HydroKimia

Sustainable Soil Care Solutions

Specialized in Soil Amendemats
Greenhouse Shading

PRODUCTS CATALOGUE

Hydrokimia began its activities in the agricultural field in 2011, with the aim of providing new solutions for improving and modifying agricultural soils. We believe that real agricultural progress begins with healthy soil; because soil is a hidden capital that we can make more efficient with modern knowledge and technology.

Hydrokimia, relying on local knowledge and field experience, has developed the production of soil-improving fertilizers appropriate to the climatic conditions and soils of Iran.

We stand with the farmers and experts of this land to together create efficient solutions to improve soil structure, increase productivity, and achieve sustainable agriculture.

Our vision

At Hydrokimia, we strive to provide effective solutions to improve soil and increase agricultural productivity, relying on up-to-date knowledge and field experience. Our goal is to maintain soil health and contribute to the sustainability of agriculture in Iran.

Our mission

Innovation is our motto; we strive every day to provide farmers with products of excellent quality and guaranteed efficiency; and we owe this to our continuous and extensive research and development activities and the use of the perspectives of our farmers and agricultural colleagues.



MINERAL SOIL CONDITIONER

TARGETED SOIL CARE



HydroKimia

MINERAL SOIL CONDITIONER

Hydro-Salt

Sodium and Saline Soil Corrector



Anti-salinity fertilizer and soil conditioner

Hydro-Salt is a saline and sodic soil amendment and is a concentrated liquid fertilizer based on calcium, sulfur and organic acids.

Hydro-Salt also increases the cation exchange capacity and improves soil texture, thus strengthening the structure and improving the physical-chemical properties and performance of the soil and providing conditions for the absorption of other micronutrients by the roots.

Hydro-Salt anti-salinity fertilizer corrects two main problems that arise in saline soils:

First, it removes sodium ions bound to organic matter and clay in the soil and then replaces sodium with calcium.

The released sodium is then leached from the root zone in the form of sodium sulfate through irrigation.

Guaranteed Analysis(% w/v)

Total Calcium (CaO)	26%
Sulfur (SO_3)	37.5%
Fulvic Acid	2.5%
Chelated Calcium	2.8%
Organic Matter	4%

PHYSICAL AND CHEMICAL PROPERTIES:

Density: 1.48-1.5 ($\frac{gr}{cm^3}$)

pH: 6.8-7.8

Conductivity: 1-5 ($\frac{mS}{cm}$)

Hydro-Salt HIGHLIGHTS

1 Reduce Soil Salinity

2 Increase Soil CEC

3 Increase Soil Aeration

APPLICATION RATES

Soil Amerliorant or Fertigation

10 – 50 L/ha as required. Use higher rate for soil amelioration.

Liquid Inject

2 – 5 L/ha. Use a minimum dilution rate of 1 part product to 3 parts water. Rate will depend on crop, row spacing & soil type.

Always consider N & P crop requirements for starters based on reliable soil test data

Home Garden Application

Dilute 45 mL per 9 L watering can and apply the diluted mix at a rate of 1 litre per square metre. Repeat every 2 - 4 weeks as required.

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MINERAL SOIL CONDITIONER

Hydro-Caltrak

Organic Liquid Calcium (SC)

Organic Liquid Calcium Fertilizer

A fertilizer containing 51% calcium, which is very useful and effective for meeting the needs of the plant.

Calcium is known as the leading mineral element. Calcium is also a carrier of other elements. With Hydro-Caltrak, we can achieve more effective and efficient results, because it can be applied through any type of fertilization and irrigation system.

Due to its easy dispersion in water, calcium can be easily delivered to the roots without mixing with the soil.

- Increase the photosynthesis process
- Increase the absorption of other nutrients
- Accelerate cell division and stimulate enzymes
- Increase the shelf life and durability of the product in the market

Guaranteed Analysis(% w/v)

Total Calcium (CaO)	51%
Total Magnesium (MgO)	1.5%
Boron (B)	0.2%
Fulvic Acid	2%
Organic Matter	3%

PHYSICAL AND CHEMICAL PROPERTIES:

Density: 1.6 $(\frac{gr}{cm^3})$

pH: 8.6-9.6

Conductivity: 4-15 $(\frac{mS}{cm})$



Hydro-Caltrak HIGHLIGHTS

1 Organic Calcium For Optimom Crop Quality

2 Complexed With Organic Acids

3 Chlorine Free

APPLICATION RATES

Soil Ameliorant or Fertigation:

Recommended application rate: 10 – 50 L/ha as required. Use a higher rate for soil amelioration.

Liquid Inject:

Recommended application rate: 2 – 5 L/ha. Use a minimum dilution rate of 1 part product to 3 parts water.

