veraison	Foliar	1-1.5
Olive tree	Pre- and mid-flowering and two interventions during the oil formation stage	Foliar	2-2.5
Tomato	From first flowering, every 10-12 days	Foliar	1-1.5
Wine Grapes	Every 8 days from pre-flowering to shaped berries	Foliar	2-2.5
Courgette	2-3 applications, every 8-10 days, during the early stages	Foliar	1-1.5

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

ILSAMIN CALCIO

N+CaO 5(8) **62% GELAMIN®**

What is it?

ILSAMIN CALCIO is a nutritional speciality in a liquid formulation based on Calcium complexed by amino acids to favour the thickening of tissues underway formation and to prevent physiopathies due to calcium deficiency. **ILSAMIN CALCIO** contains Calcium complexed by free amino acids derived from an enzymatic hydrolysis process (**FCEH®**). The chemical formulation allows to enhance the thickening of the cell wall, and consequently to increase the firmness and shelf life of fruits and/or vegetables.

How to use?

ILSAMIN CALCIO is indicated by foliar applications for fruits, trees and vegetables in post-fruit setting, during fruit swelling and to prevent physiopathies due to calcium deficiency.

Which benefits does it bring?

- High foliar absorption and assimilation;
- increases the firmness and shelf life of fruits and/or vegetables;
- prevents the comparison of physiopathies due to Calcium deficiency;
- increases the plant's tolerance to abiotic stress.

1 kg

5 kg

Formulation: liquid

COMPOSITION

Organic Nitrogen (N)	5%	Total amino acids	>30%
of which: soluble organic Nitrogen (N)	5%	pH	6.0 ± 0.5
Water soluble Calcium Oxide (CaO)	8%	Density	1.28 ± 0.02 kg/dm^3
Organic Carbon (C)	15%	Conductivity	4.00 ± 0.20 dS/m

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	kg/ha
Cherry	Every 10-15 days from post-setting to veraison	Foliar	2.5-4
Watermelon	2-4 applications, every 8-10 days, during full vegetative development	Foliar	1.5-2.5
Strawberry	Every 10-15 days from pre-flowering to veraison	Foliar	2.5-3
Aubergine	2-4 applications, every 8-10 days, during full vegetative development	Foliar	1.5-2.5
Apple	3-4 applications, every 10-15 days, starting from walnut-sized fruit	Foliar	2.5-5
Melon	2-4 applications, every 8-10 days, during full vegetative development	Foliar	1.5-2.5
Nectarine	3-4 interventions every 10-15 days from formed fruits to ripening	Foliar	2.5-4
Olive tree	3-4 interventions every 10-15 days from formed fruits to ripening	Foliar	2.5-5
Pear	3-4 applications, every 10-15 days, starting from walnut-sized fruit	Foliar	2.5-5
Peach	3-4 applications, every 10-15 days, starting from walnut-sized fruit	Foliar	2.5-4
Tomato	From fruit-setting to ripening every 7-10 days	Foliar	2-3
Industrial Tomatoes	From fruit-setting to ripening every 7-10 days	Foliar	2-3
Plum	3-4 interventions every 10-15 days from formed fruits to ripening	Foliar	2.5-4
Wine Grapes	3-4 interventions every 10-15 days from formed berries	Foliar	2.5-5
Courgette	2-3 applications, every 8-10 days, during the early stages	Foliar	1.5-2.5

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

ILSAMIN MMZ

N+MgO 4(2) **45% GELAMIN®**

What is it?

ILSAMIN MMZ is a nutritional speciality in a liquid formulation based on Magnesium, Manganese and Zinc complexed by free amino acids derived from an enzymatic hydrolysis process (**FCEH®**). The product promotes photosynthesis process, vegetative development, as well as prevents the comparison of physiopathies induced by multiple deficiencies.

How to use?

ILSAMIN MMZ is indicated by foliar applications for fruits, trees, and vegetables during the vegetative-productive development and to prevent physiopathies due to multiple deficiencies.

Whi Which benefits does it bring?

- High foliar absorption and assimilation;
- fast greening effect on plants;
- prevents the comparison of physiopathies due to multiple deficiencies;
- increases the plant's tolerance to abiotic stress.

1 kg
5 kg
20 kg

Formulation: liquid

COMPOSITION

Organic Nitrogen (N)	4%
of which: soluble organic Nitrogen (N)	4%
Water soluble Magnesium Oxide (MgO)	2%
Water soluble Manganese (Mn)	0.2%
EDTA chelated Manganese (Mn)	0.2%

Water soluble Zinc (Zn)	1%
EDTA chelated Zinc (Zn)	1%
Organic Carbon (C)	15%
pH	6.5 ± 0.5
Density	1.22 ± 0.02 kg/dm^3
Conductivity	1.80 ± 0.20 dS/m

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	kg/ha
Citrus	Every 10-20 days as required	Foliar	2-4
Artichoke	Every 7-15 days during the head formation and growth stages	Foliar	2-2.5
Cauliflower, Pepper, Industrial Tomato	Every 10-20 days as required	Foliar	2-4
Cherry and other Stone Fruits	Every 10-20 days as required	Foliar	2-4
Watermelon, eggplant	2-4 applications, every 8-10 days, during full vegetative development	Foliar	2-4
Olive tree	Every 12-15 days, from swelling to fruit ripening	Foliar	3-5
Small Fruits	Every 10-20 days as required	Foliar	2-4
Pome Fruits	Every 10-20 days as required	Foliar	2-4
Rice	From the stem elongation to the boot stages	Foliar	3-5
Table and Wine Grape	2-4 applications, every 10-15 days, starting when the shoots are 10-15 cm	Foliar	2-4

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

ILSAMIN MULTI

N 6 **70% GELAMIN®**

What is it?

ILSAMIN MULTI is a nutritional speciality in a liquid formulation based on microelements such as Iron, Zinc, Boron and Manganese complexed by free amino acids derived from an enzymatic hydrolysis process (**FCEH®**). The fertilizer prevents the comparison of chlorosis due to multiple deficiencies on microelements. **ILSAMIN MULTI** acts as a catalyst for various physiological processes (photosynthesis, flowering, respiration, pigment biosynthesis, etc.) and as a product suitable to prevent nutritional physiopathies induced by multiple deficiencies.

How to use?

ILSAMIN MULTI is indicated by foliar applications for fruit, tree, and vegetable crops during the vegetative-productive development stage.

Which benefits does it bring?

- High foliar absorption and assimilation.
- favours a more intense colour of the leaf apparatus;
- prevents the comparison of physiopathies due to multiple deficiencies;
- increases the plant's tolerance to abiotic stress.

1 kg

5 kg

Formulation: liquid

COMPOSITION

Total Nitrogen (N)	6%	Water soluble Manganese (Mn)	0.3%
of which: organic Nitrogen (N)	6%	EDTA chelated Manganese (Mn)	0.3%
Organic Carbon (C)	16.5%	Water soluble Boron (B)	0.3%
Water soluble Zinc (Zn)	0.3%	pH	7.0 ± 0.5
EDTA chelated Zinc (Zn)	0.3%	Density	1.23 ± 0.02 kg/dm^3
Water soluble Iron (Fe)	0.6%	Conductivity	1.40 ± 0.20 dS/m
DPTA chelated iron (Fe)	0.6%		

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	kg/ha
Citrus	2-4 applications, every 10-15 days, starting from vegetative growth	Foliar	1.5-2
Sugar beet, Rapeseed	2-4 applications, every 10-15 days, starting from vegetative growth	Fertigation	10-20
Flower and Ornamental Crops	Starting from the early development stages, every 15 days	Fertigation	10-20
Stone Fruit	2-4 applications, every 10-15 days, starting from vegetative growth	Foliar	1.5-2
Melon	Starting from the early development stages, every 15 days	Fertigation	10-20
	Starting from the early development stages, every 15 days	Foliar	1.5-2
Leafy Vegetables	Starting from the early development stages, every 15 days	Fertigation	10-20
	Starting from the early development stages, every 15 days	Foliar	1.5-2
Pome fruit	2-4 applications, every 10-15 days, starting from vegetative growth	Foliar	1.5-2
Tomato	Starting from the early development stages, every 15 days	Fertigation	10-20
	Starting from the early development stages, every 15 days	Foliar	1.5-2
Table and Wine Grapes	2-4 applications, every 10-15 days, starting from vegetative growth	Foliar	1.5-2
Courgette	Starting from the early development stages, every 15 days	Fertigation	10-20
	Starting from the early development stages, every 15 days	Foliar	1.5-2

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

GELAMIN

ILSAMIN S

$N+SO_3$ 4(50) BASED ON GELAMIN®

1 kg

Formulation: liquid

What is it?

ILSAMIN S is a nutritional speciality in a liquid formulation based on Sulphur complexed by amino acids obtained from an enzymatic hydrolysis process (**FCEH®**), to stimulate vegetative growth obtaining plants more vigorous and to increase the qualitative characteristics of the final yield.

ILSAMIN S promotes the biosynthesis of proteins by forming sulphur amino acids such as Cysteine and Methionine, as well as enhances the qualitative characteristics of fruits and vegetables (flavour, aroma, oil contents, etc.).

How to use?

ILSAMIN S is indicated by foliar applications for fruit, tree, vegetable, and cereal crops, during vegetative development and the fruits or vegetables ripening.

Whi Which benefits does it bring?

- Supplies high content of Sulphur in a way bioavailable for plants;
- prevents the comparison of physiopathies due to Sulphur deficiency;
- enhances the qualitative characteristics of fruits and vegetables;
- increases the plant's tolerance to abiotic stress.

COMPOSITION

Total Nitrogen (N)	4%	Total Aminoacids	25%
of which: Organic Nitrogen (N)	4%	pH	5.5 ± 0.5
Sulfur Trioxide (SO_3)	50%	Density	1.28 ± 0.02 kg/dm^3
Organic Carbon (C)	15%	Conductivity	0.43 ± 0.20 dS/m

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	DOSAGE
Garlic, Onion	3-4 interventions during bulb enlargement	Foliar	3-4 kg/ha
Cauliflower, Turnip and other brassicacee	From first flowering, every 10-12 days	Foliar	3-4 kg/ha
Cereals and Industrial crops	2-4 applications, every 8-10 days, during full vegetative development	Foliar	4-5 kg/ha
Ornamental and Floral Crops	Throughout the cycle, every 10-12 days	Foliar	300-400 gr/100 l water
Cherry tree, Apricot tree, Peach tree, Nectarine, Plum tree	2-4 applications, every 10-15 days, starting from vegetative growth	Foliar	3-3.5 kg/ha
Olive tree	2-4 applications, every 10-15 days, starting from vegetative growth 2-3 applications, every 15-20 days, starting from the oil formation stage (end of August)	Foliar	2.5-3 kg/ha
Lettuce and other Leafy Vegetables	2-4 applications, every 8-10 days, starting from 10 days after transplantation	Foliar	3-4 kg/ha
Apple tree, Pear tree, Actinidia, Citrus	2-4 applications, every 10-15 days, starting from vegetative growth	Foliar	3-3.5 kg/ha
Tomato, Pepper, Aubergine, Courgette, Melon	3-4 applications, every 10-15 days, starting from pre-flowering 2-3 applications, every 7-8 days, from the fruit swelling stage	Foliar	3-4 kg/ha
Table and Wine Grape	2-4 applications, every 10-15 days, starting from vegetative growth	Foliar	3-3.5 kg/ha

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

ILSAVEGA

N 5 VEGETAL ORIGIN

5 kg
20 kg
250 kg
1200 kg

Formulation: liquid

What is it?

ILSAVEGA is an organic fertilizer in a liquid formulation produced from precious vegetal matrices, indicated to stimulate the plant's vegetative growth even in abiotic and physiological stresses.

ILSAVEGA contains organic molecules with a stimulating action because they enhance and stimulate the formation and development of new plant tissues (leaves and fruits), contrasting abiotic and physiological stresses

How to use?

ILSAVEGA is suggested regularly for drip irrigation during the whole crop cycle for fruit, tree and vegetable crops allowing to increase the final yield in term of quantitative and qualitative aspects.

Which benefits does it bring?

- Stimulates the development of new plant tissues;
- increases the plant's tolerance to abiotic stress;
- raises the final yield and quality for the crops cultivated;
- actives the soil bacterial flora.

