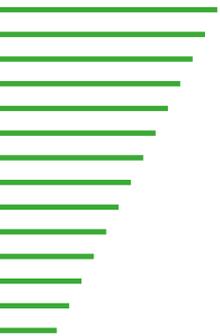


tangel AGRO



2025

Introduction



“The acquisition of a new truth is like the acquisition of a new sense, which renders a man capable and recognizing a large number of phenomena that are hidden from another, as they were from him originally.”

Tangel Agro is a Spanish company with a global vision, born to develop, produce and distribute bioprotection products for use in agricultural crops.

How Tangel Agro evolved?

Tangel Agro has been driven by a group of young and ambitious entrepreneurs & a team of strong functional as well as technical professionals that cater to customer needs with prompt service and swift action. Their preparation along with the team work has brought a series of products with properties like: efficiency, rentability and respect for the environment.

Mission and who is Tangel Agro serving:

The primary objectives of Tangel Agro is to serve the agricultor, the main protagonist of our activities.



Introduction

Tangel Agro

Tangel Agro uses in all its activities the most actual and clean technologies for a better production and distribution.

Tangel Values

The product needs to be efficient, both in its nutritional and bioprotection activations.

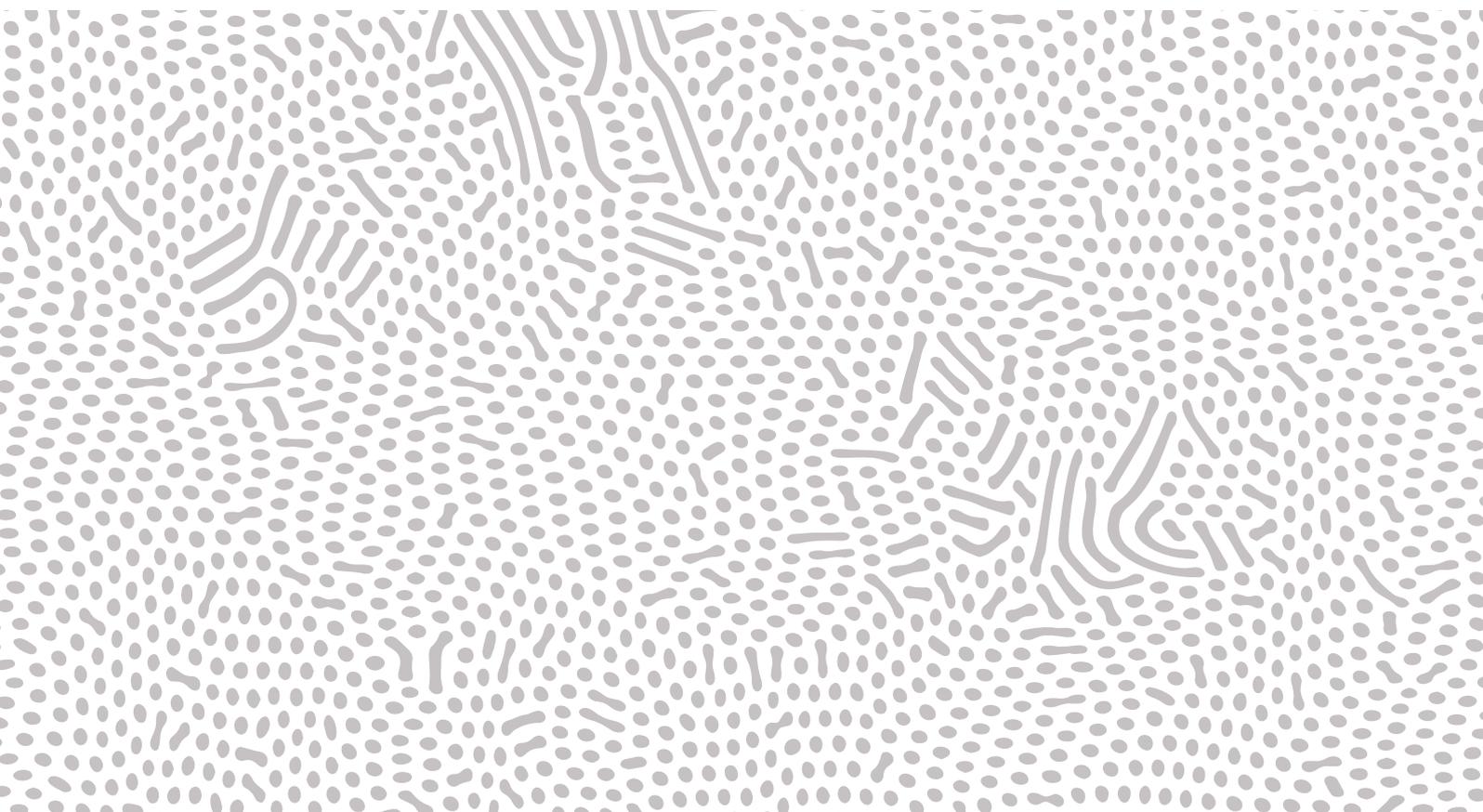
Tangel Agro assures each customer of precise and correct information in relation with each product's composition, its properties and its use on agricultural crops. **Tangel Agro does not offer only products, but also all the information that the customer needs** with regards to the fertilizing plans, mixes and quantities of each individual product.

We believe that our customers should be precisely guided and benefit from Tangel Agro's asistency so that they can utilize the products at their peak performance.

tangelAGRO



AMINOACIDS





Aminoacid
Foliar/Solid



SOWY

COMPOSITION

	%w/w
Total Aminoacids	28
Free Aminoacids	25
Total Nitrogen	5
Organic Nitrogen	4
Defense inductor (ID)	3

- VEGETAL ORIGIN
- BIOSTIMULATING ACTIVITY
- ANTISTRESS EFFECT

Liquid fertilizer of high concentration of amino acids

CHARACTERISTICS

SOWY is a product of natural origin, with a high content of free amino acids, derived from vegetable matter. Composed of amino acids that the plant uses to satisfy its protein needs, with an important energysaving, acting as an effective biostimulant during the rooting, sprouting, flowering, fruit setting and fruit development stages.

APPLICATION

CROPS	SOIL DOSAGE	Lts/ha
Strawberries	Every 10 days after transplanting	4
Fruit trees	From budding until the swelling of the fruit	6
Banana plants	Every 15 days between March and June	6
Olive trees	Throughout the whole cycle	18
Table grapes	From budding until the end of the cycle	5
Dry fruits	From budding until the swelling of the fruit	5
Citrus fruit	From flowering until the swelling of the fruit	12
Cotton	10 days after shooting until 20 days after the flowering	6
Ornamental Plants	Every 15 days after transplanting	4

ACTIONS

- ✓ INCREASED PRODUCTIVITY
- ✓ FAVORIZES RADICULAR DEVELOPMENT
- ✓ IMPROVES THE ABSORPTION AND TRANSPORTATION OF NUTRIENTS
- ✓ INDUCES A BETTER POLLINATION AND FLOWERING
- ✓ GOOD SPROUTING
- ✓ FRUITS OF GREATER QUALITY

CROPS	FOLIAR DOSAGE	cc/100L
Horticultural crops	Every 10 days after transplanting	200
Strawberries	Throughout the whole cycle	200
Tubers	Every 15 days	250
Fruit trees	From budding until the swelling of the fruit	200-300
Banana plants	Every 15 days	250
Olive trees	Throughout the whole cycle	200-300
Table grapes	From budding until the end of the cycle	250
Wine grapes	From budding until the end of the cycle	2 L/Ha
Dry fruits	From budding until the swelling of the fruit	200-300
Citrus fruits	From flowering until the swelling of the fruit	200-300
Beet	2 applications every 15 days	2,5 L/Ha
Cotton	10 days after sprouting until 20 days after the first flower.	300
Alfalfa	After every mowing	2,5 L/Ha
Ornamental plants	Every 15 days after transplanting	250
Lawn	After sowing/Growth phase	3-5 L/Ha/ 30 cc/m ²





Aminoacid
Foliar / Soil



Solid free amino acids

SOWY Solid

COMPOSITION

%w/w

Total Aminoacids	90,00
Total Free Aminoacids	85,00
Total Nitrogen	14,50

- SOLID OF HIGH SOLUBILITY
- VEGETAL ORIGIN
- BIOSTIMULATING ACTIVITY
- ANTISTRESS EFFECT

CHARACTERISTICS

SOWY SOLID is a biostimulant product composed of amino acids of vegetable origin obtained by enzymatic hydrolysis of natural proteins. Stimulates the essential metabolic processes in a crop: rooting, sprouting, flowering, setting and fruit development, especially when there are adverse situations in the process of plant development.

ACTIONS

- ✓ INCREASE RESISTANCE TO STRESS (High temperature, low humidity, drought, pest attacks, frost, flood)
- ✓ PROTEIN SYNTHESIS
- ✓ INCREASES CONTENT OF CHLOROPHYLL
- ✓ REGULATES STOMATAL OPENING
- ✓ CHELATING AGENT FOR MICRONUTRIENTS
- ✓ RAW MATERIALS HORMONES
- ✓ HELPS POLLINATION AND FRUIT SET
- ✓ INCREASES SOIL MICROBIAL ACTIVITY

SOIL APPLICATION

CROPS	Application
In all crops	SEASON: Reduction of stress, improvement of efficiency of plant protection treatment ANNUAL DOSAGE: 3-4 Kg/Ha in case of stress (salinity, dryness, etc) divided into several doses (1 Kg/Ha)
Cereals, potatoes, legumes	SEASON: Yield increase ANNUAL DOSAGE: 3-4 Kg/Ha divided into 3 applications every 15 days after the first true leaf stage
Horticultural fruit trees	SEASON: Fruit setting, fruit growth and quality ANNUAL DOSAGE: 1-2 Kg/Ha every 10-15 days, from pre blooming stage until the beginning of the colouring stage

CROPS	Application
Open field vegetables	SEASON: Yield increase ANNUAL DOSAGE: 1-2 Kg/Ha every 7-10 days after the first true leaf stage
Ornamental plants and tree nursery, landscaping, turf grass (in general)	SEASON: Root formation and nutrient uptake, sprouting leaf quality, growth ANNUAL DOSAGE: 1 Kg/Ha every 7-12 days starting from planting
Vegetables in greenhouses	SEASON: Yield, sprouting leaf quality, growth ANNUAL DOSAGE: 3-4 Kg/Ha divided into 2-3 applications every 10-15 days, starting from planting

The recommended concentration for **foliar application** is 0,3-0,5% in the usual quantity of spray water.



BIOPROTECTION



NEW

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Datasheet



Bioprotection
Foliar



Bioinsecticide. Bioacaricide.

CHARACTERISTICS

ACRON is a liquid formulation which contains an active molecular fraction obtained from leaves fractionation from Umbelliferae family.

Synergy of different active molecules with different mechanisms of action that disrupt various phases of the insect's life cycle. Aranka manages to get a delay in the appearance of resistance. This product has a mixture of lipid and organic surfactants as complements. Within each of them there is a formation of polymeric and biodegradable microspheres. All of them enhance the product dispersion and adhesion, showing its high efficiency.

ACRON

COMPOSITION

	%w/v
Active molecular fractions obtained by Umbelliferae leaves fractionation	96
Zinc (Zn)	2
Manganese (Mn)	2



ACRON is compatible with auxiliary insects and bees.

ACTIONS

-  **KNOCKDOWN EFFECT: 80% ADULT MORTALITY AFTER 3 HOURS OF APPLICATION**
-  **PROLONGED CONTACT ACTION ON PEST FEEDING**
-  **IMMEDIATE ASPHYXIANT EFFECT(BLOCKING THE TRACHEAL STIGMA)**
-  **ANTIFEEDING AND REPELLENT EFFECTS**
-  **POWERFUL DIRECT ACTION ON RED SPIDER MITES**



APPLICATION

CROPS

Extensive crops, Fruit Tree corn, cotton, vegetables.

ACRON L / WATER L

2-4L / 1000L(2-4 cc/L) Every 7-14 days depending on the pest initial infestation level.

Direct action on red spider (*Tetranychus urticae*) and mites



BIOPROTECTION
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AVAILABLE IN
250ml; 500ml, 1L, 5L, 10L, 20L



IMPORTED
FROM EU



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Datasheet



Biofungicide Foliar



2 CARB

COMPOSITION	g/Kg
Potassium Hydrogen Carbonate	990,0

2 CARB also holds 20 authorized uses in woody crops for controlling various diseases such as moniliasis, botrytis, or leaf blotch.

ACTIONS

- High effectiveness against ectoparasitic fungi
- Broad spectrum of action
- Compatible with all types of treatment programs
- Non-interfering in vinification processes, a good alternative to sulfur
- Safe for users and environmentally friendly.

MODE OF ACTION

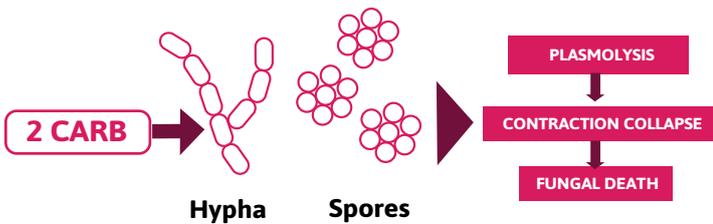
2 CARB has two distinct modes of action against ectoparasitic fungi:

- **Desiccant and direct action** on the extreme parts of the fungus, such as spores, hyphae, or mycelia. Upon applying 2CARB-K to the disease, rapid dehydration occurs in all treated parts of the fungus, causing its demise and preventing further growth.
- **Preventive action**, inhibiting disease proliferation in the treated areas with 2CARB-K. The product's application results in a slight increase in pH on the plant surface, hindering the hydrolytic enzymes' activity of the fungus, thus preventing disease establishment in the crop.

Broad-spectrum biofungicide

CHARACTERISTICS

2 CARB is a contact fungicide with preventive and curative action for controlling **powdery mildew, botrytis, and penicillium**. The mode of action of potassium hydrogen carbonate is linked to disrupting the pH, osmotic pressure, and bicarbonate/carbonate ion balance in susceptible fungi. It acts upon contact and inhibits the development of mycelial hyphae and spores. Its active ingredient is of mineral origin and extremely common in nature. Because of its extremely low toxicity, potassium bicarbonate presents no health risks to operators and bystanders, and its residues present no risks to consumers. It is a recognized food additive (E 501).



FOLIAR APPLICATION

Crops	Diseases	Dosage g /hl	Observations
Vegetables in general, Berries, General ornamentals	Powdery mildew caused by various fungi: (Oidium spp.) (Sphaerotheca fuliginea) (Erysiphe cichoracearum) (Podosphaera xanthii)	350 - 1.000	From the second true leaf unfolded (BBCH 12) until full fruit ripening (BBCH 89). Make 1-8 applications every 10 days.
Vid (grape for wine)	Powdery mildew (Erysiphe necator)	450 - 2.000	From the second true leaf unfolded (BBCH 12) until berries are ready to harvest (BBCH 89)
Apple tree	Apple scab (Venturia inaequalis)	500 - 1.000	From emerging leaf tips (BBCH 10) until change in fruit color (BBCH 85)
Post-harvest of different fruits: oranges, cherries, apples, papayas, etc.	Blue mold (Penicillium italicum) Green mold (Penicillium digitatum)	1.000 - 4.000	In post-harvest. (Harvested fruit) Immersion or surface treatment. Perform 1-2 applications every 10 days.

Concentrations higher than 1% - 2% may cause phytotoxic symptoms. Different crops have varying sensitivities. Verify phytotoxic effects concentrations before use. Usage recommendations: Can be alternated or mixed with fungicidal products under strong disease pressure. Avoid mixing with oil-based formulations. Avoid mixing with calcium-based products.

BASIC SUBSTANCE. Commission Implementing Regulation (EU) No 1107/2009. Can be used according to the conditions specified in report SANTE/10667/2015 by the Standing Committee on Plants, Animals, Food and Feed. Product usable in organic farming according to Regulation (EU) 2018/848 and compliant with NOP standards.

Foliar application rates: 350 – 1,000 g/hl.
Foliar applications using a spray volume of 300-600 l/ha, except for apple trees at 500-1,000 l/ha. Top of Form



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**Biofungicide
Elicitor
Foliar**


WONKA

COMPOSITION

%w/w

Decoction of horsetail (<i>Equisetum arvense</i>)	2,0
Willow bark extract (<i>Salix</i> spp. cortex)	0,22
Purified Chitosan	2,0

ACTIONS

- Activates the plants' defense mechanisms.**
- All-natural fungicide.**
- It favors the development and growth of plants.**
- Rich in Silica**
- Strengthens the plant tissue.**

WONKA is a good natural fungicide that also induces the plant to improve its immune system.

Antiviral Activity:

Pretreatment with chitosan significantly reduces viral infection in several plant species.

Growth Stimulation:

Applying chitosan has positive effects on plant growth, stimulating both seed germination and the growth of plant parts such as roots, shoots and leaves. The salicylic acid in willow bark extract produces a biostimulant effect on the various metabolic processes of the plant, also inducing plants to generate natural defense mechanisms.

Broad-spectrum biofungicide
CHARACTERISTICS

WONKA contains natural active ingredients with fungicidal activity and elicitors of the defense mechanism against pests and diseases.

WONKA is composed of chitosan hydrochloride, *Equisetum arvense* (horsetail) and willow bark extract (*Salix* spp. Cortex).

Bactericidal activity:

The bactericidal activity of chitosan is associated with its cationic character. The amino free groups, positively charged in an acidic medium, interact with negative charges of the cell membrane of fungi, changing the permeability of the plasma membrane, with the consequent alteration of its main functions.

Fungicidal activity:

Chitosan is a polysaccharide that acts as a bio remedial molecule and stimulates the activity of beneficial microorganisms in the soil, such as *Bacillus*, fluorescent, *Pseudomonas*, Actinomycetes, mycorrhizae and rhizobacteria, which alters the microbial balance in the rhizosphere, putting plant pathogens at a disadvantage, making them able to compete through mechanisms such as parasitism, antibiosis and induced resistance.

FOLIAR APPLICATION

Crops	Objective	Time of appl.	N° Appl	Interval between appl	Dosage ml/ha
Apple trees (<i>Malus pumila</i> , <i>Malus domestica</i>) Peach trees (<i>Prunus persica</i>)	Leaf fungi such as apple scab disease: <i>Venturia inaequalis</i> . Powdery mildew: <i>Podosphaera leucotricha</i> . Peach leaf curl: <i>Taphrina deformans</i> .	From bud break to wilting of the flowers. Spring.	2-6	7 days	300-500
Grapevine (<i>Vitis vinifera</i>)	Downy mildew: <i>Plasmopara viticola</i> . Powdery mildew: <i>Erysiphe necator</i> .	From the development of the first shoots until the berries start touching.	2-6	7 days	300-500
Cucumber (<i>Cucumis sativus</i>)	Downy mildew: <i>Podosphaera xanthii</i> . Root fungi such as root rot or blight: <i>Pythium</i> spp.	From the ninth unfolded leaf until nine or more visible lateral shoots.	2	3-4 days	400-600
Tomato (<i>Solanum lycopersicum</i>)	Early blight: <i>Alternaria solani</i> . Septoria leaf spot: <i>Septoria lycopersici</i> .	From the first visible inflorescence until the flower is about to open. Summer.	2	14 days	300-500
Strawberry (<i>Fragaria x ananassa</i>) Raspberry (<i>Rubus idaeus</i>)	Gray mold: <i>Botrytis cinerea</i> . Powdery mildew: <i>Podosphaera aphanis</i> . Other fungi: <i>Colletotrichum acutatum</i> .	Restart of growth until the end of fruiting from early spring to late summer.	4-8	5-14 days	300-500
Potatoes (<i>Solanum tuberosum</i>)	Late blight: <i>Phytophthora infestans</i> . Early blight: <i>Alternaria solani</i> . Powdery mildew: <i>Erysiphe chichoracearum</i> .	From bud break to fruit ripening	4-8	5-14 days	300-500
Ornamentals	<i>Marsonia</i> spp., <i>Phragmidium mucronatum</i> , powdery mildew, and downy mildew	One single foliar application when the first symptoms of the disease appear.	1	---	400-600

WONKA is compatible with most phytosanitary and nutritional products on the market. Do not mix with alkaline products. If in doubt, carry out a prior compatibility test.

The product is suitable for use in organic agriculture according to Regulation (EU) 2018/848 and in compliance with the NOP standard.


BIOPROTECTION
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 AVAILABLE IN
250ml; 500ml, 1L, 5L, 10L, 20L

 IMPORTED
FROM EU


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Urtica extract
Foliar / Soil



Bioinsecticide. Bioacaricide. Biofungicide

CHARACTERISTICS

URZICA contains many biologically active elements, such as pigments (chlorophyll, carotenoids and flavonoids), tannis, nitrogen compounds. The product has an acaricide, fungicide and insecticidal action. Applicable on different types of plants (fruit trees, salads, potatoes, flowers), it acts against insects (aphids, moths, codling moths, red spider) and against fungi (Alternaria, powdery mildew, mould, peronospora).

These are substances that have a general or specific action against harmful agents in crops. They are regulated by Regulation (EC) No 1107/2009 of the European Parliament and of the Council concerning the placing of plant protection products on the market. These substances (**this substance**) do not require prior registration for their use, as they are not considered plant protection products. **THEY ARE BIOPESTICIDES THAT DO NOT REQUIRE REGISTRATION.**



APPLICATION

Diseases	Crops	Dose	Observations
Mildiu	table and vine grapes, potatoes	5-10 cc/L	Start foliar applications under favourable environmental conditions for disease development. 2-6 applications every 7 days during cultivation.
Powdery mildew	Vegetables (cucumber, courgette, pumpkin) Fruit trees (apple, plum, peach, cherry) and vineyards	5-10 cc/L	Start foliar applications under favourable environmental conditions for disease development. 2-6 applications every 7 days during cultivation.
Alternaria, early blight	Fruit trees (apple, plum, peach, cherry). Leafy vegetables (broccoli, cauliflower) and fruit vegetables (cucumber, courgette, melon, pumpkin)	5-10 cc/L	Start foliar applications under favourable environmental conditions for disease development. 2-6 applications every 7 days during cultivation.

Recommendations:

- URZICA should be applied at the onset of pest presence (low pressure). Spray quality is essential; ensure good coverage of the leaf surface and the fruits to be treated. In case of high pest pressure, consider alternating or mixing with other insecticide products.
- Add the preparation to the spray tank first, then complete filling while maintaining agitation in the mixture.

URZICA

COMPOSITION

%w/v

Urtica spp
pH 6,7
Density : 1,01 kg/L
Dispensable concentrate

1,5

ACTIONS

- **BROAD SPECTRUM ACTIVITY**
- **REDUCES CROSS RESISTANCE RISK**
- **NATURAL PRODUCT**
- **HIGH SHOCK AND REPELLING EFFECT**
- **EU APPROVED SUBSTANCE**



Bioinsecticide



Bioacaricide



Biofungicide



Diseases	Crops	Dose	Observations
Botrytis, Monilia and post-harvest diseases	Apple tree, plum tree, peach tree, cherry tree	5-10 cc/L	Start foliar applications under favourable environmental conditions for disease development. 2-6 applications every 7 days during cultivation.
Scab or mottled	-----	5-10 cc/L	Start foliar applications under favourable environmental conditions for disease development. 2-6 applications every 7 days during cultivation.
Aphid, lepidoptera and mites, codling moth	Fruit trees (apple, pear, plum, peach, cherry, walnut), horticultural crops, peach, cherry, cherry, walnut, leafy vegetables (brassica, lettuce) and fruit (beans, potatoes)	5-10 cc/L	Apply when favourable environmental conditions for pest development occur and in the presence of the pest. 1-5 applications every 7 days during the crop
Diseases affecting of the neck and roots	All	5-10 L/Ha	Soil application (mulch)

BIOPROTECTION
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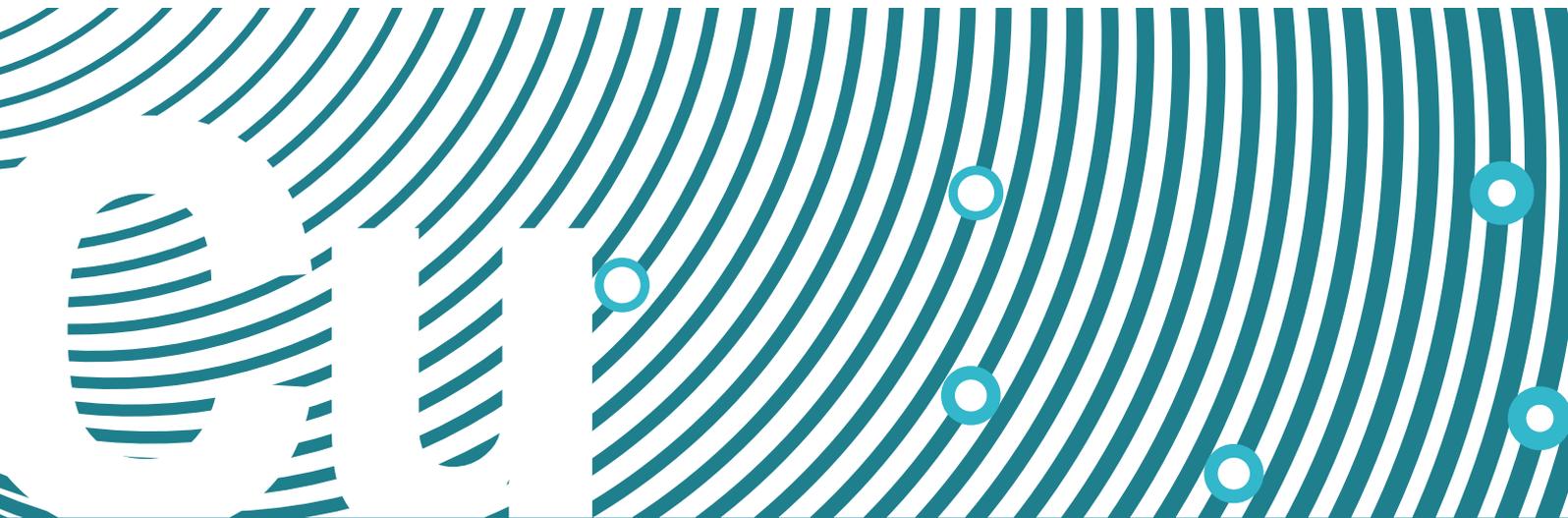
AVAILABLE IN
250ml; 500ml, 1L, 5L, 10L, 20L



IMPORTED
FROM EU



COPPER



COBBER G



Organic Copper
Foliar / Soil



BioFungicide - Bactericide
Cu Deficiency Corrector

CHARACTERISTICS

COBBER G contains the copper ion (Cu^{+2}) complexed by a natural organic molecule (Gluconic acid). This complexation favors the transport of Cu in the plant.

COBBER G is a systemic product that stimulates the synthesis of PHYTOALEXINES, which increase the natural defenses of the crops.