The rate will depend on crop, row spacing, and soil type.

Always consider N and P crop requirements for starters based on reliable soil test data.

Home Garden Application:

Dilute 45 mL per 9 L watering can and apply the diluted mix at a rate of 1 litre per square metre – this diluted mix can also be poured over foliage. Repeat every 2 - 4 weeks as required.

HydroKimia

MINERAL SOIL CONDITIONER

Hydro-CalMag

Organic Liquid Calcium & Magnesium (SC)

Organic Liquid Calcium Magnesium Fertilizer

Calcium and Magnesium are two of the four essential elements that must be supplied at high levels for maximum performance and efficiency throughout the crop production cycle. This product increases photosynthetic capacity and leaf mass growth in the early stages of plant growth.

Hydro-CalMag is enriched with Boron and Fulvic Acid to improve nutrient absorption.

- This product is compatible with almost all sources.
- 80% of leaves require an increase in these elements.
- Calcium and Magnesium are essential elements for plants.



Hydro-CalMag HIGHLIGHTS

1 Rich In Calcium And Magnesium

2 Complexed With Fulvic Acid

3 Chlorine Free

Guaranteed Analysis(% w/v)

Total Calcium (CaO)	26%
Total Magnesium (MgO)	17%
Total Boron (B)	0.2%
Fulvic Acid	2%
Organic Matter	3%

PHYSICAL AND CHEMICAL PROPERTIES:

Density: 1.6 $(\frac{gr}{cm^3})$

pH: 7.5-9.5

Conductivity: 1.5-2.5 $(\frac{mS}{cm})$

APPLICATION RATES

Soil Amelioration or Fertigation:

10 – 30 L/ha as required. Use higher rate for soil amelioration.

Liquid Inject:

2 – 3 L/ha

Use a minimum dilution rate of 1 part product to 3 parts water. Rate will depend on crop, row spacing, and soil type. Always consider N & P crop requirements for starters based on reliable soil test data.

Home Garden Application:

Dilute 45 mL per 9 L watering can and apply the diluted mix at a rate of 1 litre per square metre – this diluted mix can also be poured over foliage. Repeat every 2 – 4 weeks or as required.

HydroKimia

MINERAL MICRONUTRIENT FERTILIZER

TARGETED PERFORMANCE



HydroKimia

MINERAL MICRONUTRIENT FERTILIZER

Hydro-CalSil

Calcium Silicate Fertilizer

Calcium silicate fertilizer

Hydro-CalSil is a new generation of boron formulations that contain boron and .calcium nanoparticles in the form of a concentrated suspension

This product can be used as a micronutrient supplement to prevent or correct .deficiencies in agriculture and horticulture

Due to the low electrical conductivity of this product, it can also be used in .climates with high radiation



Hydro-CalSil HIGHLIGHTS

1. Leaf Strength
2. Strengthening of cell walls
3. Enhancing plant resistance to stress

Guaranteed Analysis(% w/v)	
Silicon (SiO_2)	35%
Calcium (Ca)	35%
Magnesium (MgO)	4%
Boron (B)	0.3%

PHYSICAL AND CHEMICAL PROPERTIES:

Density: 1.4 $(\frac{gr}{cm^3})$

pH: 7- 8

APPLICATION RATES

Type	Doses
Garlic and onion	5-10 l/ha
Fruit trees, Olive trees, vineyard	5-10 l/ha
Citrus trees	5-10 l/ha
Grass	10-40 l/ha

HydroKimia

MINERAL MICRONUTRIENT FERTILIZER

Hydro-Bortrak

Concentrated Boron Fertilizer Solution

Liquid boron element with high absorption capacity

Hydro-Bortrak is a fast-absorbing liquid foliar fertilizer that is a rich source of boron for plants. This product improves the quality of flowering and fruit formation by enhancing cell division, the growth of young plant tissues, and the transport of sugars. It also increases the strength of tissues by increasing calcium absorption and prevents the complications of boron deficiency such as flower drop and fruit cracking; therefore, it is a reliable option for meeting the needs of crops for this key element.



