



Customized Provider of Special Fertilizer Integration Solutions

Customized Provider of Special Fertilizer Integration Solutions

# Formula Manual

Email :[info@ihumate.com](mailto:info@ihumate.com)  
WhatsApp :(+86) 188 7423 0390  
Shanxi Ihumate Biotech Co.,Ltd



Email :[info@ihumate.com](mailto:info@ihumate.com)  
WhatsApp :(+86) 188 7423 0390  
Shanxi Ihumate Biotech Co.,Ltd



Making Ideal Nutrients For Precision Agriculture



Making Ideal Nutrients For Precision Agriculture

# (A) HIGH CONCENTRATION LIQUID NPK SPECIAL FERTILIZER

This kind of product is processed by DOC process with high content. Contains high efficiency active (OA) additives to improve the absorption rate and utilization rate of fertilizer. Effectively prevent the phenomenon of leaf edge yellowers and fruits, poor quality, premature aging caused by crop deficiency, and can play a role in improving quality, increasing yield, expanding fruit, and effectively enhance the disease resistance and stress resistance of crops.

## Product Features:

Water soluble: can be quickly dissolved in cold water, can be arbitrarily added water allocation.

Absorption rate: Adding active (OA) additives, absorption utilization rate of more than 90%.

Mixability: PH neutral can be mixed with most pesticides and foliar fertilizer.

## 1.Fluid special fertilizer series



Balanced type



High phosphorus type



High nitrogen type  
holotype



Super high phosphorus potassium type

High potassium type

High phosphorus high potassium type

Phosphorus potassium zinc type

Potassium phosphite type

### Technical indicators:

type	Technical index	Specific gravity	type	Technical index	Specific gravity	
Balanced type	170-170-170+TE	1.35		0-300-320+TE		
High nitrogen type	420-0-0+TE	1.3	High in phosphorus and potassium type	0-340-520+TE	1.6	
	300-100-100+TE			0-400-500+TE		
	280-70-180+TE			0-450-450+TE		
	200-150-150+TE			80-230-270+TE		
	200-200-100+TE			40-250-250+TE		
	320-0-120+TE			80-300-300+TE		
High phosphorus type	200-300-0+TE	1.3		100-200-300+TE		1.6
	100-300-100+TE			100-280-300+TE		
	150-600-0+TE			40-260-350+TE		
	160-210-130+TE			100-300-400+TE		
	50-300-50+TE			50-400-200+TE		
	80-320-100+TE			50-200-400+TE		
	60-385-195+TE			0-440-560+TE		
	100-400-100+TE			0-300-400+TE		
	50-400-50+TE			0-324-520+TE		
	40-600-40+TE			0-450-450+TE		
	100-400-0+TE			40-270-360+TE		
	0-600-0+TE			Ultra-high phosphorus potassium type		
100-500-0+TE	0-410-450+TE					
100-500-100+TE	0-500-500+TE					
150-500-0+TE	0-500-600+TE					
100-300-200+TE	0-610-410+TE					
0-0-580+0M180+TE	0-260-340+TE	1.44				
Pure potassium	0-0-580+0M180+TE	1.4	0-290-390+TE	1.5		
	0-0-580+0M180+TE		0-420-550+TE	1.67		
	0-100-500+TE		0-480-630+TE	1.77		
High potassium type	0-20-580+TE	1.4	0-400-440+TE	1.6		
	10-0-390+TE		0-460-500+TE	1.67		
	30-170-300+TE		Phosphorus potassium zinc type	0-300-190+20Zn	1.4	
	40-60-400+TE			0-430-70+15Zn		
	50-50-300+TE		/			
	50-50-400+TE					
	100-0-400+TE					
	100-0-500+TE					
	100-50-350+TE					
	100-100-300+TE					
	100-100-400+TE					
	110-160-230+TE					
	120-100-320+TE					
	150-100-300+TE					
	160-60-260+TE					

## (2) Sugar alcohol chelate, water soluble fertilizer series of trace elements

### ① Sugar alcohol water agent



>>> Calcium sugar alcohol Ca ≥ 180g/L Specific gravity: 1.5

This product uses the enzyme calcium hydrolysis technology, the use of the exclusive introduction of the international leading manufacturing process refined into efficient enzymatic calcium. Calcium in this product is calcium as the carrier, the enzyme hydrolysis of calcium ions, calcium and enzyme combination to improve the bioutilization activity of calcium, so that calcium can be efficiently absorbed and utilized by crops, solve the problem of low calcium absorption rate, and have a good preventive effect on physiological diseases caused by calcium deficiency. Powerful calcium supplement: This product has a calcium content of up to 180g/L, and is enzymolized calcium (high availability), so as to effectively meet the nutritional needs of crops for calcium elements.

