

#### Specifications of the Products:

- 1. Solubility: The usage of technical grade raw materials with water soluble anti-caking results in having highly soluble fertilizers.
- 2. Free Flowing: The anti-caking properties of our fertilizers results in the advantage of a free-flowing product when stored according to international standards.
- 3. Colors: Customers can freely choose the color tracer of their final product.
- 4. Mixing: As a fully-automated production line is used, well mixed products are the final results.
- 5. High / Low pH Fertilizers: Depending on the climate of the customer's country or the area where the fertilizer will be applied, pH can be manipulated accordingly.
- 6. Chealated Trace Elements: Added trace elements enhance the soil's uptake of fertilizers which stimulates plant growth.
- 7. Additives: Amino acids, Molybdenum and other additives can be added upon the customer's request and needs.
- 8. Compatibility: Many pesticides can be mixed with MANASEER Fertilizers & Chemicals fertilizers and applied in one application to save time and therefore money. However, small testing must be done before mixing to ensure compatibility.

#### Usage:

MANASEER Fertilizers & Chemicals' products can be used for all kinds of plants at different growth stages. Our products can be applied to plants in green and glass houses as well as outdoor crop fields.

#### **Applications:**

MANASEER Fertilizers & Chemicals products can be utilized in al kinds of irrigation systems such as: drip irrigation injection spray.

#### Our Factory:

MANASEER Fertilizers & Chemicals has designed and constructed a fully-automated NPK powder fertilizer production line and liquid/suspension NPK fertilizer production line, which both use high quality technology. Tailored made fertilizer formulas meeting customer requirements .

#### **Manufacturing Process**

MANASEER Fertilizers & Chemicals has a fully-automated state of the art Siemens PLC system with a French advanced design mixing unit for the NPK line to permit strict control over the main aspects of the final products such as solubility, pH, color, moisture content and particle size.

#### **Quality Control**

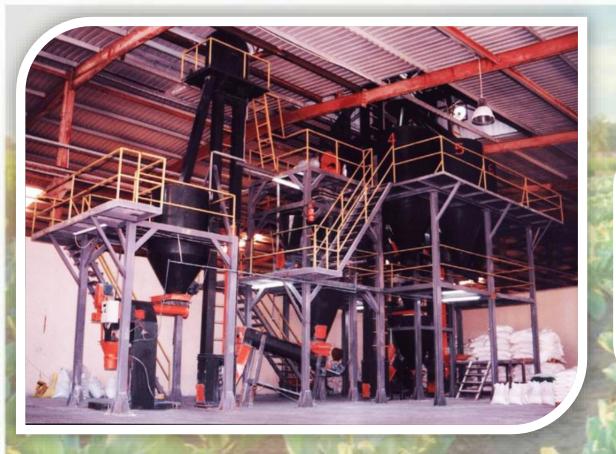
Through the manufacturing process, our quality control lab checks the quality of the products from A to Z, as follows: All raw materials are analyzed for purity, solubility and NPK percentages before the start of production. Random samples are taken and processed during production to ensure that all products meet our rigorous demands for exactness. Samples of the final product are also analyzed to assure its conformity to the customer's specifications and our satisfaction. Packaging is inspected for the accuracy of the information on the packaging, the final weight of each bag and the quality of the seal.

#### Research and Development

Our research and development department works to develop new products and to enhance the performance of our existing product lines.

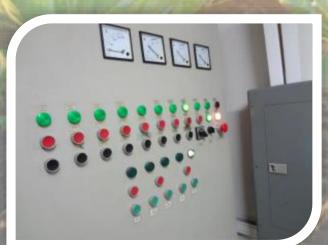
## Benefits:

- High quality products according to international standards.
- Tailored made fertilizer formulas meeting customer requirements.
- Packaging made according to customer's specifications.
- Producers for many multinational companies worldwide.
- Private label is possible.



MANASEER Fertilizers & Chemicals has designed and constructed a fully automated NPK powder fertilizer production line and liquid/suspension NPK fertilizer production line, which both use high quality technology. In addition to the new production line of specialty micro-granule fertilizers.









## Markets:

Our international marketing team exerts every effort to explore all world markets. Our customer base now covers 27 countries on 4 continents and is distributed directly and through multinational companies. Our goal is to expand the current market share and open further new markets.