COMPOSITION

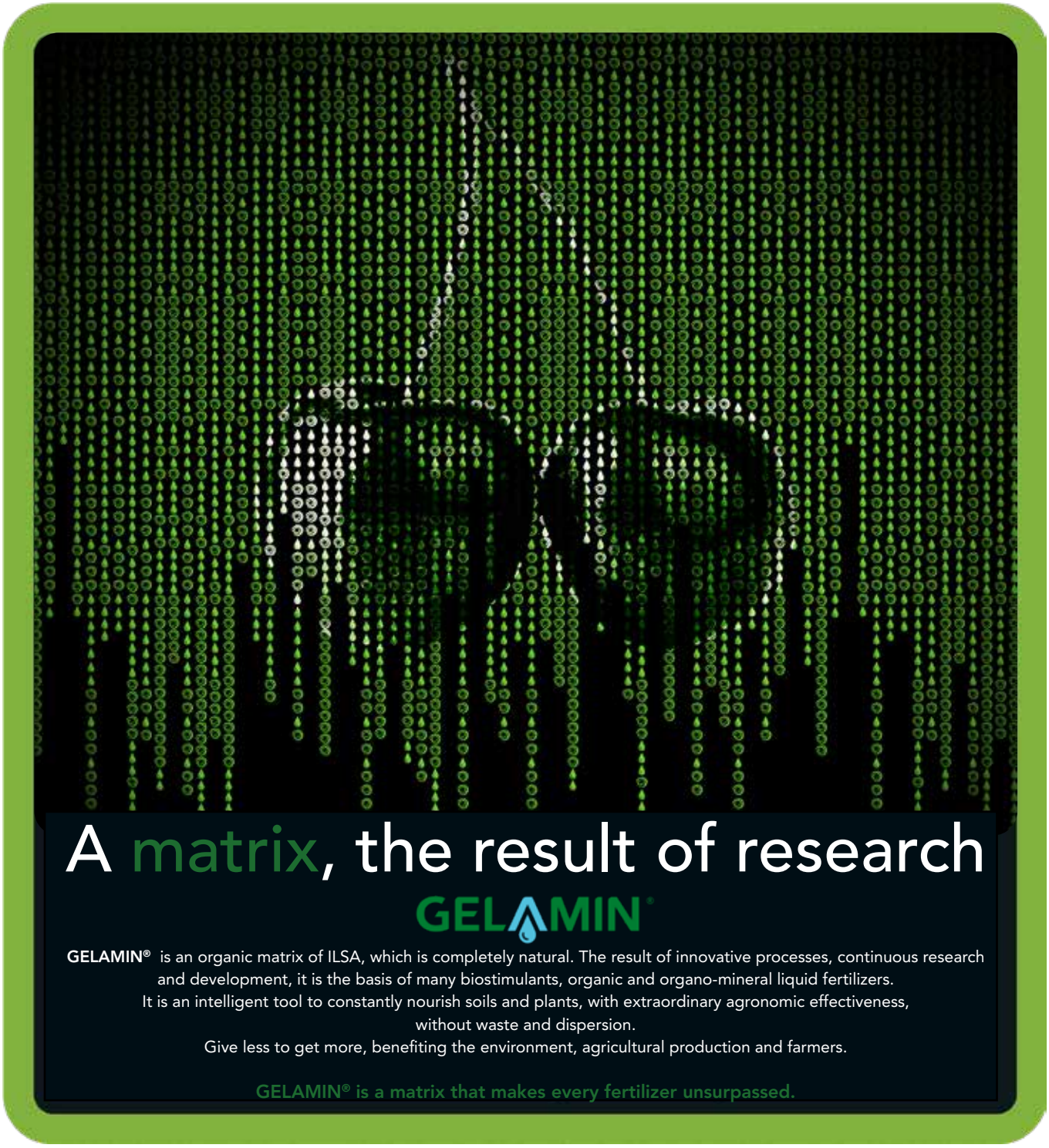
Organic Nitrogen (N)	5%	pH	8.7 ± 0.5
of which: Organic Nitrogen (N)	5%	Density	1.18 ± 0.02 kg/dm^3
Organic Carbon (C)	22%	Conductivity	0.90 ± 0.20 dS/m
Organic matter with nominal molecular weight <50 kDa	>30%		

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	kg/ha
Actinidia, Citrus	Every 10-15 days from pre-flowering to veraison	Fertigation	15-30
Other Vegetables	Every 8-10 days from transplant to the full production stage	Fertigation	20-40
Ornamental and Floral Crops	2-4 applications, every 8-10 days, during full vegetative development	Fertigation	20-40
Stone fruits, Pome fruits	Every 10-15 days from the early vegetative stages to formed fruits	Fertigation	15-30
Strawberry	Every 7-12 days from post-transplantation to fruit swelling	Fertigation	20-40
Lettuce, Chicory, Spinach and other Leafy Vegetables	Vegetative growth	Fertigation	10-30
Melon, Watermelon	2-3 applications, every 8-10 days, during the early stages	Fertigation	15-30
Tomato	2-4 applications, every 8-10 days, during full vegetative development	Fertigation	20-40
Table and Wine Grapes	Every 10-15 days from pre-flowering to veraison	Fertigation	15-30
Ornamental and Forest Nurseries	2-4 applications, every 8-10 days, starting from 10 days after trans-plantation	Fertigation	20-30

Foliar application: 2-3 kg / ha, for 2-3 applications, to increase both vegetative development both fruit enlargement.

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.



A matrix, the result of research

GELAMIN®

GELAMIN® is an organic matrix of ILSA, which is completely natural. The result of innovative processes, continuous research and development, it is the basis of many biostimulants, organic and organo-mineral liquid fertilizers.
It is an intelligent tool to constantly nourish soils and plants, with extraordinary agronomic effectiveness, without waste and dispersion.
Give less to get more, benefiting the environment, agricultural production and farmers.

GELAMIN® is a matrix that makes every fertilizer unsurpassed.

ILSA AGRO

This product has been made with the contribution of:

- California State Polytechnic University, Pomona
- Washington State University, Research and Extension Unit
- Alma Mater Studiorum - University of Bologna - Department of Agro-Environmental Sciences and Technologies

PROFESSIONAL N **PAG. 85**

PROFESSIONAL N

N 12 100% AGROGEL®

25 kg

Formulation: microgranules

What is it?

PROFESSIONAL N is a fertilizer in microgranular formulation with a high content of organic nitrogen (from protein origin) and organic carbon, specially positioned for professional and urban green areas and for home gardening.

PROFESSIONAL N provides "**AGROGEL®**" a protein matrix rich in Polypeptides and organic carbon, in a way bioavailable for soil microflora and plants.

PROFESSIONAL N stimulates the soil microorganism proliferation, promotes the absorption of nutrients present in the rhizosphere and supports vegetative development during the whole crop cycle. Thanks to the modulated release of the nutrients contained in "**AGROGEL®**" favours a regular and constant plant vegetative development even in pedoclimatic conditions unfavourable and in abiotic stress (high summer temperatures, salinity, drought, etc.).

How to use?

PROFESSIONAL N is suitable for all plants cultivated for ornamental, gardening and urban environments (lawns, turfs, vegetable gardening, urban gardens, etc.) in post-sowing / transplanting and during vegetative growth.

Which benefits does it bring?

- A high content of organic nitrogen with slow-release action;
- easy distribution and reduction in the number of applications;
- zero losses due to leaching or volatilisation;
- stimulates and supports the plant's vegetative-productive growth.

COMPOSITION

Total Nitrogen (N)	12%	Extractable organic Carbon (C) / Total organic Carbon	95%
of which: water soluble Nitrogen (N)	5%	pH	4.5
Organic Carbon (C)	40%		

DIRECTIONS FOR USE*

		jan	feb	mar	apr	may	jun	jul	aug	sep	oct	nov	dec
New orchards	kg/100 mq		3-4			3-4			4-5			6-7	
Playing Fields	kg/100 mq		5-6			6			7			10	
Lawns	kg/100 mq			5-6							8-9		
Professional Turf	kg/100 mq		3-4			3-4			4-5			6-7	
Ornamental and Forest nurseries	kg/100 mq		3-4			3-4			4-5			6-7	

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

ILSA COM

SFEROSOL®

What is it?

SFEROSOL® is a product in a lenticular formulation based on a high content of sulphur, particularly positioned to correct alkaline and sodium soils to improve the productivity of the crops.

SFEROSOL® is a corrective product based on micronized sulphur in a lenticular form. When the product is in contact with soil moisture is going to disintegrate and to releases the sulphur, in this way the soil pH is reduced. Moreover, the product removes the sodium from soil particles and stimulates the biosynthesis of sulphur amino acids and aromatic compounds, essential for the qualitative characteristics of cultivated crops (vegetables, cereals, etc.).

How to use?

SFEROSOL® is a suitable product for all crops cultivated in agriculture and it can be distributed on the occasion of soil preparation/tillage.

Which benefits does it bring?

- A high content of micronized sulphur;
- easy distribution and zero losses through the dust;
- reduces the soil pH and removes sodium from the soil;
- enhances the biosynthesis of proteins and aromatic compounds.

Formulation: lenticular

COMPOSITION

Total Sulphur (S)	87.0%

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	kg/ha
Actinidia	Soil preparation	Bury into the soil	200-500
Carrot and Pastinaca	Soil preparation	Bury into the soil	150
Cereals	Soil preparation	Bury into the soil	100-150
Stone Fruits	Soil preparation	Bury into the soil	150-300
Forage Crops	Soil preparation	Bury into the soil	100-150
Potato	Soil preparation	Bury into the soil	200-500
Pepper, Tomato, Industrial Tomato	Soil preparation	Bury into the soil	200-500
Pome Fruits	Soil preparation	Bury into the soil	150-300
Table and Wine Grape	Soil preparation	Bury into the soil	200-300
Other Vegetables	Soil preparation	Bury into the soil	150-300

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

SILIFORCE

What is it?

SILIFORCE is a fluid product based on microelements such as Molybdenum, Silicon, and Zinc. Silicon is in ortho-silicic acid form, which makes the product bioavailable and able to act effectively on the plant metabolism.

How to use?

SILIFORCE must be applied by foliar applications at low dosages. During the preparation of the solution water must be acidified because, with a pH higher than 6.5, ortho-silicic acid loses its effectiveness. When the product is applied during vegetative stages it improves the translocation of nutritional elements within the plant, allowing a strengthening of the plant tissues and stimulating fruit setting. Instead, when the product is applied during fruit swelling it increases the quality of the fruit, in terms of dry matter, size, firmness and resistance to abiotic adversities.

Which benefits does it bring?

- Enhances translocation of nutritional elements within the plant;
- increases the strengthening of vegetative tissues (leaf and fruit);
- improves the organoleptic characteristics of the fruits;
- raises the firmness and shelf life.

1 lt

Formulation: liquid

COMPOSITION

Water soluble Molybdenum (Mo)	0.2%
Water soluble Zinc (Zn)	1.8%

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	cc/ha
Actinidia	Every 10-15 days from pre-flowering to veraison	Foliar	250-300
Apricot tree, Cherry tree, Peach tree	After fruit-setting every 15 days	Foliar	250-300
Onion	2-3 applications, every 7-10 days, during the most critical stages	Foliar	250-300
String Bean	2-4 applications, every 8-10 days, during full vegetative development	Foliar	250-300
Strawberry	Every 10-15 days from pre-flowering to the entire harvest period	Foliar	250-300
Durum and Common Wheat	From the stem elongation to the boot stages	Foliar	500
Eggplant, Tomato	Every 8-10 days from transplantation to the full production stage	Foliar	250-300
Apple and Pear trees	After fruit-setting every 15 days	Foliar	250-300
Melon, Pepper	From first flowering, every 10-12 days	Foliar	250-300
Potato, Garlic, Industrial Tomato	2-4 applications, every 8-10 days, during full vegetative development	Foliar	250-300
Rice	Alone or in combination with herbicides	Foliar	500
Table and Wine Grape	Every 10-15 days from pre-flowering to veraison	Foliar	250-300
Courgette, Cucumber	2-3 applications, every 8-10 days, during the early stages	Foliar	250-300

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

ILSA FERT

ORGANO-MINERAL FERTILISERS WITH LOW ENVIRONMENTAL IMPACT

It is a complete line of organo-mineral fertilisers characterised by the presence of organic nitrogen of protein origin with modulated release and other mineral raw materials that are not allowed in organic farming.
All the fertilisers of the Ilsafert line are the result of Ilsa research and are obtained by reacting the different mineral components with the organic matrix, AGROGEL®, deriving from the exclusive Ilsa industrial process called FCH®.
In particular, all formulations are characterised by their very high agronomic efficiency and their high slow-release nitrogen content.