Bortrak HIGHLIGHTS

1. Improved flowering & fruit set
2. Stronger tissues & reduced fruit cracking
3. Reduces flower & fruit drop

Guaranteed Analysis(% w/v)

Boron (B)	15%
Nitrogen (N)	3%

PHYSICAL AND CHEMICAL PROPERTIES:

Density: 1.36 $(\frac{gr}{cm^3})$

pH: 8

Conductivity: 0.22 $(\frac{mS}{cm})$

APPLICATION RATES

Type	Time	Doses
General Vegetables	After sufficient leaf growth	3.0 L/ha
Cereals	3-leaf stage	0.5–1.0 L/ha
Fruits	At white bud stage	1.0 L/ha
Potatoes	6-leaf stage	1.0 L/ha
All Crops	As needed	0.5–3 L/ha or 200–400 mL per 100 L water
Pastures	In pastures	0.5–1.0 L/ha
General Spraying	As needed	0.5–1.0 L/ha
Ornamental Plants	After sufficient leaf growth	1.0 L/ha

HydroKimia

MINERAL MICRONUTRIENT FERTILIZER

SilKare

Soluble Potassium Silicate Clear Source

Potassium Silicate Fertilizer (Nutrition – Enhances Plant Defense)

Potassium Silicate Fertilizer is a mineral nutritional supplement.

This fertilizer serves as an important source of potassium and silicon for plants, each of which plays a key role in strengthening plant structure and supporting overall plant functions.

Proper use of this fertilizer can improve overall plant health, boost crop yield, enhance photosynthesis, and increase Brix levels in plants.

It is usually supplied as an aqueous solution, which is easily absorbed by plants.



Silkare HIGHLIGHTS

1. Enhances cell wall strength
2. Improves plant resistance to environmental stresses
3. Increases crop Brix level

Guaranteed Analysis (% w/w)

Potassium (K_2O)	13%
Silicon (SiO_2)	27%
Boron (B)	0.2%

PHYSICAL AND CHEMICAL PROPERTIES:

Density: 1.4 $(\frac{gr}{cm^3})$

pH: 12.3

APPLICATION RATES

Crops	Foliar Spray Rate	Frequency
Vegetables	0.3L per 100 L water up to 2 L/ha equivalent	Every 2 weeks or as required
Orchards & Vineyards	0.3L per 100 L water up to 3 L/ha equivalent	Every 4 weeks or as required
Ornamentals & Turf	0.3L per 100 L water up to 2 L/ha equivalent	Every 4 weeks or as required
Spot Spraying	25 mL per 10 L water	As required

HydroKimia

MINERAL MICRONUTRIENT FERTILIZER

Hydro-Robust

Calcium and Boron Deficiency Corrector

Compensates for calcium and boron deficiency

Hydro-Robust is a new generation of boron formulations that contain boron and calcium nanoparticles in the form of a concentrated suspension

This product can be used as a micronutrient supplement to prevent or correct deficiencies in agriculture and horticulture.

Due to the low electrical conductivity of this product, it can also be used in climates with high radiation.



Hydro-Robust HIGHLIGHTS

1. Very effective in terms of a homogeneous and stable formulation
2. strengthens cell membranes
3. Boron: essential for cell and tissue growth

Guaranteed Analysis(% w/v)	
Total Calcium (CaO)	21.5%
Total Boron (B)	10%
Total Magnesium (MgO)	2.5%

PHYSICAL AND CHEMICAL PROPERTIES:

Density: 1.47 $(\frac{gr}{cm^3})$

pH: 7

APPLICATION RATES

Type	Purpose	Doses
All Crops	Providing boron, calcium movement and transport, quality of pollen, flowering and fruit, rate of photosynthesis	Foliar fertilization: 0.5-3 l/ha (200-400 l water)
Vegetables	Quality of leaf, stability of stem, N absorption efficiency, Vitality (in frost), even maturation	2-3 l/ha (2-4 times)
Pome fruits	Fruit set, skin quality, flower bud development, winter hardiness	1.5-2 l/ha (2-4 times)
Citrus fruits	Fruit set, skin quality, flower bud development, winter hardiness	1.5-2 l/ha (2-4 times)
Vine grapes	Fruit set, skin quality, flower bud development, winter hardiness	1.5-2 l/ha (2-4 times)
Potatoes	Internal quality, N efficiency, skin firmness	1.5-2 l/ha (1-3 times)
Ornmentals	N efficiency, leaf quality, vitality	1-2 l/ha (1-2 times)
Suger beet	Increasing vitality, efficiency of N, (e.g. in frost conditions), to prevent heart rot and dry rot, sugar content	3-4 l/ha (1-3 times)

HydroKimia

MINERAL MICRONUTRIENT FERTILIZER

Hydro-K50

Liquid Potassium Fertilizer NK 4-50

Liquid Potassium Fertilizer

Potassium is an essential nutrient required for all agricultural crops.

After nitrogen, it is the second most needed element by plants.

Being highly mobile, potassium is quickly distributed throughout the plant.

Its main role is regulating water balance, which directly affects many vital processes.

Potassium plays a key part in maintaining cell water content, cell strength, and transpiration rate.

In addition, the transport of photosynthetic products and the activation of several plant enzymes strongly depend on potassium.

