

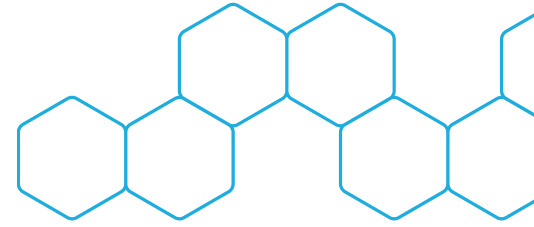


We are Excellence



CORPORATE SOCIAL RESPONSIBILITY

Hefona Group proactively evaluates the environmental, social, and labor implications of its actions to enhance the quality of life for both employees and the environment.



HEFONA GROUP was established in 2013 from the merger of two companies, GESTO and ECOTECO, both of which bring decades of experience to the table – over 20 years for GESTO and 25 for ECOTECO. The Group specializes in the manufacture, research, development, and innovation in agricultural nutrition, focusing on the efficient, productive growth of crops. It offers a wide range of products suitable for organic farming and zero-residue practices for both intensive and extensive agriculture. In addition to its product offerings, HEFONA GROUP provides marketing and technical consultancy for crop application programs. With a strong commitment to sustainability and ecological practices, HEFONA GROUP has become a recognized leader in the agricultural market.

The company combines a team of experts and an exclusive sales network, enabling it to operate nationwide and pursue international expansion. HEFONA GROUP is dedicated to delivering high-quality products and services to farmers worldwide. Its emphasis on organic farming and extensive industry experience makes it a reliable choice for those seeking sustainable, environmentally friendly agricultural solutions.



TECHNOLOGY

LiberPro®

Fundamental Principles of LiberPro® Technology

01 **RELEASE**

The active ingredients are formulated in a multi-anionic form, making them available to the plant in a sequential, stable, and protected form for maximum bioavailability.

02 **ABSORPTION**

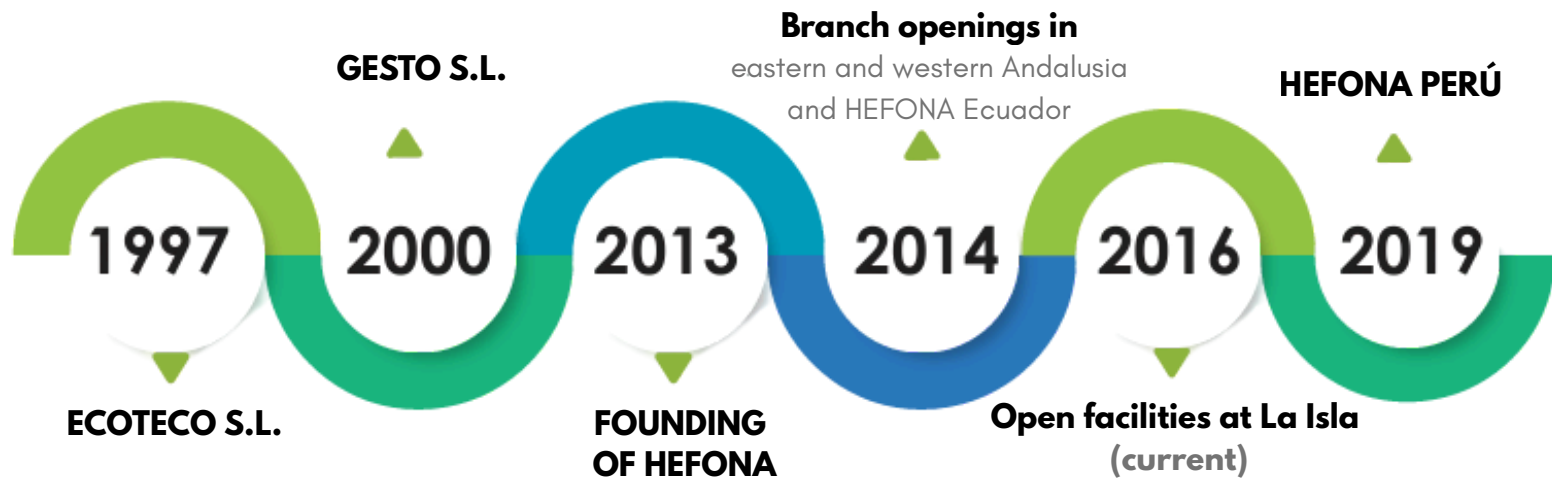
The presence of amphoteric adjuvants modifies the physicochemical properties of active substances, giving them multipolarity. This allows the substances to access the plant proactively through various routes, including hydrophilic pores and membrane lipoproteins, at both the root and foliar levels.

03 **MOBILITY**

The inclusion of amphoteric adjuvants increases membrane transport rates and bioavailability in both the inter- and intracellular space. Simultaneously, the use of stabilizers and micellar coatings enables a targeted effect.

04 **ACTION**

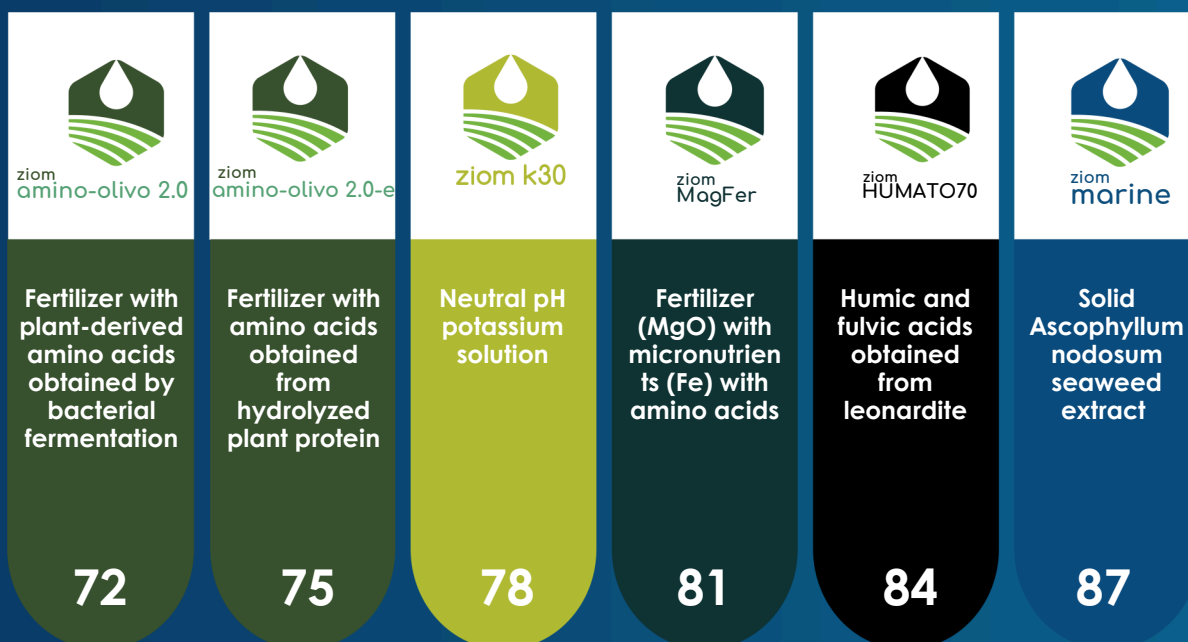
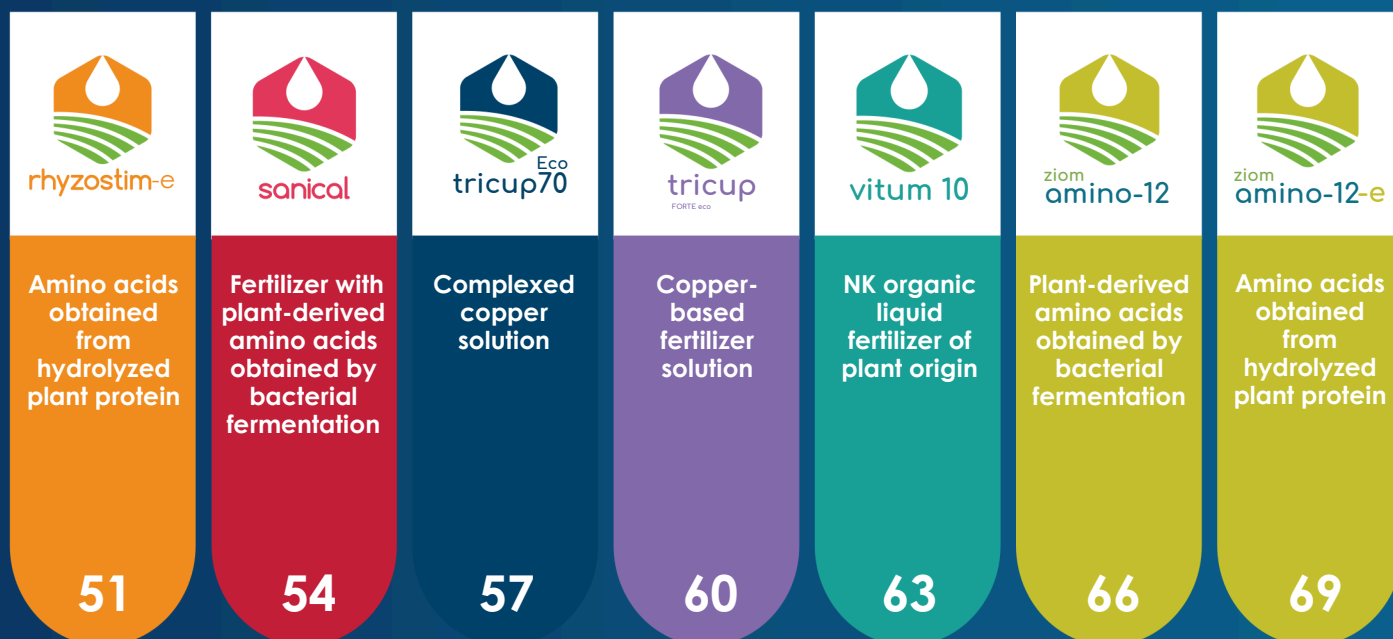
The required deficiency element reaches the target tissue, accompanied by nutrients and elicitors included in the formulation, so that the plant has the deficiency element supplied and all the metabolic tools necessary to induce a rapid response. Nutrients formulated with LiberPRO technology are guaranteed to be physiologically and nutritionally efficacious.





PRODUCT INDEX

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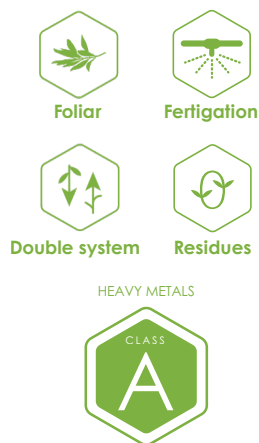




AMINO ACIDS AND SEAWEED EXTRACT

FREE AMINO ACIDS OBTAINED BY BACTERIAL FERMENTATION

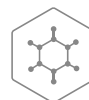




PHYSIOCHEMICAL PROPERTIES

Physical state:	Liquid
pH:	7
Electrical conductivity:	3,0 2mS/cm (en disolución acuosa al 10%)
Relative Density:	1,08 g/cm3

Fertilizer with amino acids. Group 4.1.02 (R.D. 506/2013, of June 28, on fertilizer products).



COMPOSITION

(%p/p)

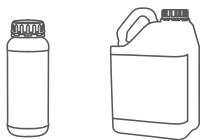
Declared nutrient content

Total Nitrogen (N)	5.00
Free Amino Acids (Proline 50% - Glycine 50%)	9.00
Organic Nitrogen (N)	5.00
Alginic acid	1.00
Mannitol	0,1

Adarga is a liquid biostimulant specially formulated to protect the cellular processes of plants during periods of stress caused by high or low temperatures, drought, salinity, dehydration, excessive sun exposure, or excess moisture.



FORMATS



1L.

5L.
20L.

Fresh *Ascophyllum nodosum*
seaweed extract



CHARACTERISTICS AND PROPERTIES

adarga is a liquid biostimulant specifically formulated to protect plant cellular processes during periods of stress from high or low temperatures, drought, salinity, dehydration, sun exposure, or excess humidity

adarga increases osmoregulator levels, thereby helping the crop maintain its photosynthetic rate, osmotic potential balance, and promoting enzymatic activity to complete its physiological processes.

Applying **Adarga** increases yield thanks to higher photosynthetic rate and improved quality, as well as color, weight, and firmness in fruits, and the consistency of leafy crops. It significantly reduces losses due to physiological disorders and frost damage. It boosts fruit set and accelerates harvest when applied during and after flowering. It also improves post-harvest preservation by producing fruit with thicker, more resistant tissues.



COMPATIBILITY

adarga is compatible with most commonly used fertilizers and plant protection products. However, if you have no prior experience, it is advisable to apply each one separately or conduct a compatibility test. Do not use on excessively alkaline media.