ILSA AGRO

PROFESSIONAL ORGANIC AND ORGANO-MINERAL FERTILISERS FOR TURFGRASS NUTRITION AND CARE

Public and private turfgrass areas in urban environments are receiving increasing attention because of their importance in improving the quality of life.
Turfgrass is the main component of urban greenery and its care requires specific and environmentally friendly fertilisers, such as those of the IlsaAgro line.
They are suitable for all types of turfgrasses, whether they are of high aesthetic quality or intensively used sports fields.

ILSA COM

QUALITY PRODUCTS MARKETED BY ILSA

Carefully selected to complete the range offered by ILSA to its customers.

ILSA TEC

PRODUCTS WITH A SPECIFIC ACTION FOR THE MOST ADVANCED AGRICULTURE

The IlsaTec line includes products with very different characteristics and purposes, highly technological and suited to meet the specific needs of the plant.
Products to nourish, and products capable of stimulating the metabolism of plants and preventing or treating stress, such as the products contained in the BIOSTIMULATION CATALOGUE.
What they have in common is the fact that each one is a specific and unique product.

ILSA TOP

LIQUID AND WATER-SOLUBLE FERTILISERS FOR FERTIGATION AND FOLIAR APPLICATION

It is a complete line of products to be applied by foliar and/or root application in order to promote the healthy and abundant growth of all crops.
The exclusive Ilsa industrial process called FCEH® guarantees the high quality standard and stability of the products over time. In particular, low molecular weight products are suitable for foliar applications and are characterised both by the high availability of laevorotatory amino acids and by their ease of penetration into the leaves. Higher molecular weight products are characterised by their purity, their ability to meet the nutritional needs of the crop at different stages of vegetative development and, above all, their ability to help overcome stressful situations.


ILSA
FERT
AZOSLOW NP
CONCIME ORGANO-MINERALE NP 12-20
con coformulante da idrolisi enzimatica
AZOSLOW N33
CONCIME ORGANO MINERALE AZOTATO
ILSAFERT
START 9-11
SPECIALIST KS
MICRO
CONCIME ORGANO MINERALE NPK

AZOKA NK

NK 6.0.18 BASED ON AGROGEL®

What is it?

AZOKA NK is a pellet organo-mineral fertilizer characterised by a high content of organic nitrogen and potassium. The fertilizer is obtained making **AGROGEL®** and potassium chloride react. The use of **AZOKA NK** allows obtaining high yield in term of quantity and quality, improving the soil fertility as well.

How to use?

AZOKA NK is characterized by slow-release of nutrients and it is appropriated for cereals, industrial and extensive crops that require a high quantity of Potassium, as well as for crops grown in bunded fields that are continuously flooded.
AZOKA NK technically can be applied for both in pre-sowing and in covering stage to fertilise rice, maize and other extensive crops. Besides, it can also be used in winter or at the vegetative restart of tree crops with high demand for nitrogen and potassium.

Which benefits does it bring?

- Favours a balanced vegetative-productive development of crops;
- guarantees a constant release of Nitrogen and Potassium during the whole crop cycle;
- raises and ensures a high quality of the final yield;
- appropriated for spring cereals such as rice and corn.

25 kg

500 kg

Formulation: pellet - 4,0 mm

COMPOSITION

Total Nitrogen (N)	6%	Organic Carbon (C)	20%
of which: organic Nitrogen (N)	6%	Organic matter	34%
Water soluble Potassium Oxide (K_2O)	18%	pH	7,6
Total Magnesium Oxide (MgO)	3%	Salinity	3.9 dS/m

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	kg/ha
Corn and other Cereals	Pre-sowing or broadcasting	Top dressing or bury into the soil	400-700
Rice	Pre-sowing or broadcasting	Top dressing or bury into the soil	400-700
Tree crops	Vegetative growth and / or post-harvest	Top dressing or bury into the soil	400-700
Tobacco	Pre-sowing or broadcasting	Top dressing or bury into the soil	400-600

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

AZOSLOW

N 29 — 50% AGROGEL®

What is it?

AZOSLOW is a pellet organo-mineral nitrogen fertilizer characterised by a slow-release in the soil. The fertilizer is obtained by reacting at controlled temperatures **AGROGEL®** with urea.

AZOSLOW is characterised by a high nitrogen content, which is complexed by **AGROGEL®** allowing the preservation of Nitrogen (organic and urea nitrogen) and the release of it gradually into the soil without leaching and/or volatilisation phenomena.

How to use?

AZOSLOW is particularly suitable for cereals and all extensive crops, for pre-sowing and/or covering applications. It can be used in the early vegetative stage of vegetable crops or during swelling fruits to enhance and increase the size of the fruits.

Which benefits does it bring?

- In one application it satisfies the crop nitrogen needs;
- it releases gradually nitrogen based on the crops' need;
- no losses by leaching and/or volatilisation;
- it stimulates the soil microfauna and enhances soil fertility.

25 kg

500 kg

Formulation: pellet - 4.0 mm

COMPOSITION

Total Nitrogen (N)	29%	Organic Carbon (C)	18%
of which: organic Nitrogen (N)	5%	Organic matter	31%
ureic Nitrogen (N)	24%		

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	kg/ha
Actinidia	After fruit setting	Top dressing	250-500
Citrus	After fruit setting	Top dressing	250-500
Beetroot, Hemp	Sowing or transplantation	Top dressing	200-500
Other Industrial Crops	Sowing	Top dressing	200-500
Stone Fruits	After fruit setting	Top dressing	250-500
Durum Wheat	Tillering-stem elongation	Top dressing	200-300
Common Wheat, Rice	Tillering-stem elongation	Top dressing	300-400
Corn	Hoeing	Top dressing	300-500
Apple and Pear trees	After fruit setting	Top dressing	250-500
Olive trees	After fruit setting	Top dressing	250-500
Vegetables	First vegetative phases	Top dressing	150-300
Table and Wine Grape	After fruit setting	Top dressing	250-500

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

AGROGEL

AZOSLOW N33

N 33 BASED ON AGROGEL®

25 kg

500 kg

Formulation: pellet - 4.0 mm

What is it?

AZOSLOW 33 is a pellet organo-mineral fertilizer based on high nitrogen content, from organic and urea source. The presence of **AGROGEL®** into the product guarantees a gradual release of nitrogen characterised by a high efficiency for crops.

AZOSLOW 33 in one application satisfies all crop needs in nitrogen due to the presence of organic nitrogen and urea nitrogen in the fertilizer. This characteristic confers to **AZOSLOW 33** a high nutritional efficacy in the short and long term, without nitrogen losses due to leaching and/or volatilisation.

How to use?

The use of **AZOSLOW N33** is recommended in pre-sowing and/or in coverage for wheat, corn, barley and other cereals and extensive crops as well.

AZOSLOW N33 is also suitable for pre-sowing/transplanting for vegetables cultivated in open fields and greenhouses and post-flowering for tree crops.

Which benefits does it bring?

- Rich in nitrogen characterised by a slow-release action;
- supports the vegetative-productive development of the plant;
- stimulates the proliferation of soil bacteria;
- satisfies all crops' need in nitrogen.

COMPOSITION

Total Nitrogen (N)	33%	Organic Carbon (C)	18%
of which: organic Nitrogen (N)	6%	Organic Matter	31%
ureic Nitrogen (N)	27%		

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	DOSAGE
Durum and Soft Wheat, Rice, Oat, Spelt, Barley	Pre-sowing or tillering	Top dressing or bury into the soil	200-300 kg/ha
Corn, Soy, Sunflower, Tobacco	Pre-sowing or tillering	Top dressing or bury into the soil	300-400 kg/ha
Fodder crops	Pre-sowing or after first mowing	Top dressing or bury into the soil	200-250 kg/ha
Stone fruit, Pome fruit, Citrus fruits, Actinidia, Olive trees	Vegetative growth or post-flowering	Top dressing or bury into the soil	250-300 kg/ha
Table and Wine Grapes	Vegetative growth or post-flowering	Top dressing or bury into the soil	250-300 kg/ha
Tomato, Potato, Melon and other Vegetables in the open field	Pre-sowing or Pre-transplantation	Bury into the soil	300-400 kg/ha
Vegetables in greenhouses	Pre-sowing or Pre-transplantation	Bury into the soil	30-40 kg/1000m²

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

AZOSLOW NP

NP 12.20 BASED ON AGROGEL®

What is it?

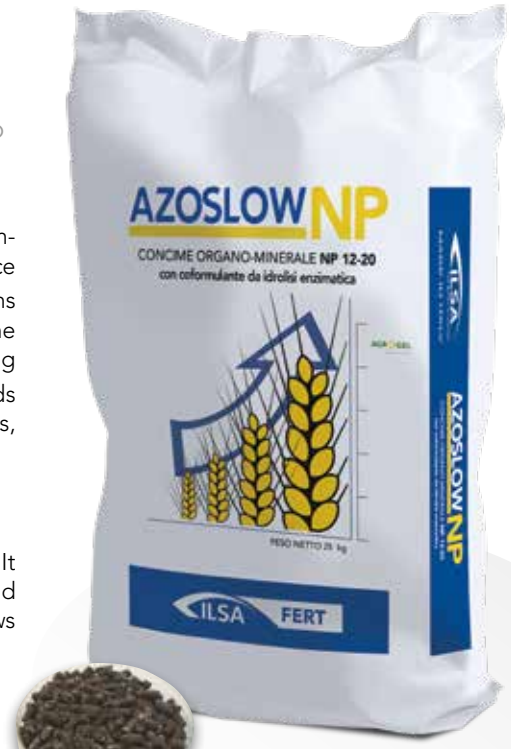
AZOSLOW NP is a pellet organo-mineral fertilizer, based on high-quality of Nitrogen, Phosphorus, and organic Carbon due to the presence of **AGROGEL®**. **AZOSLOW NP** contains three different forms of Nitrogen (organic, urea and ammonia), this characteristic allows the availability of Nitrogen to the plants in the short, medium, and long term. Furthermore, the complexing action of **AGROGEL®** towards phosphorus allows a rapid availability of this element for the plants, limiting an eventual retrogradation.

How to use?

AZOSLOW NP is suitable for cereals, vegetables, and fruits. It increases the final yield per hectare, as well as stimulates the root and vegetative development at the first plants' stage. On fruit trees, it allows an optimal flowering and fruit setting stage.

Which benefits does it bring?

- Contains Nitrogen and Phosphorus both are available in the short, medium, and long term;
- stimulates rooting and vegetative development at the beginning of the crop cycle;
- optimizes flowering and fruit setting stage;
- increases the final yields.



25 kg

500 kg

Formulation: pellet - 4.0 mm

COMPOSITION

Total Nitrogen (N)	12%	Total Phosphorus Pentoxide (P_2O_5)	20%
of which: organic Nitrogen (N)	4%	Organic Carbon (C)	15%
ammoniacal Nitrogen (N)	4%		
ureic Nitrogen (N)	4%		

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	DOSAGE
Stone Fruits	Vegetative restart	Bury into the soil	400-500 kg/ha
Green Fodder	Pre-sowing	Bury into the soil	400-500 kg/ha
Durum and Common Wheat	Pre-sowing	Bury into the soil	300-400 kg/ha
Sunflower, Tobacco	Pre-sowing	Bury into the soil	400-500 kg/ha
Corn	Pre-sowing	Bury into the soil	400-500 kg/ha
Vegetables	Pre-sowing or pre-transplantation	Bury into the soil	400-500 kg/ha
Greenhouse Vegetables	Pre-sowing or pre-transplantation	Bury into the soil	50-70 kg/1000 m²
Pome Fruits	Vegetative restart	Bury into the soil	400-500 kg/ha
Table and Wine Grape	Vegetative restart	Bury into the soil	400-500 kg/ha
Oat, Spelt, Barley, Rye, Grain Sorghum	Pre-sowing	Bury into the soil	250-350 kg/ha

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

AZOTIL S

N 25+SO_3 BASED ON AGROGEL®

What is it?