COMPOSITION	%w/w	%w/v
Copper (Cu)	6,5	8
Organic Complexant Agent Gluconic Acid		

- BIODEGRADABLE
- SYSTEMIC ACTION
- DOES NOT STAIN THE PLANT
- IMPROVE CONSERVATION OF FRUITS
- HIGH ASSIMILATION

ACTIONS

- PREVENTS THE ABIOTIC STRESS PLANT
- FUNGICIDE / NATURAL ORGANIC BACTERICIDAL
- HIGH EFFICIENCY

APPLICATION

Crops	Application
Cereals	Foliar: 150-250 cc/hL
	Foliar: 200-300 cc/hL (2 to 3 application from the beginning of budding)
Citrics	Fertirrigation: 6L-12L/ha (Apply 2-3 times: the first application near vegetative cessation, the second at the onset of budding, and the last during full vegetative activity)
	Foliar: 200-300 cc/hL (2 to 3 application from the beginning of budding)
Fruit Trees	Fertirrigation: 6L-12L/ha (Apply 2-3 times: the first application near vegetative cessation, the second at the onset of budding, and the last during full vegetative activity)
	Foliar: 150-300 cc/hL (3-4 applications as needed and based on the crop's development)
Horticultural Crops	Fertirrigation: 5L-10L/ha (3-4 applications as needed and based on the crop's development)
	Foliar: 200-300 cc/hL (2 to 3 application from the beginning of budding)
Olive Trees	Fertirrigation: 6L-12L/ha (Apply 2-3 times: the first application near vegetative cessation, the second at the onset of budding, and the last during full vegetative activity)
Rice	Foliar: 150-250 cc/hL Fertirrigation: 5L/ha Copper deficiency
Vine	Foliar: 200-300 cc/hL until veraison

Cautions

It is recommended to treat between 6 and 25 °C. Avoid applications in cases of extreme drought, humidity, frost and rain. Shake well before use. Do not freeze. In case of mixing with other products, always carry out a previous test. Incorporate this product into the last phase.



Datasheet



Inorganic Copper
Foliar / Soil



BioFungicide - Bactericide
Cu Deficiency Corrector

COBBER S

COMPOSITION	%w/v
Total Copper (Cu)	20 (200 g/L)
Copper sulfate	75 (750 g/L)
Sulfur (SO ₃)	26 (260 g/L)
Density:	1,4
pH:	4,5 - 5

- MULTISITE CONTACT ACTIVITY
- EXCELLENT CROP SAFETY AND LOW USE RATES
- CONSISTENT, SUB-MICRON PARTICLE SIZE FOR BETTER COVERAGE AND DISEASES CONTROL
- BETTER ADHESION AND COVERAGE

CHARACTERISTICS

COBBER S is a fungicide and contact bactericide, broad spectrum, preventive and curative action for the control of some diseases.

The smaller particle size in **COBBER S** delivers better plant coverage, which means better protection against fungal and bacterial diseases. The premium formulation readily mixes in water and stays suspended longer than any other liquid formulation.

ACTIONS: KEY DISEASES CONTROLLED

 <i>Alternaria</i>	<i>Collectrichum spp.</i>	<i>Phomopsis stem blight</i>
 <i>Anthracnose</i>	<i>Dieback</i>	<i>Phytophthora bud rot</i>
 <i>Bacterial leaf spot</i>	<i>Downy mildew</i>	<i>Pseudomonas leaf spot</i>
 <i>Bacterial soft rot</i>	<i>Entomosporium</i>	<i>Scab</i>
 <i>Bacterial spot</i>	<i>Exosporium leaf spot</i>	<i>Septoria leaf spot</i>
 <i>Black spots</i>	<i>Fire blight</i>	<i>Volutella leaf blight</i>
 <i>Botrytis</i>	<i>Leaf spot</i>	<i>Xanthomonas leaf spot</i>
 <i>Cercospora leaf spot</i>	<i>Pestalotia leaf spot</i>	

FOLIAR APPLICATION

Crops	Dosage	Crops	Dosage
Citrus	75-125 cc/HL	Olive	300-600 cc/HL
Fruits Trees (Winter)	250-400 cc/HL	Pistachio	200-400 cc/HL
Forest nurseries	150-180 cc/HL	Vegetable	150-180 cc/HL
Herbaceous and Ligneous	150-250 cc/HL	Vine	200-300 cc/HL

Caution

Compatible with most insecticides and fungicides. Do not mix with acides or alkalis. Do not add amino acids. Shake well before use. Do not freeze.



CROPS





Fertilizer
Foliar/Soil

CITRICUS - MnZn

COMPOSITION	%w/v
Total Zinc (Zn)	13,5
Total Manganese (Mn)	13,5
Total Nitrogen (N)	6,0
Density:	1,65
pH (10% solution):	6

Special for Citrus.
Mn and Zn Corrector

- ESPECIALLY FOR CITRUS
- RAPID UPTAKE - FLOW
- EASY TO APPLY

CHARACTERISTICS

CITRICUS MnZn is a highly concentrated emulsion (Flow) of Zinc and Manganese salts and it's chloride free and fully water soluble. A combined application of Zn and Mn is more effective than single sprays on their own.

Low **Zinc** levels reduce the fruit number per tree and, to a lesser extent, fruit size, resulting in decreased yields. Zinc deficiency symptoms in citrus first appear as chlorotic leaf spots (mottle leaf) and/or white interveinal areas with green veins.

Manganese deficiency is usually seen on young leaves as a mottled yellowing of the leaf.

APPLICATIONS

Foliar: 300-500 cc / hL

Dosage and Application

Make 2-4 applications during the crop cycle, according to needs and development.

Citrus, application should be performed after the onset of the new shoots of spring and summer when the shoots reach 2/3 of its development.

Dilution

Recommended water rate is 500-1500 L per hectare. Always shake the container before opening.

Cautions

The spray tank should be filled with half of the required amount of water. Measure the required amount of **CITRICUS MnZn** and add to the tank maintaining constant agitation. Add remaining water and Spray.

CITRICUS MnZn should be stored in frost free conditions with optimum storage range between 5-40°C. In situations of prolonged storage there may be slightly settling of the nutrient particles. This is reversible on shaking.

ACTIONS

- ✓ ENHANCE CONTENT IN VITAMIN C
- ✓ IMPROVES QUALITY (INCREASES 'TSS' CONTENT OF THE FRUIT)
- ✓ INCREASES THE SIZE OF LEAVES, SHOOTS AND FRUITS
- ✓ INCREASES YIELD. A HIGHER NUMBER OF FRUIT PER TREE



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RAPS COMPLEX

Fertilizer
Foliar

COMPOSITION

%w/v

Boron (B) water soluble	1,0
Manganese (Mn) water soluble	1,0
Magnesium (MgO) water soluble	1,2
Iron (Fe) water soluble	0,9
Zinc (Zn) water soluble	0,9
Molybdenum (Mo) water soluble	0,5
pH: 4-5	
Density: 1,2	

Foliar fertilizer for Oilseed Rape and other Oilseed plants (Flax and Sunflower)

CHARACTERISTICS

RAPS COMPLEX is a concentrated foliar nutrient solution with a tailored nutrient package to help oilseed rape crops reach their full potential.

The unique formulation of micronutrients has been specifically designed to boost oilseed rape growth particularly during the key establishment period. Essentially a brassica, the nutrient requirement of oilseed rape is substantial and very different from other arable crops such as cereals.

The micronutrients chelated by Gluconic acid, an organic molecule of natural origin bring several advantages, such as excellent solubility, biodegradability, and chemical stability of the complexes, even in alkaline conditions.



FOLIAR APPLICATION

OILSEED RAPE - Winter oilseed rape	General Dose
Autumn 4-8 leaves unfolded	1 L/ha
Spring after start of growing season / beginning of main stem elongation	
Bud formation	
From the beginning of petal fall – until the beginning of pods development	
FLAX	General Dose
“Herringbone” phase	1 L/ha
Phase of rapid growth	
Setting flower buds – until the beginning of flowering (optional)	

OILSEED RAPE - Spring oilseed rape	General Dose
Leaf development – until beginning of main stem elongation	1 L/ha
Bud formation – until beginning of flowering	
Bud formation – From the beginning of petal fall – until the beginning of pods development beginning of flowering	
SUNFLOWER	General Dose
2-4 leaves unfolded	1 L/ha
Beginning of steam elongation	

- **ESPECIALLY FOR OILSEED PLANTS**
- **RAPID UPTAKE**
- **EASY TO APPLY**

ACTIONS

- **BETTER QUALITY AND YIELD.**
- **IMPROVED MICRONUTRIENTS UPTAKE.**
- **REGULAR FLOWER AND MATURATION.**

CROPS
tangel_{AGRO}

www.tangelagro.com

AVAILABLE IN
1L - 5L - 20L - 1000L
Plastic Bottle/IBC

FERTILIZER
CE
IMPORTED
FROM EU



NEW

Datasheet



Fertilizer
Foliar/Seed



RICE COMPLEX

COMPOSITION	%w/w
Total aminoacids	17,0
N-Acetyl Thiazolidine-4 Carboxylic	1,00
Iron (Fe) chelated EDTA	0,18
Manganese (Mn) chelated EDTA	0,10
Copper (Cu) chelated EDTA	0,18
Zinc (Zn) chelated EDTA	0,10
Boron (B)	0,08
Density at 20 °C	1,25 g/ml
pH (1% water solution)	8,0 + 0,5

Biostimulant.
Special for Rice.

- ESPECIALLY FOR RICE
- BETTER QUALITY
- INCREASES YIELD

CHARACTERISTICS

Rice Complex is a liquid crop food supplement that activates the biochemical and enzymatic functions in the plant, improving the metabolic processes.

Rice Complex contains a naturally balanced mixture of Amino Acids available for proteins synthesis without energy uptake, saving biological energy. Furthermore contains natural bio promoters N-Acetyl Thiazolidine-4 Carboxylic Acid (ATCA) which through a slow enzymatic breakdown leads to the formation of proline which has a fundamental role to prevent the negative effects due to environmental stress (excessive heat, drought, poor fertilization, excessive rain fall etc.) and a mix of micronutrients: **Boron** favors pollen germination, fruit set and the growing of tissues. **Iron** and **Manganese** plays a fundamental role in chlorophyll synthesis and also in catalytic reactions. **Zinc** promotes the production of auxins, favors fruit enlargement, the transport of phosphates, formation of seeds and their ripening.

ACTIONS

- ✓ ACCELERATED PLANT'S GROWTH
- ✓ BETTER STRESS RESISTANCE
- ✓ FASTER AND IMPROVED DEVELOPMENT OF THE ROOT'S SYSTEM
- ✓ IMPROVES PHOTOSYNTHESIS, RESPIRATION, SYNTHESIS OF CARBOHYDRATES, NUCLEIC ACIDS, LIPIDS, ETC
- ✓ PROMOTE SEED GERMINATION, BLOOMING, SEED ENLARGEMENT

SEED APPLICATION

Crops	Application
Rice Seeds	Before sowing leave the seeds for 24h in solution with 2cc for 1L water

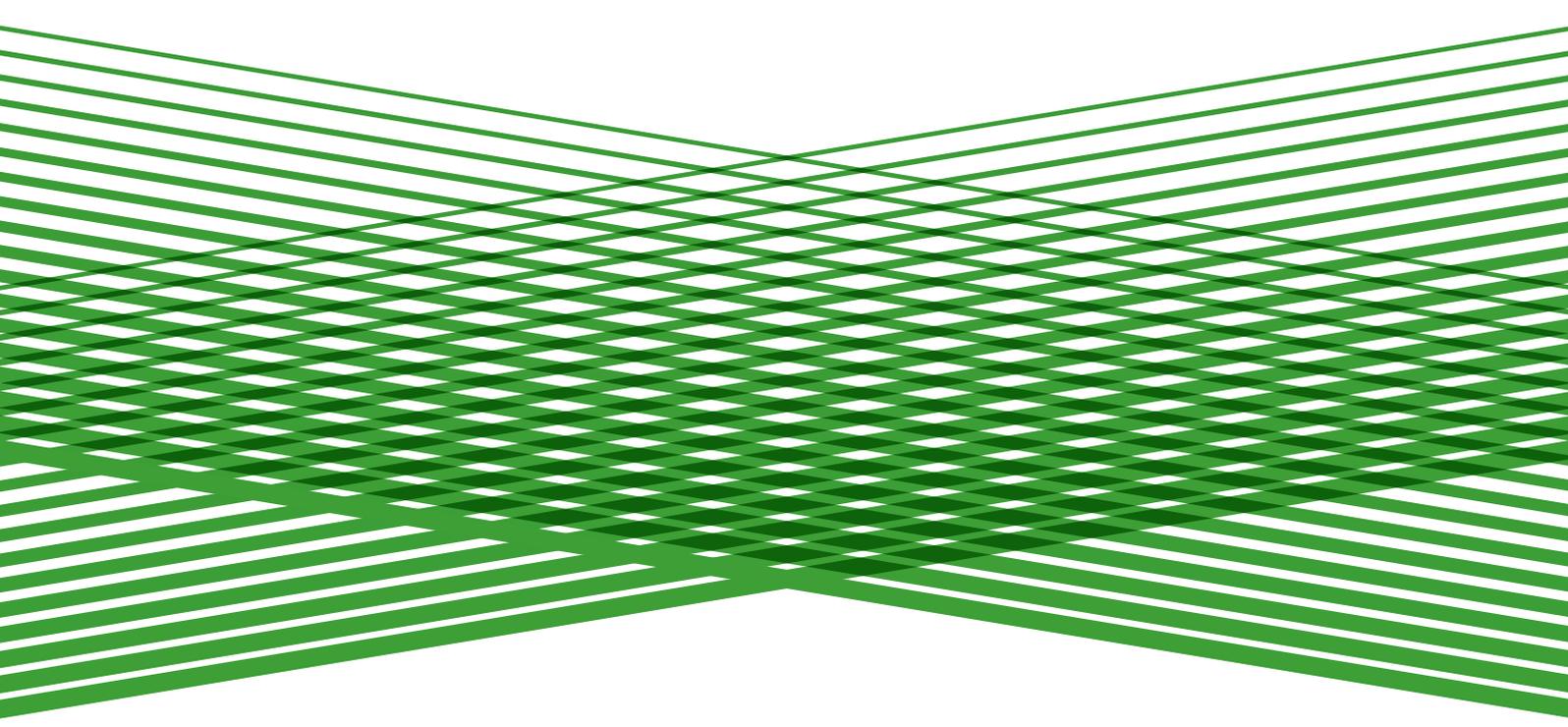
FOLIAR APPLICATION

Crops	Application
Dry Rice	600 - 800 ml/Ha - N°Applications: 2 First application 45 days after sowing repeat 70 days after sowing
Flooded Rice	500 - 700 ml/Ha - N°Applications: 2 At germination stage repeat 10 days before tillering stage

Rice Complex is compatible with most products used in agriculture unless strongly alkaline. **Rice Complex** must be applied in the cooler daytime period.



DEFENSES



DEFENDER



Immune system
enhancer
Foliar / Soil



COMPOSITION

%w/v

Total Nitrogen	4,8
Zinc (Zn) complexed	1
Manganese (Mn) complexed	2
Copper (Cu) complexed	2

Organic Complexant

- NATURAL ORGANIC COMPOUND
- EASY TRANSLOCATION

Activator of Natural Defenses

CHARACTERISTICS



IMMUNOLOGICAL ACTION

NUTRITIONAL ACTION

DEFENDER is a natural organic product, capable of increasing the defense capacity of the plant. Its composition, designed based on natural organic compounds of vegetable origin and selected micronutrients, stimulates a complete distribution throughout the whole plant and an immediate response from the plants's self-defense systems against external agents such as endogenous and exogenous fungi, agents such as **Downy mildew** in viticulture, **Verticilium** in olive trees, **Phytophthora nicotianae** in Horticultural Crops, highly aggressive **Eutypa** in grape vines and several fruit crops (Eutipiosis), **Phellinus igniarius**, **Stereum hirsutum**, producers of yesca in grape vines and grape arbours, pH. **Citrophthora** in Citrus Fruits, **Botrytis**, **Patristic pernospora** in vegetable crops, several types of mildew and other fungi in vegetable crops, stone and pipfruit trees, tropical, subtropical and industrial crops, olive trees, dry fruits, flowers, ornamental plants, etc.

ACTIONS



NUTRITIONAL : PRECOCITY, QUALITY AND YIELD

IMMUNOLOGICAL/DEFENSE: RESISTANCE TO FUNGIC DISEASES

APPLICATION

CROPS

All crops

Foliar Application

Wetting the whole plant, including its trunk, well.

200-400cc per 100 litres of water

As a preventive measure, 2-3 times throughout the vegetative cycle.

Trickle Irrigation

Adult tree

Diluted in water before applying.

10cc/ Ft

Plants

Diluted in water before applying.

5cc/ Ft

Crop

Diluted in water before applying.

1cc/ Ft



FLOWERING & FRUIT SETTING





Bioregulator
Foliar



FIX

COMPOSITION

	%w/v
Potassium (K ₂ O)	17,0
Phosphorous (P ₂ O ₅)	11,0
Seaweed extract	10,0
Molybdenum (Mo)	4,0
Boron (B)	3,0
Manitol	0,24
Density: 1,34 g/cc	

- PLANT ORIGIN
- CONTAINS SEAWEED EXTRACT
- AFFECTS THE FLOWERING AND FRUIT SET

Flowering and Fruit Setting inducer

CHARACTERISTICS

FIX is an innovative product, designed by TANGEL AGRO, with action as bioregulator. It contains nutrients and organic components of vegetable origin. All of them favor the metabolic processes of the crop that supply energy to the plant. It is an improvement of the flowering and set of different crops.

FIX is a fertilizer rich in phosphorus, potassium, micronutrients (boron and molybdenum), and seaweed (Ascophyllum nodosum extract), designed to stimulate plants during the most critical processes of their generative phase: flower formation and fruit setting.

FIX reactivates the cellular processes that favor the mooring of the fruits, avoiding the fruit fall. In the elaboration of FIX, processes are used that keep all active components soluble, for immediate uptake by the plant.

ACTIONS

- ✓ INCREASES FRUIT SIZE AND UNIFORMITY
- ✓ INCREASES COMMERCIAL PRODUCTION AND REDUCES FRUIT LOSS
- ✓ AVOID PREMATURE FRUIT DROP
- ✓ INCREASES POLLEN QUALITY
- ✓ STIMULATES THE FRUIT SETTING

Crops Rates per Application (Foliar*) Stages and Recommendations

FRUIT TREES	3 - 4 l/ha / 3-4 treatments starting from fruit-set each 10-15 days
Stone fruit	3.5 - 4.5 l/ha / 1 st appl: from stone hardening 2 nd appl: 8-10 days after 1 st treatment 3 rd appl: 8-10 days after 2 nd treatment
Apple	3.5 - 4.5 l/ha / From 20 mm fruit size 3-4 treatments each 12-15 days BBCH 71-72
Pear	3.5 - 4.5 l/ha / From 20 mm fruit size 3-4 treatments each 12-15 days.
Kiwi Fruit	4.0 - 4.5 l/ha / 1 st appl: after fruit-set 2 nd appl: 15 - 20 days after 1 st treatment 3 rd appl: 15 - 20 days after 2 nd treatment 4 th appl: 30 days after 3 rd treatment
Clementine, Tangerine	3.5 - 4.5 l/ha / From 15-20 mm fruit size 3 treatments each 15-18 days
TABLE GRAPE	3.5 - 4.5 l/ha / Fruit size increasing: 1 st appl: berry at size 8-10 mm 2 nd appl: berry at size 15-16 mm 3 rd appl: veraison. Rachis elongation: 1 st appl: inflorescences clearly visible BBCH 53 2 nd app: before flowering BBCH 57 3 rd appl: after flowering BBCH73
GRAPEVINE	3.5 - 4.5 l/ha / Fruit size increasing: 1 st appl: after fruit set 2-3 treatments each 10-15 days
OLIVE TREES	3.5 - 4.5 l/ha / Starting from stone lignification: 2 treatments also with agrochemical treatments
VEGETABLES	3.5 - 4.5 l/ha / 3-4 treatments starting from fruit-set each 10-15 days
STRAWBERRIES AND SMALL FRUITS	3.5 - 4.5 l/ha / 3-4 treatments starting from fruit-set each 10-15 days

*Use the product at the concentration of 3-5%

FLOWERING & FRUIT SETTING

tangelAGRO

www.tangelagro.com

AVAILABLE IN
1L - 5L - 20L
Plastic Bottle





**Bioregulator
Foliar /Soil**

FIX SOLID

COMPOSITION		%w/w
Phosphorous (P ₂ O ₅)		9,5
Molybdenum (Mo)		10
Boron (B)		8
Potassium (K ₂ O)		12,6
Aminoacids		5
Presentation:	soluble crystalline	

- **BIOREGULATOR**
- **INCREASES FLOWERING, FRUIT SET AND FATTENING OF FRUITS**
- **INCREASES YIELD**

Flowering and Fruit Set inducer

CHARACTERISTICS

FIX SOLID is a special product based on Molybdenum and Boron of high concentration, enriched with assimilable phosphorus. With synergic and stimulating effect of flowering and fruit set, which allows favoring the phase of growing of the fruits.

FIX SOLID applications also corrects deficiencies of nutrients contained, avoiding physiopathies and crop yields. Both Boron and Molybdenum are essential in forced crops of multiple flowering whose fruit setting and growing phases overlap in time.

ACTIONS

- ✓ **REDUCES THE ABCISSION OF FLOWER BUDS AND FRUIT DROP AT THE BEGINNING OF FRUIT SET.**
- ✓ **FAVORS THE DEVELOPMENT, GROWTH AND FATTENING OF FRUITS.**
- ✓ **INDUCES FLOWERING**
- ✓ **INCREASES POLLEN QUALITY**
- ✓ **STIMULATES THE FRUIT SETTING**

APPLICATION

Crops	Foliar application
Vegetables cucurbitae	100 – 150 g/hl With a total of 2-3 applications; starting in pre-flowering before appearance of the first flower bouquet until fruit setting, repeating applications every 12-15 days.
Citric trees, fruit trees, olive tree and vine	100 – 150 g/hl In fruit trees and citric trees, to encourage setting and development of the fruit, application in pre-flowering, petals fall, end of setting and growth. In olive tree, application before flowering and during fruit growth. In vine, application before flowering.
Ornamental plants	100 – 150 g/hl Application in pre-flowering to encourage flowering and to avoid abscission of flower buttons.
	Drip irrigation
Vegetables cucurbitae	1-1,5 Kg / Ha Application dose by irrigation since beginning of flowering until the end of setting.
Citric trees, fruit trees, olive tree and vine	2-3 Kg / Ha Application dose by irrigation starting applications before flowering.
Ornamental plants	1-1,5 Kg / Ha Application dose by irrigation to encourage flowering and to avoid abscission of flower buttons. Begin applications in pre-flowering.

It is compatible with most of the phytosanitary products and phytonutrients used in agriculture. However, it is necessary to make a previous compatibility and selectivity test of the products to apply.



HUMIC ACIDS



Datasheet



Biostimulant
Foliar / Soil

MUMIC

COMPOSITION	%w/v
Total Humic Extract	56,00
Fulvic Acids	56,00
Total Nitrogen	2,75
Total Potassium (K ₂ O)	6,50
Density: 1,33	

Liquid fertilizer of high concentration of Humic acids

CHARACTERISTICS

Mumic is a liquid humic acid corrector made from vegetable matter. **Mumic** is a completely soluble microfiltered product.

When **Mumic** is added to the soil it stimulates the root and micro organism growth, unlocking the nutrients that are in an unassimilable form for the plant.

Mumic foliar application improves the uptake and transport of nutrients as well as of other compounds (hormones, vitamins, etc...). The application of **Mumic** is safe and easy throughout all stages of plant growth, from planting to harvesting.

- **VEGETABLE ORIGIN**
- **HIGHER YIELD**
- **TOTAL MISCIBILITY**

ACTIONS

- ✓ **IMPROVES GERMINATION**
- ✓ **INCREASES ROOT DEVELOPMENT**
- ✓ **HIGHER YIELD**
- ✓ **INCREASES THE FERTILIZERS UPTAKE**

SOIL APPLICATION

Crops	Season	Annual dosage
Citrus Fruits	From budding to mid-cycle	100-130 cc/tree
Fruit Trees	From budding to mid-cycle	100-150 cc/tree
Strawberries	Throughout the whole cycle	100 L/Ha
Cut Flowers	Throughout the whole cycle	100-120 L/Ha
Open-air Horticultural Crops	Throughout the whole cycle	80-100 L/Ha
Greenhouse Horticultural	Throughout the whole cycle	100-120 L/Ha
Maize	In the first irrigation	50-80 L/Ha
Olive Trees	Throughout the whole cycle	100-150 cc/tree
Pear Trees	From budding to mid-cycle	150-200 cc/tree
Wine Grapes	From budding to mid-cycle	30-50 L/Ha

FOLIAR APPLICATION

Crops	Applications	Annual dosage
Lawn	5-6 applications	5L / 1.000 m2
Ornamental	5-6 applications	100 cc / 20 Lts
Vegetable	3-4 applications	1-2 L / 200 Lts

GENERAL DOSAGE 2-4 L/200 L

SHAKE THE MUMIC CONTAINER WELL BEFORE OPENING. Keep **MUMIC** in the original container. Do not store below 0°C or above 40°C. When stored under normal storage conditions the product will keep its physical, chemical and biological properties for at least 3 years.



NEW

Datasheet

MUMIC AMYN

COMPOSITION	%w/v
Total Humic extract	14,0
Humic Acids	14,0
Free Amino Acids	14,0
Polysaccharides	8,0
Density: 1,15 g/cc	

- BIOAVAILABILITY
- HIGHLY SOLUBLE
- SMALL PARTICLE SIZE
- STABILITY

ACTIONS

- OPTIMUM VIGOUR CROP
- INCREASES STRESS TOLERANCE
- PROMOTES ROOT GROWTH
- IMPROVE THE NUTRIENTS UPTAKE AND TRANSPORT
- INCREASES THE MICROBIAL ACTIVITY IN THE SOIL
- YIELD AND QUALITY



Biostimulant Foliar / Soil

Liquid fertilizer of high concentration of Fulvic acids and aminoacids

CHARACTERISTICS

MUMIC AMYN is an extremely bioactive growth promoting and soil improving agent in liquid form with a high concentration of natural fulvic acids. Kulvic Amyin is 100% water-soluble and suitable for all crop and garden cultures for foliage and soil application. It may be used alone or in combination with soluble fertilizers and currently, plant protection agents.

MUMIC AMYN is a natural and versatile bio stimulant. It is produced trough a bacterial fermentation process using plant raw material.

MUMIC AMYN contains a complex array of plant based soil biostimulants including natural phytohormones (cytokinins, auxins gibberellins), polyamines, antioxidants, betaines, peptides, secondary metabolites, polysaccharides, auxins, vitamins, carbohydrates and organic mater to impove nutrient availability in soil, resulting in a hight uptake in pants.

APPLICATION

Foliar: 200-300 mls/100 water

Fertirrigation: Drip: 5-10 L/ha

CROPS	Season and anual dosage
Blueberries and Cranberries	10L/ha Apply 3 times; budding, fruit setting and fruit sizing.
Cereals	Minimum dose: 4L/ha once. Can be applied mixed with herbicides. In summer cereals, apply at 35-40 days after seeding.
Fruiting vegetables and cut flowers	4-6 applications from the beginning of the crop, depending on stress and development.
Greenhouse vegetable	Apply through the cycle of the crop of the crop every 7-14 days; foliar or fertigate.
Orchards, Citrus, Subtropical and Olives	Apply and bud break, pre-bloom and once the fruit setting is complete. Use when crops stressed.
Vegetable	Leafy crops: Apply regularly in early stage of growth.
Vines	Apply during vegetative growth; repeat 2 to 3 times from post berry set until the beginning of ripening.

Foliar application enhance the effect of insecticides and fungicides. For crop specific programs contact our technical support.





Biostimulant
Foliar / Soil

MUMICEQUAL

COMPOSITION	%w/w
Total Humic extract	20
Humic acids	10
Fulvic acids	10
Potassium (K ₂ O)	8

Humic and Fulvic acids.
Liquid fertilizer

- **LEONARDITE ORIGIN**
- **BALANCED COMPOSITION**
HUMIC/FULVIC ACIDS
- **TOTAL SOLUBILITY**

CHARACTERISTICS

Mumic Equal is a mixed product of humic acids and fulvic acids from leonardite. The balanced proportion of these two groups of organic molecules, with biostimulating properties of the plant metabolism, combines the beneficial properties of humic and fulvic acids. As a consequence of the quality and purity of the original material in **Mumic Equal** and its manufacturing process, a homogeneous product of maximum purity and without insoluble precipitates is achieved.