RECOMMENDED APPLICATION RATE

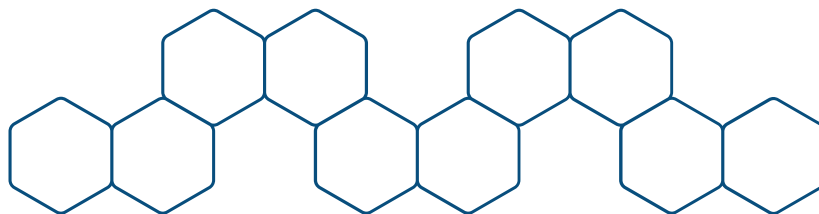
It is not necessary to establish minimum intervals between application and harvest, since its components are natural, bio-degradable, and exempt from MRLs.



DOSAGE AND METHOD OF USE

Crop

Red Berries	200-350 ml/hl. Apply 3-4 treatments per cycle from flowering until harvest.
Citrus and fruit trees	200-400 ml/hl. Apply from flowering until harvest.
Banana	200-400 ml/hl. Apply from the appearance of the fruiting bunch until harvest.
Subtropical plants	200-400 ml/hl. Apply every 30 days during the summer months.
Horticultural crops	200-350 ml/hl. In fruit-bearing vegetables, from flowering through fruit set and growth. For root, bulb, and tuber crops, apply from the beginning of underground organ formation. In leafy and flowering vegetables, apply during periods of peak water demand or at the end of the growing season to promote a longer post-harvest life.





FERTILIZER WITH AMINO ACIDS

FERTILIZER WITH PLANT-DERIVED AMINO ACIDS OBTAINED BY
BACTERIAL FERMENTATION *Corynebacterium Melassecola*





Product suitable for use in Organic Farming in accordance with Regulation (EU) 2018/848 of May 30, 2018, on organic production and labelling of organic products.



FORMATS



1L.



5L.
20L.



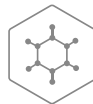
200L.
1000L.



PHYSICOCHEMICAL PROPERTIES

Physical state:	Liquid
pH:	6-7
Density (20°C):	1.21 kg/L

Fertilizer with amino acids. Group 4.1.02 (R.D. 506/2013, of June 28, on fertilizer products).



COMPOSITION

Declared nutrient content

Free amino acids	9.35
Total Nitrogen (N)	5.00
Ammoniacal nitrogen (N)	1.96
Organic nitrogen (N)	3.04
Zinc (Zn) soluble in water	2.00
Manganese (Mn) soluble in water	2.00
Sulfur trioxide (SO ₃) soluble in water	6.50

Heavy metal content is lower than the authorized limits for Class A.

AMINO ACID PROFILE

(%p/p)

Aspartic acid	0.76
Glutamic acid	2.47
Alanine	0.81
Arginine	0.05
Phenylalanine	0.06
Glycine	0.2
Histidine	0.15
Isoleucine	0.11
Leucine	0.14
Lysine	1.07
Methionine	0.07
Proline	0.69
Serine	0.06
Tyrosine	0.44
Threonine	1.08
Tryptophan	0.08
Valine	1.20

Effective and balanced biostimulant for the phenological stage of the crop.



CHARACTERISTICS AND PROPERTIES

aminostim is a proteinaceous ferment of plant biological value, composed of essential amino acids of germinal origin that the plant needs for the synthesis of structural proteins and enzymes involved in its development. This contribution induces and optimizes all processes at the metabolic level, from the efficiency in capturing and using nutritional resources to the development of the plant's full phenological potential.

The application of **aminostim** results in more vigorous plants, with increases in all primary and secondary structural and reserve metabolites, including proteins, triglycerides, carotenoids, phytosterols, free sugars, and complex polyphenols, etc.

Its benefits include increased nutrient utilization and lower energy expenditure, as well as increased synthesis of plant steroids, thereby enabling treated plants to achieve higher productivity and enhance their defenses against stress-inducing conditions.

Aminostim can be applied using both foliar and fertigation irrigation and is compatible with any crop.



COMPATABILITY

Aminostim is compatible with most commonly used fertilizers and plant protection products. However, if you have no prior experience, it is advisable to apply each one separately or conduct a compatibility test.



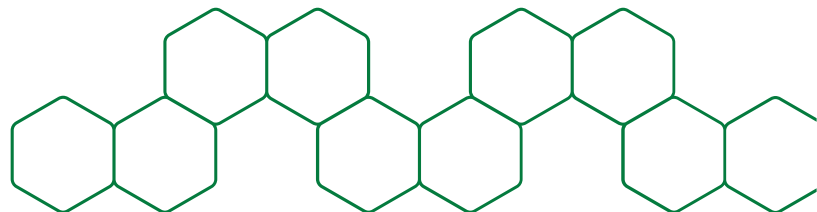
RECOMMENDED APPLICATION RATE

It is not necessary to establish minimum intervals between application and harvest, since its components are natural, bio-degradable, and exempt from MRLs.



DOSAGE AND MODE OF USE

Crops	Foliar Spraying	Fertigation
Vegetables	75-100 cc/hl. From 4-6 leaves throughout the crop cycle.	5-10 L/ha, including intensive crops.
Woody crops (fruit trees, citrus, grapevines, and subtropical plants)	100-200 cc/hl. In pre-flowering, post-flowering, or during the fruit fattening process	3-4 L/ha, 4 applications per year
Cereals and other herbaceous plants (floral, ornamentals)	1-5 l/ha. Perform one treatment when the plant is stressed. In cereals, apply at the tillering stage.	
Industrial crops	1-5 l/ha. Apply 1 or 2 treatments per crop cycle, ideally starting the first treatment at the 6-10 leaf stage, and the second treatment at the pre-flowering stage.	
Pitahaya	Apply at the sprouting stage at 100 cc/hl.	





TECHNOLOGY
LiberPro®



FERTILIZER WITH AMINO ACIDS

FERTILIZER WITH AMINO ACIDS OBTAINED FROM
HYDROLYZED PLANT PROTEINS



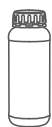
FOR ALL
CROPS



HEAVY METALS



FORMATS



1L.



5L.
20L.



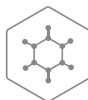
200L.
1000L.



PHYSICOCHEMICAL PROPERTIES

Physical state:	Liquid
pH:	3-4
Density (20°C):	1,294 kg/L

Fertilizer with amino acids. Group 4.1.02 (R.D. 506/2013, of June 28, on fertilizer products).



COMPOSITION

(%p/p)

Declared nutrient content

Free amino acids	10.26
Total nitrogen (N)	6.14
Ammoniacal nitrogen (N)	3.27
Organic nitrogen (N)	2.82
Water-soluble zinc (Zn)	1.111
Water-soluble manganese (Mn)	0.855

Heavy metal content below the authorized limits for Class A.

AMINO ACID PROFILE

(%p/p)

Aspartic acid	0.104
Gamma-aminobutyric acid	0.620
Glutamic acid	0.287
Alanine	0.232
Arginine	<0.100
Phenylalanine	<0.100
Glycine	0.0609
Histidine	<0.100
Isoleucine	<0.080
Leucine	<0.080
Lysine	8.08
Methionine	<0.090
Proline	0.116
Serine	<0.070
Tyrosine	<0.100
Threonine	<0.070
Tryptophan	<0.050
Valine	0.679

Bio stimulant of the phenological state of the crop, effective and balanced.



CHARACTERISTICS AND PROPERTIES

Aminostim-e is a hydrolyzed protein of plant origin with micronutrients of high biological value. Its ability to generate oligopeptides and large amounts of free amino acids in a short period of time induces and optimizes all metabolic processes, from the efficient capture and use of nutritional resources to the development of the plant's full phenological potential, thereby favoring all correlation phenomena.

The result is a more vigorous plant, with increased levels of all primary and secondary structural and storage metabolites, proteins, triglycerides, carotenoids, phytosterols, free and complex sugars, polyphenols, etc.

Its benefits include increased nutrient utilization and lower energy expenditure, as well as increased synthesis of plant steroids, thereby enabling treated plants to achieve greater productivity and enhance their defenses against stress-inducing conditions.

Aminostim-e can be applied using both foliar and fertigation irrigation and is compatible with any crop.



COMPATABILITY

Aminostim-e is compatible with most commonly used fertilizers and plant protection products. However, if you have no prior experience, it is advisable to apply each one separately or conduct a compatibility test.



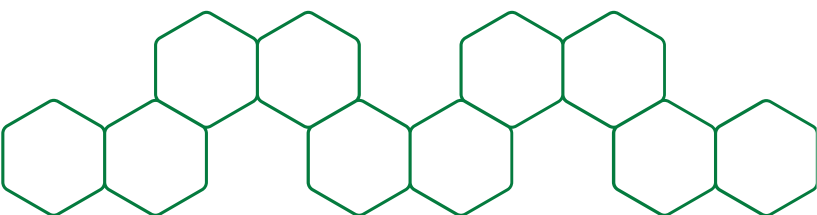
RECOMMENDED APPLICATION RATE

It is not necessary to establish minimum intervals between application and harvest, since its components are natural, bio-degradable, and exempt from MRLs.



DOSAGE AND MODE OF USE

Crops	Foliar Spraying	Fertigation
Vegetables	75-100 cc/hl. From 4-6 leaves throughout the crop cycle.	5-10 L/ha, including intensive crops.
Woody crops (fruit trees, citrus, grapevines, and subtropical plants)	100-200 cc/hl. In pre-flowering, in post-flowering, or in the fruit fattening process	3-4 L/ha, 4 applications per year
Cereals and other herbaceous plants (floral, ornamental)	1-5 l/ha. Apply one treatment when the plant is stressed. In cereals, apply at the tillering stage.	
Industrial crops	1-5 l/ha. Apply 1 or 2 treatments per crop cycle, ideally starting the first treatment at the 6-10 leaf stage, and the second treatment at the pre-flowering stage.	
Pitahaya	Apply at the sprouting stage at 100 cc/hl.	



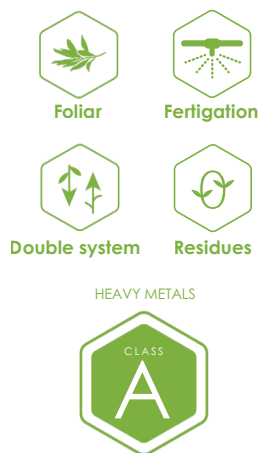


AMINO ACIDS AATC

AMINO ACIDS, AATC, OBTAINED BY CHEMICAL SYNTHESIS



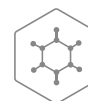
FOR ALL
CROPS



PHYSICOCHEMICAL PROPERTIES

Estado físico:	Liquid
pH:	4
Densidad:	1.05 g/cm3

Amino acids. Group 4.1.01 (Royal Decree 506/2013, of June 28, on fertilizer products.



COMPOSITION (%p/p)

Declared nutrient content

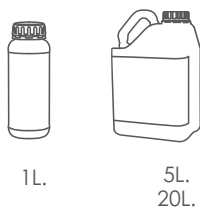
Free amino acids (Proline – 50% - Glycine – 50%)	6.5
Total nitrogen (N)	1.15
Organic nitrogen (N)	1.15

Heavy metal content below the authorized limits for Class

A. AATC content 5.5% w/v



FORMATS



Atc-55 is a specialized stimulant formulation that activates plant metabolic processes, increasing the levels of thiol groups and thereby enhancing enzymatic and metabolic activity. It stimulates biochemical processes linked to crop production and quality and increases proline levels within the plant.

Furthermore, its AATC content accelerates the effects of glycine betaine on the plant, which are involved in calcium metabolism, hypocotyl elongation, and glutathione biosynthesis.

Amino acid-based product,
AATC.
Obtained through chemical
synthesis.



CHARACTERISTICS AND PROPERTIES

Atc-55 is a specialized stimulant formulation that activates plant metabolic processes, increasing the levels of thiol groups and, consequently, enhancing enzymatic and metabolic activity. It stimulates the biochemical processes associated with crop production and quality and increases proline levels in the plant. Furthermore, its AATC content accelerates its effects on the plant, as does that of glycine betaine, which is involved in calcium metabolism, hypocotyl elongation, and glutathione biosynthesis.

With the application of **Atc-55**, thanks to the increase in metabolic activity it provides, the quantity and quality of the harvest increase, with more vigorous and healthy vegetative development, enhancing the plant's response to stress from adverse agronomic conditions and preventing calcium deficiencies.



COMPATIBILITY

Atc-55 is compatible with most commonly used fertilizers and plant protection products. However, if you have no prior experience, it is advisable to apply each one separately or conduct a compatibility test. Do not use on excessively alkaline media.



RECOMMENDED APPLICATION RATE

It is not necessary to establish minimum intervals between application and harvest, since its components are natural, bio-degradable, and exempt from MRLs.



DOSAGE AND METHOD OF USE

Crop

Horticultural crops and berries: 50-100 cc/hl. Apply at transplanting, during flowering, and during fruit development.
Olive: 50 cc/hl. Apply at bud break, flowering, when the fruit is pea-sized, and in autumn.
Citrus: 50-100 cc/hl. Apply during pre-bud break, petal fall, growth, and fruit development.
Fruit trees and subtropical plants: 50 cc/hl. Apply every 15-20 days from petal fall.
Grapevine and table grapes: 50 cc/hl. Apply every 15-20 days before and after flowering.
Winter cereals and rice: 0.5 l/ha, at tillering and during stressful situations.
Industrial crops (cotton, beetroot, etc.): 0.5 l/ha. Apply during crop growth or in stressful situations.
Potato: 50 cc/hl. Apply during crop growth or in stressful situations.