AZOTIL S is a pellet organo-mineral fertilizer, containing **AGROGEL®** rich in organic Nitrogen with slow-release action on the soil. Furthermore, the product contains Sulphur and Organic Carbon.
Thanks to the presence of the two forms of Nitrogen (organic and urea), **AZOTIL S** guarantees both a prompt effect and a gradual release of Nitrogen and other nutrients to the plants, in this way vegetative growth is stimulated and final yield is increased.
Besides, the presence of sulphur creates a microenvironment suitable for the absorption of nutrients present in the rhizosphere and stimulates the formation of sulphur amino acids, improving the quality of the final yield (vegetables, fruits, etc.).

How to use?

AZOTIL S is suitable for cereal and industrial crops in pre-sowing or tillering. Instead, for vegetable crops, the use of the fertilizer is appropriated at the beginning of the vegetative stage and for the tree crops at vegetative restart or in the post-flowering stage.

Which benefits does it bring?

- Nitrogen and Sulphur with slow-release action on the soil;
- enhances the acidification of the rhizosphere and improves soil fertility;
- favours the biosynthesis of proteins;
- stimulates the biosynthesis of sulfur compounds.

COMPOSITION

Total Nitrogen (N)	25%
of which: organic Nitrogen (N	6%
ureic Nitrogen (N)	19%
Soluble Sulphur Trioxide (SO_3)	20%

Organic Carbon (C)	17%
Organic Matter	29%
pH	7.0
Salinity	1.5 dS/m

AGROGEL

DIRECTIONS FOR USE**

CROP	TIMING	METHOD	DOSAGE
Durum and Soft Wheat, Rice, Oat, Spelt, Barley	Pre-sowing or tillering	Top dressing or bury into the soil	250-400 kg/ha
Corn, Soy, Sunflower, Tobacco	Pre-sowing or tillering	Top dressing or bury into the soil	300-500 kg/ha
Fodder crops	Pre-sowing or after first mowing	Top dressing or bury into the soil	200-250 kg/ha
Stone fruit, Pome fruit, Citrus fruits, Actinidia, Olive trees	Vegetative growth or post-flowering	Top dressing or bury into the soil	250-400 kg/ha
Table and Wine Grapes	Vegetative growth or post-flowering	Top dressing or bury into the soil	250-400 kg/ha
Tomato, Potato, Melon and other Vegetables in the open field	Pre-sowing or Pre-transplantation	Bury into the soil	300-400 kg/ha
Vegetables in greenhouses	Pre-sowing or Pre-transplantation	Bury into the soil	30-40 kg/1000m²

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

ELENNE MICRO OLIVO

NPK 11.5.5+B+SO_3 BASED ON AGROGEL®

What is it?

ELENNE MICRO OLIVO is a pellet NPK organo-mineral fertilizer, based on **AGROGEL®** . The fertilizer is rich in organic and ammoniacal nitrogen, phosphorus, and potassium in an optimal ratio, sulphur, boron, and organic carbon suitable for applications during the vegetative stage.

ELENNE MICRO OLIVO is characterized by high agronomic efficiency and by an absence of losses by leaching and/or volatilisation. Indeed, the complexation carried out by peptides to mineral elements such as sulphate and potassium guarantees a gradual release of all nutrients to the soil and plants.

ELENNE MICRO OLIVO nourishes the crops according to their natural needs and absorption, it enhances soil fertility and supplies sulphur and microelements to plant to satisfy the crops' needs.

25 kg

500 kg

Formulation: pellet - 4.5 mm

How to use?

ELENNE MICRO OLIVO is particularly suitable for spring applications on olive trees, grapevines and fruit crops, as well as for vegetables (star crops), nursery and ornamental plants as well.

Which benefits does it bring?

- Slow-release of nutrients according to the plants' needs;
- nourishes crops according to their natural absorption curves;
- supplies macro and microelements to satisfy most crops' needs;
- no leaching, no volatilisati.

AGROGEL

L.C.C. LOW CHLORINE CONTENT

COMPOSITION

Total Nitrogen (N)	11%	Water soluble Potassium oxide (K_2O)	5%
of which: Organic Nitrogen (N)	4%	Calcium Oxide (CaO)	10%
Ammoniacal Nitrogen (N)	7%	Magnesium Oxide (MgO)	3%
Total Phosphorus Pentoxide (P_2O_5) soluble in mineral acids	5%	Water soluble Sulfur trioxide (SO_3)	25%
Total Phosphorus Pentoxide (P_2O_5) soluble in neutral ammonium citrate and water	3%	Boron (B)	0.1%
Total Phosphorus Pentoxide (P_2O_5) soluble in mineral acids - minimum 55% in 2% of formic acid	2%	Organic Carbon (C)	12%

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	kg/ha
Citrus	Vegetative restart	Top dressing or bury into the soil	800-1000
Stone Fruits	Vegetative restart	Top dressing or bury into the soil	500-800
Strawberry	Pre-sowing or pre-transplantation	Top dressing or bury into the soil	500-1000
Melon, Tomato	Pre-sowing or pre-transplantation	Top dressing or bury into the soil	600-800
Olive tree	Vegetative restart	Top dressing or bury into the soil	500-700
Vegetables	Pre-sowing or pre-transplantation	Top dressing or bury into the soil	500-700
Potato	Pre-sowing or pre-transplantation	Top dressing or bury into the soil	800-1000

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

ILSAFERT START

NP 9-11 BASED ON AGROGEL®

What is it?

ILSAFERT START is a pellet organo-mineral fertilizer, based on **AGROGEL®** and rich in Nitrogen, Phosphorus, Calcium and Organic Carbon.

ILSAFERT START contains nitrogen in ammoniacal and organic form and phosphorus water-soluble, allowing efficient nutrition for plants in both the short and medium-long term. The presence of **AGROGEL®** into the fertilizer guarantees a gradual release of nitrogen and complexes and preserves phosphorus from retrogradation phenomena.

How to use?

ILSAFERT START is suitable for pre-sowing or pre-transplantation of cereals and vegetables, and during the spring season for fruit crops. The presence of calcium in the fertilizer makes it suitable for the basic fertilization of calcium-loving crops, such as rice, potato, tomato, strawberry, apple tree, vine, cherry, etc.

Which benefits does it bring?

- Balanced nutrition in Nitrogen, Phosphorus and Calcium;
- high and constant availability of Phosphorus for all crops cultivated;
- optimal start effect for cereal and vegetable crops;
- suitable for new orchards and/or for trees' vegetative restart.

25 kg

500 kg

Formulation: pellet - 4,0 mm

COMPOSITION

Total Nitrogen (N)	9%
of which: organic Nitrogen (N)	4.5%
ammonium Nitrogen (N)	4.5%
Total Phosphorus Pentoxide (P_2O_5)	11%
Calcium Oxide (CaO)	10%

Organic Carbon (C)	28%
Organic matter	48%
pH	7.7
Salinity	2.9 dS/m

AGROGEL

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	DOSAGE
Wheat, Corn, Rice and other Cereals	Pre-sowing	Bury into the soil	300-500 kg/ha
Industrial and Fodder Crops	Pre-sowing	Bury into the soil	300-600 kg/ha
Tomato, Potato, Melon and other Vegetables in the open field	Pre-sowing or Pre-transplantation	Bury into the soil	600-900 kg/ha
Vegetables in greenhouses	Pre-sowing or Pre-transplantation	Bury into the soil	60-80 kg/1000 m²
Apple, Pear, Actinidia	Vegetative growth	Top dressing or bury into the soil	600-800 kg/ha
Olive tree	Vegetative growth	Top dressing or bury into the soil	500-800 kg/ha
Table and Wine Grapes	Vegetative growth	Top dressing or bury into the soil	500-800 kg/ha
New orchards	Pre-planting	In the hole, mixed with soil	20-50 grammi/pianta
		On the soil, after transplantation	150-300 grammi/pianta

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

SPECIALIST KS MICRO

NPK 8.5.14 BASED ON 20% AGROGEL®

What is it?

SPECIALIST KS MICRO is an NPK organo-mineral fertilizer in granular form. It is obtained by acid reaction and based on **AGROGEL®**. The fertilizer has a balanced ratio of Nitrogen, Phosphorus, Potassium, Organic Carbon and Microelements.

SPECIALIST KS MICRO is characterised by a high agronomic efficiency because it nourishes crops according to their natural needs. All nutrients are gradually released to the soil and plants improving vegetative growth, enhancing soil fertility, and obtaining plants vigorous with dark green colour.

How to use?

SPECIALIST KS MICRO is particularly suitable for spring applications on olive trees, grapevines and fruit crops, as well as for vegetables (star crops), nursery and ornamental plants as well.

Which benefits does it bring?

- Gradual release of nutrients;
- high agronomic efficiency even in adverse pedoclimatic conditions;
- nourishes crops according to their natural needs;
- enhances the quality of fruits and vegetables.

Formulation: granular

25 kg

500 kg

COMPOSITION

Total Nitrogen (N)	8%
of which: organic Nitrogen (N)	2%
ammonium Nitrogen (N)	5%
ureic Nitrogen (N)	1%
Total Phosphorus Pentoxide (P_2O_5)	5%
Water soluble Potassium Oxide (K_2O)	14%
Total Magnesium Oxide (MgO)	2%

Water soluble Sulphur Trioxide (SO_3)	25%
Soluble Boron (B)	0.01%
Soluble Iron (Fe)	0.5%
Soluble Zinc (Zn)	0.01%
Organic Carbon (C)	7.5%

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	kg/ha
Actinidia	Vegetative restart	Top dressing or bury into the soil	500-700
Vegetables in open field	Pre-sowing or pre-transplantation	Top dressing or bury into the soil	600-800
Stone Fruits, Pome Fruits	Vegetative restart	Top dressing or bury into the soil	500-800
Tangerine	Post-harvest	Top dressing or bury into the soil	800-1000
Potato	Pre-sowing or pre-transplantation	Top dressing or bury into the soil	600-800
Table Grape	Vegetative restart	Top dressing or bury into the soil	800-1000
Wine Grape	Vegetative restart	Top dressing or bury into the soil	500-800
Forage Crops	Vegetative restart	Top dressing or bury into the soil	400-600

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

AGROGEL

L.C.C. LOW CHLORINE CONTENT

TEKNIFERT MICRO

NPK 11.6.9 BASED ON 20% AGROGEL®

What is it?

TEKNIFERT MICRO is an NPK organo-mineral fertilizer in granular form. It is obtained by acid reaction and based on **AGROGEL®**. The fertilizer supplies plants with Nitrogen (both organic and mineral nitrogen), Phosphorus, Potassium, Organic Carbon, Sulphur and Boron. Mineral elements and Potassium from sulphate are complexed by **AGROGEL®** that allows **TEKNIFERT MICRO** to release gradually and in an efficient way all elements to the soil and plants.

TEKNIFERT MICRO improves soil fertility, provides sulphur and Boron and stimulates the fruit setting stage as well.

How to use?

TEKNIFERT MICRO is suitable for pre-sowing or pre-transplantation of cereals and vegetables, and during the spring season for fruit crops. The presence of calcium in the fertilizer makes it suitable for the basic fertilization of calcium-loving crops, such as rice, potato, tomato, strawberry, apple tree, vine, cherry, etc.

Which benefits does it bring?

- Perfect ratio between macroelements, Sulphur and Boron;
- increases the percentage of fruit setting;
- constant release and availability of nutrients to the soil and plants;
- it is suitable for heavy soils.