ACTIONS

- INCREASES THE CAPACITY OF SOIL CATION EXCHANGE**
- STIMULATES THE DEVELOPMENT OF THE BENEFICIAL BACTERIAL POPULATION OF THE SOIL**
- STIMULATES RADICULAR DEVELOPMENT**
- INCREASES UPTAKE OF NUTRIENTS BY THE PLANT**

CROPS

Dosage L/Ha

APPLICATION

Citrus Fruits

30-80

Apply in sprouting of spring-summer, in pre-flowering, in fruit setting and fattening.

Apple and stone fruits

45-75

Apply in pre-flowering, fruit etting and fattening.

Vegetables

40-70

Apply in transplant and along the growing cycle.

Tropical fruit trees

40-80

Perform 40% of the application with the basal dressing and the rest along the crop

Herbaceous and woody crops

20-40

Apply after each cut

Olive trees and vines

20-45

Apply before sprouting, in pre-flowering and at the beginning of winter.

Flowers and ornamentals

5-60

HUMIC ACIDS





Biostimulant
Foliar / Soil

MUMIC SOLID

COMPOSITION	%w/w
Total Humic extract	85,0
Humic acids	74,0
Fulvic acids	11,0
Potassium (K ₂ O)	11,0

Solid fertilizer of high concentration of Humic acids

- LEONARDITE ORIGIN
- APPROPRIATE PROPORTION HUMIC/FULVIC ACIDS
- TOTAL SOLUBILITY
- HIGH CONCENTRATION

CHARACTERISTICS

Mumic Solid is a soluble solid product from Leonardite. With high values of total humic extract. Its potassium form confers high solubility and easy incorporation to the soil-plant system. Mumic Solid incorporates adequate levels of humic and fulvic acids in its composition, which makes it suitable as a biostimulant capable of exerting an important action on cellular respiration of the vegetable, which translates into important actions.



ACTIONS

YIELD AND QUALITY

INCREASES WATER RETENTION CAPACITY

INCREASES BENEFICIAL MICROORGANISM OF SOIL

BETTER SOIL CATION EXCHANGE CAPACITY (CEC)

ENHANCES EFFICIENCY OF FERTILIZERS

APPLICATION

Soil Application	Dosage per Hectare and application	Soil Application	Dosage per Hectare and application
Horticultural Greenhouse (horticultural crops, ornamental plants...) Open fields (horticultural crops, potatoes...)	Sandy Soil: 100 - 200 g/1.000 m ² Clayey Soil: 75 - 150 g/1.000 m ² Applications during the growth stage: Every 15 days.	Gardens: Lawns (Sprinkler systems) Gardens: Trees, shrubs (trickle irrigation)	Sandy Soil: 20 - 40 g/100 m ² Clayey Soil: 15 - 30 g/100 m ² During the growth s.: After every mowing. Sandy Soil: 100 - 200 g/Ha Clayey Soil: 75 - 150 g/Ha During the growth s.: Every 4 weeks.
Fruit Trees (apple trees, citrus fruits, bananas...)	Sandy Soil: 200 - 400 g/Ha Clayey Soil: 150 - 300 g/Ha During the growth s.: Every 15 days.	FOLIAR APPLICATION For all crops ROOT APPLICATION SEED TREATMENT	150 - 300 g/Ha 30 g/20 L water/Before transplanting 200 g/100 Kg little seed/Before sowing 125 g/100 Kg big seed/Before sowing
Sprinklers and pivot system: Cereals, green beans, rice...	Sandy Soil: 800 - 1.200 g/Ha Clayey Soil: 500 - 800 g/Ha During the growth s.: 2-4 applications.	IRON CHELATE Enhancer	5-8 g/50 g Chelate 6%
Sprinklers and pivot system: Fodder crops, alfalfa, etc...	Sandy Soil: 1.500 - 2.000 g/Ha Clayey Soil: 1.000 - 1.500 g/Ha During the growth s.: After every mowing.		



LIGNOSULFONATES



NEW

LIGNO
SULFO
NATES

LIGNO

**NATURAL CHELATING AGENT
(LIGNOSULFONATE ACID)**

MACRO

LIGNO Mg

COMPOSITION

%W/W

Magnesium oxide (water-soluble)	7,0
Magnesium oxide (complexed with LS)	7,0
Natural Chelating Agent (Lignosulfonic Acid-LSA)	



LIGNO Ca + B

COMPOSITION

%W/W

Calcium (CaO)	12,50
Boron (B)	0,20



LIGNO Mg + Fe

COMPOSITION

%W/W

Magnesium (MgO)	15,00
Iron (Fe)	4,00



LIGNO Ca + Mg + Fe

COMPOSITION

%W/W

Calcium (CaO)	2,00
Magnesium (MgO)	2,00
Iron (Fe)	1,00



MICRO

LIGNO Cu

COMPOSITION

%W/W

Copper (Cu)	6,0
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LIGNO Fe

COMPOSITION

%W/W

Iron (Fe)	6,0
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LIGNO Mn

COMPOSITION

%W/W

Manganese (Mn)	10,0
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LIGNO Zn

COMPOSITION

%W/W

Zinc (Zn)	9,0
Natural Chelating Agent (Lignosulfonic Acid)	



NEW

LIGNO
SULFO
NATES

LIGNO

NATURAL CHELATING AGENT
(LIGNOSULFONATE ACID)

MICRO

LIGNO Mn + Zn

COMPOSITION	%W/W
Manganese (Mn)	5,0
Zinc (Zn)	5,0



LIGNO Mn + Zn + Mg

COMPOSITION	%W/W
Manganese (Mn)	10,0
Zinc (Zn)	10,0
Magnesium (MgO)	3,0



LIGNO Fe + Mn + Mo + Zn

COMPOSITION	%W/W
Iron (Fe)	4,50
Manganese (Mn)	5,0
Molybdenum (Mo)	0,10
Zinc (Zn)	7,0



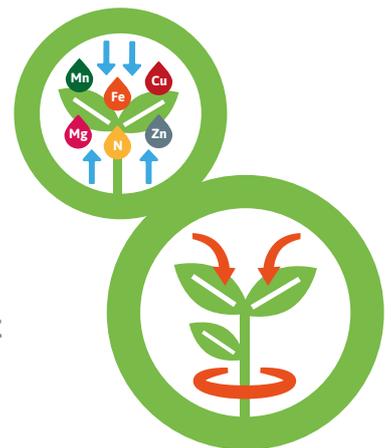
LIGNO Mix

COMPOSITION	%W/W
Manganese (Mn)	2,50
Zinc (Zn)	2,50
Iron (Fe)	2,00
Copper (Cu)	0,30
Boron (B)	0,40



LIGNO BENEFITS

- Improves availability of soil nutrients.
- Compatibility with fungicide and insecticides.
- Single element and elements combination available.
- Healthier plants endure adverse weather, disease and pest conditions.
- Excellent source of organic Carbon and Sulfur.



LIGNO CAN BE APPLIED TO VEGETABLES, CITRUS, FRUITS, NUTS, ORNAMENTALS AND TURF FOR CORRECTION OR MAINTENANCE OF PLANT NUTRITION



NEW

Datasheet



Lignosulfonic Acid
Foliar / Soil



Complexed organic magnesium corrector
(Lignosulfonic Acid)

CHARACTERISTICS

LIGNO Mg is a magnesium complex formulation that is easily and quickly assimilated, free from chlorides, sulfates, or other salts that can be phytotoxic. Magnesium is a component of chlorophyll and participates in numerous enzymatic reactions for energy production, thus its application activates photosynthesis and prevents internal disorders that can reduce yield.

LIGNO Mg effectively corrects magnesium deficiencies in soils where it is insoluble or where there are ionic antagonisms.

USAGE RECOMMENDATIONS AND DOSAGE

FOLIAR APPLICATION

Fruit trees and citrus	150-300 cc/hl
Vegetables	150-300 cc/hl
Olive trees	200-300 cc/hl
Vineyards	150-300 cc/hl

FERTIRRIGATION

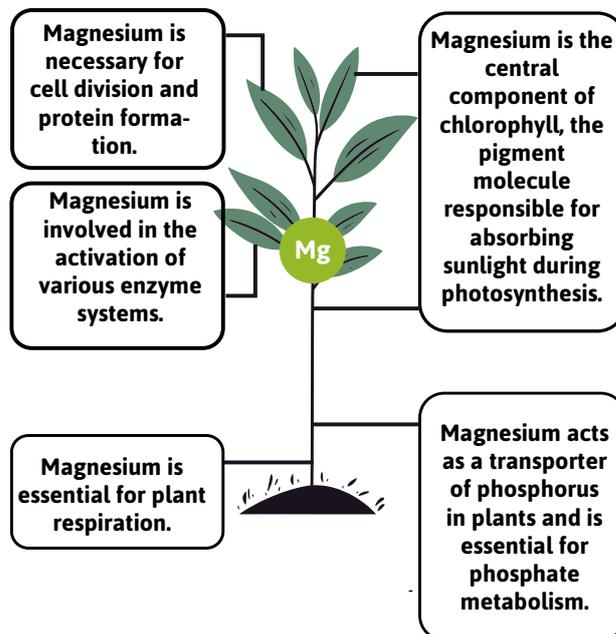
5-10 l/ha/irrigation (2-3 applications)

The dosage will vary depending on the type of crop, its condition, and its needs. Applications should be made during periods of higher demand.

LIGNO Mg

COMPOSITION

	%w/w
Magnesium oxide (water-soluble)	7,0
Magnesium oxide (complexed with LSA)	7,0
Natural Chelating Agent (Lignosulfonic Acid-LSA)	



ACTIONS

- IT PREVENTS CHLOROSIS SINCE IT STIMULATES THE PRODUCTION OF CHLOROPHYLL, XANTHOPHYLL AND CAROTENE.
- IMPROVED FORMATION AND MOVEMENT OF SUGARS, STANDARDIZING THE MATURITY.
- IT AVOIDS THE PREMATURE LOSS OF LEAVES.
- IT IMPROVES THE ABSORPTION AND TRANSPORT OF PHOSPHORUS.
- IT HELPS THE NITROGEN METABOLISM OF AVOIDING EXCESSES OF AMMONIUM IN THE TISSUES.
- HIGH PENETRATION.
- WIDE COVERAGE.



NEW

Datasheet



Lignosulfonic Acid
Foliar / Soil



Complexed Organic Mn, Zn, FeCu, B corrector
(Lignosulfonic Acid)

CHARACTERISTICS

Ligno MIX MICRONUTRIENT is a highly soluble liquid solution that is easy assimilated by crops. Its complexation with lignosulphonic acid provides high stability, promoting absorption. This ensures its effectiveness and speed of action, as well as its effect on the crop. Ligno MIX is a product based on magnesium and micronutrients, with preventive and curative effects against deficiencies of these elements. The combination of micronutrients has been studied to provide the necessary content in each phase of the crop and to avoid the adverse effects of deficiency. In this way, basic metabolic and physiological processes are stabilised and improved for the development of the plant, covering all stages of the crop.

LIGNO MIX activates the plant's metabolism resulting in an optimal physiological and nutritional state, to maximise yields.

What is LIGNO MIX important for?

- Micro elements contained in LIGNO MIX are in forms that are easily accessible to plants, thanks to which they quickly and effectively nourish plants and supplement any deficiencies.
- The properties of lignosulfonate, reducing surface tension, cause even coverage of the plants surface, without the need for additional surfactants. In addition, the biopolymer has low-foaming properties, facilitating the creation of complex tank mixtures.

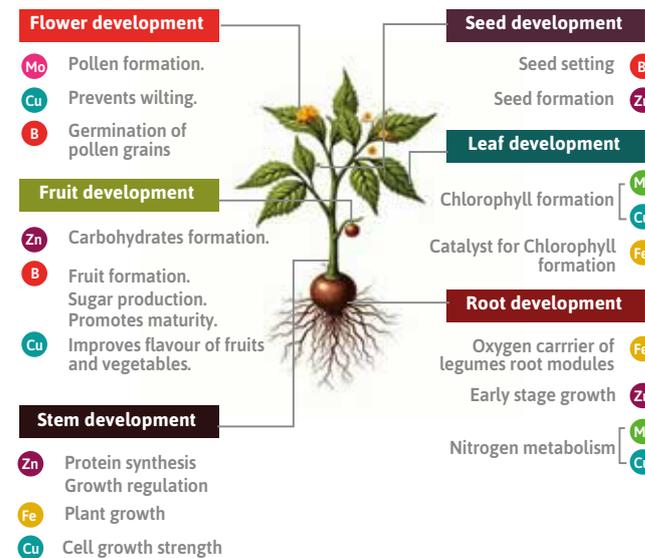
BENEFITS

- Contains key microelements responsible for the proper development and growth of crops.
- Fertilizer completely soluble in water
- Increases the use of available nitrogen.
- Lowers the surface tension of droplets, prevents washing away of fertilizer from the plant surface.

LIGNO MIX

COMPOSITION

	%w/v
Manganese (Mn)	2,50
Zinc (Zn)	2,00
iron (Fe)	2,00
Copper (Cu)	0,30
Boron (B)	0,40
Natural chelating agent (Lignosulfonic acid)	



APPLICATIONS

CROPS	APP/QT	APP. DATE	DOSE/ HA	RECOMMENDED WATER QUANTITY
Cereals	3	AUTUMN: From 3 leaf stage to winter dormancy	1L/ha	180-300L
		SPRING: Tillering base; -Beginning of shoot formation; -Flag leaf phase		
Rapeseed	3	AUTUMN: From 4-5 leaf stage to winter dormancy.	1,0-1,5 L/ha	180-300L
		SPRING: From main shoot growth stage to green bud; Compact green flower bud stage.		
Maize	2	Phase 3-6 leaf Phase 6-8 leaf	1L/ha	180-300L
Sugar Beet	2	Phase 6-8 leaf Compact inter-rows	1,5L/ha	180-300L
Potatoes	2	Covering the inter-rows. Flowering.	1L/ha	180-300L
Vegetables	2 - 3	Leaf growth and biomass building.	1L/ha	200-500L
Orchards	3 - 4	Fruit growth phase.	0,5L/ha	300-800L

Ligno MIX is compatible with most pesticides and fertilizers. However, if the desired combination has not been previously used, check for chemical mixture compatibility using a jar test prior to application



NEW

LIGNO
SULFO
NATES

NATURAL CHELATING AGENT
(LIGNOSULFONATE ACID)

Datasheet

tangelAGRO



Lignosulfonic Acid
Foliar / Soil



Complex Organic Manganese corrector
(Lignosulfonic Acid)

CHARACTERISTICS

Ligno Mn, a Manganese deficiency corrector, is a highly soluble liquid solution that can be soluble and assimilable by crops. Its complexing by means of lignosulfonic acid provides it with a high stability, favouring its absorption. This ensures effectiveness and speed of action as well as its effect on the crop. Ligno Mn is a hygroscopic biopolymer based on lignin with natural properties of low surface tension, which ensures good distribution of microelements on the leaf surface. It helps to maintain nutrients in a water-soluble form, so they can diffuse and penetrate the leaves, even in low humidity conditions.

What is Mn important for?

Ligno Mn, a Manganese deficiency corrector, is a highly soluble liquid solution that can be soluble and assimilable by crops. Its complexing by means of lignosulfonic acid provides it with a high stability, favouring its absorption. This ensures effectiveness and speed of action as well as its effect on the crop. Ligno Mn is a hygroscopic biopolymer based on lignin with natural properties of low surface tension, which ensures good distribution of microelements on the leaf surface. It helps to maintain nutrients in a water-soluble form, so they can diffuse and penetrate the leaves, even in low humidity conditions.

- Accelerates germination and early season seed development.
- Activate enzymes that perform important functions.
- Aids in chlorophyll synthesis.
- Better flowering and tillering of crops
- Important role in cereal cultivation.
- Increase the availability of Phosphorus and Calcium.
- Regulates the splitting of the water molecules during Photosynth.

BENEFITS

- PREVENTS MN DEFICIENCY SYMPTOMS IN THE PLANT
- INCREASE THE USE OF AVAILABLE NITROGEN
- RESPONSIBLE FOR THE SYNTHESIS OF PROTEINS NECESSARY FOR GROWTH AND BUILDING BIOMASS
- INCREASES PLANT TOLERANCE TO LOW TEMPERATURES AND FROSTS

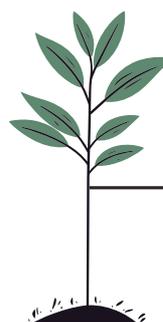
LIGNO Mn

COMPOSITION

Manganese
Natural Chelating Agent (Lignosulfonic Acid)

%w/w

10,0



Increases the availability of P and Ca

Activates several enzymes

Seed development

Accelerates germination and maturity

Healthy flowers

Green leaves and healthy inflorescences

APPLICATION



CROPS	AIM/PROBLEM	RECOMMENDATIONS	TIME
In all crops	To provide manganese, leaf quality, yield, water balance, photosynthesis rate...	Numerous applications of 2 - 4 L/ha (in at least 200L water)	When required
Cereals	N efficiency, vitality, tillering, stem stability, winter hardiness	2 - 4 times 1 - 3 L/ha	From 3-leaf stage
Potatoes	N efficiency, vitality, skin quality	2 - 4 times 1 - 3 L/ha	From 6-leaf stage
Legumes	N efficiency, increased vitality (e.g. in cold conditions)	2 - 3 times 1 - 3 L/ha	From 6-leaf stage
Maize	Increased vitality (e.g. in cold conditions)	1 - 2 times 1 - 3 L/ha	From 4-leaf stage
Oilseed rape	Vitality, oil yield, winter hardiness.	2 - 3 times 1 - 3 L/ha	From 4-leaf stage
Sunflower	Vitality, oil yield.	1 - 3 L/ha	From 4-leaf stage
Pome fruit	N efficiency, increased vitality (e.g. in cold conditions) fruit colouration	2 - 4 times 1 - 3 L/ha	Red bud until harvest
Soft fruit	N efficiency, increased vitality.	2 - 3 times 1 - 3 L/ha	Start of shoot growth
Citrus fruit	N efficiency, increased vitality (e.g. in cold conditions)	2 - 3 times 2 L/ha	From white bud to harvest
Wine grapes	N efficiency, increased vitality (e.g. in cold conditions)	2 - 3 times 2 L/ha	Inflorescences visible
Tobacco	Increased vitality (e.g. in cold conditions)	1 - 3 times 2 L/ha	From 4-leaf stage
Ornamental plants	Leaf quality, vitality	2 times 2 L/ha	Once sufficient leaf mass has developed
Cotton	Increased vitality (e.g. in cold conditions), winter hardiness	2 - 3 times 2 - 4 L/ha	From 4-leaf stage
Rice	N efficiency, vitality, tillering, stem stability	2 - 5 times 2 - 4 L/ha	From 3-leaf stage

Ligno Mn is compatible with most pesticides and fertilizers. However, if the desired combination has not been previously used, check for chemical mixture compatibility using a jar test prior to application.

LIGNOSULFONATES
tangelAGRO

www.tangelagro.com

AVAILABLE IN
1L - 5L - 10L - 20L - 1000L
Plastic Bottle/IBC



FERTILIZER



IMPORTED
FROM EU



NEW

Datasheet

LIGNO Zn



Lignosulfonic Acid
Foliar / Soil



Complexed organic zinc corrector
(Lignosulfonic Acid)

CHARACTERISTICS

Ligno ZN is a zinc deficiency corrector, a highly soluble liquid solution that is easily assimilated by crops. Its complexation with lignosulphonic acid provides high stability, promoting absorption. This ensures its effectiveness and speed of action, as well as its effect on the crop.

Ligno ZN is a natural complex chelated with zinc, especially recommended for both foliar and root application to prevent and correct zinc deficiency. It is also a perfect acidifier for the pH of the water in the nutrient solution or spray mixture, improving its assimilation.

WHAT IS Zn IMPORTANT FOR?

Zinc deficiency is probably the most common micronutrient deficiency in crops worldwide, resulting in substantial losses in crop yields and human nutritional health problems. Deficiency in Zinc might result in significant reduction in crop yields and quality. In fact, yield can even be reduced by over 20% before any visual symptoms of deficiency occur.

BENEFITS

- Prevents zinc deficiency symptoms in the plant
- Increases the use of available nitrogen
- Demonstrate high absorption efficiency
- Responsible for the synthesis of proteins necessary for growth and building biomass
- Increases plant tolerance to low temperatures and frosts.

COMPOSITION

	%w/w
Zinc	9,0
Natural Chelating Agent (Lignosulfonic Acid)	

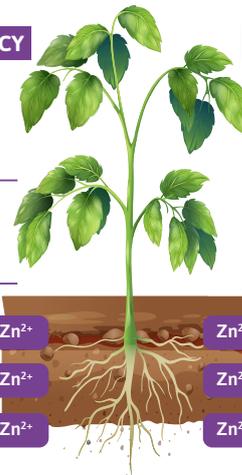
PHYSIOLOGICAL RESPONSES

ZINC DEFICIENCY

Short internodes, decrease in leaf size and delayed maturity

Disrupted photosynthesis and plant water relations

Imbalanced mineral nutrition and cell death



ZINC DEFICIENCY

Decreased protein synthesis due to enhanced proteolytic activity

Inactivation of enzymes

Imbalanced cell proliferation

BIOCHEMICAL RESPONSES

APPLICATIONS



CROPS	FOLIAR RATE	SOIL RATE	STAGES AND RECOMMENDATIONS
fruit trees, grapes, citrus, olive tree	2-4 L/Ha	3-5 L/Ha	At the vegetative re-start, before flowering and post-harvest. During vegetative growth and fruit enlargement
Horticulture in greenhouse	2-3 L/Ha	3-4 L/Ha	Transplanting and from the 4th true leaf during vegetative growth
Horticulture in open field	2-3 L/Ha	3-4 L/Ha	Transplanting and from the 4th true leaf during vegetative growth
Cereal and industrial crops	2-3 L/Ha	3-4 L/Ha	At the 4th leaf after trillering.
Nurseries	2-3 L/Ha	3-4 L/Ha	Within the 4th leaf.
Flowers and ornamentals	1-3 L/Ha	3-4 L/Ha	At the beginning and during vegetative growth.

Ligno Zn is compatible with most pesticides and fertilizers. However, if the desired combination has not been previously used, check for chemical mixture compatibility using a jar test prior to application



NEW

LIGNO
SULFO
NATES

NATURAL CHELATING AGENT
(LIGNOSULFONATE ACID)

Datasheet

tangelAGRO



Acide lignosulfonique
Foliaire / Sol



Correcteur organique complexé de zinc et de manganèse (Acide lignosulfonique)

CARACTÉRISTIQUES

LIGNO Zn+Mn est un double correcteur de carences en manganèse et en zinc. Solution liquide hautement soluble et facilement assimilable par les cultures, LIGNO Zn-Mn prévient et corrige les carences en manganèse et en zinc dans toutes les cultures, par application foliaire ou au sol. L'application de LIGNO Zn-Mn corrige et prévient les carences en ces deux éléments, principalement dues à des facteurs affectant leur disponibilité et leur absorption, tels que les basses températures, les sols à pH élevé, les antagonismes, les faibles concentrations dans le sol, les niveaux de production élevés, etc. Dans ces conditions, la probabilité de carences en manganèse et en zinc est plus élevée. Sa formulation à base de lignosulfonates est un polymère organique biodégradable d'origine naturelle.

AVANTAGES

- Rendements élevés et qualité améliorée
- Efficacité d'absorption élevée
- Augmentation de la matière sèche
- Impact environnemental réduit
- Calibrage et coloration accrus
- Optimisation de l'utilisation des nutriments

LIGNO Zn + Mn

COMPOSITION

	%p/p
Manganèse (Mn)	4,50
Zinc (Zn)	4,50
Agent chélateur naturel (acide lignosulfonique)	

APPLICATIONS



DOSE GÉNÉRALE :

Application foliaire : 300 à 500 cc/hL par application sur toutes les cultures.

Application au sol : 4 à 8 L/ha.

APPLICATION FOLIAIRE

CULTURES	NOMBRE DE DEMANDES ET MOMENT DE LA DEMANDE	DOSE
Arbres fruitiers	3-4 applications en pré-floraison, nouaison, grossissement et après récolte.	300-400 cc/hL
Agrumes	Coïncidant avec le débourrement printanier et estival, lorsque les nouvelles pousses atteignent les 2/3 de leur taille.	400 cc/h
Cultures extensives	1 à 2 applications dès le début de la croissance. 2 à 4 cm pour le lin et 5 à 6 feuilles pour le maïs.	300 cc/hL
Légume cultures	Effectuer la première application lorsque les plantes sont bien enracinées et les feuilles bien développées, puis à intervalles de 15 jours par la suite.	300 cc/hL
Cultures sensibles aux carences en zinc et en manganèse T	2 à 4 applications sur des feuilles suffisamment développées à intervalles de 15 à 20 jours.	300 cc/hL
Oliviers	1ère application en début de cycle (printemps), 2ème engraissement de septembre à octobre.	300-400 cc/hL
Vigne et vignoble	1° Inflorescences séparées 2° Boutons floraux 3° Nouaison 4° Véraison.	300-400 cc/hL

Éviter les traitements en cas de sécheresse extrême, d'humidité, de gel, de pluie ou lorsque ces conditions extrêmes sont prévisibles. En cas de mélange avec d'autres produits, toujours effectuer un essai préalable.

APPLICATION AU SOL

NOMBRE DE DEMANDES ET MOMENT DE LA DEMANDE

Effectuer 2 à 4 applications selon les besoins et la durée maximale d'application, à intervalles de 15 à 20 jours.

DOSE

4-8 L/ha

Fonctions manganèse

- Synthèse de l'hormone de croissance
- Fonction enzymatique
- Synthèse des protéines

Fonctions du zinc

- Activation enzymatique
- Synthèse de la chlorophylle
- Réduction des nitrates et synthèse des protéines

LIGNOSULFONATES
tangelAGRO

www.tangelagro.com

DISPONIBLE EN :
1L - 5L - 10L - 20L - 1000L
Bouteille en plastique/IBC



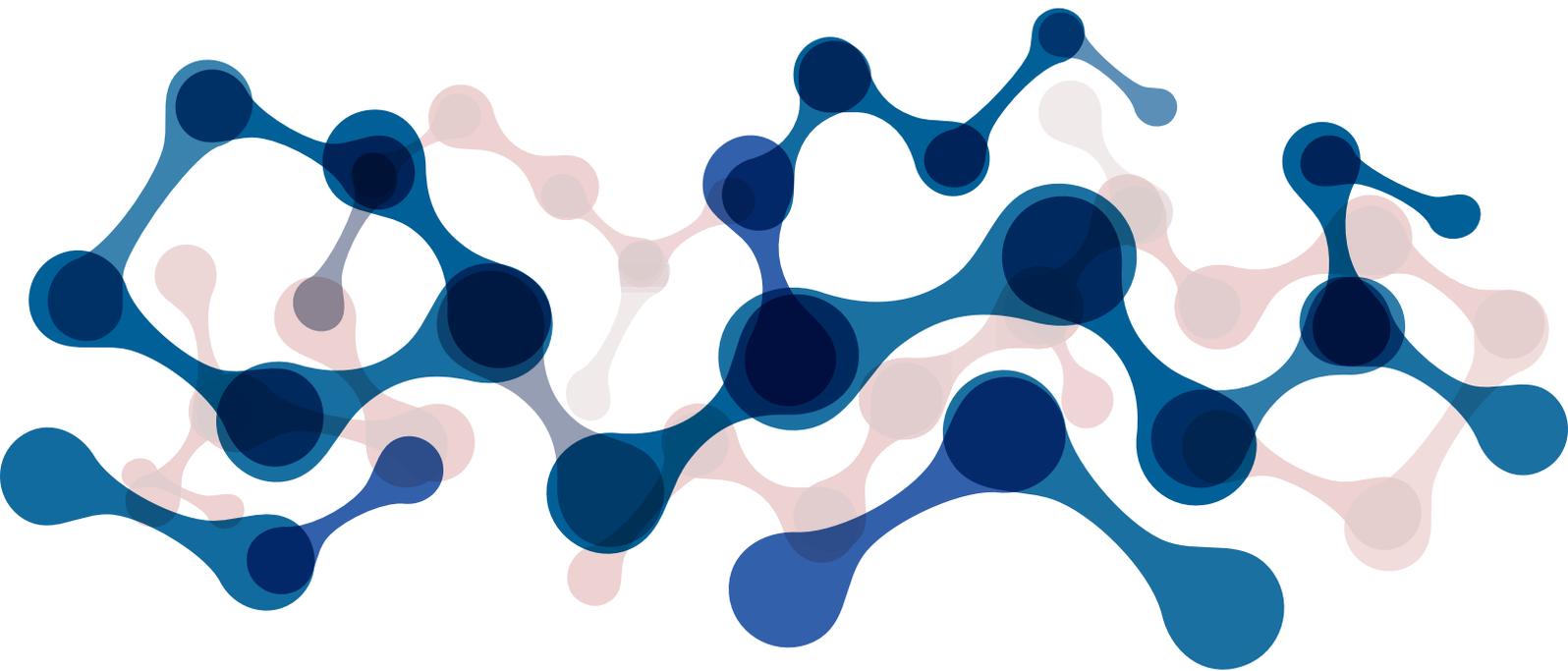
ENGRAIS



IMPORTÉ DE L'UE



MACRONUTRIENTS



NEW

Datasheet



Nutrient corrector Foliar / Soil

CAB Plus

COMPOSITION	%w/v
Calcium (CaO)	12,0
Boron (B)	1,24
Density: 1,38 g/cc	

Immediate uptake of Calcium and Boron.