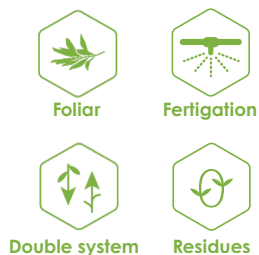




COMPLEXED CALCIUM

HIGHLY SOLUBLE AND BIOAVAILABLE CALCIUM MONOCARBOXYLATE
CONCENTRATE

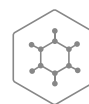




PHYSIOCHEMICAL PROPERTIES

Physical state:	Liquid
pH:	6
Density (20 °C):	1.1 kg/L

Complexed calcium. Group 1.2.1.06 (R.D. 506/2013, of June 28, on fertilizing products.



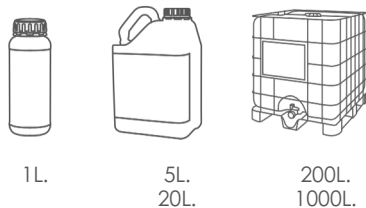
COMPOSITION (%p/p)

Declared nutrient content

Calcium oxide soluble in water	9,0
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FORMATS



Betterlife

- Improves the plant's root development and nutrient assimilation capacity.
- Improves the appearance of the plant and fruit.
- Improves all processes in which the firmness and stability of cellular structures are involved, enhancing their resistance to damage caused by external harmful agents.

Salt displacer



CHARACTERISTICS AND PROPERTIES

betterlife is a concentrate of highly soluble and bioavailable calcium monocarboxylates. The high concentration of calcium displaces excess salinity from the root environment, facilitating the absorption of macro and micronutrients under more osmotically balanced conditions. The presence of different monocarboxylic salts increases solubility compared to polycarboxylic ones, since the "intramolecular clamp effect" does not occur. This greater solubility is also sequential, as different forms of calcium salts coexist, each with its own solubility, causing the product to behave like a buffer complex that stabilizes soil pH and ionic strength.

betterlife, is not only a product designed for soil improvement that indirectly enhances the plant's absorption capacity, but it also directly increases calcium absorption.

The use of monocarboxylic acids of different molecular weights and structures achieves the entry of calcium through transport mechanisms to which inorganic calcium does not have access. All these effects result in a physicochemical improvement of the soil and in a greater absorption of metabolically active calcium.



COMPATABILITY

betterlife is compatible with most commonly used fertilizers and plant protection products. However, if you have no prior experience, it is advisable to apply each one separately or conduct a compatibility test.



RECOMMENDED APPLICATION RATE

It is not necessary to establish minimum intervals between application and harvest, since its components are natural, bio-degradable, and exempt from MRLs.



DOSAGE AND MODE OF USE

betterlife is indicated for root application in any crop: vegetables, fruit, and ornamental, and is especially recommended when we intend to:

- Reverse the physicochemical conditions of stressed soils
- Increase the root capacity for nutrient absorption.
- Increase the absorption rates of metabolically active and bioavailable calcium.
- Enhance the movement of calcium both intracellularly and extracellularly to ensure it reaches the developing tissues and areas that are deficient in calcium.

General dosage: The usual dose per application is 10 l/ha.

For improved calcium absorption, the dosage will vary between 50-80. liters/hectare/year

To correct severely problematic soils, poorly structured, saline, etc., the dose to apply will range between 80 and 160 liters/hectare/year.

La frecuencia de uso variará, entre otros factores, según las condiciones del suelo, hídricas, climatológicas, estado fenológico del cultivo, etc., además, puede ser aplicado en riegos semanales o en continuo, según necesidades, por lo que es recomendable asesoramiento técnico.





LIQUID ORGANIC FERTILIZER

NK ORGANIC LIQUID FERTILIZER OF PLANT ORIGIN





Foliar



Fertigation



Double system



Residues

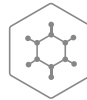
HEAVY METALS



PHYSIOCHEMICAL PROPERTIES

Physical state:	Liquid
pH:	5 - 6
Density (20 °C):	1.26 kg/L

NK organic liquid fertilizer of plant origin. Group 2.5.01 (RD 506/2013, of June 28, on fertilizer products).



COMPOSITION

(%p/p)

Declared nutrient content

Total Nitrogen (N)	3.2
Organic nitrogen (N)	3.0
Total Potassium Oxide (K ₂ O)	6.5
Total Organic Matter	40.0
Organic carbon	23.1
C/N ratio	7.5



FORMATS



1L.



5L.
20L.



200L.
1000L.

Organic deficiency corrector to unblock adverse soil nutrient conditions.



CHARACTERISTICS AND PROPERTIES

Biodinam starter is a concentrate that provides organic matter and immediately available nutrients, facilitating the assimilation and absorption of macro- and micronutrients. It acts as a starter for the rhizosphere bacterial flora. As a nutrient, it is energetic and balanced. The content of nitrogen, organic carbon, and fulvic acids enables adequate nutrient release and their assimilation by both the rhizosphere bacterial flora and the plant. As a bacterial starter, the presence of certain growth promoters for probiotic species in the rhizosphere microbiota favors the establishment and growth of this flora, accelerating its growth. When combined with microbial concentrates, the regeneration of rhizospheric flora is achieved in a more specific and targeted manner.

Biodinam starter promotes root development as well as aerial parts, improving plant respiration and photosynthesis. It favors vegetative development in the face of stress situations caused by drought, salinity, low temperatures, poor soil aeration, etc.



COMPATIBILITY

Biodinam starter is compatible with most commonly used fertilizers and plant protection products. However, if you have no prior experience, it is advisable to apply each one separately or conduct a compatibility test.



RECOMMENDED APPLICATION RATE

It is not necessary to establish minimum intervals between application and harvest, since its components are natural, bio-degradable, and exempt from MRLs.



DOSAGE AND MODE OF USE

Biodinam starter can be applied directly to the soil, through fertigation, or foliar application.

It is recommended for use in various horticultural and woody crops. For horticultural crops, it can be applied throughout the entire crop cycle. In the case of fruit trees, including citrus, subtropical, tropical, and olive varieties, it is advisable to apply it during bud break, at the end of winter dormancy, before flowering, and in any situation that causes stress to the plants.

Dosage:

Irrigation route:

- Normal application dose: 5-10 liters/ha
- Shock treatment: 20 liters/ha

Foliar route: 1.5 cc/liter.





SEAWEED EXTRACT

LIQUID MIXTURE OF AMINO ACIDS AND SEAWEED EXTRACT

Ascophyllum nodosum



FOR ALL
CROPS




PHYSIOCHEMICAL PROPERTIES

Physical state:	Liquid
Density:	1.05 g/cm ³
pH:	10.8
Electric conductivity:	3.61 mS/cm (in aqueous solution at 10%)

Solid seaweed extract 4.1.05 (R.D. 506/2013, of June 28, on fertilizer products).



COMPOSITION (%p/p)

Declared nutrient content

Free amino acids (L-tryptophan)	7.1
Total nitrogen (N)	1.0
Organic nitrogen (N)	1.0
Alginic acid	6.5-8
Mannitol	1.5-2.3

Heavy metal content below the authorized limits for Class A.



FORMATS



Blazar is recommended to increase caliber, uniformity, and fruit quality while reducing the incidence of cracking.

Inducer of natural auxins and cytokinins. Natural growth, without synthetic hormones.



CHARACTERISTICS AND PROPERTIES

blazar is a liquid biostimulant of rapid absorption formulated with extracts of fresh seaweed and a high concentration of tryptophan, an amino acid precursor of natural auxins, such as indole-3-acetic acid. Its role in cell elongation makes it fundamental during the development and swelling phases of fruit growth.

blazar increases the level of tryptophan inside the plant. At the same time, it provides other growth promoters, phytohormones, and compounds that enhance enzymatic activity, acting as bioactivators of metabolic processes and favoring crop development and fruiting, while also strengthening plants against adverse environmental conditions that cause plant stress.



COMPATIBILITY

blazar is compatible with most commonly used fertilizers and plant protection products. However, if you have no prior experience, it is advisable to apply each one separately or conduct a compatibility test.



RECOMMENDED APPLICATION RATE

It is not necessary to establish minimum intervals between application and harvest, since its components are natural, bio-degradable, and exempt from MRLs.



DOSAGE AND METHOD OF USE

Crops

Fruit vegetables	0.7-1 cc/l. Apply during fruit fattening. It lengthens the crop cycle and increases flower quality
Citrus	1 cc/l. Apply after the natural purge and repeat the treatment in summer.
Cherry	0.65 - 1 l/ha. Apply at color change and repeat every 7 - 10 days, according to weather conditions
Stone Fruit	1 l/ha. Apply when the buds fall. Repeat in 7-10 days.
Table grapes	1-1.5 l/ha. Apply when berries are pea-sized and repeat in 7-10 days. Reduces splitting.





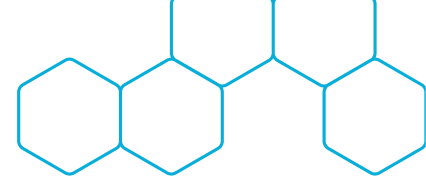
FERTILIZER WITH AMINO ACIDS

FERTILIZER WITH PLANT-DERIVED AMINO ACIDS OBTAINED BY
BACTERIAL FERMENTATION

Corynebacterium Melassecola



FOR ALL
CROPS



HEAVY METALS



Product usable in Organic Agriculture in accordance with EU Regulation 2018/848, of May 30, 2018, on organic production and labeling of organic products.



FORMATS



1L.



5L.
20L.



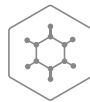
200L.
1000L.



PHYSIOCHEMICAL PROPERTIES

Physical state:	Liquid
pH:	6
Density (20 °C):	1.22 kg/L

Fertilizer with amino acids. Group 4.1.02 (R.D. 506/2013, of June 28, on fertilizer products).



COMPOSITION

(%p/p)

Declared nutrient content

Free amino acids	9.43
Total Nitrogen (N)	5.00
Ammoniacal nitrogen (N)	2.51
Organic nitrogen (N)	2.49
Boron (B) soluble in water	2.00
Molybdenum (Mo) soluble in water	0.30
Sulfur trioxide (SO ₃) soluble in water	5.10

Heavy metal content is lower than the authorized limits for Class A.

AMINO ACID PROFILE

(%p/p)

Aspartic acid	0.77
Glutamic acid	2.49
Alanine	0.82
Arginine	0.05
Phenylalanine	0.06
Glycine	0.13
Histidine	0.15
Isoleucine	0.11
Leucine	0.14
Lysine	1.07
Methionine	0.07
Proline	0.69
Serine	0.06
Tyrosine	0.44
Threonine	1.09
Tryptophan	0.08
Valine	1.21

Bioactivator, indicated for fruit setting and binding—anti-stress properties.



CHARACTERISTICS AND PROPERTIES

C-15 hort is a metabolic multi-activator with high foliar and root bioavailability. The use of the amino acids that compose it induces, at the cellular level, a metabolic awakening necessary for all correlation processes. The presence of free protein amino acids, of high biological value and easily assimilated systemically, and micronutrients, as an osmoregulator and inorganic enzymatic activator, causes an immediate response in the plant, making it more balanced, vigorous, and resistant to stress conditions, especially in the critical development stages: growth, flowering, fruit set, and fruit fattening.

C-15 hort is an exceptional flowering inducer; it favors fruit set and attachment. Its application has a stimulating effect and a general improvement in the crop, optimizing yield, improving quality, and delaying exhaustion.

C-15 hort can be applied both by foliar spraying and by fertigation and is compatible with any crop.



COMPATABILITY

C-15 hort is compatible with most commonly used fertilizers and plant protection products. However, if you have no prior experience, it is advisable to apply each one separately or conduct a compatibility test.



RECOMMENDED APPLICATION RATE

It is not necessary to establish minimum intervals between application and harvest, since its components are natural, biodegradable, and exempt from MRLs.



DOSAGE AND MODE OF USE

Crops	Foliar Spraying	Fertigation	Hydroponics
Horticultural crops and ornamental plants	100-200 cc/hl.	1-2 L/ha.	0.25 – 0.5 l/ha, in horticultural crops
Fruit trees, citrus, grapevines, olive trees, and subtropical plants	100-200 cc/hl.	1-2 L/ha.	
Extensive and industrial crops	100-200 cc/hl.	1-2 L/ha.	
Pitahaya	Apply at a sprouting rate of 200 cc/hl. At floral bud, setting until fruit formation, 150 cc/hl.		
Timing and number of applications: Will depend on the crop and the treatment goal. You can conduct as many applications as needed, as long as they are done based on technical recommendations.			