25 kg

500 kg

Formulation: granular

COMPOSITION

Total Nitrogen (N)	11%	Water soluble Potassium Oxide (K_2O)	9%
of which: organic Nitrogen (N)	2%	Water soluble Sulphur Trioxide (SO_3)	25%
ammonium Nitrogen (N)	7%	Soluble Boron (B)	0.01%
ureic Nitrogen (N)	2%	Organic Carbon (C)	7.5%
Total Phosphorus Pentoxide (P_2O_5)	6%	Organic matter	13%

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	kg/ha
Citrus	Vegetative restart	Top dressing or bury into the soil	800-1000
Vegetables in open field	Pre-sowing or pre-transplantation	Top dressing or bury into the soil	600-800
Stone Fruits, Pome Fruits	Vegetative restart	Top dressing or bury into the soil	600-800
Strawberry	Soil preparation	Top dressing or bury into the soil	500-800
Olive tree	Autumn or vegetative restart	Top dressing or bury into the soil	600-1000
Potato	Pre-sowing or pre-transplantation	Top dressing or bury into the soil	800-1000

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

AGROGEL

L.C.C. LOW CHLORINE CONTENT

A matrix, the result of research

AGROGEL.

AGROGEL® is an organic matrix of ILSA, which is completely natural. The result of innovative processes, continuous research and experimentation, it is the basis for a great number of organic fertilizers and solid mineral organics.
It is an intelligent tool to constantly nourish soils and plants, with extraordinary agronomic effectiveness, without waste and dispersion. Give less to get more, benefiting the environment, agricultural production and farmers.

AGROGEL® is a matrix that makes every fertilizer unsurpassed.

ILSA

ILSA TEC

ILSA H+ PAG. 106

ALL THE PRODUCTS IN THE **BIOSTIMULATION CATALOG** BELONG TO THE ILSATEC LINE.

ILSAORGAMIT-R
ILSAFITOCELL
ILSAC-ON
ILSASTIM+
ILSAMIN N90
SPLINTER NEW
ILSAPOLICOS
ILSAFORMA
ILSAGIRMA
ILSARODDER
ILSASTIMSET
ILSAGRADER
ILSAKOLORADO
ILSAVIVIDA
ILSASHAPE
ILSAVEGETUS
ILSADURADA
ILSALEVA
ILSANOBREAK
ILSAINTEGER
ILSATERMIKO
ILSADEEPDOWN

REFER TO THE **BIOSTIMULATION CATALOG** IN ORDER TO HAVE ALL TECHNICAL INFORMATION, THE COMPOSITIONS AND THE DIRECTIONS FOR USE FOR ALL BIOSTIMULANTS.

ILSA H+

NP FERTILIZER SOLUTION 3.17 WITH ACIDIFYING ACTION

1 kg

Formulation: liquid red colour

What is it?

ILSAC H+ is a nutritional product with acidifying, surfactant and stabilizing action containing a colour change indicator that colours the water depending on the pH reached: yellow for values greater than 6.0; orange for values 6.0-5.5 and red for values lower than 5.5.

ILSAC H+ determines a lowering of the surface tension, ensuring greater wettability, absorption and translocation of the substances and/or active ingredients within the plant' vegetative organs.

How to use?

The use of **ILSAC H+** during the solution preparation of foliar treatments allows acidifying the final solution to reach values 4.5-5.5 pH, in this way alkaline hydrolysis is avoided.

Furthermore, **ILSAC H+** stabilizes the active ingredients and nutrients present in the solution favouring their solubilization and effectiveness as well. The product can be used with the main fertilizers, pesticides and plant growth regulators available on the market.

Which benefits does it bring?

- Acidifying action;
- easy to use thanks to the colour change indicator;
- favours the best absorption of the nutrients by leaf apparatus;
- usable with the main formulations present on the market.

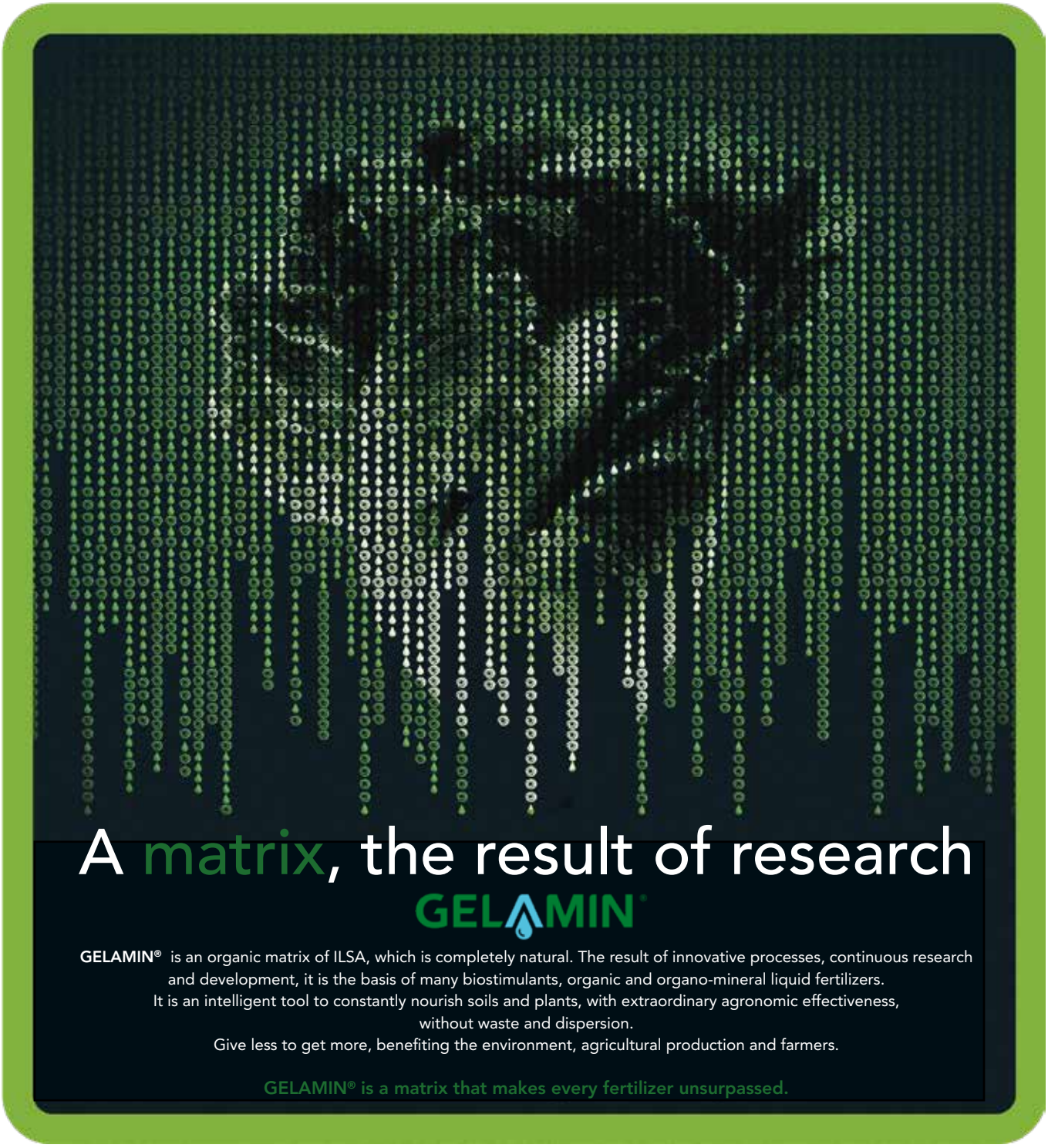
COMPOSITION

Total Nitrogen (N)	3%
of which: Ureic Nitrogen (N)	3%
Water soluble Phosphorus Pentoxide (P_2O_5)	17%

pH	1.75±0.5
Density	1.17 ±0.02 kg/dm^3
Conductivity	4.20 ± 0.20 dS/m

METHOD OF USE

Fill roughly 2/3 of the atomizer volume with water and, while constantly stirring, add an **ILSA H+** dosage of 40-60 (m/hl) and check the water colour: yellow for pH values ≥ 6.0 ; orange for pH values 6.0-5.5; red for pH values ≤ 5.5. We recommend you continue adding **ILSA H+** until the solution highlights the first shades of red. At this point, add the products to be used in the mixture along with the rest of the water.



A matrix, the result of research

GELAMIN®

GELAMIN® is an organic matrix of ILSA, which is completely natural. The result of innovative processes, continuous research and development, it is the basis of many biostimulants, organic and organo-mineral liquid fertilizers.
It is an intelligent tool to constantly nourish soils and plants, with extraordinary agronomic effectiveness, without waste and dispersion.
Give less to get more, benefiting the environment, agricultural production and farmers.

GELAMIN® is a matrix that makes every fertilizer unsurpassed.

ILSA

ILSA TOP


CLASS Fe
G-FORM
CONCIME FOGLIARE A BASE DI FERRO
ILSA TOP
ILSACROP
CONCIME ORGANO MINERALE AZOTATO
FLUIDO IN SOSPENSIONE
GEL4MIN
ILSA TOP
ILSACTIVE
START
CONCIME FLUIDO NP
GEL4MIN
ILSA TOP

CEREALMAX

N 20 **23% GELAMIN®**

What is it?

CEREALMAX is a fluid nitrogen fertilizer technically positioned for foliar applications on cereals. The product is based on a high percentage of nitrogen equal to 20%, partly organic and partly urea. The fertilizer is obtained by reacting **GELAMIN®** with technical urea.
CEREALMAX by foliar applications supplies a high nitrogen content. Urea nitrogen is complexed by **GELAMIN®**, a protein organic matrix rich in amino acids and peptides. This benefit allows for high absorption and high nutritional efficiency.

How to use?

CEREALMAX can be distributed during foliar treatments, in association with chemical products, to improve the "stay-green", to increase the quality of wheat (protein content, specific weight, etc.), as well as to avoid the "whiteness" happening. The fertilizer allows a prompt vegetative recovery after pesticide treatments and, therefore, it raises the final production and enhances the quality as well.
The high stability of the formulation allows the product to be mixed with any formulation (s). for this reason, the fertilizer can be used during weeding or other pesticide treatments.

20 kg

250 kg

1200 kg

Formulation: liquid

Whi Which benefits does it bring?

- Increases the protein content and the specific weight;
- reduces and limit whiteness appearance;
- can be mixed with all the main phytosanitary products;
- guarantees the maximum crops' yield.

COMPOSITION

Total Nitrogen (N)	20%	Total amino acids	>12.5%
of which: organic Nitrogen (N)	2%	pH	5.7 ± 0.5
ureic Nitrogen (N)	18%	Density	1.16 ± 0.02 kg/dm^3
Organic Carbon (C)	6%	Conductivity	0.23 ± 0.05 dS/m

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	kg/ha
Durum wheat	At stem elongation with the herbicide or fungicide. At booting/earing with fungicides	Foliar	5-10
Common wheat	At stem elongation with the herbicide or fungicide. At booting/earing with fungicides	Foliar	5-10
Corn	In the post-emergence weeding	Foliar	10-15
Rice	At stem elongation with herbicides and at panicle emergence with fungicides	Foliar	10-15

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

CLASS Fe G-FORM

N+Fe 2 (5,5) **23% GELAMIN®**

What is it?

CLASS Fe G-FORM is a liquid fertilizer based on **GELAMIN®** and technically is positioned for foliar applications. The fertilizer is based on organic Nitrogen and Iron appropriated for the prevention and treatment of iron chlorosis.

CLASS Fe G-FORM has high nutritional efficiency because Iron is complexed by **GELAMIN®** (rich in amino acids and peptides) obtained from an enzymatic hydrolysis process, which facilitate the leaf uptake and translocation of nutrients into the plant tissues.

1 kg

Formulation: liquid

How to use?

CLASS Fe G-FORM can be distributed by foliar applications on vegetable and tree crops, and can be used alone or mixed with other formulations or products, beforehand or at the appearance of the first symptoms of iron chlorosis.
The fertilizer improves the development of new green tissues, enhances the photosynthetic process, in this way yield and quality of the fruits or vegetables are increased.

Which benefits does it bring?

- Prevents and treats iron chlorosis;
- increases photosynthetic process and efficiency;
- stimulates vegetative development;
- no risks for the environment.