>>> Calcium magnesium sugar alcohol Ca ≥ 170g/L Mg ≥ 10g/L Specific gravity: 1.5-1.55

This product is a medium and trace element liquid product developed according to the different proportion of various elements required in different periods of crop growth, and processed by special technology. Each element in the product is rich in organic efficient active agents, which can improve the absorption rate of crops and effectively prevent leaf edge yellowing, leaf rolling, production delay, poor quality, premature aging and other phenomena caused by crop deficiency. And improve crop quality, increase yield.

>>> Calcium magnesium zinc sugar alcohol Ca ≥ 150g/L, Mg ≥ 10g/L, Zn ≥ 10g/L Specific gravity: 1.5-1.55

This product is a water-soluble foliar fertilizer prepared by complexing reaction of medium element calcium, magnesium and trace element zinc. Calcium in this product exists in complex state, high content, easy to absorb, can supplement calcium for crops, and prevent and treat physiological diseases caused by calcium deficiency in crops. Promote the healthy growth of plants, improve fruit yield and quality, reduce the occurrence of diseases during storage. Complexed magnesium increases chlorophyll content, promotes photosynthesis, activates enzymes in crops, improves crop sweetness and improves crop quality.

>>> Liquid calcium magnesium N ≥ 110g/L CaO ≥ 100g/L MgO ≥ 30g/L Specific gravity 1.3 (colorless)

>>> The proportion of nitrogen 200+ calcium 130+ magnesium 30 that does not react with phosphorus: 1.5

Mg

&gt;&gt;&gt; Magnesium sugar alcohol Mg ≥ 80g/L Proportion: 1.34



1. Chelate state, easy absorption, intelligent magnesium supplement, good effect;
2. Enhance photosynthesis, leaves thick green, strong growth;
3. Promote sugar metabolism and crop respiration, regulate crop growth, prevent premature aging;
4. Improve the protein and sugar content of crops, and the fruit has bright color and good taste;
5. Improve the activity of leaf tissue cells, resist the infection of pathogens and the spread of lesions, and slow down the necrosis of lesions.

B

&gt;&gt;&gt; Boron sugar alcohol B ≥ 150g/L Specific gravity: 1.37



1. Chelate state, easy absorption, intelligent boron supplement, good effect;
2. Promote the formation and development of crop reproductive organs, promote flower preservation, smooth fruit, improve quality;
3. Promote cell division and development, so that crops grow robust;
4. Effective correction of flower and unfruiting, brown heart disease, black heart disease, brown rot and other physiological diseases.

Fe

&gt;&gt;&gt; Iron sugar alcohol Fe ≥ 60/100/160g/L proportion :1.19/1.35/1.49

1. Chelate state, easy absorption, intelligent iron supplement, good effect;
2. Solve the physiological problems caused by iron deficiency, such as leaf greening, yellow and white, and low photosynthetic utilization rate;
3. Significantly enhance photosynthesis, make leaves turn green and thicken rapidly;
4. Improve the activity of leaf tissue cells, resist the infection of pathogens and the spread of lesions, and slow down the necrosis of lesions.

>>> Ferric nitrogen sugar alcohol  
Nitrogen 200 (amide nitrogen 145, nitrate nitrogen 55), iron 70. Specific gravity 1.29



Zn

&gt;&gt;&gt; Sugar alcohol Zinc ≥ 150/180/200g/L Specific gravity: 1.37/1.40/1.45

1. This product is made of organic matter chelate, especially add (OA) additives, easy to stick, can quickly penetrate the crop surface, prevent antagonism, is conducive to crop absorption and utilization, significantly improve the yield and quality of crops.
2. This product can prevent various diseases caused by zinc deficiency, such as "leaf disease" and "cluster leaf disease" of trees, "white seedling disease" of corn, "red seedling disease" and "shrink seedling" of rice, and other crops caused by zinc deficiency growth inhibition, leaf yellowing, low resistance and other symptoms. At the same time, other necessary elements are added to completely solve the nutritional imbalance and enhance the resistance of crops to disease.

>>> Sugar alcohol zinc manganese  
sugar alcohol ≥ 80g/L, zinc ≥ 50g/L, manganese ≥ 50g/L, specific gravity 1.2

Mn

&gt;&gt;&gt; Manganese sugar alcohol

Mn ≥ 225g/L specific gravity 1.5, freezing point -16°C;  
Mn ≥ 110g/L specific gravity 1.5  
Mn ≥ 100g/L specific gravity 1.25, freezing point -16°C, color is light pink.