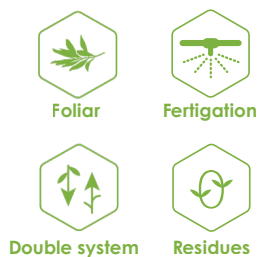


FERTILIZER WITH AMINO ACIDS

FERTILIZER WITH AMINO ACIDS OBTAINED FROM
HYDROLYZED PLANT PROTEINS

UNE 142500

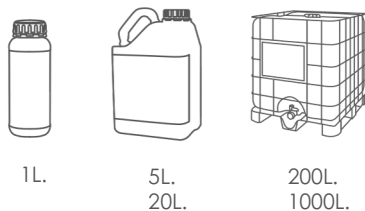




HEAVY METALS



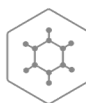
FORMATS



PHYSIOCHEMICAL PROPERTIES

Physical state:	Liquid
pH:	6-7
Density (20 °C):	1.26 kg/L.

Fertilizer with amino acids. Group 4.1.02 (R.D. 506/2013, of June 28, on fertilizer products).



COMPOSITION

(%p/p)

Declared nutrient content

Free amino acids	8.57
Total Nitrogen (N)	7.01
Ammoniacal nitrogen (N)	3.03
Organic nitrogen (N)	3.96
Boron (B) soluble in water	2.0
Molybdenum (Mo) soluble in water	0,3

Heavy metal content is lower than the authorized limits for Class A.

AMINO ACID PROFILE

(%p/p)

Aspartic acid	0.200
GABA (Gamma-aminobutyric acid)	0.511
Glutamic acid	0.390
Alanine	0.371
Arginine	0.909
Phenylalanine	<0.100
Glycine	0.0731
Histidine	<0.100
Isoleucine	0.313
Leucine	<0.100
Lysine	0.949
Methionine	<0.090
Proline	0.229
Serine	<0.070
Tyrosine	0.129
Threonine	<0.070
Tryptophan	0.0611
Valine	4.22

Antistress bioactivator.
Enhances the most demanding phenological stages. Especially indicated for fruit set and attachment.



CHARACTERISTICS AND PROPERTIES

C-15-e crops is a metabolic multi-activator with high foliar and root bioavailability. The use of the amino acids that compose it induces, at the cellular level, a metabolic awakening necessary for all correlation processes. The presence of free protein amino acids, of high biological value and easily assimilated systemically, and micronutrients, as an osmoregulator and inorganic enzymatic activator, causes an immediate response in the plant, making it more balanced, vigorous, and resistant to stress conditions, especially in the critical development stages: growth, flowering, fruit set, and fruit fattening.

C-15-e crops is an exceptional flowering inducer that promotes fruit set and development. It stimulates the crop's overall growth and improves quality, making it an effective choice for enhancing yield and delaying plant exhaustion during critical growth stages.

C-15-e crops can be applied both by foliar spraying and by fertigation and is compatible with any crop.



COMPATABILITY

C-15-e crops is compatible with most commonly used fertilizers and plant protection products. However, if you have no prior experience, it is advisable to apply each one separately or conduct a compatibility test.



RECOMMENDED APPLICATION RATE

It is not necessary to establish minimum intervals between application and harvest, since its components are natural, bio-degradable, and exempt from MRLs.



DOSAGE AND MODE OF USE

Crops	Foliar Spraying	Fertigation	Hydroponics
Horticultural crops and ornamental plants	100-200 cc/hl.	1-2 L/ha.	0.25 – 0.5 l/ha, in horticultural crops
Fruit trees, citrus, grapevines, olive trees, and subtropical plants	100-200 cc/hl.	1-2 L/ha.	
Extensive and industrial crops	100-200 cc/hl.	1-2 L/ha.	
Pitahaya	Apply at a sprouting rate of 200 cc/hl. At floral bud, setting until fruit formation, 150 cc/hl.		
Timing and number of applications: Will depend on the crop and the treatment goal. Any number of applications can be conducted as needed, always following technical recommendations.			





TECHNOLOGY
LiberPro®



FERTILIZER WITH AMINO ACIDS

FERTILIZER WITH PLANT-BASED AMINO ACIDS OBTAINED BY ACID HYDROLYSIS



FOR ALL
CROPS



PHYSIOCHEMICAL PROPERTIES

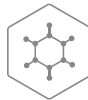


HEAVY METALS



Physical state:	Liquid
pH:	7
Density (20 °C):	1.352 kg/L

Fertilizer with amino acids. Group 4.1.02 (Royal Decree 506/2013, of June 28, on fertilizer products.)



COMPOSITION

(%p/p)

Declared nutrient content

Free amino acids	10.80
Total Nitrogen (N)	5.50
Organic nitrogen (N)	5.40
Potassium oxide (K ₂ O) soluble in water	20.20

Heavy metal content is lower than the authorized limits for Class A.

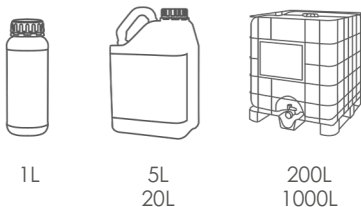
AMINO ACID PROFILE

(%p/p)

Aspartic acid	0.65-0.88
Glutamic acid	0.88-1.15
Alanine	0.28-0.38
Arginine	0.44-0.60
Phenylalanine	0.29-0.39
Glycine	0.52-0.71
Histidine	0.04-0.06
Isoleucine	0.34-0.45
Leucine	0.50-0.66
Lysine	0.09-0.12
Methionine	0.06-0.08
Proline	0.50-0.67
Serine	0.60-0.81
Tyrosine	0.10-0.14
Threonine	0.96-1.30
Cystine	0.29-0.39
Valine	0.83-1.12



FORMATS



Fertilizer with plant-derived amino acids obtained through acid hydrolysis.



CHARACTERISTICS AND PROPERTIES

ziom granero K is a special formulation that provides an innovative, effective, potassium-rich fertilizer with biostimulant action. It has a carefully crafted formulation with a high content of plant amino acids and free-chain peptides, along with a measured proportion of seaweed. These act as natural chelating agents, facilitating the assimilation and transport of potassium to all plant tissues, making it quickly available to the plant in both leaves and fruit.

ziom granero K is a versatile product suitable for all crops and can be applied via foliar irrigation or through the roots, thanks to its high absorption capacity.



COMPATABILITY

ziom granero K is compatible with most commonly used fertilizers and plant protection products. However, if you have no prior experience, it is advisable to apply each one separately or conduct a compatibility test.



RECOMMENDED APPLICATION RATE

It is not necessary to establish minimum intervals between application and harvest, since its components are natural, bio-degradable, and exempt from MRLs.



DOSAGE AND MODE OF USE

Crop

Rice: 400-500 cc/hl (4-5 l/ha). Increased resistance to lodging and grain hardness. Apply the first application at 50% ear formation and the second application at grain filling.

Alfalfa and forage crops: 400-500 cc/hl (4-5 l/ha). Increased yield. Apply after each cutting.

Citrus: 250-300 cc/hl (3-3.5 l/ha). Accelerates early production of seedlings, higher uniformity, increased yield, fruit size, and coloration. Apply 2-3 times from the start of flowering until fruit development.

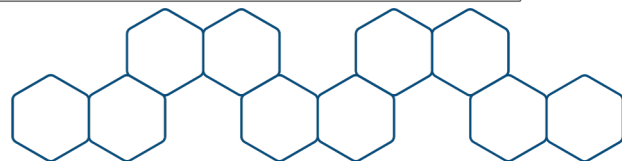
Stone and pome fruits and subtropical plants: 200-250 cc/hl (2-3 l/ha). Promotes ripening, improves fruit size, color, and firmness. Apply 2-3 times from pit hardening until 7 days before harvest. In pome fruit, apply 2-3 times from fruit enlargement until the beginning of color change.

Greenhouse and outdoor horticultural crops: 200-400 cc/hl. Increased production and quality parameters. Apply 2-3 times starting at flowering, adjusting the dose and application time according to the crop.

Olive: 200-300 cc/hl. Increases resistance to cold and disease—boosts production yield. Apply once in spring and again in autumn.

Sugar beet: 400-500 cc/hl (4-5 l/ha). Increases Brix levels. Apply the first solution during root development, and the second two weeks later.

Vineyards and table grapes: 250-350 cc/hl (3-4 l/ha). Increases sugar content. Apply 3 times from the end of June until veraison.





PROTEIN HYDROLYSATE

FERTILIZER WITH AMINO ACIDS





FORMATS



500g



PHYSIOCHEMICAL PROPERTIES

Physical state:	solid, granules
pH:	6
Relative Density:	500g/cm3

Fertilizer with amino acids. Group 4.1.02 (R.D. 506/2013, of June 28, on fertilizer products).



COMPOSITION

(%p/p)

Declared nutrient content

Total Nitrogen (N)	5.8
Ammoniacal nitrogen (N)	5.6
Phosphorus (P2O5)	1.7
Potassium (K2O)	1.9
Organic matter	89.1
Carbohydrates	44.1
Free amino acids	24.7

Heavy metal content is lower than the authorized limits for Class A.

Natural Inducing Biostimulator is responsible for a greater quantity and quality of flowering.



CHARACTERISTICS AND PROPERTIES

HEFONA ProACTIVE is a soluble granular formulation of natural and biodegradable bioactive amino acids and oligopeptides that act in a specific and targeted way on the expression of genes that regulate the synthesis of phytohormones involved in flower formation and fruit set.

The presence of soluble, absorbable carbohydrates provides the plant with immediate energy, promoting the activation of metabolic processes.

HEFONA ProACTIVE promotes the emergence of flower shoots and fruit set, resulting in earlier harvests and a significant increase in the quality and quantity of production. Its use is indicated for foliar application to all types of crops, both horticultural and woody: fruit trees, citrus, grapevines, and olives.

HEFONA ProACTIVE shows a special synergy with bioactivators.



COMPATABILITY

HEFONA ProACTIVE is compatible with most commonly used fertilizers and plant protection products. However, if you have no prior experience, it is advisable to apply each one separately or conduct a compatibility test.



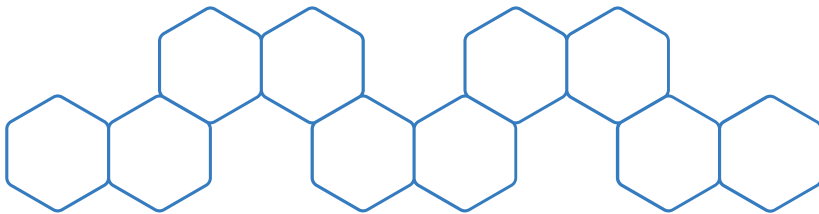
RECOMMENDED APPLICATION RATE

It is not necessary to establish minimum intervals between application and harvest, since its components are natural, bio-degradable, and exempt from MRLs.



DOSAGE AND MODE OF USE

Crops	Dosage	Objective and recommended use
Horticultural crops	50-100 cc/hl.	Every 7-10 days to stimulate flowering and promote fruit set
Fruit trees, citrus, grapevines, olive trees, and subtropical plants		In bud set, after petal fall, and after fruit set
Pitahaya	1 g/l.	Natural inducer of flowering and the formation of phytohormones. Recommended for flower emission and setting.





SEAWEED EXTRACT

Fresh seaweed extract

Ascophyllum nodosum

UNE 142500



FOR ALL
CROPS



Foliar



Fertigation



Double system



Residues

HEAVY METALS



FORMATS



1Kg



PHYSIOCHEMICAL PROPERTIES

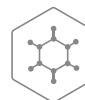
Physical state:	Liquid
pH:	10.8
Electric conductivity:	3.61 mS/cm (in aqueous solution at 10%)

Solid seaweed extract 4.1.05 (R.D. 506/2013, of June 28, on fertilizer products).

Raw materials included in the formulation

%

Extract of fresh <i>Ascophyllum nodosum</i> seaweed	100,00
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COMPOSITION

(%p/p)

Declared nutrient content

Alginic acid	17-21
Mannitol	4-6
Potassium Oxide (K ₂ O) soluble in water	17-21

Heavy metal content below the authorized limits for Class A.

Extract of natural *Ascophyllum nodosum* seaweed. Obtained by hydrolysis, high content of natural cytokinins.



CHARACTERISTICS AND PROPERTIES

ondina is a biostimulant derived from extracts of fresh marine macroalgae *Ascophyllum nodosum*. It represents a natural reserve of micronutrients and macronutrients, carbohydrates, amino acids, and growth promoters that act as bioactivators of metabolic processes, favoring crop development and fruiting, as well as their resistance to adverse environmental conditions that cause plant stress.

ondina is suitable after frosts, droughts, and waterlogging, as it increases the plant's photosynthetic activity. It stimulates cell division, favoring the development of shoots, roots, and flowers. It intervenes in fruit setting and their subsequent swelling.

Ondina is specifically designed to prevent stress during the processes of rooting, growth, flowering, and fruit set and maturation. Suitable for both foliar and fertigation applications. Soil application stimulates microbiota development.



COMPATABILITY

ondina is compatible with most commonly used fertilizers and plant protection products. However, if you have no prior experience, it is advisable to apply each one separately or conduct a compatibility test. Do not use on excessively alkaline soils.



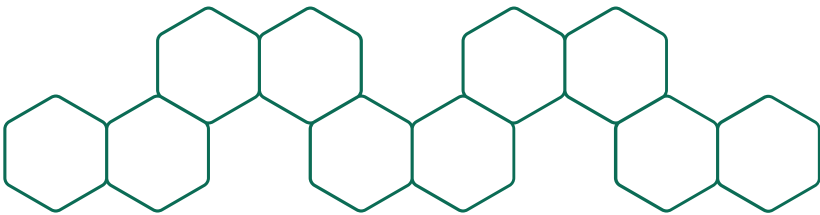
RECOMMENDED APPLICATION RATE

It is not necessary to establish minimum intervals between application and harvest, since its components are natural, bio-degradable, and exempt from MRLs.