#### **Continents:**

The continent of Asia - Africa - Europe and America.

# **Export countries:**

Algeria Iran Afghanistan

South Africa Iraq Qatar

South America Korea Syria

Egypt KSA Taiwan

Bangladesh Lebanon Tunis

Russia Libya Turkey

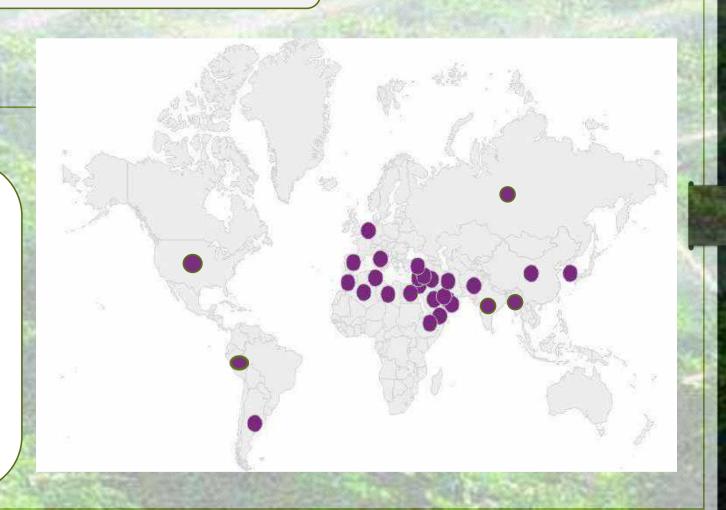
India Oman UAE

Holland Pakistan USA

Argentina Peru Yeman

# **Our Market**

MANASEER Fertilizers & Chemicals
'international marketing team exerts
every effort to explore all world
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covers 27 countries on 4 continents
and is distributed directly and
through multinational companies.
Our goal is to expand the current
market share and open further new
markets.



- The percentage of plant fertilization depends on several factors:
- 1. Soil.
- 2. Plant age.
- 3. Weather conditions.
- 4. Irrigation method.
- The soil and leaves should be tested to determine the plant's need for micronutrients.



# Sample of our production:



We produce tailor made fertilizers upon customer's specifications, also we can provide any packaging upon customer's specifications.

#### 1 - Powder Fertilizer

#### A - High-Nitrate

18.18.18+TE

16.08.24+2%MgO+TE

20.10.20+TE

18.09.27+TE

10.10.40+TE

17.07.27+TE

#### **B** - Foliar :

12.48.08+TE

21.21.21+TE

15.05.30+2%MgO+TE

30.10.10+TE

#### **C**-Specialty

14.12.14+1%MgO +TE 10.16.22+2%MgO+TE 06.20.30+3%MgO+TE

#### D - Popular :

20.20.20+TE

10.52.10+TE

28.14.14+TE

12.12.36+TE

#### 2 - Regular suspension:

10.50.10+TE(W/V)

20.20.20+TE(W/V)

12.12.36+TE(W/V)

30.10.10+TE (W/V)

05.00.60+TE (W/V)

#### 3 - Liquid:

0.28.33+TE (W/V) ( Phosphate ) specialty formula.

10.0.0+14%Ca (W/V) (Enemy of salinity(specialty formula.

Z- Calcium ( 28% Ca ) (W/V) specialty formula.

KTS ( **0.0.36+25%S +TE** ) (W/V).

5-75-3+TE (W/V).









# Powder Soluble Fertilizer









# **Specialties**





Packing the bags on shrink wrapped pallets









# Participation in International Fairs

FRUIT LOGISTICA FAIR BERLIN





IPM ESSEN
Germany





Isfahan Agricultural Fair

GROWTECH EURASIA ANTALYA





**Hortifair Netherlands** 

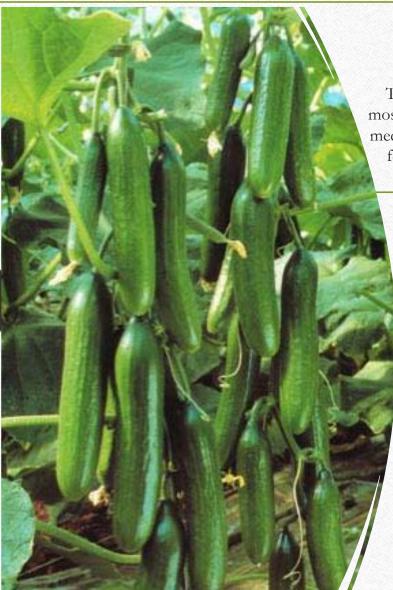




# Hydroponic Fertilizer 18-9-27

This formula has been designed for use by hydroponic and soilless culture growers. It contains a good balance of nutrients to promote healthy growth of ornamental plants and vegetables, with the convenience of all nutrients being in one package.