CHARACTERISTICS

CaB Plus is a **CALCIUM** and **BORON** deficiency corrector. Calcium and Boron in CaB Plus are quickly uptaked and translocated to the growing points of the plant.

Calcium is essential for the formation of the cell wall in plant cells. It is involved in plant respiration, translocation of photosynthates from leaves to fruiting organs, fruit setting, water absorption, among other vital functions.

Boron enhances cellular activity and is necessary for protein synthesis and sugar transport. It plays indispensable roles in metabolic reactions associated with flower setting and fruit ripening.

CaB Plus is recommended for maintaining appropriate levels of calcium and boron in the plant, preventing deficiencies or imbalances in their assimilation, thereby avoiding significant issues that may arise.

ACTIONS

- ✓ BLOSSOM END ROT (APICAL NECROSIS) IN TOMATOES, PEPPERS, EGGPLANTS AND WATERMELONS.
- ✓ WATERCORE AND GLASSINESS IN MELONS.
- ✓ INTERNAL LEAF AND CURB DEFECTS IN CAULIFLOWER.
- ✓ INTERNAL BROWNING OF BRUSSELS SPROUTS. LEAF TIPBURN IN SPINACH, LETTUCE, CELERY, CABBAGE AND STRAWBERRY.
- ✓ INTERNAL BROWNING, HOLLOWHEART, STORAGE DISORDERS, AND POOR SKIN SET IN POTATOES.
- ✓ BITTER PIT, CORK SPOT, CRACKING, INTERNAL BROWNSPOT, AND WATER CORE IN APPLES.
- ✓ HYPOCOTYL NECROSIS IN BEANS AND OTHER LEGUMES.

APPLICATION

Crops

Horticulture: Tomato, Pepper, Cucurbitis, Lettuce, Strawberry, Celery, Cabbage, Broccoli, etc.

Fruit crops: Apple, Pear, Peach, Cherry, Plum, Citrus, Grapes.

Tropical fruits: Banana, Pineapple, Mango, Durian, Papaya, Cocoa, Guava.

Field crops: Cotton Potato, Sugar beet, Rice, Turf, Pastures.

Dosage

FOLIAR:

Horticulture and field crops Apply 3-6 ml/L or 3-6 L/Ha

Fruit/Vine crops Apply 5-10 ml/L or 5-10 L/Ha

Crops

SOIL:

Drip or localized irrigation Apply 15-30 L/Ha





Nutrient corrector
Foliar / Soil

Optimising Genetic Potential



CALMA UP

COMPOSITION

%w/v

Calcium (CaO)	15
Magnesium (Mg)	2
Boron (B)	0,5
Silicon (SiO ₃)	1

- ORGANIC Ca, Mg, B and Si
- DEFICIENCIES CORRECTOR
- SUITABLE FOR ALL CROPS

Liquid Organic Ca/Mg/B/Si complex

CHARACTERISTICS

CALMA UP is a completely chelated fertilizer using complexes derived from natural plant sources: Gluconic acid. It is designed to address calcium (Ca) and magnesium (Mg) deficiencies that often occur at the same time.

Boron is added in the ideal ratio to improve the mobility of calcium in the plant and improves the uptake of potassium.

CALMA UP is Organic Ca/Mg/B/Si complex for correction of nutrients deficiencies.

ACTIONS

- ✓ IMPROVES THE FIRMNESS OF VEGETAL TISSUES AND FRUIT.
- ✓ INCREASES SHELF-LIFE.
- ✓ PREVENTS DISORDERS DUE TO CALCIUM DEFICIENCY.
- ✓ YIELD AND QUALITY - FLOWERING AND FRUIT SET.
- ✓ CALCIUM TRANSPORT AND SKIN QUALITY.
- ✓ POLLEN QUALITY AND POLLEN TUBE DEVELOPEMENT.
- ✓ BUD AND SHOOT DEVELOPMENT QUALITY IN HOPS.

APPLICATIONS

Crops	Aim/Problem-Recommendations	Time
Cereals	Yield, Quality / 1-2 times 0,5 - 1 L/ha	From 3-leaf-stage to the end of tillering.
Pasture Land	Yield, Quality / 1- 4 times 0,5 - 1 L/ha	In spring from the start of vegetation
Potatoes	Internal quality / 1-2 times 1 L/ha	From beginning of row closure.
Legumes (Soy included)	Flowering, fruit set / 2 times 1 L/ha	From 6-leaf stage
Maize	Energy density, grain fill, grain yield, pollen quality. 2 L/ha	From 4-leaf stage
Oilseed rape	Even flowering and maturation, yield. / 1-2 times 2-3 L/ha	In spring from the start of vegetation through to the beginning of flowering
Sunflowers	Pollen quality / 2 L/ha	From 4-leaf stage.
Sugar beet	Quality, yield, to prevent heart rot and dry rot. 1-2 times 2-3 L/ha	From 6-leaf stage.
Strawberries	To prevent deformed berries, flowering, fruit set. 1-2 times 1L/ha	From green buds.
Pome fruit	Calcium transport, fruit set, pollen tube development, skin quality 1-2 times 1 L/ha (and 1-2 times 1 L/ha from walnut size)	First pink to beginning of flowering.
Stone fruit	Flowering, fruit set / 1-2 times 1 L/ha	From the beginning of flowering.
Soft fruit	Flowering, fruit set / 1-2 times 1 L/ha	Before flowering.
Table grapes	Even maturation. Flowering, fruit set. / 2 times 1 L/ha	Enlargement of the inflorescences to the beginning of flowering
Wine grapes	Even maturation. Flowering, fruit set. / 2 times 1 L/ha	Enlargement of the inflorescences to the beginning of flowering.
Cabbages, leafy, vegetables and bulb vegetables	To prevent heart rot in cabbage, lettuce, etc., internal quality / 2-3 times 2-3 L/ha	Once sufficient leaf mass has developed.
Asparagus	Quality (cracks, hollow stalks, skin quality) / 2-3 times 2-3 L/ha	Once sufficient leaf mass has developed.
Root vegetables and tubers	Quality (cracks, hollow tubers, internal browning) 2-3 times 2-3 L/ha	Once sufficient leaf mass has developed.



NEW

tangelAGRO

Datasheet



Ca Fertilizer
Foliar / Soil

CAL AMYN

COMPOSITION

%w/w

Calcium (CaO)	33,60
Vegetal Origin Amino Acids	6,00
Total Nitrogen (N)	2,50
Organic Nitrogen (N)	1,80

Ca Fertilizer with Aminoacids

CHARACTERISTICS

CAL AMYN is a product based on plant amino acids and CaO, highly assimilable by plants, just a few hours after application. **CAL AMYN** is a highly concentrated calcium corrector, complexed, helps to develop cell walls and strengthens their structure. It should preferably be used during the development of the fruits to prevent and control stated caused by deficiencies or imbalances in the uptake of calcium. The plant-origin amino acids included in its formulation enhance the absorption and transport of calcium (Ca), a nutrient with inherently limited mobility. **CAL AMYN** is Source of Calcium (Ca) assimilation.



CAL AMYN protects against biter pit as well as discoloration on the skin and flesh. It also strengthens cell structure, which reduces the penetration of microbial and fungal pathogens.

The effectiveness of crop protection agents can also be increased.

CAL AMYN is distributed uniformly over the leaf and acts very rapidly on these parts of the plant. The result is a high proportion of marketable fruit of significantly improved quality. **CAL AMYN** improves the shelf life of the fruit.

APPLICATION

Usage Recommendations:

CAL AMYN is highly effective, and the prescribed dosage is more than sufficient. However, we recommend its application during the cooler parts of the day for optimal effectiveness. **CAL AMYN** can be used on all types of crops, including vegetables, orchards, and large-scale agriculture.

Crops: Suitable for all types of crops.

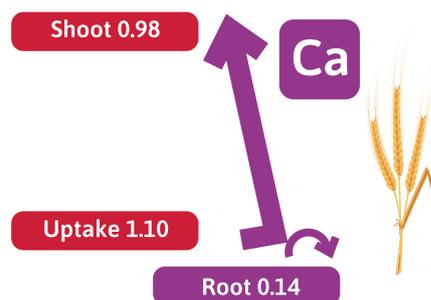
Foliar Application Dosage: 150-300g/hl or Soil Application Dosage: 5.25Kg/ha/irrigation.

CAL AMYN is recommended for urgent cases of deficiency in these nutrients, enabling normal plant development and a rapid resumption of plant biochemical processes. It is particularly suitable for nutrient-sensitive crops such as citrus, peach, grape, pear, wheat, beans, industrial peas, corn, and cotton, as well as for all field crops.

BENEFITS

- ✓ PROTECTS CROPS AGAINST BITER PIT AND SKIN/FLESH DISCOLORATION.
- ✓ REINFORCES CELL STRUCTURE, REDUCING VULNERABILITY TO MICROBIAL THREATS.
- ✓ ACHIEVES UNIFORM DISTRIBUTION OF PROTECTIVE AGENTS ON LEAVES.
- ✓ ACTS SWIFTLY FOR ENHANCED FRUIT QUALITY AND PROLONGED SHELF LIFE.

Recirculation within the Plant
Uptake and redistribution of cationic elements in rye seedlings



MACRONUTRIENTS
tangelAGRO

www.tangelagro.com

AVAILABLE IN
1Kg - 5Kg - 20Kg Bag
500Kg Bigbag

FERTILIZER
CE
IMPORTED
FROM EU



Datasheet

NPK Gel Fertilizer
Foliar / Soil



FLOWKI YELLOW

NPK Gel Fertilizer
Foliar / Soil



FLOWKI BLUE

NPK Gel Fertilizer
Foliar / Soil



FLOWKI GREEN

NPK Gel Fertilizer
Foliar / Soil



FLOWKI RED

CHARACTERISTICS

FLOWKY is a formulated nutritional product and not just a simple mixture of raw materials, as are most of NPK fertilizers in powder form.

FLOWKY has an uniform and simultaneous solubility of all the nutrients, during use, while avoiding sedimentation in the storage containers of the nutrient solution. In contrast, common NPK water soluble powder fertilizers, which are produced through a mixture of raw materials, have increase variability in grain size that results in a non-uniform dilution of nutrients, since the smallest grains are dissolved firstly.

The conductivity and the salinity index are maintained in very low levels so that the soil will not be burndened with undesirable, salt concentration.

ACTIONS

-  IMPROVES ROOT DEVELOPEMENT.
-  IMPROVES GROWTH, FRUIT SETTING AND YIELD.
-  INCREASES BUD AND TUBER NUMBERS.
-  BOOST CELL DIVISION AND EXPANSION, RESULTING IN BIGGER FRUITS.
-  SAFETY, COMFORT AND EASY HANDLING.



FLOWKI FORMULATIONS

FLOWKI YELLOW

27-27-27+TE
22-22-22+TE
20-20-20+TE

FLOWKI BLUE

30-10-10+TE
28-11-14+TE

FLOWKI GREEN

10-50-10+TE
13-40-13+TE
12-65-05+TE

FLOWKI RED

12-05-42+3MgO+TE
04-40-55+TE
10-10-50+TE

FLOWKI + AMINO ACIDS

45-00-00+TE+3AA
20-20-20+TE+3AA

FLOWKI + FULVIC ACIDS

20 20 20 +TE+6,5% FULVIC ACIDS

FLOWKI + MACRONUTRIENTS

18-11-59+TE+2MgO
20-20-20+TE+4,7MgO
12-05-42+3MgO+TE

FLOWKI + SEAWEED

20-20-20+TE+5% SEAWEED



Datasheet



NPK Gel Fertilizer
Foliar / Soil

FLOWKI YELLOW

22 22 22 + Te

COMPOSITION	%w/v
Total Nitrogen (N)	22,00
Phosphorus (P ₂ O ₅)	22,00
Potassium (K ₂ O)	22,00
Boron (B)	0,016
Iron (Fe)*	0,047
Copper (Cu)*	0,016
Manganese (Mn)*	0,016
Zinc (Zn)*	0,016
*Chelated with EDTA	

Balanced NPK Gel Fertilizer
with trace elements

CHARACTERISTICS

Flowki Yellow is a fertilizer NPK formulation with trace elements. It is specially formulated as a gel that presents an optimum balance to supplement the nutrition of crops during the vegetative growth stages and fruit stages. Also contains the trace elements to the plant more needs in the form of chelates or mineral. In general, **Flowki Yellow** can be used in all types of crops, especially if you want to boost the development of the vegetative growth and especially when outbreaks or organs are developing.

Nutrient content. Based on statistics and various analyzes it is shown that fertilizers in GEL form have a correct and precise nutrient content. In some solid fertilizers most of their levels deviate from the actual nutrient content.
High uptake rate. The fertilizers in the form of gel can be applied to the leaf and be uptaked directly through stomata, which greatly increases the speed of uptake avoiding the problems of uptake in the soil due to, among others, acidity, soil temperature or excess salts, due to not knowing these variables.

APPLICATION

Crops	Dosages	Applications
Cereals	2.5 l/ha 600 ml/100l	1-2 applications
Citrus	1.5-3.0l/ha 100-200 ml/100l	2-3 applications with 15 day intervals
Fruits and Vines	1.5-3.0 l/ha 100-200 ml/100l	Apply before flowering. Repeat every 15 days
Ornamentals	1.0-2.0 l/ha 50-100 ml/100l	Use low rate on young or delicate plants
Potatoes	2.0-3.0 l/ha 400 ml/100l	1-2 applications early in crop cycle
Sugar Beet	3.0 l/ha 500 ml/100l	1-2 applications early in crop cycle
Vegetables	2.0-2.5 l/ha 200 ml/100l	2-4 applications once transplants established
Rice		
Seed nursery	3.0 l/ha 300 ml/100l	1-2 applications - before transplanting
Root soak	- 200 ml/100l	Soak roots prior to transplanting
Post transplant	- 200 ml/100l	Apply at tillering

- PROVIDES ALL NECESSARY MACRONUTRIENTS
- HIGH CONCENTRATION PRODUCTS, LOW SALINITY AND CONDUCTIVITY
- EFFICIENCY AND GUARANTEED RESULTS.
- SAFETY, COMFORT AND EASY HANDLING.

ACTIONS

- BALANCED CONTRIBUTION OF NITROGEN, PHOSPHORUS AND POTASSIUM THROUGHOUT THE CROP CYCLE.
- IMPROVES FRUITING AND YIELD.
- LAMINAR DISPOSITION ON THE FOLIAR SURFACE. ENHANCE NUTRIENT UPTAKE.
- IMPROVE VEGETATIVE GROWTH.

*FLOWKI can be combined with almost all the fertilizers and pesticides. In case of doubt we recommend a trial or consult our technical department.



Datasheet

FLOWKI BLUE
30-10-10+TE



**NPK Gel Fertilizer
Foliar / Soil**

**NPK Gel Fertilizer
with trace elements**

- **BOOST CELL DIVISION AND EXPANSION, RESULTING IN BIGGER FRUITS.**
- **SAFETY, COMFORT AND EASY HANDLING.**

CHARACTERISTICS

FLOWKI BLUE is a formulated nutritional product and not just a simple mixture of raw materials, as are most of NPK fertilizers in powder form.

FLOWKI BLUE has an uniform and simultaneous solubility of all the nutrients, during use, while avoiding sedimentation in the storage containers of the nutrient solution. In contrast, common NPK water soluble powder fertilizers, which are produced through a mixture of raw materials, have increase variability in grain size that results in a non-uniform dilution of nutrients, since the smallest grains are dissolved firstly.

The conductivity and the salinity index are maintained in very low levels so that the soil will not be burdened with undesirable, salt concentration.

Application is suitable for different crops: fruit trees, coffee, olive trees, vegetable crops, industrial crops, meadows, etc. It can be used in drip irrigation, foliar application and flood irrigation.

APPLICATIONS

CROPS	SOIL (L/ha)	FOLIAR (mL/100L)	APPLICATIONS DETAILS
Alfalfa	-	250-300	5 applications from 2nd cut
Cotton	-	200-300	2-3 applications (from 4th leave to the harvest)
Citrus	4-5	200-300	3-4 applications (sprouting, preflowering, setting and fattening)
Fruits and Vine	3-5	200-300	2-4 applications (from sprouting until bud diferentiation)
Cereals	4-5	100-300	1-2 applications
Vegetables	4-6	200-300	3-4 applications, each 10-14 days
Ornamentals	2-3	100-200	3-5 applications according crops necessity
Sugar beet	4-5	200-300	2-3 applications
Olive tree	5-10	300-400	3 applications (beginning of sprouting, stone hardening, fattening)
Potatoes	3-5	300-400	1-2 applications at the beginning of the crop

FLOWKI can be combined with almost all the fertilizers and pesticides. In case of doubt we recommend a trial or consult our technical department.

COMPOSITION	%w/v
Total Nitrogen (N)	30,00
Phosphorous Oxide(P ₂ O ₅)	10,00
Potassium Oxide (K ₂ O)	10,00
Boron (B)	0,016
Iron (Fe) chelating agent EDTA	0,047
Copper (Cu) chelating agent EDTA	0,016
Manganese (Mn) chelating agent EDTA	0,016
Zinc (Zn) chelating agent EDTA	0,016
Molybdenum (Mo)	0,016

- **IMPROVES GROWTH, FLOWERING & YIELD**
- **HIGH CONCENTRATED PRODUCT**
- **EFFICIENCY AND GUARANTEED RESULTS**
- **SAFETY, COMFORT AND EASY HANDLING**
- **STABILITY**

ACTIONS

- **IMPROVES ROOT DEVELOPEMENT.**
- **IMPROVES GROWTH, FRUIT SETTING AND YIELD.**
- **INCREASES BUD AND TUBER NUMBERS.**



Datasheet



NPK Gel Fertilizer Foliar / Soil

FLOWKI BLUE

45-00-00+3%AA+TE

COMPOSITION

%w/v

Total Nitrogen (N)	45,00
Boron (B)	0,016
Iron (Fe) chelating agent EDTA	0,047
Copper (Cu) chelating agent EDTA	0,016
Manganese (Mn) chelating agent EDTA	0,016
Zinc (Zn) chelating agent EDTA	0,016
Molybdenum (Mo)	0,016
Free Aminoacids	3%

NPK Gel Fertilizer with trace elements with Aminoacids

CHARACTERISTICS

FLOWKI BLUE is a formulated crop nutritional product and not just a simple mixture of raw materials, as are most of NPK fertilizers in powder form. It is an ideal supplement to a well-balanced crop nutrition program. **FLOWKI BLUE** has uniform and simultaneous solubility of all nutrients and does not result in sedimentation due to the presence high-quality dispersant and suspension agents. **FLOWKI BLUE** ensures very uniform dilution and dispersion of nutrients compared to powdered NPK formulations. **FLOWKI BLUE** maintains a very low conductivity and salinity index so that both plant and soil will not be stressed and burdened with underisable salt concentrations.

STORAGE AND DISPOSAL

Store product in its original labeled container and store in a cool dry place. Keep away from any heat source and direct sunlight. Do not store in open or unlabeled containers. Avoid storing product in freezing temperature. Dispose empty containers in proper waste containers.

COMPATIBILITY

The product is generally compatible with other foliar fertilizer, insecticides, and fungicides. Do not mix with strong oxidant agents and agro-chemicals with high pH. If unsure about compatibility of the product with other agricultural chemicals, prepare a small separate mixture first and check compatibility. Text spray also on a few plants first.

WARRANTY

TANGEL AGRO S.L. warrants that this product is of high quality and conforms to the chemical description in this label.

WARNING AND PRECAUTIONS

Not a hazardous substance but keep away from fire, explosive materials, and other chemicals. No adverse effect on human health but it is always recommended to practice good hygiene and safety in handling the product. It should not be taken internally.

CROP	TIME OF APPLICATION	INTERVAL	DOSAGE
Rice	Rooting to tillering stage. Spray 2-3 times per cropping.	10-14 days	50 - 75ml / 16L water
Corn	1 week after germination. Spray 3-4 times per cropping.	7 - 10 days	50 - 75ml / 16L water
Fruiting Vegetables (tomato, eggplants, hot and sweet pepper, okra)	7-10 days after transplanting to end of vegetative stage. Spray 3-4 times/cropping	7 - 14 days	50 - 75ml / 16L water
Brassicacs (cabbage, cauliflower, broccoli, mustard, pechay, pakchoy)	3 to 4 true leaves stage to maturity. Spray 3-4 times per cropping.	10 - 14 days	50 - 75ml / 16L water
Leafy Vegetables (Lettuce, Celery, Spinach)	3 to 4 true leaves stage to maturity. Spray 3-4 times per cropping.	7 - 10 days	50 - 75ml / 16L water
Legumes/Cucurbits (Sitao, Beans, upo, ampalaya, patola, pipino, squash, watermelon, melon)	4 to 6 true leaves stage to end of vegetative stage. Spray 3-4 times per cropping.	10-14 days	50 - 75ml / 16L water
Onions / Garlic	7 to 10 days after transplanting to bulb formation. Spray 3-4 times per cropping.	10-14 days	50 - 75ml / 16L water
Plantation Crops (Banana, Pineapple)	Vegetative stage to pre-flowering stage.	21 - 28 days	50 - 75ml / 16L water
Root crops (potato, carrots, cassava, ube, kamote)	3-4 true leaves stage to tuber formation. Spray 4-5 times per cropping.	10-14 days	50 - 75ml / 16L water
Fruit Trees (mango, papaya, citrus, cacao, pomelo, durian, coffee)	Apply during growing stage and off-season period.	10-14 days	50 - 75ml / 16L water
Ornamentals / Cut - Flowers /Herbs	4-6 true leaves stage. Do regular maintenance feeding.	10-14 days	50 - 75ml / 16L water

"FLOWKI can be combined with almost all the fertilizers and pesticides. In case of doubt we recommend a trial or consult our technical department.





NPK Gel Fertilizer
Foliar / Soil

FLOWKI GREEN

10 50 10 + Te

COMPOSITION	%w/v
Total Nitrogen (N)	10,00
Phosphorus (P ₂ O ₅)	50,00
Potassium (K ₂ O)	10,00
Boron (B)	0,016
Iron (Fe)*	0,047
Copper (Cu)*	0,016
Manganese (Mn)*	0,016
Zinc (Zn)*	0,016

*Chelated with EDTA

Phosphorous NPK Gel Fertilizer with trace elements

CHARACTERISTICS

Flowki Green is a fertilizer NPK formulation with trace elements, and a high phosphorus content. It is specially formulated as a gel that presents an optimum balance to supplement the nutrition of crops during the flowering and fruit set. Also contains the trace elements to the plant more needs in the form of chelates or mineral.

Nutrient content.

Based on statistics and various analyzes it is shown that fertilizers in GEL form have a correct and precise nutrient content. In some solid fertilizers most of their levels deviate from the actual nutrient content.

High uptake rate

The fertilizers in the form of gel can be applied to the leaf and be uptaked directly through stomata, which greatly increases the speed of uptake avoiding the problems of uptake in the soil due to, among others, acidity, soil temperature or excess salts, due to not knowing these variables.

APPLICATION

Crops	Dosages	Applications
Cereals	2.5 l/ha 250 ml/100l	Early in crop cycle. Follow by 2nd application 14 days later.
Paprika	2,0-3,0l/ha 200-300 ml/100l	1st application 3 weeks after transplanting, follow with a 2nd application 14 days later.
Roses & Ornamentals	2,0-3,0 l/ha 200-300 ml/100l	Monthly applications on perennials. 2 applications 14 days apart on annuals during initial growth stages.
Strawberries	3.0 l/ha 300 ml/100l	Single application 3 weeks after planting.
Tomatoes & Peppers	2,0-3,0 l/ha 200-300 ml/100l	1st application 3 weeks after transplanting, follow by a 2nd application 14 days later.
Vegetables	3.0 l/ha 200-300 ml/100l	1 to 2 applications early on in growth period of crop.
Other crops	2,0-2,5 l/ha 300 ml/100l	For crops with phosphate deficiencies, repeat at 10-14 day intervals as required.

- IMPROVES GROWTH, FLOWERING AND YIELD.
- HIGH CONCENTRATED PRODUCT.
- EFFICIENCY AND GUARANTEED RESULTS.
- SAFETY, COMFORT AND EASY HANDLING.
- STABILITY

ACTIONS

- ✓ IMPROVES ROOT DEVELOPEMENT.
- ✓ IMPROVES GROWTH, FRUIT SETTING AND YIELD.
- ✓ INCREASES BUD AND TUBER NUMBERS.
- ✓ BOOST CELL DIVISION AND EXPANSION, RESULTING IN BIGGER FRUITS.
- ✓ SAFETY, COMFORT AND EASY HANDLING.

*FLOWKI can be combined with almost all the fertilizers and pesticides. In case of doubt we recommend a trial or consult our technical department.



Datasheet



NPK Gel Fertilizer
Foliar / Soil

FLOWKI RED

12 05 42 + 3MgO + Te

COMPOSITION	%w/v
Total Nitrogen (N)	12,00
Phosphorus (P ₂ O ₅)	05,00
Potassium (K ₂ O)	42,00
Magnesium (MgO)	03,00
Boron (B)	0,016
Iron (Fe)*	0,047
Copper (Cu)*	0,016
Manganese (Mn)*	0,016
Zinc (Zn)*	0,016

*Chelated with EDTA

Potassium NPK Gel Fertilizer
with trace elements and Mg

- HIGH CONCENTRATED PRODUCT.
- SAFETY, STABILITY, COMFORT AND EASY TO USE.
- HIGH UPTAKE

CHARACTERISTICS

Flowki Red is a fertilizer NPK formulation with trace elements and Mg, and a high content of Potassium. It is specially formulated as a gel that presents an optimum balance to supplement the nutrition of crops during the last stages of vegetative growth. Also contains the trace elements to the plant more needs in the form of chelates or mineral.

In general, **Flowki Red** can be used in all types of crops. Its use is ideal for fruit expansion, as it is essential for the production of the carbohydrate necessary during fruit formation stage or maturation. Besides, Magnesium ensures an optimal photosynthesis during this critical stage.