DOSAGE AND MODE OF USE

All Crops
Foliar application: 50-60 g/hl. (0.05-0.06%)
Localized irrigation route: 500-750 g/ha.
The crop's condition or needs will determine the doses and application timing; in any case, it is advisable to seek technical assistance.





TECHNOLOGY
LiberPro®



POTASSIUM SOLUTION

POTASSIUM SOLUTION-K9



FOR ALL
CROPS



Foliar



Fertigation



Double system



Residues



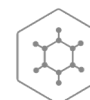
Product suitable for use in Organic Farming in accordance with Regulation (EU) 2018/848 of 30 May 2018 on organic production and labelling of organic products.



PHYSIOCHEMICAL PROPERTIES

Physical state:	Liquid
pH:	8
Density:	1.11 kg/L

Potassium solution. Group 1.1.3.01 (R.D. 506/2013, of June 28, on fertilizer products.



COMPOSITION

(%p/p)

Declared nutrient content

Potassium oxide (K ₂ O) soluble in water	9.00
--	------



FORMATS



1L



5L
20L



200L
1000L

"3 in 1" fertilizer booster to be used for:

1. Perfect dispersion and fixation of liquid fertilizer.
2. Greater protection against photodegradation.
3. Enhances the effectiveness of the treatment through the incorporated amphoteric.



CHARACTERISTICS AND PROPERTIES

potenzia is a nutrient solution that, as a source of potassium, thanks to its amphoteric nature and rapid absorption, ensures maximum assimilation and translocation throughout the plant, giving the product unique characteristics upon application.

It provides consistency and plant resistance by promoting cell wall firmness, reducing the appearance of physiopathies, stimulating phytoalexin production and plant metabolism, and participating in photosynthetic activities for protein production.

potenzia is compatible with any crop. It can be applied foliarly without phytotoxicity or burning, or incorporated into the irrigation system thanks to its excellent systemic activity. It can be used alone or in combination with standard treatment programs, as its special formulation improves the distribution, penetration, and mobilization of treatment solutions, optimizing their efficiency.



COMPATABILITY

potenzia is compatible with most commonly used fertilizers and plant protection products. However, if you have no prior experience, it is advisable to apply each one separately or conduct a compatibility test.



RECOMMENDED APPLICATION RATE

It is not necessary to establish minimum intervals between application and harvest, since its components are natural, bio-degradable, and exempt from MRLs.



DOSAGE AND MODE OF USE

Foliar spraying:

Program application: 50/100 cc/hl.

Shock treatment: 150/300 cc/hl.

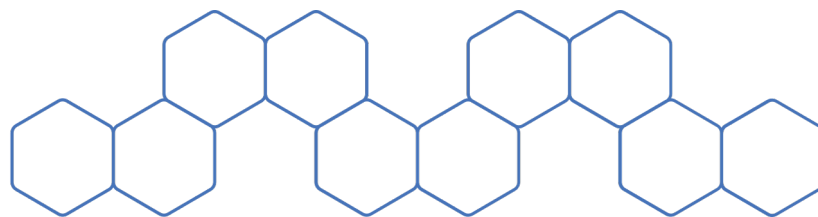
Localized irrigation method:

Sandy soil or small bulb: 2-3 l/ha.

Deep Soil or bulb: 3-4 l/ha.

Hydroponics:

Weekly application: 0.5 – 1.0 l/ha.





TECHNOLOGY
LiberPro®



AMINO ACIDS

PLANT-DERIVED AMINO ACIDS OBTAINED BY BACTERIAL
FERMENTATION

Corynebacterium Melassecola



FOR ALL
CROPS



HEAVY METALS



Product usable in Organic Agriculture in accordance with EU Regulation 2018/848, of 30 May 2018, on organic production and labeling of organic products.



FORMATS



1L



5L
20L



200L
1000L



PHYSIOCHEMICAL PROPERTIES

Physical state:	Liquid
pH:	6
Density (20°C):	1.16 kg/L

Fertilizer with amino acids. Group 4.1.02 (R.D. 506/2013, of June 28, on fertilizer products).



COMPOSITION (%p/p)

Declared nutrient content

Free amino acids	8.54
Total Nitrogen (N)	6.00
Ammoniacal nitrogen (N)	2.34
Organic nitrogen (N)	3.66

Heavy metal content is lower than the authorized limits for Class A.

AMINO ACID PROFILE (%p/p)

Aspartic acid	0.68
Glutamic acid	2.21
Alanine	0.73
Arginine	0.04
Phenylalanine	0.06
Glycine	0.11
Histidine	0.14
Isoleucine	0.10
Leucine	0.12
Lysine	0.95
Methionine	0.07
Proline	0.62
Serine	0.06
Tyrosine	0.39
Threonine	0.96
Tryptophan	0.23
Valine	1.07

Natural inducer of rhizogenesis, enhancer of the emission of both primary and secondary roots.



CHARACTERISTICS AND PROPERTIES

rhyzostim is a plant concentrate rich in auxin precursors and enzymatic cofactors with the ability to promote the new differentiation and activation of meristematic cells at the root and apical level.

At the same time, the formulation provides the plant with the full complement of amino acids, cofactors, and biological precursors necessary to respond to these growth signals.

The application of **rhyzostim** results in vigorous rhizogenesis and intense stem and leaf development. In the root system, the rate of active root growth increases at both primary and secondary levels, as well as in bulbs, rhizomes, and tubers. In the aerial parts, the appearance of new apical and axillary buds promotes the formation of new shoots, runners, and floral stems, keeping the plant balanced, compact, and branched, with short internodes. The high capacity for absorption, mobilization, and translocation of the components used through the plant's vascular system allows identical effects to be obtained with foliar and/or root treatments.

rhyzostim can be applied via foliar or fertigation irrigation in all crops at critical stages (flowering, fruit growth, etc.) or under stressful conditions (transplanting, drought, frost, plant exhaustion, suffocation, etc.).



COMPATABILITY

rhyzostim is compatible with most commonly used fertilizers and plant protection products. However, if you have no prior experience, it is advisable to apply each one separately or conduct a compatibility test.



RECOMMENDED APPLICATION RATE

It is not necessary to establish minimum intervals between application and harvest, since its components are natural, bio-degradable, and exempt from MRLs.



DOSAGE AND MODE OF USE

Crops	Foliar Spraying	Fertigation	Hydroponics
Horticultural crops and ornamental plants	100-150 cc/hl.	2-3 l/ha. 2-4 l/ha.	0.5 – 1 l/ha, in horticultural crops
Fruit trees, citrus, olive trees, and subtropical plants	100-150 cc/hl.	2-4 l/ha.	
Extensive and industrial crops	100-200 cc/hl.	1.5-2 L/ha.	
Grapevines and vine trellis	100-150 cc/hl.	2-4 l/ha.	
Pitahaya	-	2 l/ha.	
Seedbeds	1 cc/l	100 cc/hl	



AMINO ACIDS

AMINO ACIDS OBTAINED FROM HYDROLYZED PLANT PROTEIN
UNE 142500





HEAVY METALS



FORMATS



1L



5L
20L



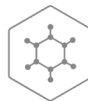
200L
1000L



PHYSIOCHEMICAL PROPERTIES

Physical state:	Liquid
pH:	4-5
Density (20°C):	1.18 kg/L

Amino acids. Group 4.1.01 (R.D. 506/2013, of June 28, on fertilizer products).



COMPOSITION

(%p/p)

Declared nutrient content

Free amino acids	9.60
Total Nitrogen (N)	6.37
Ammoniacal nitrogen (N)	3.15
Organic nitrogen (N)	3.21

Heavy metal content is lower than the authorized limits for Class A.

AMINO ACID PROFILE (%p/p)

Aspartic acid	0.209
GABA (Gamma-aminobutyric acid)	0.348
Glutamic acid	0.467
Alanine	0.478
Arginine	1.242
Phenylalanine	<0.100
Glycine	0.098
Histidine	<0.100
Isoleucine	0.400
Leucine	0.124
Lysine	0.882
Methionine	<0.090
Proline	0.359
Serine	<0.070
Tyrosine	0.122
Threonine	0.087
Tryptophan	0.190
Valine	4.470

Natural inducer of rhizogenesis, enhancer of the emission of both primary and secondary roots.



CHARACTERISTICS AND PROPERTIES

rhyzostim-e is a plant concentrate rich in auxin precursors and enzymatic cofactors with the ability to promote the new differentiation and activation of meristematic cells at the root and apical level.

At the same time, the formulation provides the plant with the full complement of amino acids, cofactors, and biological precursors necessary to respond to these growth signals.

The application of **rhyzostim-e** results in vigorous rhizogenesis and intense stem and leaf development. In the root system, the rate of active root growth increases at both primary and secondary levels, as well as in bulbs, rhizomes, and tubers. In the aerial parts, the appearance of new apical and axillary buds promotes the formation of new shoots, runners, and floral stems, keeping the plant balanced, compact, and branched, with short internodes.

The high capacity for absorption, mobilization, and translocation of the components used through the plant's vascular system allows identical effects to be obtained with foliar and/or root treatments.

rhyzostim-e can be applied via foliar or fertigation irrigation in all crops when they need to overcome critical stages (flowering, fruit growth, etc.) or in stress situations (transplanting, drought, frost, plant exhaustion, suffocation, etc.).



COMPATABILITY

rhyzostim-e is compatible with most commonly used fertilizers and plant protection products. However, if you have no prior experience, it is advisable to apply each one separately or conduct a compatibility test.



RECOMMENDED APPLICATION RATE

It is not necessary to establish minimum intervals between application and harvest, since its components are natural, bio-degradable, and exempt from MRLs.



DOSAGE AND MODE OF USE

Crops	Foliar Spraying	Fertigation	Hydroponics
Horticultural crops and ornamental plants	100-150 cc/hl.	2-3 L/ha. 2-4 L/ha.	0.5 – 1 l/ha, in horticultural crops
Fruit trees, citrus, olive trees, and subtropical plants	100-150 cc/hl.	2-4 L/ha.	
Extensive and industrial crops	100-200 cc/hl.	1.5-2 L/ha.	
Grapevines and vine trellis	100-150 cc/hl.	2-4 L/ha.	
Pitahaya	-	2 L/ha	
Seedbeds	1 cc/l	100 cc/hl	





TECHNOLOGY
LiberPro®

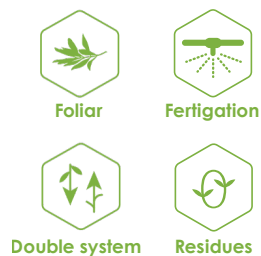


FERTILIZER WITH AMINO ACIDS

FERTILIZER WITH PLANT-DERIVED AMINO ACIDS OBTAINED BY
BACTERIAL FERMENTATION
Corynebacterium Melassecola



FOR ALL
CROPS



HEAVY METALS



Product usable in Organic Agriculture in accordance with Regulation (EU) 2018/848, of 30 May 2018, on the production and labeling of organic products.



FORMATS



1L



5L
20L



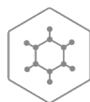
200L
1000L



PHYSIOCHEMICAL PROPERTIES

Physical state	liquid
pH:	6
Density (20°C)	1.18 kg/L

Fertilizer with amino acids. Group 4.1.02 (R.D. 506/2013, of June 28, on fertilizer products).



COMPOSITION

(%p/p)

Declared nutrient content

Free amino acids	3.95
Total Nitrogen (N)	2.70
Ammoniacal nitrogen (N)	1.19
Organic nitrogen (N)	1.51
Calcium oxide (CaO) soluble in water	6.00

Heavy metal content is lower than the authorized limits for Class A.

AMINO ACID PROFILE (%p/p)

Aspartic acid	0.32
Glutamic acid	1.04
Alanine	0.34
Arginine	0.02
Phenylalanine	0.03
Glycine	0.05
Histidine	0.06
Isoleucine	0.05
Leucine	0.06
Lysine	0.45
Methionine	0.03
Proline	0.29
Serine	0.03
Tyrosine	0.18
Threonine	0.45
Tryptophan	0.03
Valine	0.51

Quality-promoting biostimulant.
Corrector of calcareous
physiopathies and enzymatic
activator.



CHARACTERISTICS AND PROPERTIES

Sanical is a formulation designed to increase the bioavailability and transport of calcium by activating the plant's cellular metabolism. The use of multicomplexes in the formula allows for programmed release and differential, sequential absorption of calcium, ensuring the plant a continuous supply of calcium. The use of carriers and elicitors makes Sanical improve intracellular bioavailability at all times. The plant responds with accelerated growth and maturation of tissues and organs, and a delay in senescence, thereby increasing physical and metabolic resistance and ultimately prolonging its useful life and resilience.

Sanical can be used on all crops at all stages of development. From flowering to harvest, providing at every moment the benefit that the plant needs according to its state and physiological needs.