Mo

&gt;&gt;&gt; Molybdenum sugar alcohol Mo ≥ 20g/L specific gravity 1.02

② Marine algae water agent

K

&gt;&gt;&gt; Seaweed potassium

0-50-500+20g/L alginic acid  
+TE (Fe, Mn, Zn, B 0.5g/L each)



>>> Polyphenol potassium phosphorus (seaweed potassium phosphorus)  
0-400-500+2 boron +1 zinc + seaweed extract 100g/L



>>> Seaweed silicon potassium  
① Silicon 90+ Potassium 150+ seaweed  
② Silicon oxide 395-potassium oxide 220, seaweed extract 20,  
specific gravity 1.43, freezing point -16°C

>>> Seaweed humate potassium silicon  
0-20-180+100SiO<sub>2</sub>+30HA+ Seaweed extract 30g/L



Ca

>>> Algae calcium  
Technical index 1: Nitrogen 110, Ca160, seaweed extract 100g/L  
Technical index 2: Calcium ≥180g/l Seaweed extract ≥100g/L  
Sugar alcohol polymer ≥90g/L green proportion 1.5



>>> Algae calcium magnesium micro  
Nitrogen 110, Ca150, Mg5, boron 2, zinc 1,  
Manganese 1, iron 1, Copper 1,  
seaweed extract 100g/L



>>> Algae calcium magnesium boron zinc  
Ca ≥150g/L, Mg ≥5g/L, Zn ≥2g/L,  
B ≥2g/L, Fe ≥1g/L, seaweed ≥5g/l  
Specific gravity: 1.48-1.5



B

>>> Algal boron  
B ≥150g/L, seaweed ≥20g/L Proportion: 1.37



1. Special addition of alginic acid, easy absorption, intelligent boron supplement, good effect;
2. Promote the formation and development of crop reproductive organs, promote flower preservation, smooth fruit, improve quality;
3. Promote cell division and development, so that crops grow robust;
4. Effective correction of flower and unfruiting, brown heart disease, black heart disease, brown rot and other physiological diseases.

>>> Boron 150+ Molybdenum 2+HA+ seaweed



>>> Eleven elements of seaweed

N ≥100g/L	P <sub>2</sub> O <sub>5</sub> ≥40g/L	K <sub>2</sub> O ≥40g/L	CaO ≥126g/L
MgO ≥16g/L	B ≥1g/L	Fe ≥0.3g/L	Mn ≥0.3g/L
Zn ≥0.3g/L	Cu ≥0.1g/L	Mo ≥0.5g/L	Seaweed ≥100g/L

## >>> Twelve elements of seaweed

N $\geq$ 100g/L	P <sub>2</sub> O <sub>5</sub> $\geq$ 40g/L	K <sub>2</sub> O $\geq$ 40g/L	CaO $\geq$ 126g/L
MgO $\geq$ 16g/L	B $\geq$ 1g/L	Fe $\geq$ 0.3g/L	Mn $\geq$ 0.3g/L
Zn $\geq$ 0.3g/L	Cu $\geq$ 0.1g/L	Mo $\geq$ 0.5g/L	Ti $\geq$ 0.05g/L
seaweed $\geq$ 100g/L			

## >>> Thirteen elements of seaweed

N $\geq$ 100g/L	P <sub>2</sub> O <sub>5</sub> $\geq$ 40g/L	K <sub>2</sub> O $\geq$ 40g/L	CaO $\geq$ 126g/L
MgO $\geq$ 16g/L	B $\geq$ 1g/L	Fe $\geq$ 0.3g/L	Mn $\geq$ 0.3g/L
Zn $\geq$ 0.3g/L	Cu $\geq$ 0.1g/L	Mo $\geq$ 0.5g/L	Ti $\geq$ 0.05g/L
Se $\geq$ 0.05g/L	seaweed $\geq$ 100g/L		

## >>> Algae 14 elements

N $\geq$ 100g/L	P <sub>2</sub> O <sub>5</sub> $\geq$ 40g/L	K <sub>2</sub> O $\geq$ 40g/L	CaO $\geq$ 126g/L
MgO $\geq$ 16g/L	B $\geq$ 1g/L	Fe $\geq$ 0.3g/L	Mn $\geq$ 0.3g/L
Zn $\geq$ 0.3g/L	Cu $\geq$ 0.1g/L	Mo $\geq$ 0.5g/L	Ti $\geq$ 0.05g/L
Se $\geq$ 0.05g/L	Co $\geq$ 0.05g/L	seaweed $\geq$ 100g/L	

## ③ Other Aqueous solution

**K**

### >>> Silicon potassium mixture 45 silicon +150 potassium

1. This product adopts unique silicon solubilization technology, which makes the total amount of silicon and potassium in the liquid fertilizer reach ultra-high concentration, and greatly reduces the antagonism to pesticides in the mixing with pesticides, and significantly enhances the low temperature resistance of silicon and potassium fertilizer. It can quickly and efficiently supplement the needs of crops for silicon and potassium, and the absorption efficiency is 5-10 times that of similar products.
2. This product uses a new activator to maintain the stability of water-soluble silicon compounds, forming a more stable and active molecule in the product, which is conducive to crop photosynthesis and chlorophyll content, promote the accumulation of organic matter, improve the quality of crops, and increase the yield;
3. Improve the toughness and strength of plant cells, increase the thickness of cell wall, prevent lodging, improve the resistance of crops to diseases and pests, and reduce the occurrence of various diseases and pests;
4. This product can enhance the ventilation in the body of crops, prevent root rot and premature aging, effectively regulate the opening and closing of crop leaf stomata and inhibit water evaporation, enhance the drought resistance, cold resistance and low temperature resistance of crops, enhance the pollen vitality of melon and fruit crops, and significantly improve the fruit yield.