COMPOSITION

Total Nitrogen (N)	2%
of which: soluble organic Nitrogen (N)	2%
Iron (Fe) complexed	5.5%
Organic Carbon (C)	6%

Total amino acids	>12.5%
pH	5.5 ± 0.5
Density	1.28 ± 0.02 kg/dm^3
Conductivity	2.00 ± 0.30 dS/m

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	DOSAGE
Actinidia	2-4 applications, every 8-10 days, during full vegetative development	Foliar	2 kg/ha
Citrus	Every 10-15 days from pre-flowering to veraison	Foliar	3-4 kg/ha
Other Stone Fruits	2-4 applications, every 8-10 days, during full vegetative development	Foliar	2 kg/ha
Ornamental and Floral Crops	2-4 applications, every 8-10 days, during full vegetative development	Foliar	0.5-1 kg/1000 m^2
Strawberry	Every 10-15 days from pre-flowering to veraison	Foliar	2.5 kg/ha
Apple tree	2-4 applications, every 8-10 days, during full vegetative development	Foliar	2-3 kg/ha
Blueberry, Raspberry and other small fruits	2-4 applications, every 8-10 days, during full vegetative development	Foliar	2 kg/ha
Peach tree	Every 10-15 days from pre-flowering to veraison	Foliar	2-3 kg/ha
Lawns	Start of vegetative growth	Foliar	1 kg/1000 m^2
Table and Wine Grapes	2-4 applications, every 8-10 days, during full vegetative development	Foliar	2-3 kg/ha
Ornamental and Forest Nurseries	2-4 applications, every 8-10 days, starting from 10 days after transplantation	Foliar	0.5-1 kg/1000 m^2

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

GELAMIN

ILSA

ILSACROP

N 20 **23% GELAMIN®**

What is it?

ILSACROP is a fluid organo-mineral fertilizer based on high nitrogen content. The fertilizer can be used for foliar applications and/or for fertigation. It is a fertilizer based on technical urea complexed with **GELAMIN®**.
The high nitrogen content and the presence of amino acids and peptides allows **ILSACROP** to be suitable for plant vegetative development, particularly sprouting of new shoots and increasing the final yield due to the high absorption efficiency.

20 kg

250 kg

1200 kg

Formulation: liquid

How to use?

ILSACROP is the ideal nitrogen supplement for cereals, vegetables and fruit trees. It allows a more rapid plant recovery in the post-transplanting stage, and for fruit trees, in post-harvest it favours the formation of reserve substances into vegetative organs. **ILSACROP** can be mixed without limitations with the main pesticide and nutritional products.

Whi Which benefits does it bring?

- Supplies a high amount of organic and urea nitrogen;
- stimulates the vegetative development of new shoots;
- allows a fast recovery in the post-transplanting stage;
- no phytotoxicity on the vegetative apparatus.

COMPOSITION

Total Nitrogen (N)	20%
of which: organic Nitrogen (N)	2%
ureic Nitrogen (N)	18%
Organic Carbon (C)	6%

Total amino acids	>12.5%
pH	6.0 ± 0.5
Density	1.16 ± 0.02 kg/dm^3
Conductivity	0.21 ± 0.02 dS/m

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	kg/ha
Actinidia	From the stages of vegetative growth to the full development of the fruits	Foliar	5-10
Citrus	3-4 applications, every 15-20 days, from pre-flowering to fruit development	Foliar	5-10
Stone Fruits	From the stages of vegetative growth to the full development of the fruits		5-10
Durum and Common Wheat	From the stem elongation to the booting stages	Foliar	5-10
Lettuce	After transplantation	Fertigation	5-10
Corn	Alone or in combination with herbicides	Foliar	5-10
Melon o Popone	After transplantation	Fertigation	5-10
Olive tree	From vegetative growth to pre-flowering	Foliar	5-10
Potato	2-4 applications, every 8-10 days, during full vegetative development	Fertigation	5-10
Tomato	From the stages of vegetative growth to the full development of the fruits	Foliar	5-10
Pome Fruits	2-4 applications, every 8-10 days, during full vegetative development	Fertigation	5-10
Rice	Alone or in combination with herbicides	Foliar	5-10

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

GELAMIN

FOLIAR FERTILIZER

ILSA

ILSACTIVE FINALE

NK 5.0.15 **BASED ON GELAMIN®**

What is it?

ILSACTIVE FINALE is a fluid NK organo-mineral fertilizer, positioned for fertigation. The fertilizer is based on potassium thiosulfate complexed by **GELAMIN®**, technically is suitable for the fruit ripening stage, furthermore, the presence of amino acids and peptides allows both a high absorption of nutrients and activates the plant endogenous mechanisms to contrast abiotic stress.

How to use?

ILSACTIVE FINALE can be used by fertigation on grapevines, olive trees, fruits and orchards, and vegetable crops (fruit, leaf and bulb). It improves the quality of production, in terms of aromas, taste and flavours.

Which benefits does it bring?

- High uptake and translocation of potassium and sulphur;
- limit the transpiration of fruit during the ripening stage;
- increases the qualitative characteristics of the fruits;
- improves the organoleptic characteristics and fruits colour.

20 kg

1200 kg

Formulation: liquid

COMPOSITION

Total Nitrogen (N)	5%	Organic Carbon (C)	3%
of which: soluble organic Nitrogen (N)	1%	Total amino acids	>6%
ureic Nitrogen (N)	4%	pH	7.5 ± 0.5
Water soluble Potassium Oxide (K_2O)	15%	Density	1.35 ± 0.05 kg/dm^3
Water soluble Sulphur Trioxide (SO_3)	25%	Conductivity	5.00 ± 0.20 dS/m

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	kg/ha
Citrus	Every 10-15 days from veraison to ripening	Fertigation	20-30
Apricot tree, Cherry tree, nectarine, Plum tree, Apple tree, Pear tree	Every 10-15 days from veraison to ripening	Fertigation	15-20
Asparagus	Every 8-12 days from transplantation to the full production stage	Fertigation	15-20
Artichoke	Every 7-15 days during the entire harvest period	Fertigation	20-25
Cauliflower	2-4 applications, every 8-10 days, during full vegetative development	Fertigation	15-20
Floral and Ornamental Crops	Every 5-10 days from transplantation to full vegetative development	Fertigation	15-20
Strawberry	Every 10-15 days from pre-flowering to veraison	Fertigation	20-25
Melon o Popone, Watermelon	2-4 applications, every 8-10 days, during full vegetative development Every 7-15 days during the entire harvest period	Fertigation	20-25
Peach tree	3-4 applications, every 10-15 days, starting from walnut-sized fruit	Fertigation	15-20
Industrial Tomato, Eggplant	Every 7-15 days during the entire harvest period	Fertigation	20-25
Celery	2-3 applications, every 8-10 days, during the early stages	Fertigation	15-20
Table and Wine Grape, Olive tree	Every 10-15 days from veraison to ripening	Fertigation	15-20
Ornamental and Forest Nurseries	Every 7-12 days during the finishing stage	Fertigation	15-20

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

ILSACTIVE START

NP 5.15 BASED ON 14% GELAMIN®

What is it?

ILSACTIVE START is a fluid organo-mineral NP fertilizer, positioned for fertigation. The product is based on phosphorus in a quick-acting form (water-soluble) and a slow-release form (polyphosphate), both of the two forms are complexed with **GELAMIN®**.

How to use?

ILSACTIVE START can be used at the beginning of vegetative growth to increase the development of new shoots, to stimulates the formation of new vegetative tissues, including roots and rootlets.

ILSACTIVE START is indicated for vegetables in the post-transplanting stage, for grapevines, olive trees and fruit trees at the vegetative restart until fruits setting. The product contains protein nitrogen and phosphorus in a balanced percentage that allows to use it during the maximum plants' needs.

Whi Which benefits does it bring?

- Stimulates germination and root development;
- allows a constant availability of phosphorus;
- supports vegetative development and photosynthesis process;
- allows plants to overcome physiological stress due to post-transplanting.

20 kg

250 kg

1200 kg

Formulation: liquid

COMPOSITION

Total Nitrogen (N)	5%	Organic Carbon (C)	3%
of which: soluble organic Nitrogen (N)	1%	pH	6.0 ± 0.5
ammonium Nitrogen (N)	4%	Density	1.19 ± 0.02 kg/dm^3
Total Phosphorus Pentoxide (P_2O_5)	15%	Conductivity	3.00 ± 0.20 dS/m

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	kg/ha
Beetroot, Strawberry	From sowing or transplantation, until the intense growth stage, every 10 days	Fertigation	20-40
Turnip tops, Artichoke, Savoy Cabbage, Lettuce, Spinach	From sowing ortransplantation, until the intense growth stage, every 10 days	Fertigation	20-40
Stone Fruits	Every 12-15 days from the full vegetative growth to fruit setting	Fertigation	20-40
Eggplant, Pepper, Tomato	After harvesting and/or Vegetative growth	Fertigation	20-40
Melon, Courgette	From sowing or transplanting, until the intense growth stage, every 10 days	Fertigation	20-40
Pome Fruits	From sowing or transplanting, until the intense growth stage, every 10 days	Fertigation	20-40
Arugula	Every 12-15 days from the full vegetative growth to fruit setting	Fertigation	20-40
Table and Wine Grapes	From sowing or transplanting, until the intense growth stage, every 10 days	Fertigation	20-40
Forage Crops	Every 12-15 days from the full vegetative growth to fruit setting	Fertigation	20-40

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

GELAMIN

FERTIGATION

ILSAMIN CaMg

N+CaO+MgO 9(9-2) BASED ON 34% GELAMIN®

What is it?

ILSAMIN CaMg is a fluid organo-mineral fertilizer, based on Calcium and Magnesium complexed with **GELAMIN®**, positioned both by foliar application and fertigation. The fertilizer contains amino acids and peptides obtained from an enzymatic hydrolysis process.

ILSAMIN CaMg prevents physiopathies due to specific deficiencies such as Calcium and Magnesium (rachis desiccation, apical rot, bitter pit, etc.) at the same time, it enhances the photosynthesis process and thickening of tissues improving the firmness of fruits.

How to use?

ILSAMIN CaMg is suitable for fruit trees, olive trees, grapevine, and vegetable crops from fruit setting until the end of fruit sweeling.

Which benefits does it bring?

- Prevents calcium and magnesium deficiencies;
- improves the firmness of fruits and vegetables;
- intensifies chlorophyll photosynthesis;
- limits fruit malformations.

1 kg
5 kg
20 kg

Formulation: liquid

COMPOSITION

Total Nitrogen (N)	9%	Organic Carbon (C)	9%
of which: organic Nitrogen (N)	3%	Total amino acids	>18%
nitric Nitrogen (N)	6%	pH	6 ± 0.5
Water soluble Calcium Oxide (CaO)	9%	Density	1.39 ± 0.02 kg/dm^3
Water soluble Magnesium Oxide (MgO)	2%	Conductivity	5.00 ± 0.50 dS/m

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	kg/ha	METHOD	kg/ha
Citrus, Actinidia, Olive tree	From fruit-setting to ripening every 7-10 days	Fertigation	10-15	Foliar	2-4
Stone Fruits	3-4 applications, every 10-15 days, starting from walnut-sized fruit	Fertigation	15-20	Foliar	2.5-4
Strawberry, Melon	From fruit-setting to ripening every 7-10 days	Fertigation	25-40	Foliar	2-2.5
Eggplant	After first flowering, every 10-12 days	Fertigation	25-40	Foliar	2.5-4
Apple tree, Pear tree	3-4 applications, every 10-15 days, starting from walnut-sized fruit	Fertigation	15-20	Foliar	2.5-4
Leafy Vegetables	3-4 applications, every 10-12 days, starting from 15 days after transplantation	Fertigation	20-25	Foliar	2-2.5
Pepper, Tomato, Industrial Tomato	After first flowering, every 10-12 days	Fertigation	25-40	Foliar	2.5-3
Table and Wine Grapes	3-4 interventions every 10-15 days from formed berries	Fertigation	10-15	Foliar	2.5-3.5

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

ILSA AGRO

PROFESSIONAL NPK PAG. 117

PROFESSIONAL NPK

NPK 8.6.14 20% AGROGEL®

Formulation: microgranules

What is it?

PROFESSIONAL NPK is a micro-granular NPK organo-mineral fertilizer, based on **AGROGEL®**, with a balanced ratio between Nitrogen (with immediate effect and slow-release action), Phosphorus, Potassium, Sulphur, Magnesium, and other microelements.
The micro-granular formulation facilitates homogeneity distribution and constant nutrition, where each granule contains all nutrients declared.
The use of **PROFESSIONAL NPK** allows a vigorous development of different species present in the lawn, as well as guarantees a uniform green colour even in abiotic stress.