•	TOTAL NITROGEN (N)	0/0
•	Nitrate Nitrogen8%	
•	Ammoniacal Nitrogen 4%	
•	Urea Nitrogen 6%	
•	Water Insoluble Nitrogen NONE	
•	AVAILABLE PHOSHORIC ACID (P2O5)9%	<u>%</u>
•	Soluble Phosphorus (P) 39 %	
•	Insoluble Phosphous NONE	
•	SOLUBLE POTASH (K2O)	<u>%</u>
•	Soluble Potassium (K)	
•	Chlorine, less than	
•	TOTAL AVAILABLE PRIMARY	
	PLANT FOOD	



## General product NPK 20.20.20

The most widely used of all the water soluble fertilizers is 20-20-20 All Purpose Fertilizer. It is ideal for use in most situations where the soil condition is not know. It may be used alone or in combination with other analyses to meet the nutritional requirements of different plants. It is popular with bedding plant growers, and is the standard formula for feeding foliage plants. Due to its high solubility, 20-20-20 is widely used as a foliar feed to correct nutrient deficiencies in various agricultural and horticultural crops.

•	TOTAL NITROGEN (N)
•	Nitrate Nitrogen 5.90 %
•	Ammoniacal Nitrogen
	Urea Nitrogen
•	Water Insoluble Nitrogen NONE
•	AVAILABLE PHOSHORIC ACID (P2O5)20%
•	Soluble Phosphorus (P) 8.7 %
•	Insoluble Phosphous
•	SOLUBLE POTASH (K2O)
•	Soluble Potassium (K)
•	Chlorine ,less than
•	TOTAL AVAILABLE PRIMARY
	PLANT FOOD



# **Green House Special 10-52-10**

This formula will provide the proper rate of nitrogen, phosphorus and potassium for good root development. Twice the level of chelated iron is present in 10-52-10 to provide for extra iron requirements. It is therefore unnecessary to add additional iron chelate, is recommended for use beginning two weeks after germination through to eight weeks of growth.

•	TOTAL NITROGEN (N)
•	Nitrate Nitrogen 0.9%
•	Ammoniacal Nitrogen
•	Urea Nitrogen 1.3%
	Water Insoluble Nitrogen NONE
•	AVAILABLE PHOSHORIC ACID (P2O5)52%
	Soluble Phosphorus (P)22.6%
•	Insoluble Phosphous
•	SOLUBLE POTASH (K2O)
•	Soluble Potassium (K)
•	Chlorine ,less than
•	TOTAL AVAILABLE PRIMARY
•	PLANT FOOD 72 %



## Foliar Specialty 21-21-21

Water soluble fertilizers is 21-21-21 All Purpose Fertilizer. It may be used alone or in combination with other analyses to meet the nutritional requirements of different plants. It is popular with bedding plant growers, and is the standard formula for feeding foliage plants. Due to its high solubility, 21-21-21 is widely used as a foliar feed to correct nutrient deficiencies in various agricultural and horticultural crops.

•	TOTAL NITROGEN (N)21%
•	Nitrate Nitrogen
•	Ammoniacal Nitrogen 0.2%
•	Urea Nitrogen 2.3%
•	Water Insoluble Nitrogen NONE
•	AVAILABLE PHOSHORIC ACID (P2O5)21%
•	Soluble Phosphorus (P) 9.24%
•	Insoluble Phosphous NONE
•	<u>SOLUBLE POTASH (K2O)</u>
•	Soluble Potassium (K)
•	Chlorine, less than
•	TOTAL AVAILABLE PRIMARY
•	<u>PLANT FOOD 63 %</u>

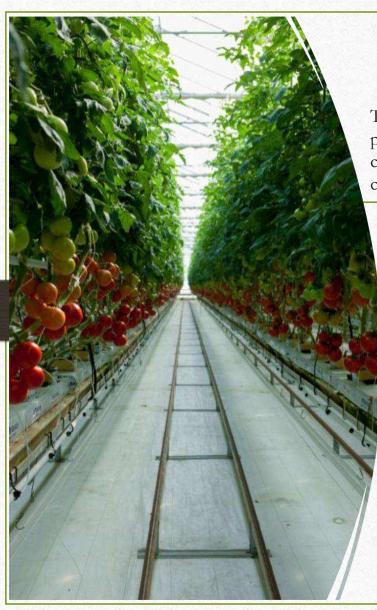
Free KCL, High Nitrate.