>>>600 liquid potassium 0-0-600+ Organic matter 190+TE colorless, specific gravity 1.52, freezing point -16°C  
Colorless, specific gravity 1.52, freezing point -16°C

>>>630 liquid potassium 0-0-630+ organic matter 200+TE colorless, specific gravity 1.57, freezing point -10°C  
Colorless, specific gravity 1.52, freezing point -16°C

>>>50-150-400 (no trace elements) Specific gravity: 1.4, PH: 8Colorless, specific gravity 1.52, freezing point -16°C

**Ca**

### >>> Calcium boron mixture Ca $\geq$ 140g/L B $\geq$ 10g/L Proportion: 1.47 Colorless, specific gravity 1.52, freezing point -16°C

1. Sugar alcohol complex, high absorption and utilization rate;
2. Combination of calcium and boron to prevent bitter pox, umbilical rot, cracked fruit, brown rot and other physiological diseases;
3. Promote waxy formation, bright fruit surface, reduce disease, improve fruit quality;
4. Strengthen cell wall, improve fruit hardness, prolong storage life;
5. Promote the development of reproductive organs, promote flower preservation, smooth fruit, accelerate the transport of carbohydrates and sugar synthesis, and improve quality.

>>> Phosphorus calcium zinc 40-420-40+35 Calcium +35 zinc specific gravity: 1.5  
Colorless, specific gravity 1.52, freezing point -16°C

>>> Chitosan oligosaccharide calcium Ca170g/L chitosan oligosaccharide 30g/L  
specific gravity :1.5 freezing point -16°C  
Colorless, specific gravity 1.52, freezing point -16°C

**B**

>>> Boron 100+ molybdenum 5+ Zinc 10+20HA black liquid  
Colorless, specific gravity 1.52, freezing point -16°C

>>> Boron zinc molybdenum boron  $\geq 120$ g/L, zinc  $\geq 10$ g/L, molybdenum  $\geq 5$ g/L  
proportion: 1.3 Colorless, specific gravity 1.52, freezing point -16°C

>>> Boron 20 zinc 40 manganese 30 copper 10  
(Trace elements are more balanced, and all trace elements in EDTA state are used) specific gravity: 1.3-1.32

>>> Boron zinc manganese copper boron  $\geq 95$ g/L, zinc  $\geq 3$ g/L, manganese  $\geq 1$ g/L, copper  $\geq 1$ g/L  
Specific gravity: 1.25

>>> Boron zinc manganese iron boron  $\geq 95$ g/L, zinc  $\geq 3$ g/L, manganese  $\geq 1$ g/L, iron  $\geq 1$ g/L  
proportion: 1.26

>>> Boron zinc molybdenum iron manganese  
Boron  $\geq 120$ g/L, zinc  $\geq 15$ g/L, molybdenum  $\geq 1$ g/L, iron  $\geq 2$ g/L, manganese  $\geq 1$ g/L Specific  
gravity: 1.36

>>> Boron, zinc, molybdenum, iron, manganese, copper specific gravity: 1.26  
Boron  $\geq 90$ g/L, zinc  $\geq 5$ g/L, molybdenum  $\geq 0.5$ g/L, iron  $\geq 1.5$ g/L, manganese  $\geq 1.5$ g/L,  
copper  $\geq 1.5$ g/L

>>> Liquid boron B  $\geq 150/180$ g/L specific gravity: 1.44 colorless

**Zn**

>>> Liquid zinc ① Zinc  $\geq 170$ g/L  
② Nitrogen  $\geq 170$ g/L, zinc  $\geq 150$ g/L, specific gravity 1.4 (light yellow liquid)  
③ Zinc  $\geq 220$ g/L, specific gravity 1.48 (colorless transparent liquid)

>>> Proportion of zinc 100+ boron 3:1.24

>>> Zinc 70+ manganese 28+ boron 0.1+ molybdenum 0.1 specific  
gravity: 1.23 colorless

>>> Zinc 50+ Boron 48+ Molybdenum 2+ iron 2+ manganese 2+ copper 2  
Specific gravity :130.87

>>> Zinc 50+ manganese 10+ iron 30+ Boron 10+ copper 10+ molybdenum 5  
Specific gravity :137.66

>>> Proportion of zinc 50+ boron 50+ iron 20 :135.25

>>> Zinc 80 magnesium 9 iron 4 boron 2 molybdenum 4 manganese 15 copper  
6 specific gravity :1.29