How to use?

PROFESSIONAL NPK is characterized by a suitable ratio between all nutritional elements allowing it to be used for all needs of lawns, sports fields, floral and ornamental plants.

Which benefits does it bring?

- Stimulates a homogeneous development of lawns and green spaces;
- no losses due to leaching and/or volatilization;
- nourishes in a balanced and uniform way;
- maintains a balance between all species cultivated in the lawn.

COMPOSITION

Total Nitrogen (N)	8%
of which: organic Nitrogen (N)	2%
ammonium Nitrogen (N)	4%
ureic Nitrogen (N)	2%
Total Phosphorus Pentoxide (P_2O_5)	6%
Water soluble Potassium Oxide (K_2O)	14%

Total Magnesium Oxide (MgO)	2%
Water soluble Sulphur Trioxide (SO_3)	20%
Water soluble Boron (B)	0.01%
Total Iron (Fe)	0.5%
Total Zinc (Zn)e	0.01%
Organic Carbon (C)	7.5%

DIRECTIONS FOR USE*

		jan	feb	mar	apr	may	jun	jul	aug	sep	oct	nov	dec
Playing Fields	kg/100 mq			8		6				8		12	
Ornamental and Floral Crops	kg/100 mq			5		8				10	15		
Lawns	kg/100 mq			4		3				4		8	
Public Parks	kg/100 mq			10		15				15	20		

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

AGROGEL

B.T.C. LOW CHLORINE CONTENT

ILSA COM

PERLKA® CALCIOCIANAMIDE

What is it?

PERLKA® CALCIOCIANAMIDE is a simple EC nitrogen fertilizer, in granular or microgranular form. The product contains a high content of Nitrogen (main cyanamide) and Calcium.

How to use?

PERLKA® CALCIOCIANAMIDE, once distributed on the soil characterizes by the presence of humidity, in which the product rapidly will be transformed on both available calcium for plants and nitrogen gradually released to the plants. For maximum benefit, **PERLKA® CALCIOCIANAMIDE** must be distributed on the soil two weeks before sowing/transplanting of vegetables or at the vegetative restart of tree crops. The product is suitable at the beginning of the vegetative crop cycle (apple, rice, corn and other star crops).

Which benefits does it bring?

- Balanced nitrogen nutrition;
- high content of calcium bioavailable for plants;
- increases the final yield and quality;
- supports the development of plants more vigorous.

5 kg

25 kg

600 kg

Formulation: microgranular, granular

COMPOSITION

Total Nitrogen (N)	19.8%	Other forms	3%
of which: Nitric Nitrogen (N)	1.8%	Calcium (CaO)	>48%
Cyanamid Nitrogen (N)	15.0%	Magnesium Oxide (MgO)	1.5%

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	kg/ha
Actinidia**	15 days before vegetative restart	Bury into the soil	300-400
Stone Fruits**	15 days before vegetative restart	Bury into the soil	300-400
Pome Fruits**	15 days before vegetative restart	Bury into the soil	300-400
Hazelnut**	15 days before vegetative restart	Bury into the soil	300-400
Olive trees**	15 days before vegetative restart	Bury into the soil	300-400
Table grapes and wine grapes**	15 days before vegetative restart	Bury into the soil	300-400
Strawberry	Before transplantation	Bury into the soil	300-400
Artichoke	15 days before vegetative restart	Bury into the soil	400
Potato, Pepper, Tomato	Pre-sowing or Pre-transplantation	Bury into the soil	400
Asparagus	After harvesting the shoots	Bury into the soil	300-500
Other horticultural crops	Before transplantation	Bury into the soil	300-500
Rice	About 1 week before submersion	Bury into the soil	250-350
Corn	Pre-sowing	Bury into the soil	400-500
Green Fodder, Pasture lands	Autumn-Winter	Bury into the soil	100-500

**in case of grassing, it is advisable to distribute on damp soil without burying.
*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

Distribution areas: Veneto, Friuli Venezia Giulia, Trentino Alto Adige, Lombardia (except for Milano e Pavia)

ILSAFOL 20.20.20

What is it?

ILSAFOL 20.20.20 is a water-soluble NPK mineral fertilizer positioned for foliar applications. The fertilizer contains nitrogen, phosphorus, potassium, and chelated microelements.

How to use?

ILSAFOL 20.20.20 is suitable during the vegetative development of grass plants and during sprouting of the tree plants, enhancing a regular and uniform development of the leaves and stimulating the photosynthetic process as well. Furthermore, the presence of chelated micro elements also prevents micro-nutritional deficiencies. Besides, ILSAFOL 20.20.20 is recommended during fruit swelling, in this way fruit size will be guaranteed according to the market' needs.

Which benefits does it bring?

- Supplies nitrogen, phosphorus, and potassium in a balanced way;
- prevents micro-deficiencies;
- supports plants' vegetative development;
- enhances the fruit swelling stage.

2,5 kg

Formulation: hydrosoluble powder

COMPOSITION

Total Nitrogen (N)		20%
of which: Ureic Nitrogen (N)	11.4%	
Nitric Nitrogen (N)	5.2%	
Ammoniacal Nitrogen (N)	3.4%	
Total Phosphoric Anhydride (P_2O_5)		20%
Water soluble Potassium oxide (K_2O)		20%

Water soluble Boron (B)	0.02%
Water soluble on dry EDTA chelated Cooper (CU)	0.02%
Water soluble EDTA chelated Iron (Fe)	0.04%
Water soluble EDTA chelated Manganese (Mn)	0.02%
Water soluble Molybdenum (Mo)	0.01%
Water soluble EDTA chelated Zinc (Zn)	0.02%

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	DOSAGE
Cherry tree, Apricot tree, Peach tree, Nectarine, Plum tree, Olive tree	2-4 applications, every 8-10 days, during full vegetative development 2-4 applications, every 10-15 days, from the fruit swelling stage	Foliar	2-2.5 kg/ha
Ornamental and Floral Crops	Throughout the cycle, every 10-12 days	Foliar	250-300 gr/100 l water
Apple tree, Pear tree, Actinidia, Citrus	2-4 applications, every 8-10 days, during full vegetative development 2-4 applications, every 10-15 days, from the fruit swelling stage	Foliar	2-2.5 kg/ha
Leafy Vegetables	2-4 applications, every 8-10 days, starting from 10 days after transplantation	Foliar	2-2.5 kg/ha
Fruit Vegetables in open field	2-4 applications, every 10-15 days, from the fruit swelling stage	Foliar	2-2.5 kg/ha
Greenhouse Fruit Vegetables	2-4 applications, every 10-15 days, from the fruit swelling stage	Foliar	250-300 gr/100 l water
Table Grape	2-4 applications, every 8-10 days, during full vegetative development 3-4 interventions during the berry swelling stage, every 10-15 days	Foliar	2.5-3 kg/ha
Wine Grape	2-4 applications, every 8-10 days, during full vegetative development 1-2 interventions after fruit setting, every 10 days	Foliar	2-2.5 kg/ha

*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.

ILSASOL 20.20.20

What is it?

ILSASOL 20.20.20 is a water-soluble NPK mineral fertilizer positioned for fertigation. The fertilizer contains nitrogen, phosphorus, potassium, and chelated microelements essential to plants' development

How to use?

ILSASOL 20.20.20 is recommended during all phenological stages, from vegetative development to flowering stage, and from fruit setting to fruit swelling.

The high purity of the raw materials used to produce **ILSASOL 20.20.20** allows to increase the uptake by roots and to increase the final yield and quality of all crops cultivated (trees, vegetables and flowers, etc.)

Which benefits does it bring?

- Fertilizer with acid reaction and immediately water-soluble;
- supplies essential elements for the plants' growth;
- favours a harmonious crops' development;
- suitable to be mixed with radical biostimulants.

25 kg

Formulation: hydrosoluble powder

COMPOSITION

Total Nitrogen (N)	20%
of witch: Ureic Nitrogen (N)	14%
Nitric Nitrogen (N)	4%
Ammoniacal Nitrogen (N)	2%
Total Phosphoric Anhydride (P_2O_5)	20%
Water soluble Potassium oxide (K_2O)	20%
Water soluble Boron (B)	0.01%

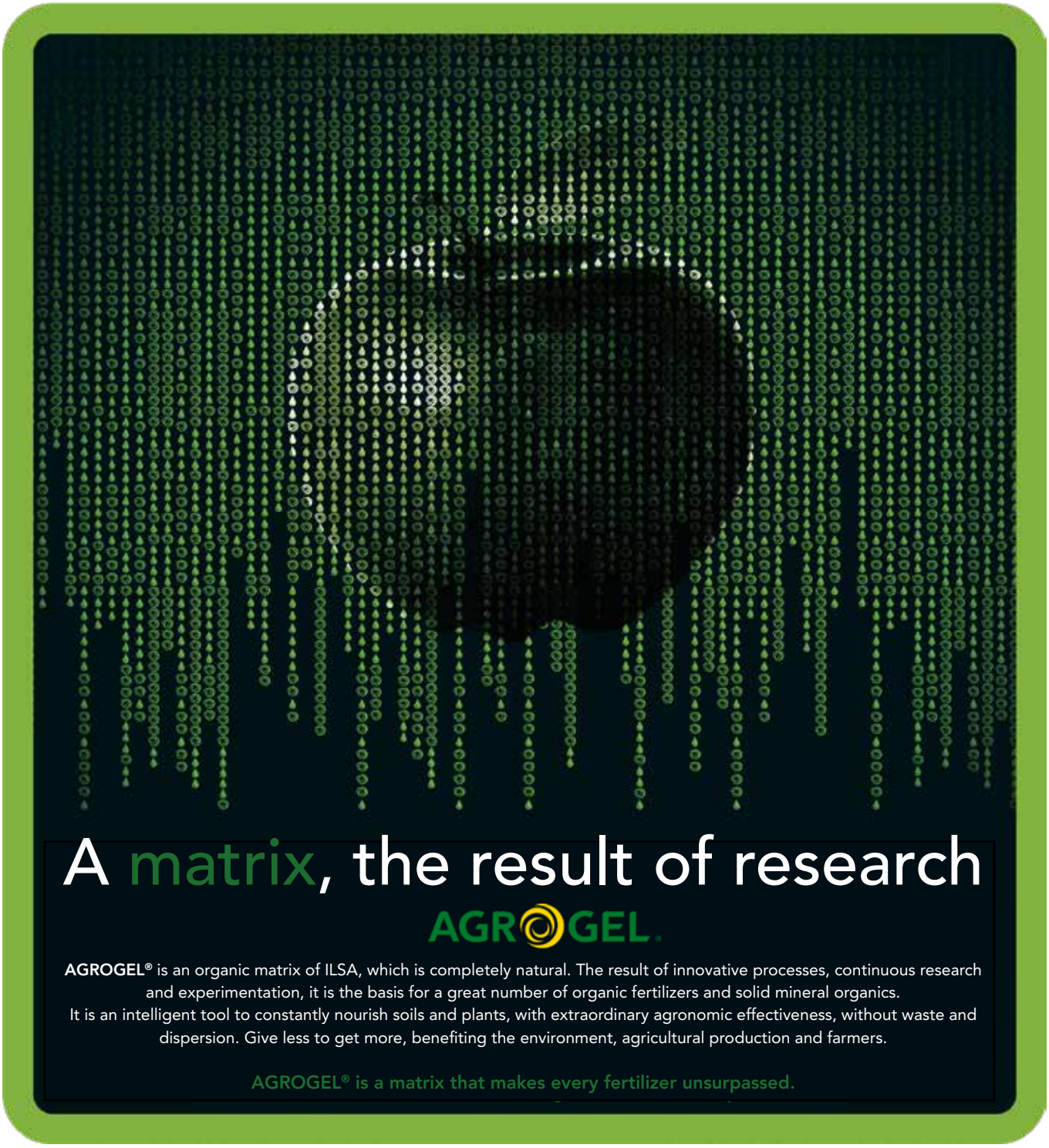
Water soluble on dry EDTA chelated Cooper (CU)	0.01%
Water soluble EDTA chelated Iron (Fe)	0.02%
Water soluble EDTA chelated Manganese (Mn)	0.01%
Water soluble Molybdenum (Mo)	0.005%
Water soluble EDTA chelated Zinc (Zn)	0.01%