Potassium is required in significant concentrations during the later stages of the crop development. Potassium regulates stomatal movements and maintains metabolic systems for the transport of sugars. During reproductive growth stages, **Flowki Red** supplies essential potassium whilst maintaining other elements at optimal concentration.

Flowki Red supplies magnesium which is often deficient in crops grown on light, sandy soil. Magnesium together with other micro nutrients are vital for chlorophyll and protein synthesis.

ACTIONS

- IMPROVES SUGAR CONTENT IN FRUITS.
- PROMOTES FRUIT DEVELOPEMENT AND FRUIT SIZE.
- IMPROVES GROWTH, QUALITY AND YIELD.
- MINIMIZES PHYSIOLOGICAL DISORDERS.

FOLIAR APPLICATION

Crops	Applications
Horticultural	200-250 cc/100L
Fruits, Citrus & Vine trees	200-300 cc/100L
Olive trees	250-400 cc/100L
Extensive	200-250 cc/100L

SOIL APPLICATION

Crops	Applications
Horticultural	5-10 L/100L
Fruits, Citrus & Vine trees	5-10 L/100L
Olive trees	5-10 L/100L
Extensive	5-10 L/100L

*FLOWKI can be combined with almost all the fertilizers and pesticides. In case of doubt we recommend a trial or consult our technical department.



Datasheet



Nitrogen and Phosphorus fertilizer
Foliar / Soil

N-PHOSPHATE 12-61-00

COMPOSITION	%w/v
Nitrogen Total (N)	12,0
Ammoniacal nitrogen (N-NH ₄)	12,0
Phosphorus Pentoxide (P ₂ O ₅)	61,0
pH	1-2
Density	1,4

Liquid Monoammonium Phosphate

CHARACTERISTICS

N-PHOSPHATE, monoammonium phosphate is ideal for use in the initial growth phase of all crops, immediately before and after seeding and planting/transplanting.

N-PHOSPHATE is a stable solution compatible with all direct fertilizers based on Phosphates. It is especially suitable during the first half of the crop cycle.

N-PHOSPHATE is a liquid fertilizer free of chloride and sodium. It is the ideal fertilizer for increasing the availability of soil-phosphorus, especially in calcareous soils. **N-PHOSPHATE** consists in high purity of nutrients and no residue or contaminants.

ACTIONS

- ✓ **IMPROVES THE GROWTH OF HIGH QUALITY ROOTS AND SHOOTS**
- ✓ **POWER THE OVERALL PERFORMANCE OF THE PLANT**
- ✓ **BETTER ENU (EFFICIENCY OF NUTRIENT USE) IN ALKALINE AND ACID SOILS**
- ✓ **PROVIDES AN ACIDIFYING EFFECT ON THE SOIL SOLUTION FAVORING SOLUBILITY OF PHOSPHORUS AND MICRONUTRIENTS**

FOLIAR APPLICATION

HIGHLY EFFICIENT SOURCE OF PHOSPHORUS AS PHOSPHATE (H₂PO₄) WHICH PROMOTES RAPID UPTAKE BY THE PLANT

CROPS

Cereals	<p>Timing: Spring Rate: 5-6 L/Ha Comments: Apply when deficiency is suspected, when soil/weather conditions prevent adequate phosphate uptake through the roots, or when SAP analysis shows low nutrient status. Repeat as necessary at 10-14 day intervals.</p>
Maize	<p>Timing: 4-8 leaves Rate: 5-6 L/Ha Comments: Apply when deficiency is suspected, when soil/weather conditions prevent adequate phosphate uptake through the roots, or when SAP analysis shows low nutrient status. Repeat as necessary at 10-14 day intervals.</p>
Potatoes	<p>Timing: 7-10 days after tuber initiation Rate: 15 L/Ha Comments: At 7-10 days start of tuber initiation. Crops are usually meeting along the rows at this stage.</p>
Other crops	<p>Timing: As required Rate: 5-6 L/Ha Comments: Apply when deficiency is suspected, repeat after 10-14 days if required.</p>

Do not apply in tank mix pesticides when crops is showing deficiency symptoms, is under estress, or is adverse weather conditions.



NEW

Datasheet



Potassium fertilizer
Foliar / Soil



Potassium fertilizer
with Humic extracts

CHARACTERISTICS

In **RENK**, the low-molecular-weight organic acids are highly effective at penetrating cellular membranes. They carry positive ions, like potassium, into the cell, which results in a higher concentration of potassium within the cell.

RENK, is an optimal formulation of K to achieve an adequate supply of this important macronutrient. Renk maintains the optimum level of K at times of high demand by the plant.

Potassium complexed with humic acids in **RENK**, enhances potassium fertilization while augmenting the absorption of other essential nutrients.

FOLIAR APPLICATION

FERTIRRIGATION 15-40 l/ha
FOLIAR 300-600 cc/100l

Citrus	In the fruit set, fruit enlargement and before harvesting.
Cotton	2-4 applications along the crop cycle.
Fruit	In the fruit set, fruit enlargement and before harvesting.
Horticultural	2-6 applications along the crop cycle.
Olive	In the fruit set, fruit enlargement and before harvesting.
Ornamental	2-4 applications along the crop cycle.
Strawberry	1-3 applications on flowering and fruit formation of tubers.
Sugar beet	Starting 2 months before harvest.
Tropical fruits	2-4 applications during the crop cycle.
Vine	In times of fruit enlargement, ripening and coloring.

RENK

COMPOSITION

%w/v

Potassium (K ₂ O)	43,0
Total Humic extract	9,0
Humic Acids	7,0
Fulvic Acids	2,0
Density: 1,5 g/cc	
Free of chloride	

- High concentration of K with amino acids.
- Systemic potassium transport in the plant.
- Faster uptake and translocation of potassium.
- Uses to prevent or correct potassium deficiencies in all crops.

ACTIONS

- ✓ ACCELERATES FRUCTIFICATION PROCESSES.
- ✓ HOMOGENEOUS MATURATION.
- ✓ INCREASES THE NUTRITIVE VALUE, SUGARS CONTENT AND FRUIT OILS.
- ✓ ENHANCE YIELD AND QUALITY ON CROPS.
- ✓ STIMULATES THE MATURATION, SIZING AND QUALITY OF THE FRUIT.

RENK, is compatible with the majority of fertilizers and phytosanitary products commonly used in agriculture. However, before mixing it is recommended to perform a prior test. To improve fruit quality (sugar, color, firmness, etc), apply from the beginning of fruit development, with an interval of 10-20 days.

Application is recommended during fruit fattening and ripening stages, as well as when intending to induce color change.



NEW

Datasheet

RENK SOLID

COMPOSITION %w/w

Potassium (K ₂ O)	30,0
Total Humic extract	30,0
Fulvic Acids	27,0
Humic Acids	3,0
Nitrogen (N)	2,0



Potassium fertilizer
Foliar / Soil



Potassium fertilizer with Humic and Fulvic acids

CHARACTERISTICS

RENK SOLID is a highly concentrated fertilizer rich in fulvic acids and fast assimilable potassium.

Fulvic acids are potent organic stimulants, demonstrating higher reactivity compared to humic acids due to their smaller molecular size, thereby acting more quickly to enhance plant development. Furthermore, they enhance cellular membrane permeability, thereby improving nutrient absorption.

In the soil, they act as natural chelating agents. They form fulvates with bound cations, transforming them into easily assimilable molecules that quickly enter the plant, optimizing the supply of fertilizers applied through irrigation. They enhance soil structure by increasing aeration and clay flocculation, promoting root growth.

ACTIONS

-  **HIGHER SIZE FRUIT - BEST CONSISTENCY.**
-  **ADVANCEMENT OF RIPENING.**
-  **MORE INTENSE COLOR.**
-  **GREATER QUALITY - HIGHER YIELD.**
-  **INCREASES THE CONTENT OF SUGARS AND OTHER RESERVE SUBSTANCES.**

APPLICATION

Crops	Foliar	Dosage
VINEYARD:	2-4 applications separated by 10-15 days starting from the nouasion stage and during ripening.	3-4 Kg/ha Optimal concentration. 300g/hl-400g/hl Maximum concentration. 1000g/hl On young and fragile foliage maximum 500g/hl
FRUIT TREES Stone fruits Pip fruits	2-3 applications separated by 15 days starting at the beginning of fruits growth and up to 2 weeks before harvest.	
FIELD CROPS Beets, potatoes, taproots	3-5 interventions on sufficiently developed foliage.	Use 7-15 kg/ha per application (to be diluted to 10% maximum in the mother solution).
VEGETABLES Tomatoes, pepper, melon...	3-5 interventions on sufficiently developed foliage.	

Fertirrigation

Apply **RENK SOLID** during the active periods of highest nutrient demand, particularly during vegetative growth, fruit set, and fruit development.





Fertilizer
Foliar/Soil



X-PK

COMPOSITION

%w/v

Phosphorus (P₂O₅)

45,0

Potassium K₂O

50,0

Special for Extensive Crops.
Phosphorus and Potassium Fertilizer

ACTIONS

- FERTILIZER RICH IN PHOSPHORUS AND POTASSIUM
- HIGH SOLUBILITY OF MACRONUTRIENTS (P,K)
- MAXIMUM TECHNOLOGY WITH HIGHLY SELECTED RAW MATERIALS
- 100% FREE OF IMPURITIES AND CHLORINE
- SAFETY, COMFORT AND EASY HANDLING

CHARACTERISTICS

X-PK is a liquid fertilizer with a high concentration of phosphorus (P) and potassium (K) designed for the application of extensive crops.

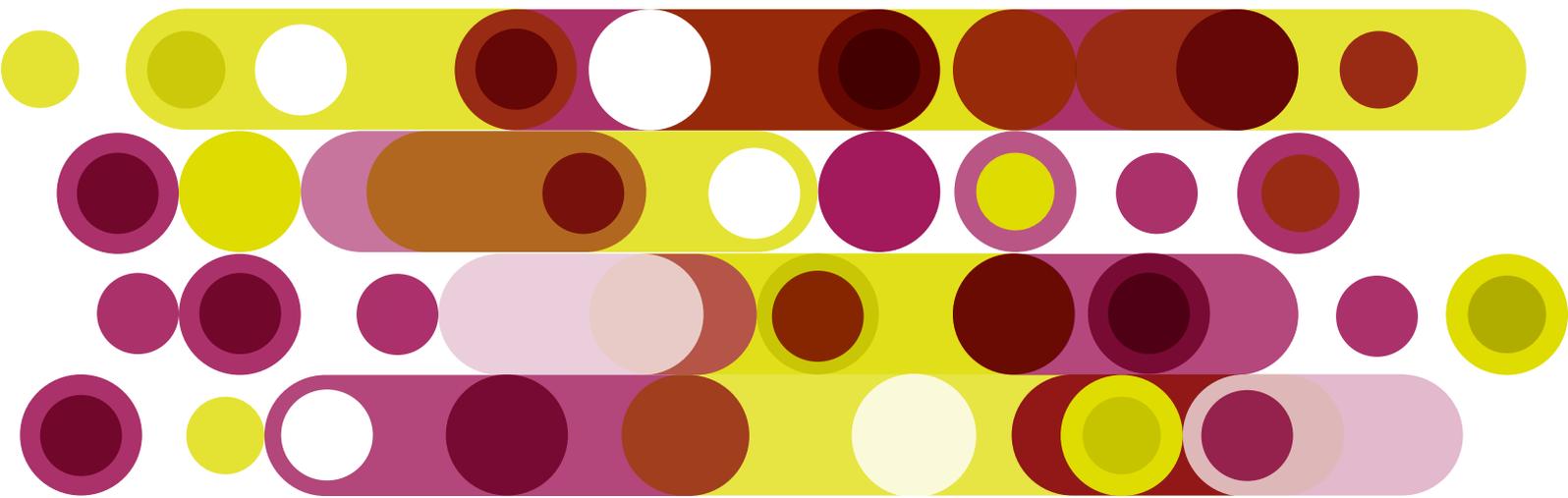
X-PK has a particularly formulation suitable to be applied when required to provide an adequate supply of phosphorus and potassium in specific vegetative stages.

APPLICATION

Crops	Aim/Problem	Recommendations	Time
In all crops	To provide phosphorus and potassium.	3-5L/ha (in min. 200L water or 0.5-1% for sensitive crops and under glass/film 0.25-0.5%).	When required
Cereals	Energy balance, yield, N efficiency, vitality.	2 times 4L/ha (particularly with cold and moisture).	In spring from the start of the vegetation.
Cereals	Energy balance, N efficiency, vitality, winter hardiness.	4L/ha (particularly with cold and moisture).	In autumn from the 3-leaf stage.
Legumes (Soy included)	Nodulation, quality, maturation.	2 times 4L/ha.	From 6-leaf stage.
Maize	Initial development, energy balance, N efficiency, vitality.	4L/ha (particularly with cold and moisture).	From 4-leaf stage.
Oilseed rape	Energy balance, N efficiency, vitality.	1-2 times 4L/ha (particularly with cold and moisture).	In spring from the start of the vegetation through to the beginning of flowering.
Sunflower	Initial development, energy balance, N efficiency, vitality.	4L/ha (particularly with cold and moisture).	From 4-leaf stage.
Sugar Beet	Leaf structure, juvenile development, N efficiency, root growth, sugar formation.	2 times 4L/ha.	From 6-leaf stage.
Potatoes	Yield, tuber and skin quality, tuber growth.	2 times 4L/ha.	From a tuber diameter of 10mm.
Strawberries	Initial development, vitality energy and water balance, N efficiency.	2 times 4L/ha.	Start of vegetation.
Strawberries	Fruit firmness, fruit size.	1-3 times 4-6L/ha.	Fruit set to harvesting
Pome fruit	Promotion of red top colour, fruit size, fruit firmness.	2-4 times 4-6L/ha.	Between June fruit drop and harvesting
Stone fruit	Promotion of fruit firmness, fruit size, sugar content.	2 times 4-6L/ha.	Fruit set to harvesting.
Soft fruit	Fruit firmness, fruit size.	1-3 times 4-6L/ha.	Fruit set to harvesting.
Soft fruit	Initial development, validity, energy and water balance, N efficiency.	2 times 4-6L/ha.	Start of vegetation.
Desert grapes	Initial development, validity, energy and water balance, N efficiency.	2 times 4-6L/ha.	5 leaf stage to beginning of flowering
Wine grapes	Initial development, validity, energy and water balance, N efficiency.	2 times 4-6L/ha.	5 leaf stage to beginning of flowering
General Vegetables	Initial development, validity, energy and water balance, N efficiency.	1-2 times 4-8L/ha (particularly with cold and moisture)	Once sufficient leaf mass has developed
Asparagus	Energy balance, yield, N efficiency, depositing of reserve substances, validity	1-3 times 4-6L/ha	From the middle of the vegetation period



MICRONUTRIENTS





Organic Boron Complexed corrector

BORON PLUS

COMPOSITION

%w/v

Boron (B)	15,40
OMA (Organic Matter Activator)	

Boron corrector

CHARACTERISTICS

BORON PLUS is a liquid boron deficiency corrector for foliar or soil application. In sugar beet it prevents heart diseases or putrid of the root. In apple and pear, prevents bitter pits and cracks. In grape prevents the bunch, avoiding small, wrinkled fruits. In olive prevents the loss of production and the deformation of the olive.

In horticulture, **BORON PLUS** prevents heart rot in cellery, the coiled leaves in cauliflower and broccoli. In lettuce it prevents heart rotting and burning side; in stud it prevents the drying of the tip and stems; in potato it avoid the necrotic of tubers with deformities.

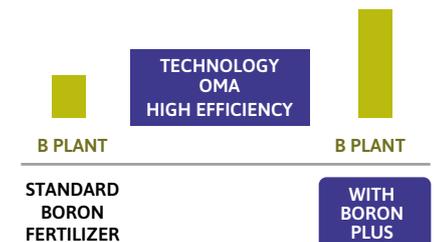
APPLICATION

Crops	Objective	Details
All crops	Supply with boron.	1-4 l/ha as a foliar application in 200-400 l water or 5-8 l/ha as a soil application. During application with knapsack sprayer at 0,5%
Asparagus, root vegetables, tuberous plants	Quality (cracks; empty asparagus or tubers; inner scald), supply with boron.	1-2 x 3 l/ha as soon as enough leaves are developed
Cereals	Output, supply with boron.	0,5-1 l/ha until end of tillering, a deficiency proof by leaf analysis provided
Crucifers, leaf vegetables, bulbous vegetables	Inner quality, supply with boron.	1-2 x 2-3 l/ha as soon as enough leaves are developed
Fruit vegetables	Flowering, fruit setting, supply with boron.	1-2 x 2 l/ha before blossom when enough leaves are developed
Hop	Development of bud and sprout, quality.	3-5 x 0,1 % until flowering
Maize	Pollen quality, graining, grain yield, energy density, supply with boron.	3 l/ha from 4 leaf stage onwards
Oil seed rape	Resistance against cold, regular flower and maturation, yield. Regular blossom-time and maturity, output, supply with boron.	2-4 l/ha in autumn from 4 till 6 leaf-stage 2-4 l/ha in spring until beginning of blossom
Pit fruit	Pollen germination, flower quality, fruit setting, calcium transport, skin quality.	2-3 x 1 l/ha from red bud until petal fall
Pit fruit, Stone fruit, Strawberries, Berries, Table grapes	Storage of reserve substances, regeneration, resistance against cold, flower quality.	2 x 1 l/ha after harvest
Potatoes	Inner quality, against heart necrosis in cabbage, supply with boron.	1-2 x 1 l/ha at meeting across the rows
Stone fruit	Flower quality, fruit setting.	1 l/ha beginning of blossom time
Sugar beet	Against heart and dry rot, output, quality, supply with boron.	1-2 x 3 l/ha between 6-leaf-stage and meeting across the rows
Table grapes	Flower quality, fruit setting, regular maturity.	2 x 1 l/ha from increasing of flower cluster until beginning of blossom

ACTIONS

-  ENHANCES CELL WALL STRUCTURE
-  BETTER CELL DIVISION
-  PROMOTES SUGAR TRANSPORT
-  HIGHER FLOWERING AND FRUITING
-  ENHANCES PLANT HORMONE REGULATION

Thanks to OMA technology we have increase the effectiveness of the fertilizer even under conditions of difficult weather.



NEW

Datasheet



**Boron corrector
Foliar**

Boron Corrector

CHARACTERISTICS

Boron is a micronutrient required for all plant nutrition. Soil application of BORON UP or foliar sprays can be used to ensure an adequate B supply for optimum growth. BORON UP is a high-purity, single-nutrient fertilizer comprising 20.50% Boron (B). Through a rapid dissolution process, it can be applied via fertigation and hydroponics, and it is particularly recommended for foliar applica-

BORON UP

COMPOSITION	%w/w
Boron (B)	20,50

- ✓ FLOWERING AND FRUITING
- ✓ DEVELOPMENT OF VIABLE SEEDS
- ✓ SUGAR TRANSPORT
- ✓ IMPROVED YIELD QUALITY
- ✓ INCREASED YIELD

tion. Applying BORON UP appropriately can mitigate boron deficiencies in crops, notably in cereals, rapeseed, sugar beets, potatoes, brassica vegetables, legumes, and pome/stone fruits. This treatment effectively prevents and rectifies severe physiological disorders that otherwise lead to substantial losses in both yield quantity and quality.

APPLICATION

	N° of Appl.	Crop phenological stage	Appl. rate (Kg/ha)	Spray solution appl. (L/ha)
ARABLE CROPS				
Legumes	2	Pod end seed development	1	200-300
	2	4-6 leaves 6-8 leaves	0,5 0,5-1	
Potatoes	3	Inter-rows closure	1	
		Tuber formation	1	
		Fruit development	1	
Soybean	1	Development of side shoots and the main shoot	1	
Sugar beets	2	4-6 leaves	2	
		Inter-rows closure	2	
Wheat s/w*	1	First node to flag leaf	1	
ORCHARD CROPS				
Pome trees: apple/pear	4	Bud burst	1-2	500-800
		White bud	1-2	
		Flowering	1-2	
		After fruit harvest	1-2	
VEGETABLE CROPS				
Brassica plants: cabbage, cauliflower, broccoli	2-3	Leaf development	0,5	300-500
		Rosette growth	1	
		Development of harvestable vegetative plant parts	0,5-1	
Bulb vegetables onion, leek	2-3	Leaf development	1	
		Development of harvestable vegetative plant parts	0,5	
Cucurbits: pumpkin, zucchini, cucumber	3	Leaf development	0,5	
		Formation of side shoots, inflorescence emergence	1	
		Flowering. Fruit development	0,5	
Leaf vegetables	1	Development of harvestable vegetative plant parts	0,5	
Legumes	3	Leaf development	0,5-1	
		Development of side shoots and the main shoot	1	
		Inflorescence emergence and flowering	1	
Root vegetables: carrot, celery, beet	2-5	Leaf development BBCH stage: 14-16	0,5	
		Leaf development BBCH stage: 17-19	0,5	
		Development of harvestable vegetative plant parts	1	
		Development of harvestable vegetative plant parts	0,5-1	
		Development of harvestable vegetative plant parts	0,5-1	
Solanaeous: tomato, pepper, early potato	2-5	Leaf development, formation and growth of side shoots, tuber formation	1	
		Inflorescence emergence and flowering	1	
		Fruit development	0,5-1	
		Ripening of fruits and seeds	1	



NEW

tangelAGRO

Datasheet

Nutrient
corrector
Soil / Foliar

Solid fertilizer corrector of multiple deficiencies

CHARACTERISTICS

TANGEL MIX MICRO is a SOLID compound, highly-soluble in all types of water and whose Iron, Manganese, Copper, Zinc, Boron, Molybdenum and Magnesium micronutrients contribute simultaneously to the plant by providing the necessary dosage of nutrients that are indispensable for the perfect development of any crop.

Except for the Boron and Molybdenum, the nutrients in **TANGEL MIX MICRO** are included in a molecule (EDTA, ethylenediaminetetraacetic acid) that protects them in the soil and, when applied to the leaves, facilitates their uptake and transport to the plant.

APPLICATIONS

CROPS	Application	CROPS	Application
Cereals, Grain Legumes, Oilseed crops, Cotton, Maize, Summer crops	RATE: 1-1.5 kg/ha APPLICATION: Foliar CRITICAL COMMENTS: Apply early season, tillering and bolting.	Apples, Pears, Nut crops, Citrus, Mangoes, Stonefruit, Avocados, Pineapples.	APPLICATION: Foliar CRITICAL COMMENTS: Apply 2-3 times during the crop cycle. Apply by dilute application only. Do not exceed maximum per hectare rate. Minimum water rate of 500L per ha. RATE: 2-3 kg/ha APPLICATION: Fertigation CRITICAL COMMENTS: Apply every 7-10 days during the crop cycle.
Pastures, lucerne and forage crops.	RATE: 1-2 kg/ha APPLICATION: Foliar CRITICAL COMMENTS: Apply after each grazing or cutting.	Olives.	RATE: 0.5-1.5 kg/ha APPLICATION: Foliar CRITICAL COMMENTS: Apply when sufficient foliage is present. Apply in a minimum of 500L/ha of water. RATE: 5-10 kg/ha APPLICATION: Soil CRITICAL COMMENTS: Apply before sowing, transplanting or beginning of plant growth.
Potatoes and other tuber crops.	RATE: 1 kg/ha APPLICATION: Foliar CRITICAL COMMENTS: Apply up to 4 applications from 10cm stage until post flowering, at 7-10 day intervals. Apply in a minimum of 500L/ha of water.	Strawberries.	RATE: 2-3 kg/ha APPLICATION: Fertigation CRITICAL COMMENTS: Apply every 7-10 days during the crop cycle.
Vegetables	CRITICAL COMMENTS: Apply up to 3 applications at 10-15 day intervals when sufficient foliage is present. Apply in a minimum of 500L/ha of water. RATE: 5-10 kg/ha APPLICATION: Soil CRITICAL COMMENTS: Apply before sowing, transplanting or beginning of plant growth. RATE: 2-3 kg/ha APPLICATION: Fertigation CRITICAL COMMENTS: Apply every 7-10 days during the crop cycle. RATE: 2-3 kg/1000L APPLICATION: Hydroponics CRITICAL COMMENTS: Apply as required- 1L of prepared solution per 100 L irrigation water. Use the higher rate during crop development or periods of high temperature or during shorter and cooler days.	Other berry crops	RATE: 2-3 kg/1000L APPLICATION: Hydroponics CRITICAL COMMENTS: Apply as required- 1L of prepared solution per 100 L irrigation water. Use the higher rate during crop development or periods of high temperature or during shorter and cooler days.
Grapevines (wine and table).	APPLICATION: Foliar CRITICAL COMMENTS: Apply 2-3 times during the crop cycle. Apply by dilute application only. Do not exceed maximum per hectare rate. Minimum water rate of 500L per ha. RATE: 2-3 kg/ha APPLICATION: Fertigation CRITICAL COMMENTS: Apply every 7-10 days during the crop cycle.		

TANGEL MIX MICRO

COMPOSITION

%w/w

Iron (Fe)	7,50
Manganese (Mn)	3,50
Zinc (Zn)	0,70
Boron (B)	0,65
Molybdenum (Mo)	0,30
Copper (Cu)	0,28
Chelating agent EDTA	

- TOTAL SOLUBILITY
- QUICK AND EFFECTIVE ASSIMILATION
- FOR ALL KIND OF CROPS

ACTIONS

- ✓ CORRECTS SEVERES MICRONUTRIENTS DEFICIENCIES. YIELD AND QUALITY IN CROPS.
- ✓ EDTA (CHELATING AGENT), FACILITATES THE UPTAKE AND TRANSPORT TO THE PLANT.

MICRONUTRIENTS
tangelAGRO

www.tangelagro.com

AVAILABLE IN
1Kg - 5Kg - 20Kg - 500Kg
Bag/Bigbag

FERTILIZER



IMPORTED FROM EU





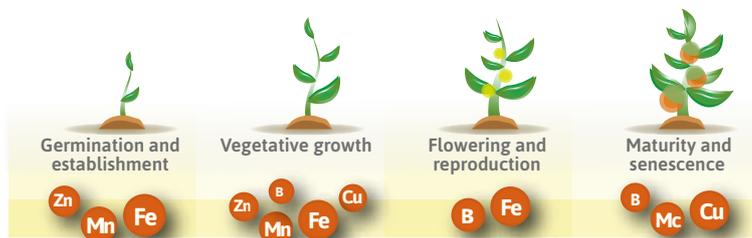
Nutrient corrector
Soil / Foliar

Liquid fertilizer corrector of multiple deficiencies

CHARACTERISTICS

TANGEL MIX MICRO L is a LIQUID chelated micronutrient fertilizer containing Boron, Copper, Iron, Manganese, Molybdenum and Zinc for foliar and soil application to prevent deficiencies and to treat Iron, Manganese, Copper, Zinc, Boron and Molybdenum deficiency in a wide range of crops.

A concentrated liquid alternative to EDTA powder. **TANGEL MIX MICRO L** avoids all the problems associated with storage, handling and mixing powdered chelate; no dust, no weighing, no mess and no problems with storing partly used containers.