Sanical enhances fruit set and strengthens fruit retention during the flowering stage. In fruits, bulbs, vegetables, and tubers, the result is a significant reduction of physiological disorders and malformations caused by calcium deficiency (cracking, splitting, cork spot, puffiness, apical rot "peseta") and an improvement in the fruit's quality, physical characteristics, and organoleptic properties (weight, density, texture, and more intense and uniform color, as well as higher sugar content).

In leafy crops, it improves turgor and resistance, providing a natural shine to fruits indicative of health and quality. Sanical provides greater firmness and resistance of fruits, thereby extending post-harvest life. It protects crops and fruits from photothermal stress.



COMPATABILITY

Sanical is compatible with most commonly used fertilizers and plant protection products. However, if you have no prior experience, it is advisable to apply each one separately or conduct a compatibility test.



RECOMMENDED APPLICATION RATE

It is not necessary to establish minimum intervals between application and harvest, since its components are natural, bio-degradable, and exempt from MRLs.

DOSAGE AND MODE OF USE

Crops	Dosage	Foliar Spraying
Fruit trees and subtropical plants	200-300 cc/hl.	Apply 3 times during flowering, fruit formation, and ripening.
Citrus	200-300 cc/hl.	Citrus: Apply 3 times during flowering, fruit set, and 30 days before harvest.
Lettuce, endive, cabbage	200-250 cc/hl.	Apply 1-3 times.
Artichoke	200-300 cc/hl.	Apply 1-3 times.
Solanaceae	200-300 cc/hl.	Apply according to the fertilization schedule at 8 to 12-day intervals.
Cucurbitaceae	200-300 cc/hl.	Make 2-4 applications for fruit formation at 10-15 day intervals. Strawberry: Apply according to the fertilization schedule at 10 to 15-day intervals
Strawberry	100-300 cc/hl.	Apply according to the fertilization schedule at 10 to 15-day intervals.
Potato	200-250 cc/hl.	Make 2-3 applications after bulb formation. Make 1 application 10-12 days before harvest to strengthen the skin and facilitate mechanical harvesting.
Garlic, onion	200-300 cc/hl.	Apply 1-3 times.
Pitahaya	200-300 cc/hl.	Make applications in the program from budding to fruit formation. Treatments every 15 days.
Grapevines	200-300 cc/hl.	Make 2-4 applications from flowering.
Olive	200-300 cc/hl.	2-3 applications per year are recommended during the cycle

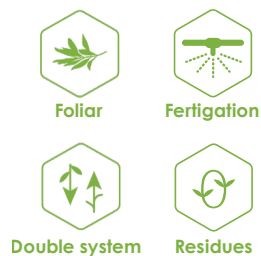
Via localized irrigation: Generally, 2-4 applications.
Soil: 2-3 l/ha Sandy soil: 2-3 /ha Hydroponic: 0.5-1 l/ha



PROTEIN HYDROLYSATE

FERTILIZER WITH AMINO ACIDS





HEAVY METALS



FORMATS



1L



5L
20L



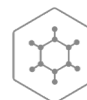
200L
1000L



PHYSIOCHEMICAL PROPERTIES

Physical state	Liquid soluble
pH:	9-10
Density (20 °C)	1.3 kg/l

Complexed copper solution. 1.3.05
(Royal Decree 506/2013, of June 28, on
fertilizer products.)



COMPOSITION (%p/p)

Declared nutrient content

Copper (Cu) soluble in water	7.00
Copper (Cu) complexed	7.00
Complexing agent, heptagluconic acid	

Tricup 70 Eco can be used on all crops, and it can be applied to the plant either through foliar application or via localized irrigation systems. Tricup 70 Eco corrects copper deficiencies.

Phytoalexin inducer. Activator of the plant's natural defenses. Acts from within the plant. Dual system.



CHARACTERISTICS AND PROPERTIES

Tricup 70 Eco is a fertilizer solution composed of copper complexes that enhance the action of the heptagluconic complex through synergy, significantly improving its absorption and subsequent translocation. As a copper source, it has been designed to enhance the function of essential enzyme groups involved in plant metabolism. Its full bioavailability and mobility, thanks to its systemic power, allow it to reach sufficient concentrations so that vital pathways in the plant are not interrupted by nutritional deficiencies or imbalances, such as CO₂ fixation and biosynthesis of structural and storage polysaccharides, detoxification of superoxide radicals formed during photosynthesis, and synthesis of phytoalexins from phenolic compounds or their polymerization during lignification.

The result is a more robust, functional, structural, and conductive system that prevents the collapses that occur in xylem vessels.



COMPATIBILITY

Tricup 70 Eco is compatible with most commonly used fertilizers and plant protection products. However, if you have no prior experience, it is advisable to apply each one separately or conduct a compatibility test. Do not mix with amino acids, mineral oils, other copper compounds, or alkaline reaction products without prior testing.



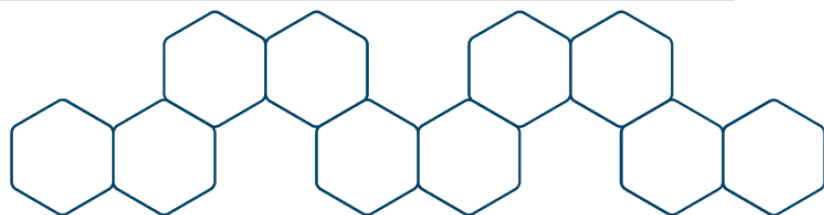
RECOMMENDED APPLICATION RATE

It is not necessary to establish minimum intervals between application and harvest, since its components are natural, bio-degradable, and exempt from MRLs.



DOSAGE AND MODE OF USE

Horticultural crops: Apply preventively every 10-20 days, and every 7 days in cases of obvious stress. Foliar: 100-200 cc/hl.
Localized Irrigation: 2-3 L/ha.: 2-3 L/ha.
Hydroponics: 0.5-1 L/ha. Except in organic farming, where hydroponic cultivation is not authorized.
Fruit trees, olive groves, citrus, vineyards, other woody and subtropical crops: Apply 3 times: spring, summer, and autumn as a root, crown, and vascular fortifier. • In olive groves, apply in spring and autumn. • In citrus, from flowering. • In fruit trees, after fruit set. • In grapevines and trellised vines, apply until veraison.
Foliar: 100-200 cc/hl. Targeted wood applications: 300-400 cc/hl (200-300 L of solution/ha).
Irrigation: 2-3 L/ha.
Injection: 7-10 cc/tree in injections around the trunk, depending on the tree's size and age.
Pitahaya: Apply from transplanting, as needed.

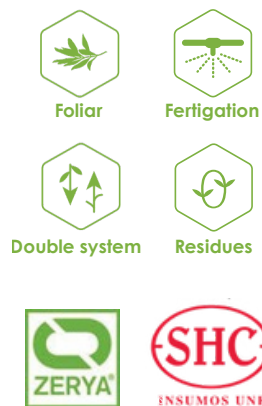




COPPER-BASED FERTILIZER

COMPLEXED COPPER-BASED FERTILIZER SOLUTION

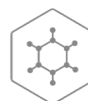




PHYSIOCHEMICAL PROPERTIES

Physical state	Liquid soluble
pH:	9-10
Densidad	1.5 kg/l

Complexed copper solution. 1.3.05
(Royal Decree 506/2013, of June 28, on
fertilizer products.)



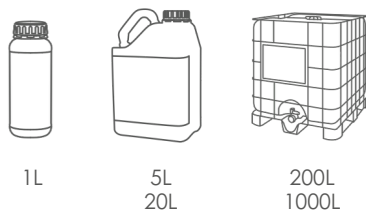
COMPOSITION (%p/p)

Declared nutrient content

Copper (Cu) soluble in water	5.80
Copper (Cu) complexed with GA	5.00
Complexing agent, gluconic acid	



FORMATS



1L

5L
20L

200L
1000L

Tricup FORTE can be used on all types of crops. It is especially recommended for those who are more susceptible during their development to various diseases, including vascular, foliar, and root diseases. Tricup FORTE corrects copper deficiencies.

Phytoalexin inducer. Activator of the plant's natural defenses. Acts from within the plant. Dual system.



CHARACTERISTICS AND PROPERTIES

Tricup Forte Eco is a concentrated formulation of copper amino and gluconic complexes, along with cationic cofactors that support the function of enzymatic groups essential for plant metabolism. The high concentration, provided in a bioavailable and translocated form, enables systemic administration, achieving sufficient levels to prevent the interruption of vital pathways in the plant due to nutritional deficiencies. These pathways include:

- CO₂ fixation and biosynthesis of structural and storage polysaccharides;
- the detoxification of superoxide radicals formed during photosynthesis; and
- the synthesis and polymerization of phytoalexins from phenolic compounds.

The result is a more robust, functional, structural, and conductive system that prevents the collapse of xylem vessels and increases the plant's defenses against diseases caused by biotic and abiotic factors.



COMPATIBILITY

Tricup Forte Eco is compatible with most commonly used fertilizers and plant protection products. However, if you have no prior experience, it is advisable to apply each one separately or conduct a compatibility test. Do not mix with amino acids, mineral oils, other copper compounds, or alkaline reaction products without prior testing.



RECOMMENDED APPLICATION RATE

It is not necessary to establish minimum intervals between application and harvest, since its components are natural, bio-degradable, and exempt from MRLs.



DOSAGE AND MODE OF USE

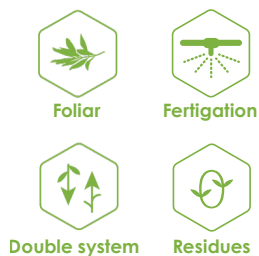
Horticultural crops: Apply preventively every 10-20 days, and every 7 days in cases of obvious stress.
Foliar: 100-200 cc/hl.
Localized irrigation: 2-3 L/ha.
Hydroponics: 0.5-1 L/ha.
Fruit trees, olive groves, citrus, vineyards, other woody and subtropical crops: Apply 3 times: spring, summer, and autumn as a root, crown, and vascular fortifier. • In olive groves, apply in spring and autumn. • In citrus, from flowering. • In fruit trees, after fruit set. • In grapevines and trellised vineyards, apply until veraison. • In pitahaya, apply fortnightly from November to December (200 cc/hl). For the rest of the year, apply at a rate of 300 cc/hl if conditions warrant. • In grapevines and trellised vines, apply until veraison.
Foliar: 100-200 cc/hl.
Targeted wood applications: 300-400 cc/hl (200-300 L of solution/ha).
Irrigation: 2-3 L/ha.
Injection: 7-10 cc/tree in injections around the trunk, depending on the tree's size and age.
Pitahaya: Apply from transplanting, as needed.



LIQUID ORGANIC FERTILIZER

NK ORGANIC LIQUID FERTILIZER OF PLANT ORIGIN





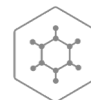
HEAVY METALS



PHYSIOCHEMICAL PROPERTIES

Physical state	Dark brown liquid
pH:	5 - 5.5
Density (20 °C)	1.3 kg/L

NK organic liquid fertilizer of plant origin. Group 2.5.01 (Royal Decree 506/2013, of June 28, on fertilizer products).



COMPOSITION

(%p/p)

Declared nutrient content

Total nitrogen (N)	2.8
Organic nitrogen	2.8
Total Potassium oxide (K ₂ O)	5.7
Total organic matter	45.1
Organic carbon	26.1
C/N ratio	9.34



FORMATS



5L
20L



200L
1000L

Biogenic complex of fermentative origin in a restrictive culture medium—regenerator of soils and their microbiota.



CHARACTERISTICS AND PROPERTIES

Vitum10 is a stable organic solution rich in organic matter and low-molecular-weight fulvic acids, containing betaine and vitamins, that forms a biogenic complex promoting the establishment of a probiotic microbial flora in the rhizosphere for optimal plant development. It contains all the necessary cellular components and nutrients to establish a desirable, balanced population, resulting in a highly stable, synergistic root ecosystem. Simultaneously, as an energy source, it degrades complex organic matter, transforming it into simpler, more readily available nutrients.

Vitum10 promotes the microbial transformation of complex nutrients in the soil, thereby making them more readily assimilable. The creation of a healthy microbiota has an impact on two vital aspects of a crop: on the one hand, it improves the texture and oxygenation of the soil, and on the other, it provides the plant with organic and inorganic nutrients that stimulate its metabolism, enhancing its development from the ground up, resulting in improved quality and increased harvest.



COMPATIBILITY

vitum10 is compatible with most commonly used fertilizers and plant protection products. However, if you have no prior experience, it is advisable to apply each one separately or conduct a compatibility test.



RECOMMENDED APPLICATION RATE

It is not necessary to establish minimum intervals between application and harvest, since its components are natural, bio-degradable, and exempt from MRLs.



DOSAGE AND MODE OF USE

Vitum10 is indicated for root application in horticultural and woody crops.

Its use is recommended in numerous horticultural crops and woody crops.

- In horticultural crops, it can be applied throughout the entire crop cycle.
- In fruit trees, olive groves, etc., it is recommended to apply at bud break, emergence from winter dormancy, pre-flowering, and in any stressful situation.

The frequency and dosage of application will depend on the crop and soil type. The recommended dosage will range from 100 to 200 liters/ha/year.