**Mo**>>> Liquid molybdenum  $\text{Mo} \geq 160\text{g/L}$  specific gravity: 1.2**Fe**>>> Chelated iron  $\text{Fe} \geq 5\text{g/L}$ ,  $\text{Zn} \geq 95\text{g/L}$ , specific gravity 1.25, freezing point -10 degrees**Si**>>> Liquid silicon  $\text{SiO}_2 \geq 400\text{g/L}$ , specific gravity 1.43, Ph 9-10, white>>> Liquid potassium silicon  $\text{K}_2\text{O} \geq 220\text{g/l}$ ,  $\text{SiO}_2 \geq 390\text{g/l}$ 

>>> Eleven elements

$\text{N} \geq 100\text{g/L}$	$\text{P}_2\text{O}_5 \geq 40\text{g/L}$	$\text{K}_2\text{O} \geq 40\text{g/L}$
$\text{CaO} \geq 126\text{g/L}$	$\text{MgO} \geq 16\text{g/L}$	$\text{B} \geq 1\text{g/L}$
$\text{Fe} \geq 0.3\text{g/L}$	$\text{Mn} \geq 0.3\text{g/L}$	$\text{Zn} \geq 0.3\text{g/L}$
$\text{Cu} \geq 0.1\text{g/L}$	$\text{Mo} \geq 0.5\text{g/L}$	

Specific gravity: 1.40 colorless, specific gravity 1.52, freezing point -16°C

This product is composed of nitrogen, phosphorus, potassium, calcium, magnesium, boron, iron, manganese, copper, zinc, molybdenum, and is suitable for the whole process of crop growth. The perfect combination of various elements ensures high quality crops, especially for rooting, flowering and fruit setting. This product can remove harmful salinization and purify water quality. The active phosphorus in this product can neutralize and activate the residual nitrogen, phosphorus, potassium and trace elements in the soil, so that various elements of crops can be fully absorbed, balance nutrition, and ensure the high quality and high yield of crops.

This product can not only promote the root growth of crops, enhance photosynthesis, but also increase the sugar content and color of fruits. Fully replenish the nutrients required during the growth of crops.

>>> Twelve elements

$\text{N} \geq 100\text{g/L}$	$\text{P}_2\text{O}_5 \geq 40\text{g/L}$	$\text{K}_2\text{O} \geq 40\text{g/L}$
$\text{CaO} \geq 126\text{g/L}$	$\text{MgO} \geq 16\text{g/L}$	$\text{B} \geq 1\text{g/L}$
$\text{Fe} \geq 0.3\text{g/L}$	$\text{Mn} \geq 0.3\text{g/L}$	$\text{Zn} \geq 0.3\text{g/L}$
$\text{Cu} \geq 0.1\text{g/L}$	$\text{Mo} \geq 0.5\text{g/L}$	$\text{Ti} \geq 0.05\text{g/L}$

>>> Thirteen elements

$\text{N} \geq 100\text{g/L}$	$\text{P}_2\text{O}_5 \geq 40\text{g/L}$	$\text{K}_2\text{O} \geq 40\text{g/L}$
$\text{CaO} \geq 126\text{g/L}$	$\text{MgO} \geq 16\text{g/L}$	$\text{B} \geq 1\text{g/L}$
$\text{Fe} \geq 0.3\text{g/L}$	$\text{Mn} \geq 0.3\text{g/L}$	$\text{Zn} \geq 0.3\text{g/L}$
$\text{Cu} \geq 0.1\text{g/L}$	$\text{Mo} \geq 0.5\text{g/L}$	$\text{Ti} \geq 0.05\text{g/L}$
$\text{Se} \geq 0.05\text{g/L}$		

>>> Fourteen elements

$\text{N} \geq 100\text{g/L}$	$\text{P}_2\text{O}_5 \geq 40\text{g/L}$	$\text{K}_2\text{O} \geq 40\text{g/L}$
$\text{CaO} \geq 126\text{g/L}$	$\text{MgO} \geq 16\text{g/L}$	$\text{B} \geq 1\text{g/L}$
$\text{Fe} \geq 0.3\text{g/L}$	$\text{Mn} \geq 0.3\text{g/L}$	$\text{Zn} \geq 0.3\text{g/L}$
$\text{Cu} \geq 0.1\text{g/L}$	$\text{Mo} \geq 0.5\text{g/L}$	$\text{Ti} \geq 0.05\text{g/L}$
$\text{Se} \geq 0.05\text{g/L}$	$\text{Co} \geq 0.05\text{g/L}$	

&gt;&gt;&gt; Organic matter 150+ NPK 40 Specific gravity: 1.1

#### ④ Contains amino acids

&gt;&gt;&gt; 0-20-450+100AA proportion: 1.45

&gt;&gt;&gt; 0-420-280+9 manganese +9 zinc +2 boron +100AA

&gt;&gt;&gt; Zinc 12.5+ copper 1+ Boron 1.5+ Manganese 5+100AA proportion: 1.09

>>> Pure liquid amino acids:  
Amino acid 100+ zinc 90+ manganese 5+ molybdenum 2+  
copper 2+ boron 2 specific gravity: 1.25-1.27