### Hydroponic Fertilizer 6-12-32 High Nitrate Urea free

This formula has been specially formulated to provide an excellent fertility program for greenhouse vegetable crops grown using NFT, rockwool culture and other forms of hydroponic or soilless culture. It is an all-nitrate fertilizer, giving the grower complete control over the levels of ammoniacal nitrogen in NFT tomatoes. It features a high K:N ratio to provide for the high potassium needs of hydroponic vegetables. It is completely water soluble and contains a micronutrient package especially designed for NFT production by experts in the field. Fe,Mn,Cu,and Zn are chelated to maintain availability over a wide pH range . Ferttilizer formula 6-12-32 is recommended for use in conjunction with calcium nitrate.

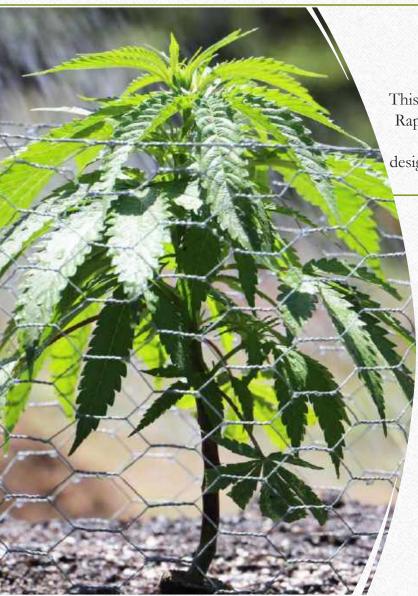
•	TOTAL NITROGEN (N)
•	Nitrate Nitrogen6%
•	Ammoniacal Nitrogen 0%
•	Urea Nitrogen NONE
•	Water Insoluble Nitrogen NONE
•	AVAILABLE PHOSHORIC ACID (P2O5) 12%
•	Soluble Phosphorus (P) 5%
•	Insoluble Phosphous NONE
•	SOLUBLE POTASH (K <sub>2</sub> O)
•	Soluble Potassium (K) 26%
•	Chlorine, less than 0.3%
•	TOTAL AVAILABLE PRIMARY
•	PLANT FOOD 50%



## Hydroponic Fertilizer 8-12-28 High Nitrate Urea free

This formula has been designed for use in conjunction with calcium nitrate to supply nitrogen, phosphrous, potassium, minor elements, calcium and magnesium at appropriate levels for hydroponic culture. 8-12-28 is a good formulation to use for crops grown hydroponically, including use in substrate cultures such as rockwool and phenolic foam.

•	TOTAL NITROGEN (N)
•	Nitrate Nitrogen7.5%
•	Ammoniacal Nitrogen 0.52%
•	Urea Nitrogen NONE
•	Water Insoluble Nitrogen NONE
	AVAILABLE PHOSHORIC ACID (P2O5) 12%
•	Soluble Phosphorus (P) 5%
•	Insoluble Phosphous NONE
•	SOLUBLE POTASH (K2O)
•	Soluble Potassium (K) 22.4%
•	Chlorine, less than 0.3%
•	TOTAL AVAILABLE PRIMARY
•	PLANT FOOD



## Forestry Seedling Starter 20-10-20

## High Nitrate Urea free

This formula is used for the majority of the growing season, after seedlings have a well established root system. Rapid vegetative growth of forest tree seedlings Occurs between the 4th and 16th weeks of growth. 20-10-20 should be used on a constant feed basis to encourage good top growth. This formulation is specifically designed for forestry with four times the iron as in our regular horticultural fertilizers, lower phosphorus, lower total salts, and added magnesium.