MICRONUTRIENT ESSENTIAL TO SUPPORT GROWTH PROCESSES AND ITS GROWTH STAGES

TANGEL MIX MICRO L

COMPOSITION

%w/v

Iron (Fe)	7,50
Manganese (Mn)	3,00
Copper (Cu)	0,40
Zinc (Zn)	5,00
Boron (B)	0,65
Molybdenum (Mo)	0,20
Chelating Agent EDTA	

- HIGH CONCENTRATION FOR A LIQUID CHELATE
- GOOD TANK MIX ABILITY
- VERY SAFE FORMULATION
- FOR ALL KIND OF CROPS
- QUICK AND EFFECTIVE ASSIMILATION

ACTIONS

- ✓ **CORRECTS SEVERES MICRONUTRIENTS DEFICIENCIES.**
- ✓ **YIELD AND QUALITY IN CROPS.**
- ✓ **EDTA (CHELATING AGENT), FACILITATES THE UPTAKE AND TRANSPORT TO THE PLANT.**

APPLICATIONS

Foliar	Dosage and Treatment
General dose	1-1,5L/Ha or 100-150 ml/100L Applied when symptoms appear.
Horticultural	3 x 75-100 ml/hl of water (3 x 0,5-1L/Ha) At 10-15 days intervals, beginning when the foliage is enough.
Fruit trees, vines, citrus and olive trees	100 ml/100L of water (1L/Ha) First bloom. 100 ml/100L of water (1-1,5L/Ha) After fruit set.
Cereal, Field crops, Industrial crops	1L/Ha During the crop cycle.
Potatoes and Vegetable Bulb	4 x 1L/Ha At 7/10 days intervals, starting at 10 cm of growth. Apply in a minimum of 500L/Ha water.
Ornamental plants	75-150 ml/hl of water (0,5-1,5L/Ha) 2-4 applications with intervals of 7-10 days at the beginning of the growing season.



NEW

Datasheet



Nutrient corrector
Soil / Foliar



TRIMAX

COMPOSITION	%w/v
Manganese (Mn)	15,0
Zinc (Zn)	15,0
Copper (Cu)	2,0
Boron (B)	2,0

- BETTER YIELD
- IMPROVES QUALITY
- GREATER PROTEIN CONTENT

Manganese, Zinc, Boron and Copper

CHARACTERISTICS

TRIMAX is a highly concentrated micronutrient liquid, completely soluble, designed to enhance plant nutrition and vigor. It is a formulation of probiotic micronutrients and a stable source of copper, manganese, boron and zinc.

TRIMAX is a highly efficient and effective uptake of zinc, manganese, boron and copper to optimize micronutrients nutrition of the plant.

APPLICATIONS

CROPS	Application Rate	Problem/Target Details
Cereals	1-1,5 L/ha	Shocking, yield, N-efficiency.
	1-1,5 L/ha	N-efficiency, photosynthesis performance, winter hardness.
	0,5-2 L/ha	Seed dressing with nutrients for improved youth development. Details: In the spring from the start of vegetation In the autumn from 3-leaf stage Seed treatment.
Potatoes	1-2 L/ha	Problem/Target: Shell quality, resistance. Details: 1-2 times from start of series
Soya	1-1,5 L/ha	Problem/Target: Photosynthetic performance, resistance, winter hardness. Details: 1-2 times from 6-leaf stage
Corn	2 L/ha	Problem/Target: Yield, photosynthetic performance, resistance. Details: From 4-leaf stage.

ACTIONS

- ✓ INCREASES THE LEVELS OF COPPER MANGANESE AND ZINC.
- ✓ INCREASES THE VIGOR AND QUALITY ON CROPS - DECREASES DISEASE RISK.
- ✓ SEED AND GRAIN FORMATION - PROMOTES MATURITY.
- ✓ PROTEIN SYNTHESIS.
- ✓ INCREASES SUGAR CONTENT - INTENSIFIES COLOUR.
- ✓ IMPROVES FLAVOR IN FRUITS AND VEGETABLES.

CROPS	Application Rate	Problem/Target Details
Rape	1 L/ha	Problem/Target: Yield, photosynthetic performance, resistance, winter hardness.
	1 L/ha	Yield, photosynthetic performance, resistance, winter hardness. Details: 1-2 times in spring from start of vegetation to early flowering In the autumn from 4-leaf stage.
Sunflower	1 L/ha	Problem/Target: Yield, photosynthetic resistance. Details: From 4-leaf stage.
Sugar beet	1 L/ha	Problem/Target: Yield, photosynthetic resistance. Details: 1-2 times from 6-leaf stage.

TRIMAX is miscible with the usual plant protection agents. However, a mixture test is advisable. For mixtures with leaf fertilizers or plant protection products, fill the syringe to 2/3 with water and add the products individually, add TRIMAX as the last component. Immediately apply with constant stirring.

TRIMAX is stable for at least 2 years since manufacturing date. Store in the closed original container in a cool and ventilated area. **DO NOT store in direct sunlight.** Keep away from food and animal feed. Keep out of the reach of children.

SHAKE WELL BEFORE USE!!



NEW

tangel_{AGRO}

Datasheet



Organic
corrector
Soil/Foliar

Organic Zn Complex corrector

CHARACTERISTICS

ZINC FORTE is a zinc compound in the form of an organic complex. It is recommended for crops with high zinc requirements such as corn, potatoes, cereals, fruit trees, strawberries, onions, spinach, and soybeans. **ZINC FORTE** is recommended for soils with a high pH, high phosphorus content, and a lack of oxygen in the root zone. Zinc is an essential element in plant nutrition. It is needed in protein metabolism and forms a part of the enzyme system which regulates plant growth. Zinc is ranked high on the list of plant foods as one of the most limiting factors in crop production.

APPLICATION

CROP	FERTIGATION	FOLIAR SPRAY
APPLE	400 – 800 gr / 1000L m2 per application	100 – 150 gr / 100L
CEREALS	200 – 300 gr / 1000 m2	80 – 120 gr / 100L
CITRUS	400 – 800 GR / 1000L m2 per application	100 – 150 gr / 100L
CORN	200 – 300 gr / 1000 m2	80 – 120 gr / 100L
CUCUMBER	300 – 1500 gr / 1000 m2 per application	100 – 120 gr / 100L
LETTUCE	300 – 1500 gr / 1000 m2 per application	100 – 120 gr / 100L
MELON	300 – 1500 gr / 1000 m2 per application	100 – 120 gr / 100L

CROP	FERTIGATION	FOLIAR SPRAY
OLIVE TREE	300 – 400 gr / 1000 m2 per application	100 – 120 gr / 100L
PEAR	400 – 800 gr / 1000L m2 per application	100 – 150 gr / 100L
PEPPER	300 – 1500 gr / 1000 m2 per application	100 – 120 gr / 100L
POTATO	200 – 300 gr / 1000 m2	80 – 120 gr / 100L
TOMATO	300 – 1500 gr / 1000 m2 per application	100 – 120 gr / 100L
VINE	300 – 400 gr / 1000 m2 per application	100 – 120 gr / 100L

ALL TYPE OF CROPS:
2,0 – 2,5 Kg / ha

Keep the solution in the tank under agitation for 10 to 15 minutes. Preventive applications are recommended. If a deficiency becomes evident, apply **ZINC FORTE** as soon as possible, at any time.

ZINC FORTE

COMPOSITION

%w/w

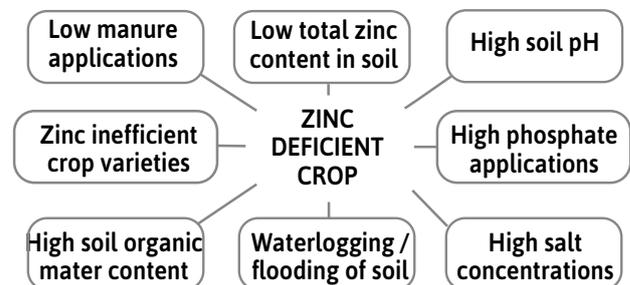
Zinc (Zn)
pH (1%) 6,5 ± 0,5

30,00

- BETTER ROOT DEVELOPMENT
- MORE VIGOROUS SHOOT GROWTH
- BETTER FLOWER FORMATION AND FRUIT SET
- MORE UNIFORM MATURITY
- MORE EFFICIENT UTILIZATION OF SOIL AND FERTILIZER NUTRIENTS

ACTIONS

CAUSES OF ZINC DEFICIENCY IN CROPS



SHAKE IT BEFORE USE

MICRONUTRIENTS
tangel_{AGRO}

www.tangelagro.com

AVAILABLE IN
0,5 L - 1L - 5L - 1000L
Plastic Bottle/IBC

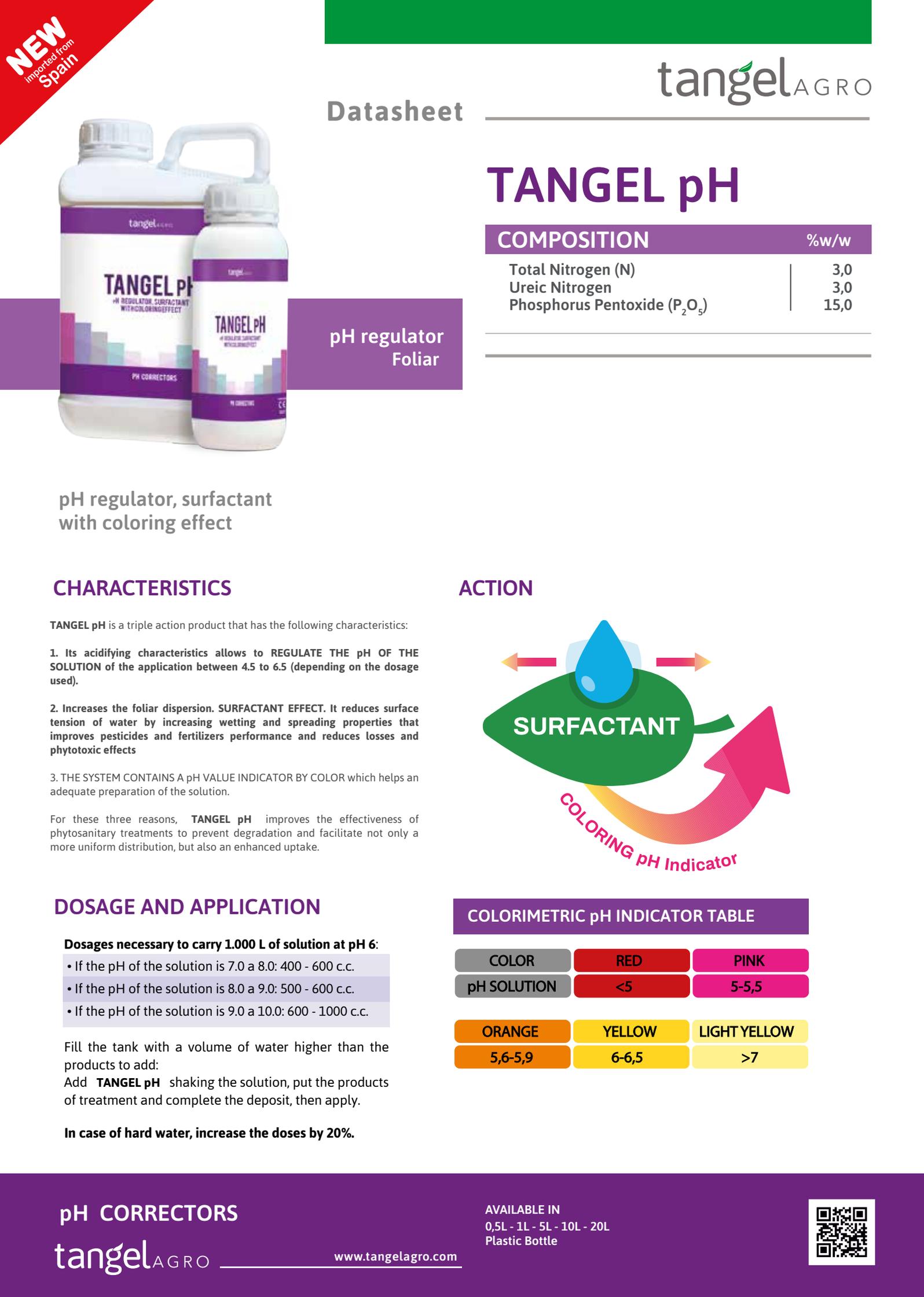
FERTILIZER

IMPORTED
FROM EU



pH CORRECTORS





NEW
imported from
Spain

Datasheet

TANGEL pH

COMPOSITION

%w/w

Total Nitrogen (N)	3,0
Ureic Nitrogen	3,0
Phosphorus Pentoxide (P ₂ O ₅)	15,0



pH regulator
Foliar

pH regulator, surfactant
with coloring effect

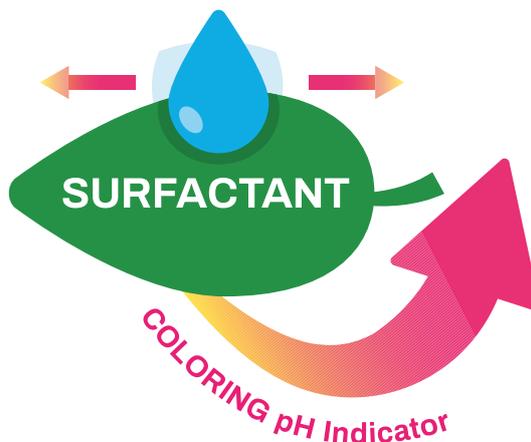
CHARACTERISTICS

TANGEL pH is a triple action product that has the following characteristics:

1. Its acidifying characteristics allows to **REGULATE THE pH OF THE SOLUTION** of the application between 4.5 to 6.5 (depending on the dosage used).
2. Increases the foliar dispersion. **SURFACTANT EFFECT**. It reduces surface tension of water by increasing wetting and spreading properties that improves pesticides and fertilizers performance and reduces losses and phytotoxic effects
3. THE SYSTEM CONTAINS A pH VALUE INDICATOR BY COLOR which helps an adequate preparation of the solution.

For these three reasons, **TANGEL pH** improves the effectiveness of phytosanitary treatments to prevent degradation and facilitate not only a more uniform distribution, but also an enhanced uptake.

ACTION



DOSAGE AND APPLICATION

Dosages necessary to carry 1.000 L of solution at pH 6:

- If the pH of the solution is 7.0 a 8.0: 400 - 600 c.c.
- If the pH of the solution is 8.0 a 9.0: 500 - 600 c.c.
- If the pH of the solution is 9.0 a 10.0: 600 - 1000 c.c.

Fill the tank with a volume of water higher than the products to add:

Add **TANGEL pH** shaking the solution, put the products of treatment and complete the deposit, then apply.

In case of hard water, increase the doses by 20%.

COLORIMETRIC pH INDICATOR TABLE

COLOR	RED	PINK
pH SOLUTION	<5	5-5,5
ORANGE	YELLOW	LIGHT YELLOW
5,6-5,9	6-6,5	>7

pH CORRECTORS

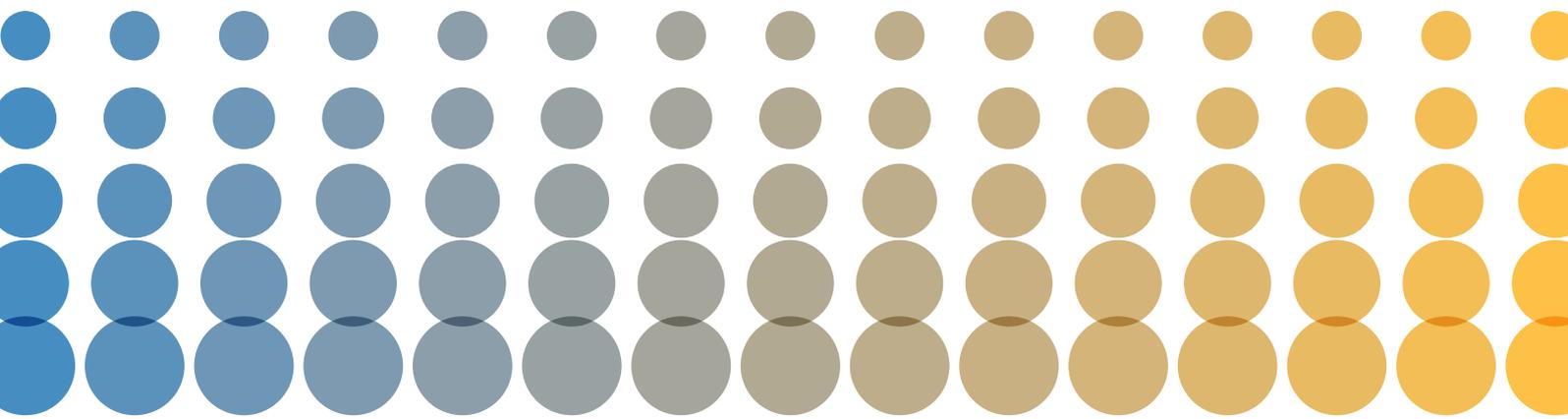
tangelAGRO

www.tangelagro.com

AVAILABLE IN
0,5L - 1L - 5L - 10L - 20L
Plastic Bottle



PHOSPHITE SELF DEFENSE





Phosphite self defense
Soil/Foliar



Fungicide action
Zn and Mn fertilizer

PHIT-MZ

COMPOSITION

%w/w

Phosphorus (P ₂ O ₅)	14,5
Zinc (Zn)	5,0
Manganese (Mn)	3,0
Density at 20°C	1,3 g/cc

CHARACTERISTICS

PHIT MZ is a soluble liquid that has in its formulation phosphites of manganese (Mn) and zinc (Zn) used as contribution of these elements and in the correction of shortcomings due to deficiencies or imbalances in the assimilation of them by the plants in all vegetable crops.

PHIT MZ is manufactured under strict quality standards by TANGEL-INV, ensuring his composition as well as its effect on all crops.

ACTIONS

The perfect balance that **PHIT MZ** smakes is that it stimulates self-defense mechanisms (phytoalexins), giving the plants a strengthening in trunk, neck and root on any type of horticultural, fruit cultivation, citrus or floriculture.

APPLICATIONS

Crop	Dose	Application time
Citrus, fruit	3-4 cc/L in foliar application 4-9 l/ha soil application at the end of the irrigation	Period of maximum vegetative development. Make 2 treatments every 7-9 days.
Vegetables, strawberries, ornamental	3-4 cc/L in foliar application 4-9 l/ha down at the end of irrigation	Period of higher vegetative development. Make 2-5 applications every 7-10 days.
Climbing vine, vine	1.5-3 cc/L in foliar application	Period of higher vegetative development.
Saplings	1.5 cc/L immersion	All crops: fruit trees, citrus, strawberries, vegetable transplant plants, ornamental
Painting	500 cc/L	Painting and impregnated the trunk and the branches on the affected parties

It has an excellent solubility which allows an immediate incorporation to the sap flow of the plant through the roots, stems, leaves, etc. Foliar and root applications are recommended and fertigation, while the addition of adjuvants is not necessary.

Performs the following functions:

-Controls and corrects the deficiencies of Mn and Zn due to deficiencies or imbalances of these elements which are very necessary for a proper development in different cultures.

-Due to the character, which is attributed, as inhibitor of the reproductive cycle of fungi, it prevents fungal attacks such as watering and rot (Phytophthora, downy mildew, etc).

-Balanced phosphorus contribution, macro element indicated and recommended for a proper nutrition from the plant in all of their vegetative periods.

Do not mix with oils, copper compounds or alkaline reaction products. If you want to mixtures with fungicides, insecticides, organic products etc, are recommended first to test compatibility.

Precautions:

- In case of accidental ingestion go to a medical center.
- It is recommended to take normal precautions in application of the product, use gloves and protect your eyes
- If there is direct contact with eyes or prolonged contact with skin, wash the affected area with plenty of water



PHIT-PK



Phosphite self defense
Soil/Foliar



COMPOSITION	%w/w
Potassium Phosphonate	95,0
Phosphorus (P ₂ O ₅)	57,0
Potassium (K ₂ O)	38,0

- P AND K NUTRITION ACTION
- DISEASES CONTROL
- YIELD AND QUALITY

P and K fertilizer.
Fungicide action

SYSTEMIC ACTIVITY FOR EFFECTIVE DISEASE CONTROL

INDUCTOR OF THE NATURAL PLANT DEFENSE.
CRYSTALLINE POTASSIUM PHOSPHONATE

CHARACTERISTICS

PHIT-PK is a water-soluble and stabilized product for: foliar, soil drenching, drip irrigation, trunk painting and hydroponic applications. Stimulates production of Phytoalexins, which enhance host natural defences against Oomycets fungi. Soluble and stabilised powder. It solves quickly and homogeneously in water. **PHIT-PK** is easily uptaked by leaves, roots and also through bark of trees. Dues its up and down systemic action, acts readily over sensible tissues increasing the host resistance against fungi attacks.

APPLICATION

Application/doses	Spray Volume	Remarks
CITRUS AVOCADO TOP FRUITS		
Foliar spray (H.V.) 250 g/hl	1.000-3.000 l/ha	Three (3) preventive treatments per season are recommended: in the beginning of Spring, Summer and beginning of Autumn. In top fruits, treat once or twice in pre-blossom or/and petal fall, to prevent Fire blight.
Foliar spray (mistblower) 600 g/hl	300 - 1.200 l/ha	
Trunk painting 300 g/l	—	Scratch the infected part of the stem and paint the affected area. Severe cases: make three (3) treatments per season.
Soil (through drip irrigation) 5 - 7 kg/ha	—	Make 2 preventive treatments: 1st in spring; 2nd in autumn.
STRAWBERRIES		
Soil (through drip irrigation) 2,5 - 5 kg/ha	—	Make 2 - 3 treatments from rooting to flowering to prevent attacks of Phytophthora cactorum.
Foliar spray 250 g/hl	800 - 1.000 l/ha	From the start of flowering to end of harvesting, make 3 - 4 treatments.
VINEYARD AND TABLE GRAPES		
Viney.Foliar spray (mistblower) 500 g/hl	300 - 500 l/ha	Treat every 15 days from flowering to ripening. A tank mix with preventive fungicides as Folpet or Mancozed are recommended.
Tab. Grapes Foliar spray 250 g/hl	600 - 1.000 l/ha	

ACTIONS

- ENHANCED PHYTOALEXIN AND CHITINASE CONTENT
- IMPROVED CELL WALL STRENGTHENING AND ACTIVATION OF NATURAL DEFENSE RESPONSE
- ENHANCED P-CONTENT, BIOMASS AND FOLIAR AREA
- INCREASED SOLUBLE SUGAR CONTENT AND FRUIT FIRMNESS
- INCREASED FRUIT SIZE AND YIELD

Application/doses	Spray Volume	Remarks
LETTUCE AND LEAF CROPS		
Foliar spray 2,5 Kg/ha	600 - 1.000 l/ha	Two (2) treatments are recommended: 1st: 7-10 days after transplanting/ 2nd: 15 days later.
ONIONS		
Foliar spray 1,5 - 2,5 Kg/ha	300 - 500 l/ha	Three (3): preventive treatments per season: 1st: three (3) true leaves stage/2nd: 15 days later/3rd: 15-21 days later.
FENCES OF CONIFERS		
Foliar spray 250 g/hl	600 - 1.000 l/ha	Make 4 treatments every month from Spring to mid Summer. Use up to 20-30 g in case of isolated big trees (soil drenching).
Soil (drip irrigation or drenching) 10 g/m of fence	—	
TOMATOES/CUCURBITS		
Foliar spray 150-250 g/hl	800 - 1.000 l/ha	Fortnightly (15 days) from flowering until mid-end harvesting.
PEPPERS		
Soil (drip irrigation or dren.) 2,5 Kg/ha	—	Every 15-21 days from one week after transplanting to harvesting.
TURF AND GOLF COURSES		
Foliar or sprinkler irrigation 0,75 - 1 Kg/1000m ²	—	Monthly treatments from beginning of Spring to mid Autumn.

PHOSPHITE SELF DEFENSE

tangelAGRO

www.tangelagro.com

AVAILABLE IN
1Kg - 2Kg - 5Kg - 20Kg
Bag



IMPORTED FROM EU



PHYTOREGULATORS



NEW

Datasheet



Plant Growth Regulator
Soil / Foliar



GIB PLUS

COMPOSITION	%w/w
Gibberellins	3,00
Total Nitrogen (N)	23,00
Potassium (K ₂ O) water soluble	12,00
Zinc (Zn)	10,00
Fulvic Acids	1,50

Plant growth regulator

CHARACTERISTICS

GIB PLUS is a hormonal product designed to stimulate the development of plants, formulated with a high content of gibberellic acid and enriched with elements that act in synergy with this hormone: Nitrogen, Potassium and Zinc. The appropriate formulation rapidly activates the growth of axillary buds, in addition to helping to overcome periods of environmental stress in the early stages of development.

The composition of its three surfactant ingredients favors the dispersion of water molecules considerably and improving its mobility in the soil and the infiltration speed.

The fulvic acids it contains **GIB PLUS**, promote the formation of soil aggregates, thus favoring the porous spaces between the particles consequently improving the mobility of the water and its availability, as well as that of the nutrients present in the soil.

ACTIONS

- **INCREASES THE NUMBER OF FRUITS, COLOR AND SIZE.**
- **ACCELERATES THE SPROUTING OF VEGETATIVE BUDS.**
- **STIMULATES FLOWERING.**
- **IT FAVOURS THE GROWTH OF INTERNODES.**
- **HIGH CONTENT OF GIBBERELLINS**
- **HIGH EFFICIENCY**
- **SYNERGISTIC ACTION OF FULVIC ACIDS AND ZN**

APPLICATION

Crops	Dosis (L/Ha)	Application stages
Alfalfa	500g to 1Kg/Ha	Apply after each cut when regrowth appears.
Bean, Chickpea, Soy	500g to 1Kg/Ha	Apply in full bloom and beginning of pod growth.
Celery	500g to 1Kg/Ha	To increase the length of the petioles, apply four weeks before harvest.
Citrus	3 to 4Kg/Ha for every 1000L water	Apply at the beginning of flowering and repeat 2 to 3 times with an interval of 3 weeks between each application.
Cotton	500g to 1Kg/Ha	Apply during the bloom stage.
Cucurbits (Watermelon, melon, cucumber and pumpkin)	500g to 1Kg/Ha	Apply at the beginning of fruiting and repeat every 8 days
Maize and Sorghum	500g to 1Kg/Ha	Apply at the stage of 4 to 6 developed leaves.
Potatoes	1 to 2Kg/Ha for every 1000l water 200g/100L water (4 ppm gibberellins)	Apply at the time of sowing, sprinkle the tuber. Apply in the immersion treatment.

Crops	Dosis (L/Ha)	Application stages
Strawberries	1 to 2Kg/Ha	Apply at the beginning of flowering and repeat at intervals of 21 days between each application.
Sugar cane	1Kg/Ha	Apply at the time of stem elongation.
Tomatoes	500g to 1Kg/Ha	Apply in the third and fourth week after transplanting and repeat at the beginning of fruit development.
Tomatoes	500g to 1Kg/Ha	Apply in the third and fourth week after transplanting and repeat at the beginning of fruit development.
Vid (Seedless variety "Thompson Seedless Perlette")	250 to 500g/100L water 1Kg/100L water 500g to 2Kg/100L water	Apply in the thinning stage of the flowers. Apply for bunch elongation.
Walnut tree	200g/100L water 500g/100L water 300g/100L water 400g/100L water	Apply to green tips. Apply 8 days later. Apply 15 days later. Apply 21 days later.

For trees in production, apply the 4th applications. For developing trees, apply the first 3 applications.





Plant Growth Regulator Foliar



MAGNUS

COMPOSITION		%w/w	
Gibberellines	500 ppm	Calcium (Ca)	0,8
Auxines	500 ppm	Zinc (Zn)	2,0
Cytokinins	200 ppm	Fulvic Acids	25,0
Cisteine	500 ppm	Nitrogen (N)	9,0
Tiamine	1110 ppm		
Inositol	200 ppm		

Plant growth regulator

CHARACTERISTICS

MAGNUS is a high-tech product with a balanced composition in growth regulators (Gibberellins, Auxins, Citokinins), vitamins (Inositol, Thiamine, ...), amino acids, fulvic acids and nutrients. All this makes it a product that improves the metabolic efficiency of the plant. Thus, **MAGNUS** achieves a vigorous foliage, excellent flowering, mooring and fruit setting in crops among other effects.