### (3) phosphite series

## >>> Potassium phosphite

#### 技术指标:

name	matching	Specific gravity	PH	colour
Potassium phosphite name	0-520-340+TE	1.4		
	0-520-270+TE			
	0-525-375+TE			
	0-420-280+TE		Stock solution PH3.01 PH (dilution 250 Times) 2.86	colourless
	0-460-430	1.49	Stock solution 3.05	

#### Product features:

- 1, potassium phosphite is a kind of high phosphorus, high potassium fully water-soluble fertilizer, after the application of crops quickly supplement phosphorus, potassium and various trace elements, conducive to crop control, strong shoots, promote flower bud differentiation, swelling, early maturity, improve yield, improve quality.
- 2, to prevent crop deficiency symptoms, such as leaf yellowing, deformity, lobules, falling flowers, cracked fruit and other phenomena.
- 3, when pathogens invade, potassium phosphite can induce the production of lignin in seedling cells, increase the thickness and hardness of the cell wall, and prevent the invasion and expansion of bacteria.
- 4, trivalent phosphorus ion has a strong killing effect on fungi and bacteria, and has a preventive and therapeutic effect on most diseases such as ulcer disease.
- 5, potassium phosphite is a registered fungicide in foreign countries, because of its outstanding effect and safety for crops and humans and animals.



Potassium phosphite

### (4) chitosan oligosaccharide series

>>> Large amount of elemental water soluble fertilizer:  
Chitosan oligosaccharide phosphorus  
potassium :0-40-560+ chitosan oligosaccharide 30g/L



>>> Medium element water soluble fertilizer:  
Calcium and magnesium chitosan oligosaccharides :Ca170,  
Mg5, chitosan oligosaccharides 30g/L

>>> Trace element water soluble fertilizer:  
Chitosan oligosaccharide zinc: zinc 150,  
chitosan oligosaccharide 30g/L

### (5) Brown algae oligosaccharide series

>>> Large amount of elemental water soluble  
fertilizer:Brown algae oligosaccharide phosphorus  
potassium:0-20-580+ algin oligosaccharides 20g/L



>>> Medium element water soluble fertilizer:  
Brown algae oligosaccharides calcium magnesium:  
Ca160, Mg10, brown algal oligosaccharides 20g/L

Brown algae oligosaccharide  
phosphorus potassium  
Brown algae oligosaccharides  
calcium magnesium

>>> Trace element water soluble fertilizer:  
Brown algae oligosaccharides boron zinc  
molybdenum:140 Boron, 5 zinc, 2 molybdenum,  
brown algal oligosaccharides 20g/L

>>> Brown algae oligosaccharide slow-release nitrogen:  
N+P2O5+K2O ≥ 400g/L Humic acid ≥ 30g/L  
Brown algal oligosaccharides ≥ 20g/L



Brown algae oligosaccharides  
boron zinc molybdenum

Resource advantaged products

Technical indicators:

Contains humic acid Water-soluble fertilizer	110-110-110+60HA
	120-50-180+60HA
	180-50-120+60HA
	50-250-50+60HA
	50-100-50+50HA
	50-50-100+50HA
	100-50-50+50HA
	200-0-30+30HA
alginate	300-0-50+30HA+20 seaweed

Third, mineral humic acid series

Product features:

1. This product is rich in humic acid and nitrogen, phosphorus and potassium, which can effectively promote the rooting and strengthening of crops, adjust soil pH, improve soil aggregate structure, promote the absorption of nutrients by roots, improve crop resistance, and resist the adverse effects of extreme weather such as low temperature and drought on crops.
2. This product is rich in nutrients, full soluble plant protein, pure natural high concentration of plant enzymes, stimulate crop root growth, regulate capillary root meristem and regeneration ability, increase the number of effective roots, improve root absorption and utilization of water and fertilizer.
3. This product is rich in natural cyanobacteria photoinducin, which can promote photosynthesis, accelerate carbon reaction rate, greatly improve the synthesis efficiency of organic matter, further enhance the growth function and immune function of plants, deeply tap the growth potential of plants, and promote plants to absorb more nutrients, thus healthy and rapid growth.



(A) CONVENTIONAL NPK LARGE AMOUNT OF ELEMENTAL WATER SOLUBLE FERTILIZER

Technical indicators:

High nitrogen extraction type	30-10-10+TE	28-14-14+TE
Balanced quick replenishment and increased production type	17-17-17+TE	18-18-18+TE
	19-19-19+TE	20-20-20+TE
	21-21-21+TE	
High nitrogen and potassium turgor type	9-15-30+TE	15-5-40+TE
	10-5-30+TE	15-8-35+TE
	10-5-35+TE	15-10-35+TE
	10-10-30+TE	16-6-35+TE
	12-4-34+TE	16-6-36+TE
	12-5-35+TE	16-6-38+TE
	12-10-35+TE	18-5-27+TE
	12-10-36+TE	18-6-32+TE
	12-6-36+TE	19-2-23+TE
	15-5-30+TE	20-10-20+TE
Quick-acting type of increasing production and promoting harvest	15-5-35+TE	20-10-30+TE
	0-5-55+TE	10-10-40+TE
	5-0-50+TE	12-5-42+TE
	5-6-42+TE	12-6-40+TE
	6-6-45+TE	12-6-42+TE
	6-10-40+TE	12-6-43+TE
	8-0-47+TE	12-8-40+TE
Rapid rooting and flower promoting type	10-5-40+TE	13-7-40+TE
	5-35-10+TE	10-50-10+TE
	8-45-7+TE	10-52-10+TE
	10-30-10+TE	12-48-10+TE
	10-40-15+TE	12-52-8+TE
Superphosphate superpotassium type	10-45-5+TE	25-25-10+TE
	0-45-45+TE	3-37-37+TE
	4-35-34+TE	10-29-30+TE