Horticultural crops (fertigation):

From the start of planting, three consecutive applications are recommended during the first, second, and third weeks at a dose of 20 liters/Ha. Continue applying at the same dose every two weeks until the end of the crop.

Fruit trees, olive groves, citrus, vineyards, other woody and subtropical crops (fertigation):

3-4 applications per year of 40-60 liters/ha are recommended: a first application at the beginning of vegetation, a second at the beginning of fruit set, and a third during full fruit development, with a fourth application possible if circumstances warrant it.





AMINO ACIDS OF PLANT ORIGIN

PLANT-DERIVED AMINO ACIDS OBTAINED BY BACTERIAL FERMENTATION

Corynebacterium Melassecola



FOR ALL
CROPS



Foliar



Fertigation



Double system



Residues

HEAVY METALS



Product usable in Organic Agriculture in accordance with EU Regulation 2018/848, of 30 May 2018, on organic production and labeling of organic products.



FORMATS



1L



5L
20L



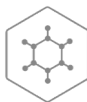
200L
1000L



PHYSIOCHEMICAL PROPERTIES

Physical state	Liquid
pH:	6
Density (20 °C)	1.18 kg/L

Amino acids. Group 4.1.01 (Royal Decree 506/2013, of June 28, on fertilizer products).



COMPOSITION

(%p/p)

Declared nutrient content

Free amino acids	12.01
Total Nitrogen (N)	8.20
Ammoniacal nitrogen (N)	4.20
Organic nitrogen (N)	4.00

Heavy metal content is lower than the authorized limits for Class A.

AMINO ACID PROFILE

(%p/p)

Aspartic acid	0.97
Glutamic acid	3.12
Alanine	1.05
Arginine	0.08
Phenylalanine	0.09
Glycine	0.16
Histidine	0.19
Isoleucine	0.16
Leucine	0.19
Lysine	1.35
Proline	0.88
Serine	0.09
Tyrosine	0.57
Threonine	1.38
Tryptophan	0.12
Valine	1.53

Plant-based amino acids with high glutamic acid content and rapid absorption.



CHARACTERISTICS AND PROPERTIES

The formulation of **ziom amino-12** is specifically designed to promote the plant's metabolic processes by optimizing nutrient transport, penetration, and storage. Its application, both foliar and through fertigation, results in energy savings for the plant, which in turn leads to increased carbohydrate synthesis.

ziom amino-12 is a special formulation of amino acids derived from fermentation by *Corynebacterium melassecola* bacteria and is 100% plant-based.

ziom amino-12 can be used in all types of crops



COMPATABILITY

Ziom amino-12 is compatible with most commonly used fertilizers and plant protection products. However, if you have no prior experience, it is advisable to apply each one separately or conduct a compatibility test.



RECOMMENDED APPLICATION RATE

It is not necessary to establish minimum intervals between application and harvest, since its components are natural, bio-degradable, and exempt from MRLs.



DOSAGE AND MODE OF USE

Crops	Foliar Spraying	Fertigation
Horticultural crops	1 - 5 cc/l.	5 - 10 L/ha.
Stone fruits, pome fruits, citrus fruits, pitahaya, and subtropical fruits	1 - 5 cc/l.	5 - 10 L/ha.
Olive	1 - 5 cc/l.	2 - 5 l/ha.





AMINO ACIDS

AMINO ACIDS OBTAINED FROM HYDROLYZED PLANT PROTEIN





HEAVY METALS



FORMATS



1L



5L
20L



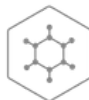
200L
1000L



PHYSIOCHEMICAL PROPERTIES

Physical state	Liquid
pH:	4-5
Density (20 °C)	1.243 kg/L

Amino acids. Group 4.1.01 (Royal Decree 506/2013, of June 28, on fertilizer products).



COMPOSITION

(%p/p)

Declared nutrient content

Free amino acids	11.41
Total Nitrogen (N)	7.72
Ammoniacal nitrogen (N)	4.64
Organic nitrogen (N)	3.03

Heavy metal content is lower than the authorized limits for Class A.

AMINO ACID PROFILE

(%p/p)

Aspartic acid	0.090
Glutamic acid	0.320
Alanine	0.155
Arginine	<0.100
Phenylalanine	0.111
Glycine	0.316
Histidine	<0.100
Isoleucine	<0.080
Leucine	<0.080
Lysine	10.040
Methionine	<0.090
Proline	0.141
Serine	<0.070
Tyrosine	<0.100
Threonine	<0.070
Tryptophan	<0.050
Valine	<0.070

Plant-based amino acids with high glutamic acid content and rapid absorption.



CHARACTERISTICS AND PROPERTIES

The formulation of **ziom amino-12-e** is specifically designed to promote the plant's metabolic processes, optimizing nutrient transport, penetration, and storage. Its application, both foliar and through fertigation, results in energy savings for the plant, which in turn leads to increased carbohydrate synthesis.

ziom amino-12-e is a special formulation of amino acids derived from 100% plant-based protein hydrolysates.

ziom amino-12-e can be used on all types of crops.



COMPATABILITY

ziom amino-12-e is compatible with most commonly used fertilizers and plant protection products. However, if you have no prior experience, it is advisable to apply each one separately or conduct a compatibility test.



RECOMMENDED APPLICATION RATE

It is not necessary to establish minimum intervals between application and harvest, since its components are natural, bio-degradable, and exempt from MRLs.



DOSAGE AND MODE OF USE

Crops	Foliar Spraying	Fertigation
Horticultural crops	1 - 5 cc/l.	5 - 10 L/ha.
Stone fruits, pome fruits, citrus fruits, pitahaya, and subtropical fruits	1 - 5 cc/l.	5 - 10 L/ha.
Olive	1 - 5 cc/l.	2 - 5 l/ha.





FERTILIZER WITH AMINO ACIDS

FERTILIZER WITH PLANT-DERIVED AMINO ACIDS OBTAINED BY BACTERIAL FERMENTATION



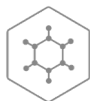
FOR ALL
CROPS



PHYSIOCHEMICAL PROPERTIES

Physical state	Liquid
pH:	6
Density (20 °C):	1,25 kg/L

Amino acids. Group 4.1.01 (Royal Decree 506/2013, of June 28, on fertilizer products).



COMPOSICIÓN (%p/p)

Declared nutrient content

Free amino acids	10.18
Total Nitrogen (N)	6.80
Ammoniacal nitrogen (N)	3.40
Organic nitrogen (N)	3.40
Boron (B) soluble in water	0.70
Iron (Fe) soluble in water	0.30
Manganese (Mn) soluble in water	0.30
Sulfur trioxide (SO ₃) soluble in water	3.80
Zinc (Zn) soluble in water	0.35

Heavy metal content is lower than the authorized limits for Class A.

AMINO ACID PROFILE

(%p/p)

Aspartic acid	0.83
Glutamic acid	2.69
Alanine	0.89
Arginine	0.05
Phenylalanine	0.07
Glycine	0.14
Histidine	0.16
Isoleucine	0.12
Leucine	0.15
Lysine	1.15
Proline	0.75
Serine	0.07
Tyrosine	0.47
Threonine	1.17
Valine	1.30

Plant-based amino acids with high glutamic acid content and micronutrients, including boron, magnesium, copper, iron, and zinc.



Foliar



Fertigation



Double system



Residues

HEAVY METALS



Product usable in Organic Agriculture in accordance with EU Regulation 2018/848, of 30 May 2018, on organic production and labeling of organic products



FORMATOS



1L



5L
20L



200L
1000L



CHARACTERISTICS AND PROPERTIES

Ziom Amino Olivo 2.0 is a 100% plant-based amino acid concentrate obtained through bacterial fermentation. It is characterized by rapid absorption, penetrating the plant quickly and reaching areas of highest demand.

Ziom Amino Olivo 2.0 is specifically designed for application to olive trees to activate natural processes in three critical phases.

During the budding phase, it stimulates the growth of annual vegetative branches, responsible for the following season's production. More vigorous and balanced growth guarantees higher yields when they begin producing fruit. Treatment during the flowering phase improves pollen quality and quantity and promotes proper flower development, thereby increasing fertilization and fruit set rates. The final treatment, applied after fruit set and during the growth phase, increases fruit size, reduces losses from fruit drop, and provides greater resistance to stress.



COMPATABILITY

Ziom Amino Olivo 2.0 is compatible with most commonly used fertilizers and plant protection products. However, if you have no prior experience, it is advisable to apply each one separately or conduct a compatibility test.



RECOMMENDED APPLICATION RATE

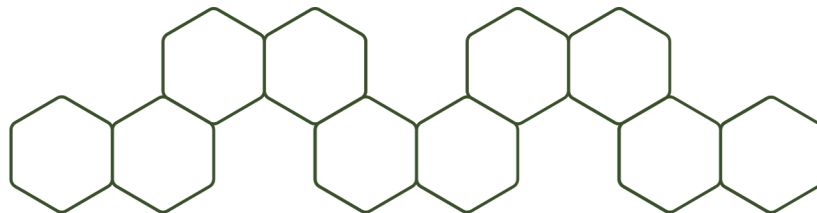
It is not necessary to establish minimum intervals between application and harvest, since its components are natural, bio-degradable, and exempt from MRLs.



DOSAGE AND MODE OF USE

	Application	Goal	Dosage
1st application	Budbreak	Growth of annual vegetative branches.	250-300 cc/Hl.
2nd application	First flowering	Improved pollen quality and increased fertilization and fruit set.	250-300 cc/Hl.
3rd application	Fruit growth	Increased fruit size and resistance.	250-300 cc/Hl.

ziom amino olivo 2.0 is specifically indicated for olive cultivation to improve crop activity.





FERTILIZER WITH AMINO ACIDS

FERTILIZER WITH AMINO ACIDS OBTAINED FROM HYDROLYZED
PLANT PROTEIN
UNE 142500



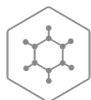
FOR ALL
CROPS



PHYSIOCHEMICAL PROPERTIES

Physical state	Liquid
pH:	5-6
Density (20 °C)	1.236 kg/L

Fertilizer with amino acids. Group 4.1.02 (Royal Decree 506/2013, of June 28, on fertilizer products.)



COMPOSITION

(%p/p)

Declared nutrient content

Free amino acids	10.24
Total Nitrogen (N)	6.32
Ammoniacal nitrogen (N)	3.48
Organic nitrogen (N)	2.80
Boron (B) soluble in water	0.81
Iron (Fe) soluble in water	0.19
Manganese (Mn) soluble in water	0.30
Zinc (Zn) soluble in water	0.27

Heavy metal content is lower than the authorized limits for Class A.

AMINO ACID PROFILE

(%p/p)

Aspartic acid	0.092
Gamma-aminobutyric acid (GABA)	0.0839
Glutamic acid	0.233
Alanine	0.141
Arginine	<0.100
Phenylalanine	<0.100
Glycine	0.188
Histidine	<0.100
Isoleucine	<0.080
Leucine	<0.080
Lysine	8.56
Proline	0.106
Serine	<0.070
Tyrosine	<0.100
Threonine	<0.070
Valine	0.744

Plant-based amino acids with high glutamic acid content and micronutrients, including boron, magnesium, copper, iron, and zinc.



Double system



Residues

HEAVY METALS



FORMATS



1L



5L
20L



200L
1000L



CHARACTERISTICS AND PROPERTIES

Ziom Amino Olive 2.0-e is a concentrate of amino acids extracted by acid hydrolysis of plant-based proteins and micronutrients of high biological value. It is characterized by rapid absorption, rapid penetration into the plant, and easy access to areas of maximum demand.

Ziom Amino Olive 2.0-e is specially designed for application in olive trees as an activator of natural processes in three critical phases.

During the budding phase, it stimulates the growth of annual vegetative branches, responsible for the following season's production. More vigorous and balanced growth guarantees higher yields when they begin producing fruit. Treatment during the flowering phase improves pollen quality and quantity and promotes proper flower development, thereby increasing fertilization and fruit set rates. The final treatment, applied after fruit set and during the growth phase, increases fruit size, reduces losses from fruit drop, and provides greater resistance to stress.



COMPATABILITY

Ziom Amino Olivo 2.0-e is compatible with most commonly used fertilizers and plant protection products. However, if you have no prior experience, it is advisable to apply each one separately or conduct a compatibility test.



RECOMMENDED APPLICATION RATE

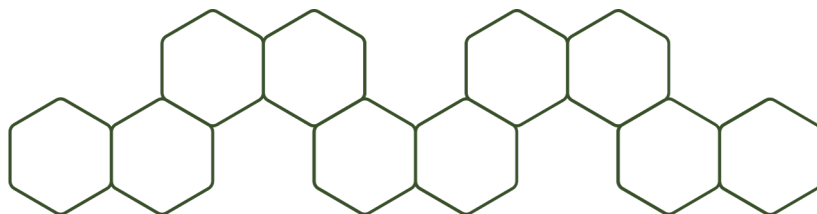
It is not necessary to establish minimum intervals between application and harvest, since its components are natural, bio-degradable, and exempt from MRLs.