FERTIGATION

DIRECTIONS FOR USE*

CROP	TIMING	METHOD	DOSAGE
Citrus	Every 10-15 days from fruit setting to veraison,as needed	Fertigation	25-50 kg/ha
Cherry tree, Apricot tree, Peach tree, Nectarine, Plum tree	Every 10-15 days from fruit setting to veraison,as needed	Fertigation	50-75 kg/ha
Ornamental and Floral crops	During the cycle, every 10-12 days	Fertigation	500-600 gr/100 l water
Apple tree, Pear tree, Actinidia	Every 10-15 days from fruit setting to veraison,as needed	Fertigation	50-75 kg/ha
Olive tree	Every 10-15 days from fruit setting to veraison,as needed	Fertigation	25-50 kg/ha
Greenhouse Vegetables	2-4 applications, every 8-10 days, starting from 10 days after transplantation	Fertigation	5-6 kg/1000 m^2
Vegetables in open field	2-4 applications, every 8-10 days, starting from 10 days after transplantation	Fertigation	50-75 kg/ha
Table and Wine Grape	Every 10-15 days from fruit set to veraison,as needed	Fertigation	50-75 kg/ha

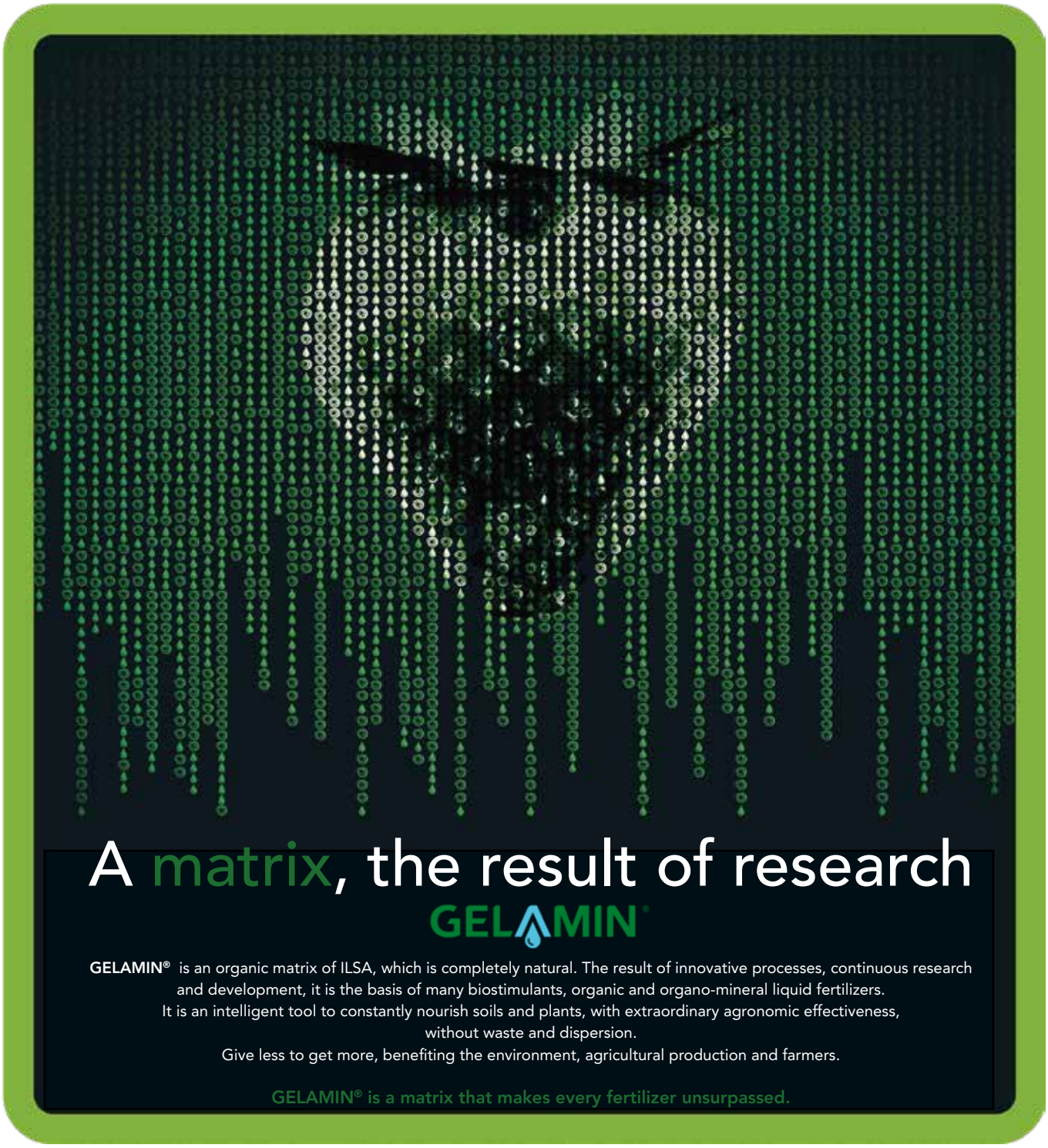
*Dosages are purely indicative and may vary depending on pedoclimatic conditions and average yields expected.


A matrix, the result of research
AGROGEL.
AGROGEL® is an organic matrix of ILSA, which is completely natural. The result of innovative processes, continuous research and experimentation, it is the basis for a great number of organic fertilizers and solid mineral organics.
It is an intelligent tool to constantly nourish soils and plants, with extraordinary agronomic effectiveness, without waste and dispersion. Give less to get more, benefiting the environment, agricultural production and farmers.
AGROGEL® is a matrix that makes every fertilizer unsurpassed.

CONVERSION TABLE kg/lt

liters = kg/density

Product	Density kg/l a 20°C	kg	liters	kg	liters	kg	liters	kg	liters	kg	liters	kg	liters	kg	liters	kg	liters
CEREALMAX	1,16	1	0,862	1,5	1,293	2	1,724	2,5	2,155	3	2,586	5	4,310	10	8,621	20	17,241
CLASS Fe G-FORM	1,28	1	0,781	1,5	1,172	2	1,563	2,5	1,953	3	2,344	5	3,906	10	7,813	20	15,625
ILSACROP	1,16	1	0,862	1,5	1,293	2	1,724	2,5	2,155	3	2,586	5	4,310	10	8,621	20	17,241
ILSACTIVE FINALE	1,35	1	0,741	1,5	1,111	2	1,481	2,5	1,852	3	2,222	5	3,704	10	7,407	20	14,815
ILSACTIVE START	1,19	1	0,840	1,5	1,261	2	1,681	2,5	2,101	3	2,521	5	4,202	10	8,403	20	16,807
ILSADRIP EXTRA	1,22	1	0,820	1,5	1,230	2	1,639	2,5	2,049	3	2,459	5	4,098	10	8,197	20	16,393
ILSADRIP FERRO	1,26	1	0,794	1,5	1,190	2	1,587	2,5	1,984	3	2,381	5	3,968	10	7,937	20	15,873
ILSADRIP FORTE	1,22	1	0,820	1,5	1,230	2	1,639	2,5	2,049	3	2,459	5	4,098	10	8,197	20	16,393
ILSAMIN BIO-K	1,25	1	0,800	1,5	1,200	2	1,600	2,5	2,000	3	2,400	5	4,000	10	8,000	20	16,000
ILSAMIN BORO	1,26	1	0,794	1,5	1,190	2	1,587	2,5	1,984	3	2,381	5	3,968	10	7,937	20	15,873
ILSAMIN CALCIO	1,28	1	0,781	1,5	1,172	2	1,563	2,5	1,953	3	2,344	5	3,906	10	7,813	20	15,625
ILSAMIN CaMg	1,39	1	0,719	1,5	1,079	2	1,439	2,5	1,799	3	2,158	5	3,597	10	7,194	20	14,388
ILSAMIN MMZ	1,22	1	0,820	1,5	1,230	2	1,639	2,5	2,049	3	2,459	5	4,098	10	8,197	20	16,393
ILSAMIN MULTI	1,23	1	0,813	1,5	1,220	2	1,626	2,5	2,033	3	2,439	5	4,065	10	8,130	20	16,260
ILSAMIN S	1,28	1	0,781	1,5	1,172	2	1,563	2,5	1,953	3	2,344	5	3,906	10	7,813	20	15,625
ILSAVEGA	1,18	1	0,847	1,5	1,271	2	1,695	2,5	2,119	3	2,542	5	4,237	10	8,475	20	16,949



A matrix, the result of research

GELAMIN®

GELAMIN® is an organic matrix of ILSA, which is completely natural. The result of innovative processes, continuous research and development, it is the basis of many biostimulants, organic and organo-mineral liquid fertilizers.
It is an intelligent tool to constantly nourish soils and plants, with extraordinary agronomic effectiveness, without waste and dispersion.
Give less to get more, benefiting the environment, agricultural production and farmers.

GELAMIN® is a matrix that makes every fertilizer unsurpassed.

ILSA

ILSA DISTINCTIVE FEATURES

THE HISTORY
More than sixty years of history for our customers means continuity, solidity, the ability to remain in the market and always meet requirements adequately with high quality products.

PRESENT IN 57 COUNTRIES
For our customers it means benefiting from extensive application experience in a wide range of crops and in the most diverse conditions.

WORLD LEADER IN THE FIELD OF ORGANIC PLANT NUTRITION
This leadership seems to indicate a precise direction of ILSA's commercial strategy, while 90% of its turnover is made in traditional agriculture with products allowed in ORGANIC farming. This proves, for our customers, the competitiveness of our products both from an agronomic point of view and in terms of price.

MAJOR INVESTMENTS IN RESEARCH
ILSA invests heavily in research, proving its awareness of how much more there is to know about plants and soil. For our customers it means entering into a partnership with a company aware of how important knowledge is in order to always be able to guarantee application quality, productivity and respect for the environment. Distributing ILSA products is good for the dealer's image.

AGROGEL® AND GELAMIN® TWO EXCLUSIVE MATRICES
AGROGEL®, the result of research, used for the production of ILSA fertilisers and included in legislation in March 2007, is the only fully standardised natural raw material. This means being able to guarantee our customers, with absolute precision, the titres relating to organic nitrogen, soluble organic nitrogen, organic carbon, soluble organic carbon, humidity, pH, etc. Basically, objective quality and awareness of using a product with low environmental impact.

GELAMIN® the matrix for the production of special liquid products offers all the advantages of enzymatic hydrolysis for both animal and plant-based raw materials.

QUALITY AND AGRONOMIC EFFICIENCY OF THE PRODUCTS
In order to bear the ILSA brand, each product must successfully pass some tests lasting no less than three years, starting from the growth room and ending in the open field.
ILSA is one of the few companies with an internal structure exclusively dedicated to the quality control of incoming raw materials and outgoing formulations, but above all dedicated to the evaluation of the efficiency of fertilisers and this means guaranteeing our customers the best agronomic results and ensuring that each product keeps its promises, putting our customer in a position to best qualify their presence on the market.

INNOVATIVE PRODUCTS
Solid organic fertilisers with modulated release or liquid fertilisers with a molecular weight predetermined during the production phase are just some of the examples of ILSA's innovative capacity. The way in which the nutrients are released is calculated right from the production phase so that the product is able to meet the needs of the crops as effectively as possible, according to the uptake curves of the nutrients. Feeding plants as needed means maximum efficiency with any soil, balance and maximum yield.

COMPLETENESS OF THE OFFER
Biostimulants and fertilisers that meet the requirements of all fertilisation techniques, whether by solidroot, by foliar application with a generic or specialised objective, or byfertigation, means that a customer can therefore rely completely on ILSA to meet all the nutritional needs of the crops.
The products of the VIRIDEM®program are the perfect synthesis of the completeness of the ILSA offer.


ILSA
The green evolution

HUBER

AgroSolutions

AGROGEL®

gelatine for agricultural use
www.agrogel.it

GELAMIN®

fluid gelatine for agricultural use
www.gelamin.it

VIRIDEM®

vegetal extracts for agricultural use
www.viridem.it

ILSA
The green evolution

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