BALANCED QUICK REPLENISHMENT AND INCREASED PRODUCTION TYPE



HIGH NITROGEN AND POTASSIUM TURGOR TYPE



QUICK-ACTING TYPE OF INCREASING PRODUCTION AND PROMOTING HARVEST



SUPERPHOSPHATE SUPERPOTASSIUM TYPE



RAPID ROOTING AND FLOWER PROMOTING TYPE



HIGH NITROGEN EXTRACTION TYPE

NPK soluble fertilizer products

Product features:

This product belongs to the quick-acting water-soluble fertilizer series nutrition products, the formula is unique, does not contain any hormones, pure nutrition preparations, non-toxic and no residue; In particular, the medium and trace elements (chelate) required for crop growth are added to promote nutrient absorption and improve crop resistance, which is an indispensable ideal fertilizer for plants from seedling cultivation and transplantation to the whole growth cycle, and is the first choice for pollution-free planting.

1. Full nutrition, full water soluble, full absorption. It can be widely used in drip irrigation, spraying, flushing and other fertilization methods.
2. This product has high purity and 100% utilization. Improve nutrient absorption of crops, suitable for a variety of soils and crops.
3. This product has high technical content, among which lemon acidification technology is applied in the fertilizer to ensure that the product is quickly dissolved, fully absorbed, and the waste of fertilizer is reduced.

## (2) NPK WATER-SOLUBLE FERTILIZER WITH CALCIUM AND MAGNESIUM

### Technical indicators:

MAGNESIA CAST	18-18-18+2MgO+TE	17-17-35+2MgO+TE
	30-10-10+1MgO+TE	15-30-15+2MgO+TE
	15-5-30+3MgO+TE	12-6-36+2MgO+TE
	20-20-20+2MgO+TE	19-19-19+2MgO+TE
	20-10-30+2MgO+TE	3-11-38+1.5MgO+TE
CALCIUM-ADDED TYPE	14-0-36+5CaO+TE	5-5-45+4CaO+TE
	18-18-18+6CaO+TE	15-5-35+2CaO+TE
	8-0-30-10Ca ELEMENTAL CALCIUM	
SUPERPHOSPHATE SUPERPOTASSIUM TYPE	13-2-35+3CaO+1MgO+TE	13-6-16+6CaO+3MgO+TE
	13-7-30+3CaO+1MgO+TE	14-0-20+13CaO+1MgO+TE
	14-0-30+8CaO+1MgO+TE	18-18-18+6CaO+1MgO+TE
	14-4-33+5CaO+1MgO+TE	14-0-36+4CaO+1MgO+TE
	17-17-17+4CaO+2MgO+TE	11-6-33+4CaO+2MgO+TE

### Product features:

1. THIS PRODUCT WILL BE A LARGE NUMBER OF ELEMENTS N, P, K AND MEDIUM ELEMENTS CA, MG COMBINATION, PHASE COMBINATION OF A LARGE NUMBER OF FAST-ACTING WATER SOLUBLE ELEMENTS WATER SOLUBLE FERTILIZER SERIES, NITROGEN, PHOSPHORUS, POTASSIUM, CALCIUM AND MAGNESIUM COOPERATE WITH EACH OTHER, NO ANTAGONISM.
2. THE PHOSPHORUS IN THIS PRODUCT EXISTS IN THE FORM OF PHOSPHOROUS ACID AND DOES NOT REACT WITH CALCIUM AND MAGNESIUM, WHILE THE CALCIUM AND MAGNESIUM IN THIS PRODUCT EXIST IN THE IONIC STATE. AFTER APPLICATION, THE TOUGHNESS OF THE CROP SKIN IS ENHANCED, THE CRACKING PHENOMENON IN THE PROCESS OF CROP COLORING AND EXPANSION IS PREVENTED, AND VARIOUS PHYSIOLOGICAL DISEASES CAUSED BY CALCIUM DEFICIENCY OF CROPS ARE PREVENTED. MAGNESIUM CAN PROMOTE PHOTOSYNTHESIS OF CROPS, AND PROMOTE BETTER UTILIZATION AND ABSORPTION OF LIGHT AND HEAT WHILE SWELLING, ENSURING UNIFORM COLORING AND SUGAR.
3. THE PRODUCT CAN BE DIRECTLY ABSORBED BY THE CROP AFTER APPLICATION, PROMOTE THE ROOTS OF THE CROP TO BE DEVELOPED, THE STALK IS STRONG, AND THE LEAF COLOR IS DARK GREEN; POTASSIUM CAN QUICKLY SWELL FRUIT; CALCIUM CAN IMPROVE THE QUALITY, ENLARGE THE FRUIT AND IMPROVE THE YIELD. MAGNESIUM CAN PROMOTE PHOTOSYNTHESIS OF CROPS AND INCREASE THE GREEN CONTENT OF LEAVES. NITROGEN CAN PROMOTE EARLY MATURING AND EARLY MARKET.