DOSAGE AND MODE OF USE

	Application	Goal	Dosage
1º Application	Budbreak	Growth of annual vegetative branches.	250-300 cc/Hl.
2º Application	First flowering	Improved pollen quality and increased fertilization and fruit set.	250-300 cc/Hl.
3º Application	Fruit growth	Increased fruit size and resistance.	250-300 cc/Hl.00 cc/Hl.

Ziom amino olivo 2.0-e is specifically indicated for olive cultivation to improve crop activity.

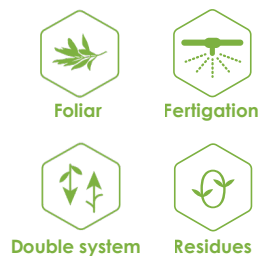




POTASSIUM SOLUTION

NEUTRAL PH POTASSIUM SOLUTION

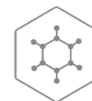




PHYSIOCHEMICAL PROPERTIES

Physical state:	Soluble liquid
pH:	7-7.5
Density:	1.20 kg/l

Inorganic fertilizers with main nutrients
1.1.3. Potassic R.D. 506/2013, of June
28, on fertilizer products.



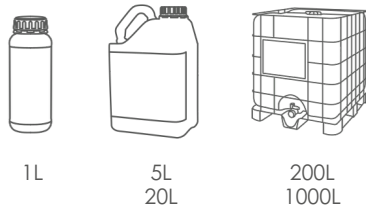
COMPOSITION (%p/p)

Declared nutrient content

Potassium oxide (K ₂ O) soluble in water	25.00
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FORMATS



Ziom k30 is a liquid fertilizer solution with high potassium content, formulated as a neutral organic salt that allows immediate penetration and provides excellent translocation capacity. It is recommended for all crops when a supplementary supply of rapidly assimilable potassium is needed.

Liquid potassium corrector with
neutral pH.



CHARACTERISTICS AND PROPERTIES

ziom k30 is designed to provide a highly bioavailable potassium (K+) supplement in situations of high demand for this nutrient, especially in conditions that may slow the plant, such as metabolic overexertion.

The interval that elapses from flowering, fruit formation, and swelling until maturation represents the metabolically most active stage of the plant. The supply of K+ ensures the synchronous activation of the entire enzymatic machinery and, therefore, the obtaining of a homogeneous final product in which all its organoleptic and nutritional characteristics are maximized without causing exhaustion in the crop.

Likewise, in stressful situations, the metabolic activation induced by **ziom k30** enables the plant to withstand these episodes with greater strength and resources, resulting in a more robust and functional structural and conductive system, thereby avoiding the collapses that occur in xylem vessels.



COMPATIBILITY

Ziom K30 is compatible with most commonly used fertilizers and phytosanitary products. However, if you have no prior experience, it is advisable to apply to each one separately or to run a compatibility test.



RECOMMENDED APPLICATION RATE

It is not necessary to establish minimum intervals between application and harvest, since its components are natural, bio-degradable, and exempt from MRLs.



DOSAGE AND MODE OF USE

Crop	Foliar Route	Fertigation
Horticultural crops	300-500 cc/hl. Make 2-4, or more, applications at intervals of one or two weeks, depending on the condition and needs of the crop.	10 to 20 l/ha per application; carry out 2-4 applications from fruit set until about 8-10 days before harvest. Any additional applications can be carried out when circumstances so advise.
Citrus, pome fruits, stone fruits, pitahaya, and subtropical fruits	300-400 cc/hl., apply 2-4 times, from fruit set until 30 days before harvest.	75-150 cc/plant, divided into several applications throughout the fruit's development until ripening.
Olive	300-500 cc/hl., make 2 applications, the first after fruit set and the second at pit hardening.	30-60 cc/plant per application, the number of applications and the total amount applied will be adjusted according to the established fertilization plan and the crop's needs.
Grapevine and Vine trellis	250-300 cc/hl., make three or more applications, the first at the end of June, the second in mid-July, and the third in mid-August.	40-60 l/ha, divided into several applications during fruit fattening and ripening, up to 8-10 days before harvest.
Ornamental plants and cut flowers	200-300 cc/hl. Apply as many times as necessary, depending on the crop's condition and needs.	5-10 L/ha per application. Begin applications at bud break and continue throughout the flowering period. Repeat treatments every 8-10 days if necessary.
Fine lawns	10-20 l/ha per treatment. Dosages may be increased when necessary, subject to appropriate technical consultation.	



FERTILIZER WITH AMINO ACIDS

FERTILIZER (MGO) WITH MICRONUTRIENTS (FE) WITH AMINO ACIDS



FOR ALL
CROPS



Foliar



Fertigation



Double system



Residues

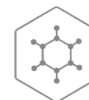
HEAVY METALS



PHYSIOCHEMICAL PROPERTIES

Physical state:	Liquid
pH:	4.5
Color:	Amber
Density (20 °C):	1.236 g/cm3

Fertilizer with amino acids. Group 4.1.02
(Royal Decree 506/2013, of June 28, on
fertilizer products.)



COMPOSITION

(%p/p)

Declared nutrient content

Free amino acids (L-Glycine)	4.0
Magnesium Oxide (MgO) Water-soluble	5.3
Water-soluble iron (Fe)	0.8
Iron (Fe) complexed with citric acid	0.8

Heavy metal content is lower than the
authorized limits for Class A.



FORMATS



1L



5L
20L



200L
1000L

Product based on concentrated
humic extracts in flakes.



CHARACTERISTICS AND PROPERTIES

ziom MagFer is a liquid fertilizer solution with a carefully formulated, doubly complexed composition designed to prevent and correct nutrient deficiencies. Furthermore, the high concentration of L-glycine enhances its role as a precursor for chlorophyll synthesis, thereby boosting photosynthetic efficiency and promoting the production of essential proteins and enzymes for plant growth and development. It also facilitates nutrient absorption and transport to plant tissues.



COMPATABILITY

ziom MagFer is compatible with most commonly used fertilizers and plant protection products. However, if you have no prior experience, it is advisable to apply each one separately or conduct a compatibility test.



RECOMMENDED APPLICATION RATE

It is not necessary to establish minimum intervals between application and harvest, since its components are natural, bio-degradable, and exempt from MRLs



DOSAGE AND MODE OF USE

ziom MagFer can be applied to all types of crops that require its nutrients. Although it is recommended for foliar application, it can also be applied via irrigation.

General dosage: 2-3 L/ha. Technical assistance is recommended for specific crops or agronomic conditions.



HUMIC ACIDS

HUMIC AND FULVIC ACIDS OBTAINED FROM LEONARDITE





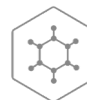
HEAVY METALS



PHYSIOCHEMICAL PROPERTIES

Physical state:	Solid, granules
pH:	8-11 (10% solution)

Humic acids. Group 4.1.03 (R.D. 506/2013,
of June 28, on fertilizer products.



COMPOSITION

(%p/p)

Declared nutrient content

Total humic extract	60.4
Humic acids	52.8
Fulvic acids	7.6
Potassium Oxide (K ₂ O) soluble in water	8.5

Heavy metal content below the
authorized limits for Class A.



FORMATS



10Kg
25Kg

Product based on concentrated
humic extracts in flakes.



CHARACTERISTICS AND PROPERTIES

ziom HUMATO 70 is a solid concentrate of humic acids derived from leonardite with high solubility. They act as a multi-chelate for micronutrient exchange and as adsorption/desorption centers for complex organic substances and water.

Both properties make it a reservoir of ions and nutrients continuously supplied to the plant. Indirectly, it promotes the establishment of a rhizosphere microflora that helps recycle nutrients immobilized in the soil. The overall result is: an increase in seed germination rate, better root development, greater vegetative growth, and qualitatively and quantitatively superior fruit production.

The nature of humic acids also enables them to act as an ultraviolet filter, preventing light-induced damage to plants and nutrients while improving soil structure and texture.

ziom HUMATO 70 has a particle size in suspension of <100 microns and is 100% water-soluble, so that it can be used both foliar and in fertigation. Its use is recommended for all crops, including horticultural crops, fruit trees, cut flowers, and lawns.

It can be applied directly or mixed with soluble fertilizers. The product has a shelf life of 2-3 years.



COMPATIBILITY

ziom HUMATO 70 can be used with any organic or inorganic fertilization plan. It is compatible with bio-stimulants (Bacteria Pack, Fungi Pack, seaweed, etc.) and with most commonly used fertilizers and phytosanitary products. However, if you have no prior experience, it is advisable to apply to each one separately or to run a compatibility test.



RECOMMENDED APPLICATION RATE

It is not necessary to establish minimum intervals between application and harvest, since its components are natural, bio-degradable, and exempt from MRLs.



DOSAGE AND MODE OF USE

Application to the soil:

As a general rule, an application of 10-20 kilograms per hectare per year is recommended. In soils with structural problems (sandy, clayey), the doses can be increased to 20-30 kilograms per hectare per year.

Applications should preferably be carried out periodically throughout the crop, rather than in concentrated, widely spaced applications. However, when the condition of the crop so advises, or when the necessary facilities for continuous application are not available, these are the recommendations:

- **Horticultural crops:** 2-3 kg/Ha, every 8-10 days, throughout the entire growing cycle.
- **Citrus, fruit trees, and subtropical plants:** 0.5-1 kg/ha, throughout the entire crop cycle.
- **Grape vines:** 2-3 kg/Ha, distributed in four applications (budding, pre-flowering, fruit set, and veraison), throughout the entire crop cycle.
- **Pitahaya:** 2-3 kg/Ha, every 8-10 days, throughout the entire crop cycle.
- **Ornamental plants and lawn:** 1-3 kg/Ha, every 15 days, throughout the entire cultivation cycle.

Foliar application (irrigation systems):

Do not use at concentrations higher than 0.015% (150g/1000L). It can be applied 2-4 times per harvest.

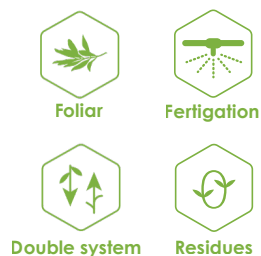


SEAWEED EXTRACT

SOLID ASCOPHYLLUM NODOSUM SEAWEED EXTRACT



FOR ALL
CROPS



HEAVY METALS



Product suitable for use in organic farming in accordance with Regulation (EU) 2018/848 of 30 May 2018 on the production and labeling of organic products.



FORMATS



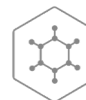
750g



PHYSIOCHEMICAL PROPERTIES

Physical state:	Solid, flakes
pH:	9-11
Electric conductivity	4-6 mS/cm (in aqueous solution at 1%)

Solid seaweed extract 4.1.05 (R.D. 506/2013, of June 28, on fertilizer products).



COMPOSITION

(%p/p)

Declared nutrient content

Total nitrogen (N)	2.00
Phosphorus pentoxide (P2O5)	2.00
Alginic acid	10.00
Mannitol	4.00

Heavy metal content below the authorized limits for Class A.

ziom marine is specifically designed to prevent stress during rooting, growth, flowering, fruit set, and fruit ripening. Suitable for both foliar and fertigation applications.

Solid extract of fresh *Ascophyllum nodosum* seaweed in flakes, obtained from cold processes.



CHARACTERISTICS AND PROPERTIES

ziom marine is a special nutrient based on pure extracts of fresh Macro Seaweeds *Ascophyllum nodosum*, which thanks to certain physical processes allows the establishment of dried flakes without losing nutrients and with very high solubility, which due to its properties significantly increases the induction of the natural sprouting of the crop, increasing the natural resistance of the plant, affecting the increase of production and the setting and quality of the fruits.

ziom marine thanks to the way it presents these seaweed flakes, provides not only slow-release nitrogen, but also amino acids, polyphenols, and oligosaccharides, increasing the natural resistance of the plants and influencing the fruits.



COMPATIBILITY

ziom marine es compatible con la ma -



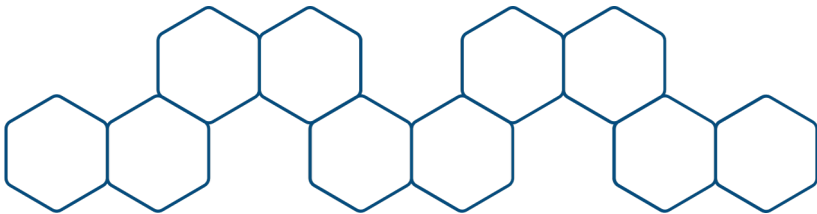
RECOMMENDED APPLICATION RATE

No procede establecer plazo de seguridad entre la aplicación y cosecha, ya que sus componentes son naturales, biodegradables y exentos de LMR'S.



DOSAGE AND METHOD OF USE

Crop	Foliar route	Localized irrigation	Hydroponics
Olive groves, citrus and stone fruits, small fruits, and subtropical fruits	50-60 gr/hL. Application every 2-3 weeks from the budding period until the early stages of fruit growth.	0.75 to 1 kg/Ha. According to the crop, as it shows its development. Applications every 10-15 days in general. Mainly apply 2-3 applications before and after flowering periods to promote fruit set.	200-300 gr/ha.
Horticultural crops	55-75 gr/hL. Application in days after transplanting with already rooted culture, and every 2 weeks in cultures from leaf emergence to developing fruit.		





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