•	<u>TOTAL NITROGEN (N)20%</u>
•	Nitrate Nitrogen
•	Ammoniacal Nitrogen 8 %
	Urea Nitrogen NONE
•	Water Insoluble Nitrogen NONE
•	AVAILABLE PHOSHORIC ACID (P2O5)10 %
•	Soluble Phosphorus (P) 4.4 %
•	Insoluble Phosphous
•	<u>SOLUBLE POTASH (K2O)</u>
•	Soluble Potassium (K)
•	Chlorine ,less than
•	TOTAL AVAILABLE PRIMARY

PLANT FOOD...... 50 %



# Green House Special 8-8-42 High Nitrate Urea Free

8-8-42 is a formulation specially designed to supply twice as much potassium as nitrogen, yet still maintain optimum levels of other plant nutrients. This formula is suggested for the period when plants are setting bud, as well as during maturation and blooming. At these times, higher potassium levels are required for optimum plant response. The potential acidity of this fertilizer is very low, making it a neutral formula, exhibiting minimal acidifying tendencies in the soil. If soil or tissue samples show low potassium levels, this is a good formulation for correcting this problem.

•	TOTAL NITROGEN (N)	8%
•	Nitrate Nitrogen	5%
•	Ammoniacal Nitrogen	1.4%
•	Urea Nitrogen	NONE
	Water Insoluble Nitrogen	NONE
•	AVAILABLE PHOSHORIC ACID (P2O5)	80/0
•	Soluble Phosphorus (P)	.3.5 %
•	Insoluble Phosphous	NONE
•	SOLUBLE POTASH (K2O)	42%
•	Soluble Potassium (K)	34.8 %
•	Chlorine ,less than	0.3 %
•	TOTAL AVAILABLE PRIMARY	
•	PLANT FOOD.	59 %



### Summer Turf Fertilizer 25-5-15+TE High Urea, Nitrate Free

**25-5-15+TE** is a water Suspendible fertilizer which contains 50% of its nitrogen in a slow-release form to provide fertilizer for approximately 8 weeks. It quickly mixes with water and readily stays in suspension with good hydraulic agitation. 25-5-15 Summer Turf fertilizer contains 0.10% chelated Iron to give quick greening, with good residual to give long lasting color. This turf fertilizer has a low salt index and is compatible with most turf herbicides and pesticides, enabling fertilizing and weed control or insect control to be done in one single application.

•	TOTAL NITROGEN (N)
•	Nitrate NitrogenNONE %
•	Ammoniacal Nitrogen 1.0%
4	Urea Nitrogen
•	Water Insoluble Nitrogen 12.0%
•	AVAILABLE PHOSHORIC ACID (P2O5)5 %
•	Soluble Phosphorus (P) 21 %.
•	Insoluble Phosphous NONE
•	SOLUBLE POTASH (K2O)
•	Soluble Potassium (K)
•	Chlorine, less than 0.3%
•	TOTAL AVAILABLE PRIMARY
•	PLANT FOOD 45 %



This formulation is an excellent alternative to traditional granular turf fertilizers. It can be applied with high or low volumes of water with a minimal possibility of burning due to its low salts content. Application with water results in the nutrients being more readily available for plant uptake than dry fertilizer applications which require water for activation. The primary source of nitrogen in 35-5-10 is urea which results in a slower release in soil than either nitrate or ammoniacal forms of nitrogen. Depending on environmental conditions, the nitrogen will be available over a 4 to 8 week period. The added iron in completely chelated form also encourages the fast greening of turf. Its compatibility with most turf fungicides and insecticides, and the possibility of applying with fairly low volumes of water, make it ideal for application with pesticides.

• <u>TOTAL NITROGEN (N)</u>
• Nitrate Nitrogen
Ammoniacal Nitrogen
• Urea Nitrogen 31%
• Water Insoluble Nitrogen NONE%
• AVAILABLE PHOSHORIC ACID (P2O5)
• Soluble Phosphorus (P) 2 %
• Insoluble Phosphous NONE
• <u>SOLUBLE POTASH (K2O)</u>
• Soluble Potassium (K) 8.3 %
• Chlorine, less than 0.3%
• TOTAL AVAILABLE PRIMARY
• PLANT FOOD





# General product NPK 19-19-19

### High Urea Nitrate free

The most widely used of all the water soluble fertilizers is 19-19-19 All Purpose Fertilizer. It is ideal for use in most situations where the soil condition is not know. It may be used alone or in combination with other analyses to meet the nutritional requirements of different plants. It is popular with bedding plant growers, and is the standard formula for feeding foliage plants. Due to its high solubility,19-19-19 is widely used as a foliar feed to correct nutrient deficiencies in various agricultural and horticultural crops.