Guaranteed Analysis (% w/v)

Potassium (K_2O)	50%
Total Nitrogen (N)	4%
Ammoniacal Nitrogen (N)	1%
EDTA	2%

PHYSICAL AND CHEMICAL PROPERTIES:

Density: 1.5 $(\frac{gr}{cm^3})$

pH: 11.5-12.5



Hydro-K50 HIGHLIGHTS

1. Fast uptake through leaves and roots
2. Enriched with Nitrogen and other micronutrients
3. Chelated with EDTA

APPLICATION RATES

Type	Purpose	Doses
Cereals	When deficiency is suspected repeat applications as necessary at 10-14 day intervas	2.0 l/ha 200ml/100L
Cut Flowers	3-4 applications during bud initiation and main flowering period at 10-14 day intervals	3.0 l/ha 300 ml/100L
Fruits	When deficiency is diagnosed or suspected 10-14 day intervals	3.0-5.0 l/ha 300-500 ml/100L
Potatoes	2-4 application at bulking at 10-14 day intervals	up to 5.0 l/ha 500ml/100L
Salad Crops	When deficiency is diagnosed or suspected. Repeat as necessary at 10-14 day intervals	2.0 l/ha 400ml/100L
Leafy Crops	When deficiency is diagnosed or suspected. 10-14 day intervals	2.0 l/ha 400ml/100L
Vines	3-5 aplication at 10-14 day intervals	2.0 l/ha 200ml/100L
Other Crops	When deficiency is diagnosed or suspected. Repeat as necessary at 10-14 day intervals	2.0 l/ha 400ml/100L

HydroKimia

GREENHOUSE COATINGS

TARGETED COOLING



HydroKimia

GREENHOUSE COATINGS

Hydro-White

Waterproof Shading Agent For Greenhouses

Rainproof shading powder for greenhouses

Hydro-White is a temporary shade coating for plastic and greenhouse roofs.
Plants inside the greenhouse are protected from sunlight and heat radiation after spraying this product on the greenhouse roof.
This reduces the temperature of the greenhouses and creates a favorable climate, which allows for stable plant growth.
The coating is resistant to rain.

- Suitable for all types of greenhouse roofs, including plastic - polycarbonate and glass
- The two-component coating creates a completely uniform water- and rain-proof film.
- Resistant to rain and weathering for up to 6 months, depending on weather conditions.



Hydro-White HIGHLIGHTS

1 Cooling The Greenhouse Environment

2 Greenhouse Light Management

3 Suitable for glass, acrylate, polycarbonate and plastic film

Contents of a pack

Powder bag	**20kg**
Additives	**2 liter gallon**

How to use

The tank and spray paths should be clean.

First add the liquid component to approximately 100 liters of clean water and stir the tank.

Then add the powder component and mix well.

While the roof surface is dry, spray the contents of the tank on 1000 to 1200 square meters of roof.

Stir the contents of the tank regularly while spraying. If there is a possibility of rain, postpone spraying.

Consumption rate

Shading	Spraying surface	Number of 20 kg bags
80%	**1000 m^3**	**2 bags**
60%	**1000 m^3**	**1 bags**

HydroKimia

GREENHOUSE COATINGS

BLUEFIX

Waterproof Shading Agent For Greenhouses

Rainproof shading powder for greenhouses

BLUEFIX is a temporary shade cover with a blue shade and light weight for plastic and greenhouse roofs.

The blue shade increases shading and filters more of the UV spectrum, which is very suitable for plants that require more shade and coolness (such as peppers and roses ...).

After spraying this product on the greenhouse roof, the plants inside the greenhouse are protected from light and heat radiation from the sun.

The coating is resistant to rain.

-Suitable for all types of greenhouse roofs, including plastic-polycarbonate and glass

-The two-component coating creates a completely uniform waterproof and rainproof film.

-Resistant to rain and weathering for up to 6 months, depending on weather conditions.



BLUEFIX HIGHLIGHTS

1 Cooling The Greenhouse Environment

2 Filter UV Spectrometer At Heat Source

3 Suitable for glass, acrylate, polycarbonate and plastic film

Contents of a pack

Blue powder bag	**12 kg**
Additives	**2 liter gallon**

How to use

The tank and spray paths should be clean.

First add the liquid component to approximately 100 liters of clean water and stir the tank.

Then add the powder component and mix well.

While the roof surface is dry, spray the contents of the tank on 1000 to 1200 square meters of roof.

Stir the contents of the tank regularly while spraying. If there is a possibility of rain, postpone spraying.

Consumption rate

Shading	Spraying surface	Number of Bluefix packs
60%	**square meters 1200**	**1 pack**

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HydroKimia

Sustainable Soil Care Solutions

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