APPLICATIONS

Crops	Application
Chard, spinach and open leaf lettuce	Apply 0,75 to 1 L/Ha of 3 to 4 weeks after emergence.
Cotton	Apply 0,75 to 1 L/Ha at the time of first or second squares. Apply mainly in medium and low size varieties or to exit from a stage of stress.
Garlic and onions	Apply 0,75 to 1 L/Ha in the moments before the bulb differentiation (10-12 weeks after planting).
Alfalfa	Apply 0,75 to 1 L/Ha after each cut when regrowth appears.
Celery	Apply 0,75 to 1 L/Ha of 4 to 6 weeks before cutting.
Broccoli, Cauliflower, Cabbage and Lettuce	Apply 0,75 to 1 L/Ha at the beginning of the formation of the head (inflorescence).
Scallion and leek	Apply 0,75 to 1 L/Ha at 30 days after transplantation for leek and 45 days after planting for onions, repeated 30 days later.
Cucurbits (cucumber, melon and watermelon)	Apply 0,75 to 1 L/Ha when the plants are 3-5 true leaves. Repeat at the beginning of the formation of elvers, continue every 15 days until the last cut.
Cereals (wheat, barley, oats, triticale)	Apply 0,75 to 1 L/Ha when full tillering, beginning of stalk formation and boot stage.
Melon	In plantations with 1 or 2 years, apply 0,75 to 1 L/Ha during the cycle. In cultured 3 more years to 2 applications with 30-day interval between each. The first when the plant is 30cm height and the second 50cm height.

- APPLICATION TO ALL CROPS
- OPTIMAL HORMONAL BALANCE
- HIGH ASSIMILATION IN THE AERIAL PART OF THE PLANT
- QUALITY AND YIELD IN CROPS

ACTIONS

- ✓ IMPROVES THE STRUCTURAL DEVELOPMENT OF THE PLANT.
- ✓ BETTER UPTAKE AND USE OF NUTRIENTS IN CROPS.
- ✓ EXCELLENT FLOWERING, FRUIT SET AND ROOTING.
- ✓ GREATER RESISTANCE TO STRESS WHEN RECOVERING THE HORMONAL BALANCE.
- ✓ INCREASE IN YIELD AND QUALITY IN CROPS.

Crops	Application
Flowers	Apply 0,75 to 1 L/Ha at the time of the appearance of the flower stems.
Beans, Green Beans, Soybeans	Apply 0,75 to 1 L/Ha at the time of the appearance of flower buds and repeat 1-3 times every 15 days.
Maize and sorghum	Apply 0,75 to 1 L/Ha between 6 and 8 fully developed leaves, and if possible repeat in full bloom.
Potato	Apply 0,75 to 1 L/Ha at the time of tuber initiation and repeat 15-30 days later.
Tomato, pepper and aubergine	Apply 0,75 to 1 L/Ha to the appearance of the flowers, repeat every 2 or 3 weeks until the last commercial flowering.
Tobacco	Apply 0,75 to 1 L/Ha at 30 days after transplanting and repeat 30 days later.
Citrus, avocado, mango, papaya and guava	Apply 150 to 200ml per 100L of water to the appearance of repeating blooms 30 days.
Apple and peach	Apply 150 to 200ml per 100L silver tips water (apple) and green tips (peach) and repeat when the fruit has 1 to 2 cm diameter.
Strawberry	Apply 0,75 to 1 L/Ha once a month, starting at the time of appearance of the first flower cluster.





Plant Growth Regulator
Foliar



MAXIMUM

COMPOSITION

%w/w

Cytokinins	3000 ppm
Total Nitrogen (N)	6,00
Calcium (CaO)	9,00
Fulvic Acids	5,50
Chelating agents	3,60
Density	1,35

Plant growth regulator

CHARACTERISTICS

MAXIMUM is a hormonal product designed for an optimal supply of Cytokinins, Nitrogen and Calcium. Its use is highly recommended during the vegetative growth period until the beginning of flowering.

ACTIONS



Increases the formation and differentiation of new tissues and lateral budding.



Exerts a regulatory function that delays the aging of the plant organs, and lengthens the life of leaves and bulbs.



Favors the formation of flower buds and the growth of the fruit



Delays the senescence of the plants.

APPLICATIONS

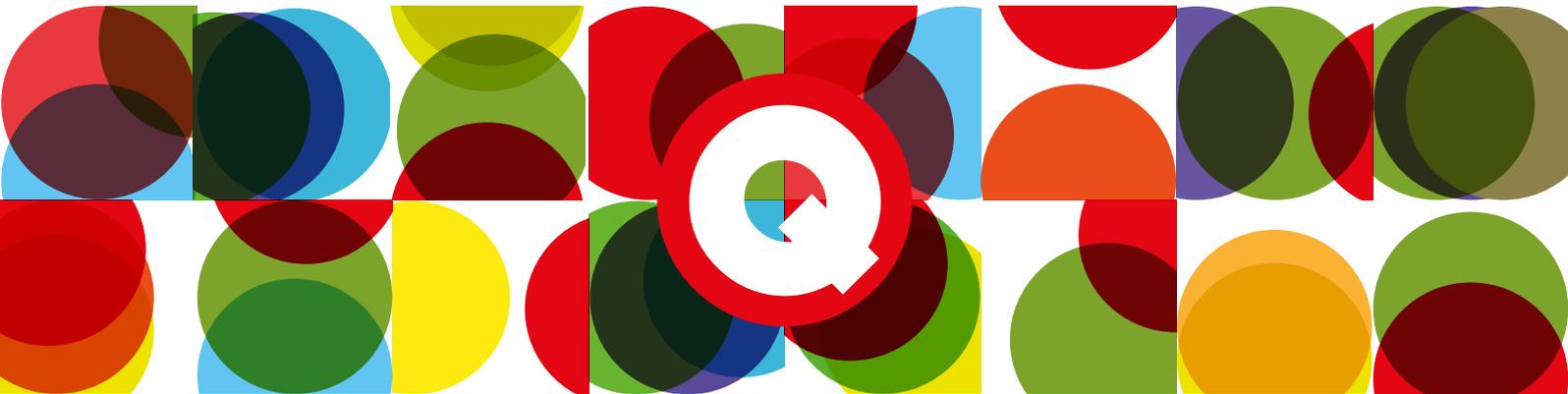
Crops	Dosis (L/Ha)	Application
Alfalfa	1-2 L/Ha	At the beginning of the growth of each cut.
Beans, Soybeans, Cheackpeas	1-2 L/Ha	At the flower bud stage and at the beginning of pod growth.
Banana and Pineapple	1L per 1000L of water	At the beginning of the intensive growth of the plant and at the setting of the fruit.
Cereals (wheat, barley, oats, triticale)	1L/Ha	At the first shoot in winter crops and in spring crops when the plant has 2 to 5 leaves.
Citric	1-2 L/Ha	At the beginning of flowering and repeat 15 to 20 days later.
Corn and Sorghum	1 L/Ha	In the 6 to 8 leaf stage.
Cotton	1 L/Ha	At the beginning of the cultivation and repeat four times with intervals of 8 days.
Cucumbers, Eggplant, Zucchini, Tomatoes	1 L/Ha	At the beginning of flowering and make 2-3 applications with intervals of 10 to 15 days.
Garlic and Onion	1-2 L/Ha	In the 6 to 8 leaf stage and repeat every 15 days.
Potatoes	1-2 L/Ha	At 20 days after emergence and repeat at 20 and 40 days later.

Crops	Dosis (L/Ha)	Application
Peanuts	1,5-2L/Ha	At 80 days after sowing.
Rice	1L/Ha	When the plant has 2 to 3 leaves and at the beginning of the panicle.
Sugar Cane	1-2 L/Ha	45 to 60 days after sowing and a second time 45 days after the first application.
Sun Flower	1L/Ha	To the formation of the sunflower star state.
Vegetables (of leaf and flower stem)	1,5-2L/Ha	In the 6 to 8 leaf stage and repeat 15 to 21 days later.
Vegetables (of root)	1,5-2L/Ha	In the 4 to 6 leaves stage and repeat 3 times with an interval of 15 days.
Vid	1L/Ha	At the time of flowering and repeat at the beginning of fruit growth.
Walnuts	2L per 1000L of water	Before flowering, repeat 15 days later and if necessary, 20 days after the second application.



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QUALITY AND COLOR



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Color
Maduration
Soil/Foliar

CANDY

COMPOSITION %w/w

Total Nitrogen (N)	3,0
Potassium (K ₂ O)	5,0
Calcium (CaO)	5,0
Magnesium (MgO)	2,0
Polysaccharides	25,0
Uronic acid	2,0
Boron (B)	0,1
Zinc (Zn)	0,1

- ORGANIC AND NATURAL PRODUCT
- BALANCED MACRO AND MICRONUTRIENTS COMBINATION WITH ORGANIC MATRIX
- OPTIMIZED BALANCED

Color natural promoter and fruit ripening

CHARACTERISTICS

CANDY is a product specially designed to improve the uniformity, coloration, consistency and maturation of the fruit. **CANDY** is a product that includes a special form in the quality and production of the fruit, as a consequence of its active biological components

CANDY incorporates an organic molecular polymer of high weight, which confers more elasticity, hydration and firmness to the skin of the fruits. The contribution of calcium (Ca) and magnesium (Mg), give **CANDY** the ability to reduce the permeability of cell membranes and the absorption of water, helping to increase the firmness of the fruit and, therefore, extend its useful life.

The **CANDY** balanced formulation, designed with an organic matrix rich in polysaccharides, macro and microelements, key elements in the process of fruit setting and ripening, has been achieved because of a careful selection of various components, prepared in an optimal balance. The result is a product with the highest quality and efficiency.

ACTIONS

- ✓ IMPROVES NATURALLY FRUIT COLOR.
- ✓ INCREASES FRUIT CONTENT OF SUGAR.
- ✓ IMPROVES FRUITING AND PROLONG SELF LIFE.
- ✓ IMPROVES THE CALIBRE AND FIRMNESS OF THE FRUIT.
- ✓ ADVANCES THE FRUIT RIPENING.

FOLIAR APPLICATION

Crops	Doses
Fruit crops (table grapes, wine, apple, pear, peach, nectarine, apricot, cherry, kiwi, etc.)	ml 400-450/hl make 2-3 close treatments (7 days) beginning from veraison
Citrus fruits, oil and table Olive	ml 400-450/hl make 2-3 close treatments (7 days) beginning from veraison
Vegetable and industrial crops in full field (industrial and table tomatoes, pepper, eggplant, strawberry, watermelon, melon, Borlotti beans, sugar bean, etc.)	ml 400-450/hl make 2-3 close treatments (7 days) beginning from veraison

Crops	Doses
Greenhouse vegetable crops	ml 300-400/hl make two treatments on each fruiting stage from mid enlarged fruits
Flowering plants, ornamentals and cut flowers	ml 200-300/hl

SOIL APPLICATION

Crops	Doses
All crops	lit 0,8-1,0/1000m ² by half enlarged fruit. we recommend the mixture with chelapotash 4kg/1000m ²

QUALITY AND COLOR

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AVAILABLE IN
0,5 L - 1L - 5L - 20L - 1000L
Plastic Bottle/IBC



Imported
from EU



ROOTING



NEW

Datasheet



Rooting
Foliar / Soil

+ROOT

COMPOSITION

%w/v

Amino acids	4,00
Total Nitrogen (N)	2,48
Phosphorus (P ₂ O ₅)	12,00
Potassium (K ₂ O)	6,30
Organic matter	33,75
Fulvic acids	19,50
Organic carbon	17,73
IBA	0,2

Root development

CHARACTERISTICS

+ ROOT is a product for application in the early stages of plant development in order to improve rooting.

The synergy between all the components present in + ROOT, allows to enhance the capacity of assimilation and mobility inside the plant of the Macronutrients and Micronutrients, accelerating the development of the root system and an optimal start of the crops.

The Organic Matter of + ROOT will carry a source of energy in the biological processes and a stimulation of the microbial life of the soil (rhizosphere).

The product has a biostimulant effect in plants, activating the production of auxins which enhances cell division and induce the formulation of lateral roots and adventitious.

Its composition helps plants to achieve its maximum genetic potential and establish a strongroot system which will increase both nutrients and water absorption.

• **BALANCED PROPORTION OF ORGANIC MATTER AND NUTRIENTS**

• **CONTAINS NATURAL PHYTOHORMONES SPECIFIC TO ROOTING**

ACTIONS

-  **HIGHER DENSITY OF ROOTS.**
-  **INCREASE IN THE UPTAKE OF WATER AND NUTRIENTS. GREATER RESISTANCE TO STRESS FACTORS.**
-  **RECOVERY OF ROOTS DAMAGED BY NEMATODES AND FUNGI ACTIVITY.**
-  **INCREASE IN THE SYNTHESIS OF ENDOGENOUS CYTOKININS IN ROOTS.**

SOIL APPLICATION

Crops	Doses	Applications/Treatments
Seedbeds	5-15 ml/L	1 - 3 / Form out to cotyledons
Horticultural outdoor (Transplantation)	10-20 L/Ha	1 - 2 / In the first watering plant and 8-15 days
Horticultural greenhouse trees	2-3 L/Ha	1 - 2 / In the first watering planing and 8-15 days
Beding plants	10 ml/base	1 - 2 / At the beginning of activator when necessari to recover the radicular mass
Young trees	20-50 ml/base	
Adult trees	40-60 ml/base	

To perform a foliar application in these crops: general doses 300-500 cc/hl

FOLIAR APPLICATION

Extensive Crops	Applications/Treatments
Maize	1 / after the beginning of vegetation - development of leaves (BBCH 10-14)
Oilseed rape	1 / after the beginning of vegetation - development of leaves (BBCH 10-14) 2 / the root system regeneration after the beginning of spring vegetation (BBCH 19/20)
Potato	1 / development of leaves (BBCH 10-14)
Sugar beet	1 / after the beginning of vegetation - development of leaves - youth stage (BBCH 10-16) 2 / development of leaves - rosette growth - crop cover (BBCH 18-33)
Wheat	1 / after the beginning of vegetation - development of leaves - 3 leaves unfolded (BBCH 10-13) 2 / the root system regeneration after the beginning of spring vegetation (BBCH 21/22)

Doses for these extensive crops: 1-1,5 l/ha

ENHANCES THE FORMATION OF THE ROOT SYSTEM



SEAWEED EXTRACT
Ascophyllum Nodosum

AMINOACIDS

ROOTING
BIO INDUCTORS:

Alginate acid
Mannitol

MICRONUTRIENTS

ROOTING



NEW



**Rooting
Foliar / Soil**



+ROOT SOLID

COMPOSITION

%w/w

Nitrogen (N) Total	7,00
Phosphorus (P ₂ O ₅)	35,0
Free amino acids	20,0
Indolbulyric acid (IBA)	1500 ppm
Naphthacetic acid (ANA)	500 ppm

Root development

CHARACTERISTICS

+ROOT SOLID has a high concentration of Phosphorus (fast assimilation) and specific organic extracts rooting inducing for any stage of crop development.

+ROOT SOLID is a plant biostimulant that promotes development and root growth, in foliar and soil applications directly in the root areas, its effect contributes to increase the flow of nutrients from the soil solution to the plant, granting plants with greater resistance to adverse environmental effects.

+ROOT SOLID provides the conditions and elements necessary for the development of the root, increasing its growth and obtaining and increase in the vigor and resistance of the crop.

Each molecule of **+ROOT SOLID** has a specific function in the stimulation of root system development. In addition, the composition of Stym root solid is in a specifically studied balance in favour the development of the crop during the first stages.

Recommended for:

+ROOT SOLID is used at the beginning of the plant activity to stimulate the growth of the roots and favour the activity of the plant in the first stages; in cases of stress, it also activates the plant. Its use is recommended for all kind of crops.

The relationship between the good root system and the proper formation of vascular tissues, is direct and together establish one of the most important bases for achieving a greates productive potential of the crop.

In addition to this, it is at the root that most hormones are responsible for regulating plant metabolism are synthesized in important processes as cell division, thickening and elongation; senescence, fruit setting and growth fruit, etc.

ACTIONS

-  **INDUCTION OF ABSORBENT ROOT HAIR FORMATION**
-  **ROOT STRENGTHENING, THANKS TO THE PARTICIPATION OF PHOSPHORUS AND POTASSIUM OF HIGH ASSIMILATION**
-  **INCREASING ITS GROWTH AND OBTAINING AN INCREASE IN THE VIGOR AND RESISTANCE OF THE CROP**
-  **IN A STRESSFUL SITUATION ALLOWS THE REINFORCEMENT OF THE ROOT ZONE NECESSARY FOR THE RECOVERY AND REACTIVATION OF CROPS.**
-  **INCREASES THE NUMBER OF THE CROPS**

APPLICATIONS

CROP	DOSAGE Kg/Ha	APPLICATION TIME
Substratum or substrate for trays	Dissolve 125-250g in enough water to humidify 100 kg of substrate.	Use the low dosage at temperatures below 20°C and the high dosage at temperatures higher than 20°C
Nursery bad and trays	100g for each 200L of water.	Apply once a week, starting in the third week of seeding development
FIELD APPLICATIONS		
Transplant	100g for each 100L of water.	Apply at the time of transplantation or one week after applying 400g pero 100L of water, apply directing to the base of the plant.
Foliar	0.5 to 1 Kg/ha.	Apply in the second and third weeks after transplantation.
Drip irrigation	2kg/Ha.	Dilute the product in irrigation water. Apply to the 2nd, 3rd and 4th week after transplantation.

+ROOT SOLID is applied by sprinkler a dissolved solution in the amount of water indicated in the recommendation.

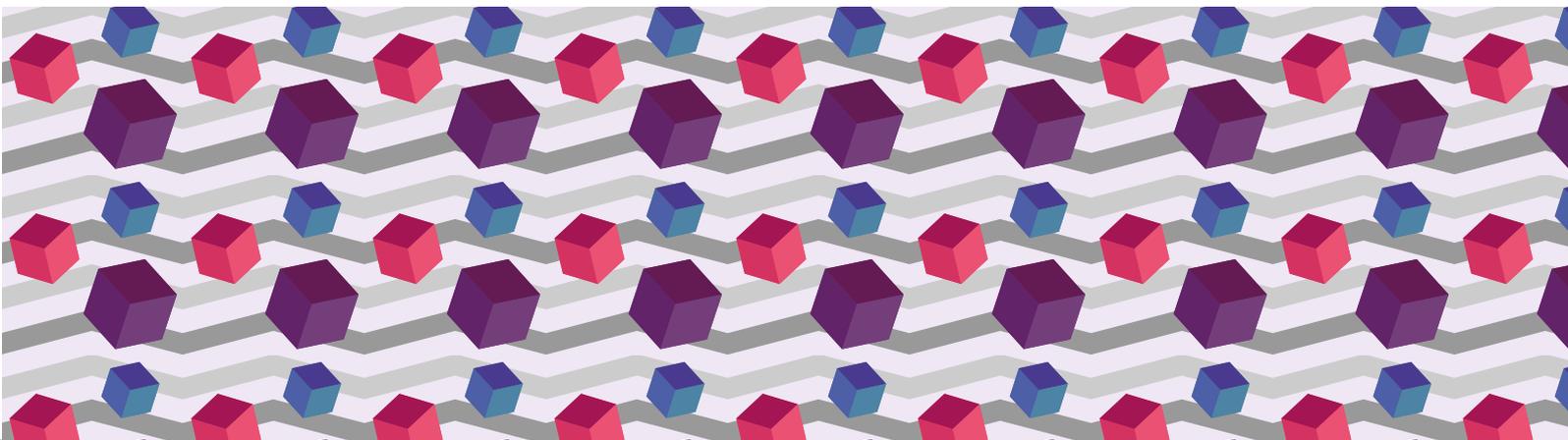
In the case of newly transplanted seedlings it is suggested to apply **+ROOT SOLID** when the root activity is starting (1-5 days after transplantation), be careful that the product may stay deep in the root. For best results, it is recommended to repeat the treatment once or twice at a weekly interval.

In establishment annual crops we suggest applying **+ROOT SOLID** at an interval of 10-15 days, preferably during the cutting season. In the case of perennials apply it on when it starts the "root development" or during fruiting. For a better result it is recommended to repeat the treatment 2 or 3 times.

It is recommended to be mixed with registered products in authorized crops, but compatibility test, It is suggested to avoid mixing with Calcium-base products non chelated.



SALINITY CORRECTORS



NEW

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Datasheet



Salinity
corrector
Soil

Salinity Corrector

CHARACTERISTICS

SALDIUM is a powerful desalinizer and soil conditioner, composed of a low-molecular-weight anionic polymer of maleic acid, which solubilizes magnesium, calcium, and sodium in saline soils, sodic soils, and saline-sodic soils. Its desalination effect is notable for acting both in the soil and in water. Furthermore, its application improves the properties of the soil as a cultivation medium: it loosens soil aggregates for better drainage and solubilizes blocked mineral nutrients (Ca, Mg, P, K, and micronutrients) so that crops can take full advantage of them.

COMPATIBILITY

Due to its acidic nature, **SALDIUM** adapts perfectly to fertigation applications and is compatible with most

SALDIUM

COMPOSITION

%w/w

Polymerized polymaleic acid	33,00
Density	1,13

ACTIONS

- REDUCTION OF SOIL ELECTRICAL CONDUCTIVITY BY LEACHING OF SODIUM AND CHLORIDE.
- CLEANING OF BRACKISH IRRIGATION WATER.
- DECOMPACTION AND IMPROVED DRAINAGE OF THE SOIL.



NUTRIENT
RELEASE



LEACHING OF
SODIUM AND
CHLORIDE



HYDRAULIC
CONDUCTIVITY

commonly used products. Do not mix with alkaline reaction products as they could precipitate in the mixture and clog the drippers. Before any new mixture, it is recommended to carry out preliminary physicochemical and biological tests. In case of doubt, consult your distributor or technical advisor.



SOIL APPLICATION

CROPS	DOSE (L/Ha)	N° APPS	METHODS OF USE	TIME OF APP
Horticultural	3-4	2-4	Fertigation	Apply the first application at the start of the cycle at a high dose and repeat every 15-30 days at a lower dose depending on the degree of salinity.
Woody Crops	3-5	3-5	Fertigation	Apply the first application at the start of the cycle at a high dose and repeat every 15-30 days at a lower dose depending on the degree of salinity.

CROPS	DOSE (L/Ha)	N° APPS	METHODS OF USE	TIME OF APP
Rice	5	1-2	Foliar (before sowing)	Apply one day before sowing with the soil flooded to allow product incorporation into the soil.
Saline Water Treatment	5/10 cc/m ³	CONTINUOUS	Fertigation	Continuous injection with an ultra-low volume pump directly into the irrigation water intake (before fertilizer injection).



FOLIAR APPLICATION: ONLY FOR RICE

SALINITY CORRECTORS

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AVAILABLE IN:



IMPORTED
FROM EU



SEAWEED EXTRACT



NEW

Datasheet



Seaweed extract
Foliar / Soil



Seaweed extract. Bioactivator

MARE

COMPOSITION

%w/v

Seaweed extract	20,0
Nitrogen (N)	4,0
Potassium (K ₂ O)	3,5
Alginate Acid	3,0
Mannitol	0,8
Density: 1,09 g/cc	

- 100% SEAWEED EXTRACT ASCOPHYLLUM
- BALANCED PROPORTION OF MACRO AND MICRONUTRIENTS

CHARACTERISTICS

MARE is a product based on extracts of marine seaweed (Ascophyllum nodosum) obtained from a careful extraction method that retains all the properties of the molecules.

MARE contains natural phytohormones vitamins and carbohydrates (mannitol, alginates, organic acids and macronutrients. The proportion of these components in the extract is completely balanced. The combination of all its components works synergistically, providing a powerful activator effect on plant development.

MARE is especially recommended to prevent critical phenololylcal estages such as growth, flowering, fruit setting and ripening, and periods of adverse environmental conditions. Rapidly uptaked through the foliar and/or root system.

APPLICATIONS

CROPS	TIMING	RATES OF USE
Pome fruit	Start of flowering Full flowering End of flowering Fruit size 5-10 mm	2 l/ha 2 l/ha 3 l/ha 3 l/ha
Stone Fruit	Start of flowering Petal fall After first fruit fall	3 l/ha 3 l/ha 4 l/ha
Strawberries	Early spring growth First bloom First fruit set	3 l/ha 3 l/ha 3 l/ha
Wine Grapes	5 - 6 leaf stage Before bloom Berry set / early shattering	3 l/ha 3 l/ha 3 l/ha
Table Grapes	1st Bloom, 2nd Fruit set, 3rd fruit size 5-10 mm, 4th Berry closure	3 l/ha
Tomatoes, Bell peppers, Melons, Aubergines, Cucumber, Squash	4 treatments starting at (first) bloom in 14-day intervals	2,5 l/ha or 250 ml/hl
Broccoli, Cauliflower, Cabbage	4 - 6 true leaf stage 10 - 14 days later head initiation	3 l/ha 3 l/ha 3 l/ha

ACTIONS

- ✓ INCREASES TOLERANCE TO WATER STRESS, SALINE AND LOW TEMPERATURES.
- ✓ ACTIVATES SPROUTING GROWTH.
- ✓ IMPROVES FRUIT SETTING.
- ✓ STIMULATES THE GROWTH OF FRUITS.
- ✓ INCREASES TOLERANCE TO STRESS CAUSED DISEASES AND PESTS.

CROPS	TIMING	RATES OF USE
Asparagus	14 days after end of harvest Approx. 3 weeks later	5 l/ha 5 l/ha
Avocado	Before flowering (cauliflower stage), full bloom and after flowering	3 l/ha
Rooting/ Transplant Solution	Root dripping of transplants prior to planting	0,01 %
Wheat	Early tillering Flag leaf fully enlarged	1 l/ha
Canola	Beginning of stem extension At first inflorescence	2-3 l/ha
Corn	4-6 leaf stage 8-10 leaf stage	1 l/ha

Note: MARE can be applied by spraying and sprinkling, together with pesticides as well drip irrigation /fertigation systems.



NEW

Datasheet



Seaweed extract
Foliar / Soil



MARE AMINO

COMPOSITION

	%w/v
Seaweed extract	30,0
Total Nitrogen (N)	6,0
Free aminoacids	4,0
Alginic Acids	5,0
Mannitol	1,5
composición Density: 1,19 g/cc	

- 100% SEAWEED EXTRACT ASCOPHYLLUM
- AMINO ACIDS OF ENZYMATIC HYDROLYSIS. VEGETABLE ORIGIN
- BOOSTED WITH MICRO, MACRONUTRIENTS AND HUMIC ACIDS

Seaweed. Biostimulant action

CHARACTERISTICS

MARE AMINO is a product that combines in a balanced way the action of the L-α Amino acids of vegetable origin and seaweed extract of Ascophyllum Nodosum, obtaining a complete biostimulant.

MARE AMINO contains a balance of specific L-a-amino acids obtained by enzymatic hydrolysis with polysaccharides (such as alginic acid and mannitol, among others) and that exert a synergistic response in the stimulation of physiological processes previously cited



FLOWERING



FRUIT SETTING



RIPENING

ACTIONS

- ✓ PROMOTES THE SYNTHESIS OF PROTEIN AND NATURAL GROWTH SUBSTANCES
- ✓ STIMULATION OF THE ROOT GROWTH
- ✓ ENHANCED UPTAKE OF NUTRIENTS INTO BOTH ROOTS AND LEAVES
- ✓ RESISTANCE TO DISEASE AND PEST
- ✓ PRECURSOR OF AUXINS, WICH STIMULATE PLANT VEGETATIVE
- ✓ IMPROVES FRUIT SETTING, RIPENING AND FRUIT COLOR, INCREASING QUALITY AND QUANTITY

FOLIAR APPLICATION

Crops	Doses Application
Fruit trees, citrus, grapes, nut, olive	2-3 L/ha per application (appl.) 3-4 applications at 10-14 days intervals, from bud burst to flowering and during fruit development
Horticultural crops: Capsicum, cucurbits, strawberries, tomatoes	2-3 L/ha per appl. Apply 2 weeks after transplantation for fast plant development and during fruit growth
Lettuce and leaf vegetables	1,5-2 L/ha per appl. 2-3 applications with 7-10 days interval, starting with leaves well developed.
Potato	2-3 L/ha per appl. Apply during vegetative growth
Cereals	1-2 L/ha per appl. 1-2 applications from beginning of stem elongation to flowering

*General recommendation: 1-3 L/1000 L or 1-3 L/ha

SOIL APPLICATION

Crops	Doses Application
Fertirrigation drip irrigation	1-5 l/ha divided into several appl. of 2-3 l/ha per appl. Apply every two weeks to maintain extended crop response

Cautions:

Avoid mixtures of **MARE AMINO** with copper or mineral oil products. Doses are approximate and may vary depending of the area characteristics and crops needs.