•	TOTAL NITROGEN (N)
•	Nitrate Nitrogen
•	Ammoniacal Nitrogen 1.8 %
•	Urea Nitrogen
•	Water Insoluble Nitrogen NONE
•	AVAILABLE PHOSHORIC ACID (P2O5)
•	Soluble Phosphorus (P)
•	Insoluble Phosphorus NONE
•	SOLUBLE POTASH (K2O)
•	Soluble Potassium (K)
•	Chlorine ,less than 0.3 %
•	TOTAL AVAILABLE PRIMARY
•	PLANT FOOD

This formula can be available in a high-nitrate or Urea-free



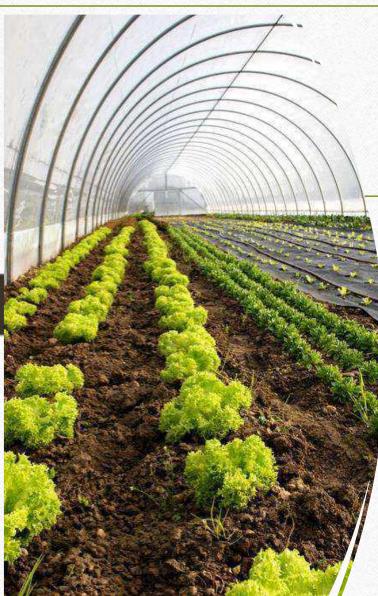
## General product NPK 18-18-18

## High Urea Nitrate free

The most widely used of all the water soluble fertilizers is 18-18-18 All Purpose Fertilizer. It is ideal for use in most situations where the soil condition is not know. It may be used alone or in combination with other analyses to meet the nutritional requirements of different plants. It is popular with bedding plant growers, and is the standard formula for feeding foliage plants. Due to its high solubility,

18-18-18 is widely used as a foliar feed to correct nutrient deficiencies in various agricultural and horticultural crops.

•	<u>TOTAL NITROGEN (N)</u>
•	Nitrate Nitrogen 0.7 %
•	Ammoniacal Nitrogen
•	Urea Nitrogen
	Water Insoluble Nitrogen NONE
	AVAILABLE PHOSHORIC ACID (P2O5) 18%
•	Soluble Phosphorus (P)8%
•	Insoluble Phosphous NONE
•	SOLUBLE POTASH (K2O)
•	Soluble Potassium (K) 15%
•	Chlorine ,less than
•	TOTAL AVAILABLE PRIMARY
•	PLANT FOOD
	This formula can be available in a high-nitrate or Urea-free.



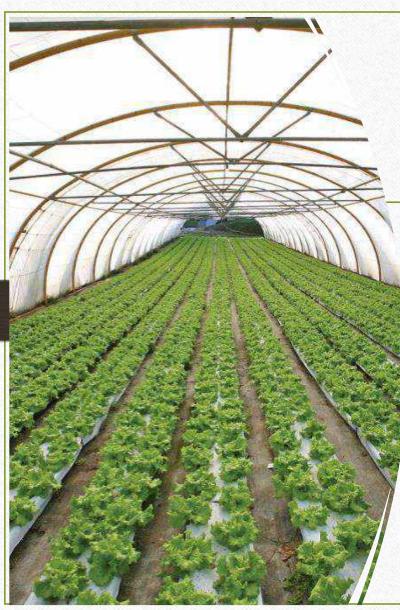
## Green House Special 25-10-10

## High Urea Nitrate free

This formula is designed for use during periods of vegetative growth, when plants have a high nitrogen requirement. Where soil or tissue tests show low nitrogen, this formulation helps to correct the deficiency. Crops such as Roses, Carnations, Chrysanthemums and Snapdragons respond well to this analysis. It has also proven to be a good fertilizer for container nursery crops. The potential acidity of 30-10-10 is very high, and because of its acid forming tendencies, it is recommended for Orchids and many woody ornamentals.