## (3) GRANULAR NPK LARGE AMOUNT OF ELEMENTAL WATER SOLUBLE FERTILIZER

### Technical indicators:

High nitrogen and high potassium pigmented fruiting type	15-5-30+TE
Balanced quick replenishment and increased production type	17-17-17+TE
	18-18-18+TE
	19-19-19+TE
Potassium-calcium promoting type	14-0-16-16CaO+TE

### Product features:

This product belongs to the quick-acting water-soluble fertilizer series nutrition products, the formula is unique, does not contain any hormones, pure nutrition preparations, non-toxic and no residue; In particular, the medium and trace elements (chelate) required for crop growth are added to promote nutrient absorption and improve crop resistance, which is an indispensable ideal fertilizer for plants from seedling cultivation and transplantation to the whole growth cycle, and is the first choice for pollution-free planting.

1. Full nutrition, full water soluble, full absorption. It can be widely used in drip irrigation, spraying, flushing and other fertilization methods.
2. This product has high purity and 100% utilization. Improve nutrient absorption of crops, suitable for a variety of soils and crops.
3. This product has high technical content, among which lemon acidification technology is applied in the fertilizer to ensure that the product is quickly dissolved, fully absorbed, and the waste of fertilizer is reduced.



## (4) POLYPHOSPHORUS NPK WATER SOLUBLE FERTILIZER

### Technical indicators:

20-20-20+TE
12-8-40+TE

### Product features:

1. Excellent raw materials: selected high purity raw materials preparation.
2. High utilization rate: polymerized phosphorus accounts for more than 25% of available phosphorus, fast and slow combination, not easy to be fixed by soil.
3. Good water solubility: high product purity, fast dissolution speed, good water solubility.
4. Balanced nutrition: The product contains a variety of trace elements to fully supplement crop nutrition.
5. High safety: Strict control of limited indicators, high safety.

## >>>>> MAGNESIUM NITRATE

### Technical indicators:

$N \geq 10.8\%$   $MgO \geq 15.8\%$



## ANHYDROUS CALCIUM NITRATE<<<<<<

### Technical indicators:

17% available nitrogen, 33% calcium oxide



## >>>>> CALCIUM AMMONIUM NITRATE

### Technical indicators:

$N \geq 15\%$  (including 14% nitrate nitrogen and 1% ammonium nitrogen)  $Ca \geq 18\%$  ( $CaO \geq 25\%$ )



### >>>>> CALCIUM AMMONIUM NITRATE WITH BORON

Technical indicators:

$N \geq 15\%$  (AVAILABLE NITROGEN  $\geq 14\%$ ,  
AMMONIUM NITROGEN  $\geq 1\%$ )  $CaO \geq 25\%$   $B \geq 0.2\%$



### >>>>> AMMONIUM CAPROLACTAM SULFATE (NH4)2SO4

Technical indicators:

NITROGEN CONTENT  $\geq 21\%$  SULFUR CONTENT  $\geq 23\%$   
MOISTURE  $\leq 0.5\%$  FREE ACID  $\leq 0.08\%$



### >>>>> CRYSTAL POTASSIUM NITRATE

Technical indicators:  $N \geq 13.5\%$   $K_2O \geq 46\%$



### POTASSIUM DIHYDROGEN PHOSPHATE (CRYSTAL)

$P_2O_5 \geq 52\%$   $K_2O \geq 34\%$  Technical indicators:

### >>>>> Powdered potassium nitrate

Technical indicators:  $N \geq 13.5\%$   $K_2O \geq 46\%$



### POTASSIUM DIHYDROGEN PHOSPHATE (POWDER)

$P_2O_5 \geq 52\%$   $K_2O \geq 34\%$  Technical indicators:

### >>>>> GRANULAR POTASSIUM NITRATE

Technical indicators:  $N \geq 13.5\%$   $K_2O \geq 46\%$



### >>>>> CALCIUM NITRATE

Technical indicators:

$N \geq 11.76\%$   $CaO \geq 23.4\%$



### >>>>> ORGANIC CALCIUM

Technical indicators: Content:  $Ca \geq 30\%$ ,  $CaO \geq 42\%$ .  
Mesh: 80-100 mesh.