SEAWEED EXTRACT





Seaweed extract
Foliar / Soil



MARE KELP

COMPOSITION

%w/v

Seaweed Kelp extract	30,0
Folic acid	0,10
Auxines	450ppm
Cytokines	1200ppm

Density 1,05
pH (10% solution) 4,4

Seaweed. Biostimulant action

CHARACTERISTICS

MARE KELP is a natural metabolic biostimulant and root promoter, obtained by natural extraction from seaweed *Ecklonia maxima* KELP. **MARE KELP** contains a high auxin-cytokinin ratio and polysaccharides, alginic acid, mannitol, micronutrients of natural origin, generating a strong stimulus to the formation of new growth points in the roots of the treated plants. These new root hairs cause, naturally, an increase of cytokinins in plants, which are synthesized in the root tips. The endogenous cytokinins stimulates the plant's growth and fruit size, and in turn, the application of exogenous auxins stimulates the movement of Ca to the fruit. Improving the firmness and post-harvesting life.

APPLICATIONS

CROP	DOSES/ APPLICATIONS	1 ST APPLICATION	2 ND APPLICATION
Citrus	300-500 cc/Ha	At the beginning of sprouting	Fruit fattening
Corn, Soybeans, cereal	150-200 cc/Ha	Apply 20 to 25 days after emergence.	
Potato	150-250 cc/Ha	6 to 10 leaves of the plant, tubering starting	15 days after the 1st application
Rice	250-300 cc/Ha	1st application at the time of the godson, to increase grain production	
Strawberries	300 cc/Ha	Flowering	Flowering/ fruit fattening
Stone fruits, Table grapes	300-400 cc/Ha	Pre-flowering	Fruit fattening
Sugar beet, cotton and other industrial crops	150-250 cc/Ha	1 application in pre-flowering or in stages of 6 to 10 leaves of the plants	

- 100% ECKLONIA MAXIMA SEAWEED EXTRACT
- HIGH CONCENTRATION OF NATURAL HORMONES

ACTIONS

- ✓ INCREASES ROOT MASS AND GROWTH OF SEEDINGS.
- ✓ INCREASES THE NUMBER OF FRUIT, SIZE, COLOR AND SUGAR.
- ✓ IMPROVES NUTRIENT UPTAKE.
- ✓ ALLEVIATES THE EFFECT OF STRESS.
- ✓ IMPROVES SHELF-LIFE DURING COLD STORAGE.



ROOTING



FRUIT SETTING



YIELD

Sun Flower	300 cc/Ha	1 application for 4-6 leaves	
Tobacco	200 cc/Ha	1st application at transplantation	2nd foliar application 15 days after the first application.
Tomato (Long-Life)	300 cc/Ha	At the beginning of Flowering Period	When 20-30% Fruit setting. Optional 3rd Application after 2-3 weeks
Tomato (Industrial)	400 cc/Ha	When 20-30% of Flowers	
Pepper, cucumber, eggplant, melon, water melon	300-400cc/Ha	10-15% of open flowers	2-3 weeks after first application
Tropical Fruits (Banana, Pineapple)	300-400cc/Ha	Flowering	Fruit fattening

For more information, please contact the TANGEL AGRO technical service.



NEW

Datasheet



**Seaweed extract
Foliar / Soil**



MARE SOLID

COMPOSITION

%w/w

Seaweed Extract	25,0
Mannitol	1,0
Alginic Acid	1,0
Total Humic Extracts	40,0
Humic Acids	37,0
Fulvic Acids	3,0
Free Aminoacids	25,0

- **100% SEAWEED EXTRACT ASCOPHYLLUM**
- **POWERING BY HUMIC AND FULVIC ACIDS**

Seaweed. Biostimulant action

CHARACTERISTICS

MARE SOLID is a spray-dried, microgranular powder-based growth stimulant, manufactured from Ascophyllum nodosum which improves the coloring of crops.

MARE SOLID contains natural substances that act as growth promoters, which increase the yield and vigor of crops and improves their color. **MARE SOLID** is indicated in metabolic and biochemical processes that increase the resistance of the plant against different conditions of biotic and abiotic stress. **MARE SOLID** incorporates Natural Phytohormones (auxins, cytokinins, betaines and gibberellines), fulvic and humic acids.

ACTIONS

- ✓ **IMPROVES ROOT GROWTH AND PLANT DEVELOPEMENT.**
- ✓ **IMPROVES PLANT NUTRITIONAL HEALTH.**
- ✓ **INCREASES DESIRABLE YIELD.**
- ✓ **IMPROVES PLANT VIGOR.**
- ✓ **MAXIMIZES CROP POTENTIAL DURING PERIODS OF STRESS.**
- ✓ **IMPROVES SEED GERMINATION.**

APPLICATIONS

Crops	Doses Application
FOLIAR APPLICATION	
Citrus	75 g/hL 1° preflowering, 2° petal fall and 3° fattening
Fruit trees	75 g/hL 3 applications, preflowering (C) stage (E) stage (G) petal fall
Vineyard and vine arbour	75 g/hL 1° separates inflorescences 2° floral buds and 3° fruit set
Olive tree	75 g/hL 1° application at the beginning of the period (spring), 2° at 15 days and 3° post-harvest
Horticultural crops	75-100 g/hL Make the 1° application with a good rooted and great leaves development. Then, each 15 days

Forage, industrials, ornamentals crops and vine grower	50-75 g/hL 1-3 applications since the beginning of the growth stage
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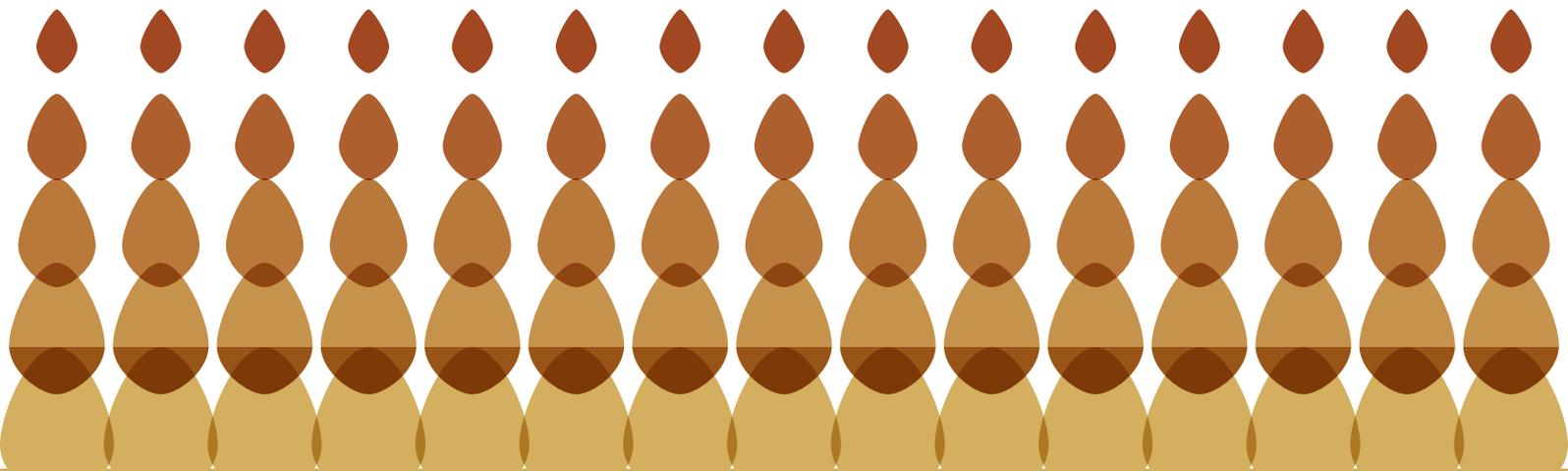
ROOT APPLICATION	
Root application	0,75-1 Kg/Ha Each 15-20 days, when the plant needs root activation
Application to take root	1,5 Kg/Ha 2-3 applications after the transplant or plantation, each week

General dosage. Foliar: 50-100 g/hL each application in every crops. **Root:** 1 Kg/Ha. **Maxim concentration:** 1% (1 Kg/hl of water)

Cautions: **MARE SOLID** can be mixed with all common formulations, except for products with alkaline reaction, oils, based on and sulfur, mineral oils and emulsions.



SEED DRESSING





Seed dressing
Foliar / Soil

Biostimulant.
Seed treatment.

SOWY SEED

COMPOSITION

%w/w

Total aminoacids	9
Free aminoacids	6
Total nitrogen (N)	5
Total organic matter	30
Seaweed extract	6

- **INCREASES THE PERCENTAGE OF SEED GERMINATION**
- **IMPROVES QUALITY AND YIELD**

CHARACTERISTICS

SOWY Seed is a product made from plant extracts and seaweed. The amino acids provides the necessary energy for germination of the seeds and invigorate the plants.

SOWY Seed increases the yield and quality of crops.

ACTIONS



EXCELLENT STICKING ABILITY TO SEED

EFFECT ON THE UNIFORMITY AND SPEED OF EMERGENCE

IMPROVES ROOT DEVELOPEMENT

INCREASES THE PERCENTAGE OF SPEED GERMINATION

PROTECTS THE SEED FROM DESSECCATION

APPLICATION

CROPS	L/1000Kg seeds	Water Qty. (L)	ml/Kg	Water Qty (ml)
Barley	1-1,5	10	1-1,5	10
Corn	2-2,5	12	2-2,5	12
Rape	3-4	12-15	3-4	12-15
Rice	2	10	2	10
Soy	2	10	2	10
Sunflower	1,5	10	1,5	10
Wheat	1-1,5	10	1-1,5	10

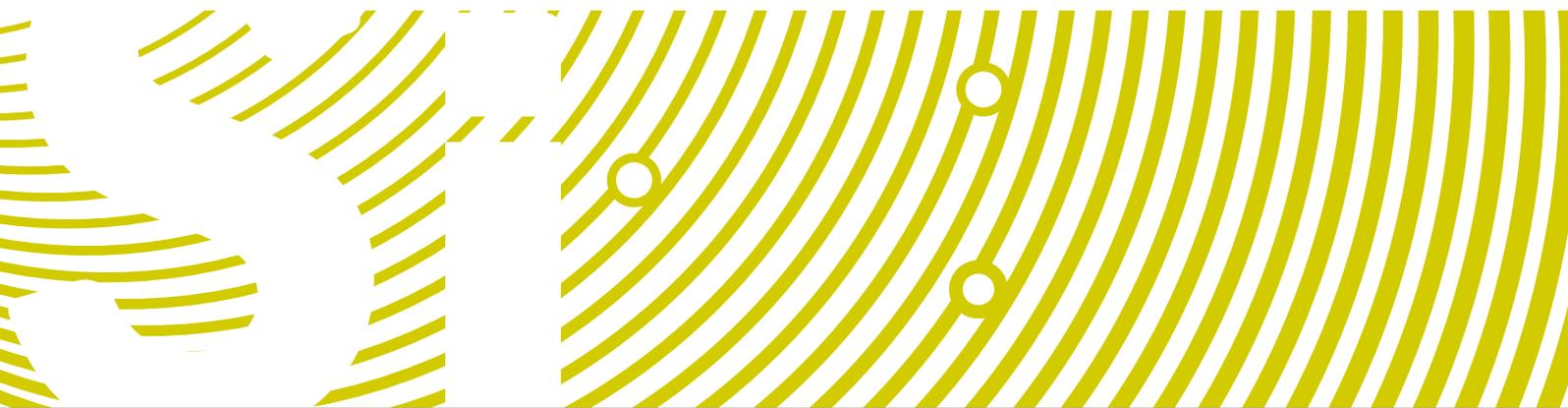
Apply **SOWY Seed** directly to the seed in a container that provides a good distribution of seeds.

Place half of the seeds in a container and apply half of the required product on the surface of the seeds. Mix and stir manually or using suitable machinery. Add the remaining seed and the product and stir.

SOWY Seed certainly applies in seeds treated with inoculants, fungicides and insecticides. It is advisable to first add the inoculant, fungicide and insecticide and then **SOWY Seed**



SILICON



Datasheet



Nutrient corrector Foliar



Nutrient corrector Silicon

SIL-AA

COMPOSITION	%w/v
Silicon (SiO ₂)	26,4
Potassium (K ₂ O)	10,2
Free Amino Acids	3,0

- SILICON COMPLEXED WITH AA
- HIGH UPTAKE AND TRANSPORT OF Si AND K
- HIGH MISCIBILITY AND SOLUBILITY

CHARACTERISTICS

Sil-AA is a concentrated product of Silicon and Potassium supplemented with plant amino acids, which improve the uptake and distribution of these two nutrients in plants.

Sil-AA is applied via foliar and is compatible with most pesticides except for those of alkaline reaction.

APPLICATIONS

Crops	Details
Annuals: Vegetables, cut flowers, nursery, strawberries, sugarcane and wheat.	1-2L/Ha or 200-400 ml/100L Foliar: Apply in a minimum of 600 L water. Apply every 10-15 days from first visible leaf onwards. For best results apply first sprays before leaf hardening of crop. Apply to sugarcane during the lead-up to the dryer months.
Perennials: tree crops, vines, bananas and turf.	1-2L/Ha or 200-400 ml/100L Foliar: Apply in a minimum of 600 L water. Apply during leaf flush and after fruit set and every 10-14 days during disease events.
Soil and Drip or hydroponic nutrient solution.	200ml/1000L 6-8 time per crop cycle. Maximum of 8 L/Ha.

ACTIONS

- ✓ INCORPORATES SILICON; ESSENTIAL/BENEFICIAL NUTRIENT FOR ALL CROPS.
- ✓ INCREASES RESISTANCE TO ABIOTIC STRESSES.
- ✓ IMPROVES NATURAL RESISTANCE TO FUNGAL PATHOGENS AND PEST.
- ✓ INCREASES POSTHARVEST LIFE.
- ✓ INTENSIFIED ROOT SYSTEM DEVELOPMENT. MORE QUALITY AND YIELD.
- ✓

Silicon and postharvest life or produce:

Researchers have shown that Silicon can inhibit ethylene which reduces the speed of aging and death of harvested plant parts. Silicon treated plant have also been shown to maintain their chlorophyll (green) content over a longer period. The end result is produce with better shelf life and appearance.



Datasheet



Calcium Silicate Fertilizer
Soil/Foliar



Calcium silicate fertilizer

SIL-CA

COMPOSITION

%w/v

Silicon (SiO ₂)	24,0
Calcium (Ca)	15,0
Density	1,40
pH	7,8

- NUTRITION
- FUNGICIDE
- MITICIDE
- INSECTICIDE

CHARACTERISTICS

SIL-CA is a fortifier of plant tissues for foliar and soil use whose purpose is to increase the tolerance of the crop to the attack of pathogens, increasing the life of the fruit and increasing the resistance of the plant and the fruit to the physical damages caused by friction, manipulation, etc.

Calcium is a key element in all stages of a plant's cycle. It is essential for growing reaching from germination up to ripening of the fruits. Calcium makes vegetal tissues more resistant.

Resistance to Disease and Pest

Si deposition in the epidermis tissues provides a physical barrier to pathogens and insects, allowing for a reduction in the frequency of chemical applications

Cell Structure

Si accumulated in the epidermal tissues increases the mechanical stability of the plant. Reduces the incident of lodging

Photosynthetic Activity

The improved structure produces stronger stems with more erect leaves, increasing its ability to capture light

Uptake of Nutrients

Particularly Nitrogen, Phosphorous, Potassium and Micronutrients

Resistance to Environmental Stress

- Reduced drought and heat stress. The deposition of Si in the plant tissues reduces transpiration rates.
- Reduce salt stress by inhibiting Sodium uptake.
- Alleviate toxicity of heavy metals: Iron, Manganese, Cadmiun, Aluminium, and Zinc by regulating plant uptake

Post Harvest Life

Si can associate with cell wall proteins where it might exert an active production of defence compounds

DOSAGE AND APPLICATION

Crops	Doses (L/ha/application)	
	SOIL	FOLIAR
Garlic and onion	5-10	1-4 0.5-1
Banana	7-15	1-4
Berries	5-10	1-3
Crucifers	5-10	1-4
Cucurbitaceae		
Fruit trees	5-10	2-4
Gramineae		1-4
Lettuce		1-4
Legumes		1-4
Ornamental	7-15	2-6
Papaya	5-10	1-6
Grass	10-40	
Solanaceous	5-10	1-4
Carrot	5-10	1-3





Calcium Silicate Fertilizer
Soil/Foliar



SIL-CA Mg

COMPOSITION		%w/v
Silicon (SiO ₂)		27,00
Calcium (CaO)		23,50
Magnesium (MgO)		8,25
Density	1,50	
pH	5-6	

CALCIUM and magnesium SILICATE FERTILIZER

CHARACTERISTICS

SIL Ca Mg is used as a source of Silicon, Calcium and Magnesium in plant nutrition programs.

The application of this product prevents and corrects Calcium deficiencies aggravated by slight deficiencies of Magnesium and Boron. Regular foliar application of **SIL Ca Mg** prevents the effect of calcium deficiencies (apical necrosis, fruit cracking and early maturation) and Magnesium deficiencies (photosynthetic activity reduction). Crops treated with **SIL Ca Mg** have better vegetative growth and higher harvest yield.

Resistance to Disease and Pest

Si deposition in the epidermis tissues provides a physical barrier to pathogens and insects, allowing for a reduction in the frequency of chemical applications

Cell Structure

Si accumulated in the epidermal tissues increases the mechanical stability of the plant. Reduces the incident of lodging

Photosynthetic Activity

The improved structure produces stronger stems with more erect leaves, increasing its ability to capture light

Uptake of Nutrients

Particularly Nitrogen, Phosphorous, Potassium and Micronutrients

Resistance to Environmental Stress

- Reduced drought and heat stress. The deposition of Si in the plant tissues reduces transpiration rates.
- Reduce salt stress by inhibiting Sodium uptake.
- Alleviate toxicity of heavy metals: Iron, Manganese, Cadmium, Aluminium, and Zinc by regulating plant uptake

Post Harvest Life

Si can associate with cell wall proteins where it might exert an active production of defence compounds.

DOSAGE AND APPLICATION

Crops	Dose (Foliar cc/100L)	Application
Horticultural	300-400	Apply 3-4 times at 2 weeks intervals since 15 days post-transplantation
Grapevine and Kiwi	200-300	Apply since 20 cm buds every 15 days (min. 3 applications)
Pome and Stone fruit	200-300	Apply since newly formed fruits until colour change
Pome fruits	250-350	Start applications in newly formed fruits, applying at 15 days intervals
Citrics	300	Apply during bud growth during spring and fall
Berries	200-300	Apply since budding until harvest at 15 days intervals
Potato	300-400	Start applications 30 days after emergence to improve photosynthesis

Caution

Avoid contact with eyes, food or drinks. Keep out reach of children. If swallowed seek medical advice.

Do not store in direct sunlight. Store between 5°C and 35°C.

Shake it before use



NEW

Datasheet



Fertilizer
Foliar/Soil

Si Silicon	Fe Iron	Zn Zinc
----------------------	-------------------	-------------------

SIL Fe Zn

COMPOSITION	%w/v
Silicon (SiO ₂)	18,0
Iron (Fe)	2,0
Zinc (Zn)	2,0

Immunity Activator - Biostimulant.
Special for Extensive Crops.

- DESIGNED FOR EXTENSIVE CROPS
- PREVENTIVE / CURATIVE ACTION
- OPTIMAL MISCIBILITY
- LOW COST OF TREATMENT (0.5L / HA)

CHARACTERISTICS

Sil Fe Zn activates natural immune systems of plants and stimulates their growth and development. It contains silicon which is easily absorbed by plants, strengthening cell walls and stimulating numerous vital processes in the plant.

Sil Fe Zn as an immunity stimulant is one of the main elements of the strategy to support the natural resistance of plants STRESS CONTROL SYSTEM.

ACTIONS

- **INCREASED PLANT TOLERANCE TO ADVERSE GROWING CONDITIONS (E.G. DROUGHT AND OTHER ABIOTIC STRESSES).**
- **LIMITED INFLUENCE OF BIOTIC STRESS CAUSED BY PATHOGENS AND/OR PEST ATTACK.**
- **STIMULATED ROOT GROWTH IN YOUNG PLANTS.**
- **IMPROVED CROP YIELD, QUALITY AND STORAGE PARAMETERS.**

FOLIAR APPLICATION

Crops	Treatments	Water Volume
Cereals	2-4	200-300
Trees	2-4	500-1000
Horticultural	2-4	400-600

Dosage: 0,5 l/ha

⚠ Shake it before use

SOIL APPLICATION

Irrigate the plants 3-6 times in the vegetative period with a 0.1% product solution (100ml of product in 100 liters of water).

LEAF FERTILIZATION:

Apply at critical times for plant growth and development every 10-14 days. To increase the resistance of plants to periodic water shortages - perform at least one treatment before the expected period of water shortage, and then 2-3 treatments every 5-7 days.



Datasheet



Nutrient corrector
Soil/Foliar



SIL-MARE NPK

COMPOSITION	%w/w
Seaweed extract	23,00
Silicon (SiO ₃)	10,00
Total Nitrogen (N)	5,00
Phosphorus (P ₂ O ₅)	3,00
Potassium (K ₂ O)	7,00
Alginic acid	0,60
Manitol	0,20

Seaweed biostimulant action

COMBINED ORGANIC-MINERAL NPK LIQUID FERTILIZER WITH SILICATE AND SEAWEED EXTRACTS FOR REVITALIZATION AND STRENGTHENING OF THE PLANTS.

CHARACTERISTICS

SIL MARE NPK is an NPK fertilizer containing natural seaweed extract derived from Ecklonia maxima as well as 10% Silicon that strengthens plant tissues.

It contains, in addition to the mineral nutrients and silicate, valuable components excreted from the cellular juice of the seaweed (Ecklonia Maxima). These are mainly phytohormones (Auxins), polysaccharides, vitamins.

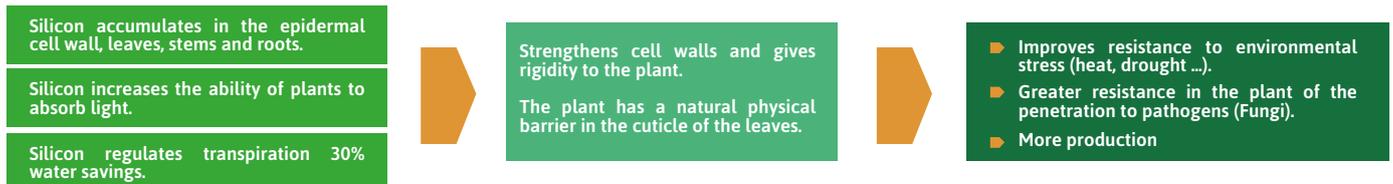
SIL MARE NPK is an organic and free residue product that provides SILICON to plant tissues in a rapidly and effectively way achieving to induce natural self-defense mechanisms within the plant.

ACTIONS

SIL MARE NPK Provides rigidity to the plan tissues:

- **MORE ERECTED LEAVES.**
- **TISSUES LESS APPETIZING FOR CHEWING AND SUCKING.**
- **INSECTS.**
- **CONDUCTING VESSELS MORE OPERATIONAL**
- **FASTER HEALING OF WOUNDS.**

SILICON EFFECTS ON PLANTS:



APPLICATIONS

Crops	Doses	Application
Apple	3-4 L/Ha	1st sprouting. Repeat after setting.
Cereal	200-300cc/cl	1 to 2 application during tillering and entanglement.
Citrus	3-4 L/Ha	1st sprouting. Repeat after setting.
Corn	500cc/cl	1st in 20 cm plant. Repeat at 15 days.
Garlic	500cc/cl	1st with 4 true leaves. Repeat after 15 days.
Onion	500cc/cl	1st 20 days after transplant. Repeat at 15 days
Potato	500cc/cl	1st with 4 true leaves. Repeat after 15 days.
Rice	500cc/cl	1st at the start of tillering. Repeat at 20 days.
Turf	400cc/cl	Apply after each cut.
Vine	3-4 L/Ha	1st in sprouting. Repeat after setting.
Watermelon	500cc/cl	1st in 20cm plant. Repeat at 15 days.

Applied preventively, SIL MARE NPK protects against mites and other soft-bodied insects: spider mites, whiteflies, aphids, caterpillars.... and most common fungal diseases: powdery mildew, botrytis.

CAUTION

Good compatibility with all phytosanitary products. With products based on trace elements, reduce the dose and make a test. A simple compatibility test with the intended mixing components is recommended before use.



SOLAR PROTECTOR





Fertilizer
Foliar/Soil

Micronized calcium carbonate liquid

PROTECT SUN FLOW

COMPOSITION

%w/v

Calcium (CaO ₃)	34,0
Silicon (CaSiO ₃)	5,0
pH (solution 1%)	7-8

CHARACTERISTICS

PROTECT SUN FLOW is a micronized calcium carbonate liquid sunscreen and next-generation silicon, designed to provide protection to the plant and fruit during the period of growth, improving the health of the plant and eliminating sunburn.

The foliar application of **PROTECT SUN FLOW** at the defined dosage, allows to create an indirect protection of the plant and the fruits from sunburn and more generally from thermal stress. The homogeneous film that forms on the plant protects the crops from UV rays: reducing absorption and increasing the light diffusion.

APPLICATION

CROP	Application per season	Amount of formulated /Ha
Apples	3	20-30 L/Ha
Citrus	3	20 L/Ha
Tomatoes	3	20 L/Ha
Melons	2	20 L/Ha
Watermelons	2	20-30 L/Ha
Grape	3	10-20 L/Ha
Pomegranate	3	20 L/Ha
Avocado	3	20 L/Ha

ACTIONS

- *Reduces the temperature in plants and fruits by 3 - 4 °C*
- *Reduces damage from sunburn*
- *Improvement of post-harvest quality*
- *Protects against water stress*
- *Enhances the fruit color*
- *Extends post-harvest life*
- *Reduces the attack of insects*
- *Prevents mildew and oidium*
- *Easy removal in post-harvest*

CROP	Amount of water /Ha	Total season /Ha
Apples	800-1000 L/Ha	800-1000 L/Ha
Citrus	800-1000 L/Ha	800-1000 L/Ha
Tomatoes	750 L/Ha	750 L/Ha
Melons	1000 L/Ha	1000 L/Ha
Watermelons	1000 L/Ha	1000 L/Ha
Grape	1000 L/Ha	1000 L/Ha
Pomegranate	1000 L/Ha	1000 L/Ha
Avocado	1000 L/Ha	1000 L/Ha

! Shake it before use

Caution !

Avoid contact with eyes, food or drinks. Keep out reach of children. If swallowed seek medical advice. Do not store in direct sunlight. Store between 5°C and 35°C

SOLAR PROTECTOR

tangel_{AGRO}

www.tangelagro.com

AVAILABLE IN
1L - 5L - 10L - 20L - 1000L
Plastic Bottle/IBC



IMPORTED FROM EU



tangel^{leaf}AGRO

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