•	TOTAL NITROGEN (N)
•	Nitrate Nitrogen
•	Ammoniacal Nitrogen 7.5%
•	Urea Nitrogen
•	Water Insoluble Nitrogen NONE
•	AVAILABLE PHOSHORIC ACID (P2O5)10%
•	Soluble Phosphorus (P)4.4%
•	Insoluble Phosphous NONE
•	SOLUBLE POTASH (K2O)
٠	Soluble Potassium (K)8.3%
•	Chlorine, less than
	TOTAL AVAILABLE PRIMARY
	PLANT FOOD

This formula can be available in a high-nitrate or Urea-free.

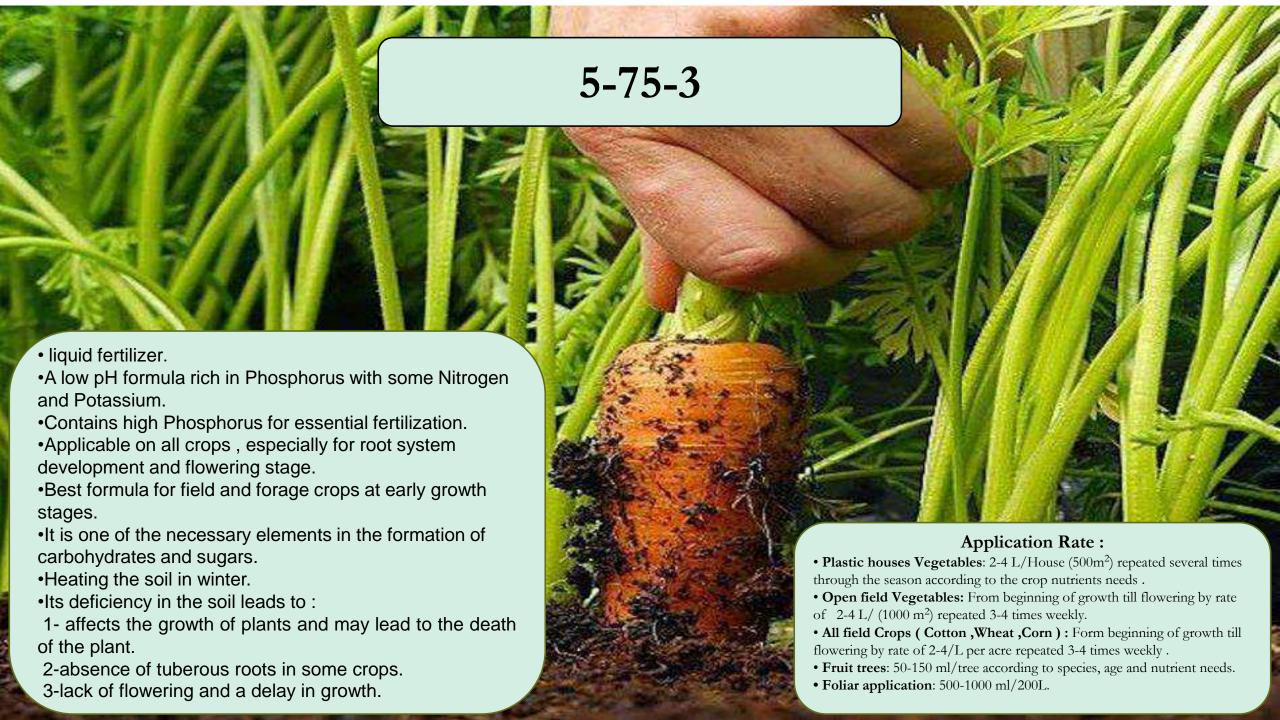


## Specialty Fertilizer 5-75-3

## High Urea Nitrate free

This formula is widely used in transplanting operations. Young vegetable plants being set in the field respond well to this starter formula with its well balanced chelated micronutrient complex. It tends to be held by the soil particles where it is more readily available for plant up- take.

•	TOTAL NITROGEN (N)
•	Nitrate Nitrogen NONE
•	Ammoniacal Nitrogen NONE
•	Urea Nitrogen 5% (w/v)
	Water Insoluble Nitrogen NONE
•	AVAILABLE PHOSHORIC ACID (P2O5)75%
	Soluble Phosphorus (P)33%(w/v)
•	Insoluble Phosphous NONE
•	<u>SOLUBLE POTASH (K2O)</u>
•	Soluble Potassium (K)
•	Chlorine, less than
•	TOTAL AVAILABLE PRIMARY
	PLANT FOOD 83 %





### Forestry Seedling Starter 10-40-10 Nitrate free, Urea free

Forestry Seedling Starter will provide the proper rate of nitrogen, phosphorus and potassium for good rod root development in forest tree seedlings. Twice the level of chelated iron is present in **10-40-10** to provide for extra iron requirements of forest tree seedlings. It is therefore unnecessary to add additional iron chelate. Forestry Seedling Starter is recommended for use beginning two weeks after germination through to eight weeks of growth.

	Weens of 810 West
•	TOTAL NITROGEN (N)
•	Nitrate NitrogenNONE %
•	Ammoniacal Nitrogen 10%
•	Urea Nitrogen NONE
	Water Insoluble Nitrogen NONE
•	AVAILABLE PHOSHORIC ACID (P2O5)40%
•	Soluble Phosphorus (P) 17.6 %
•	Insoluble Phosphorus NONE
•	SOLUBLE POTASH (K2O)
•	Soluble Potassium (K)
•	Chlorine, less than
•	TOTAL AVAILABLE PRIMARY
•	<u>PLANT FOOD</u>

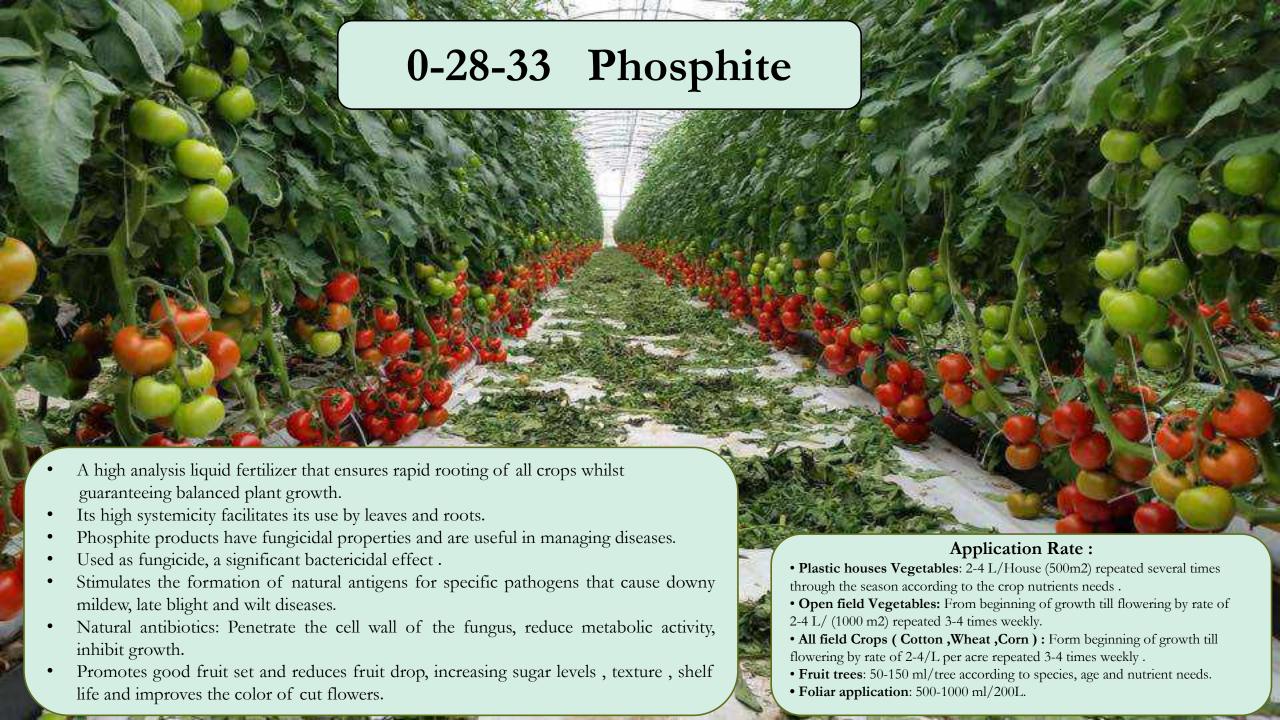


## Specialty Fertilizer Phosphite 0-28-33

Nitrate free, Urea free

This formula is widely used in transplanting operations. Young vegetable plants being set in the field respond well to this starter formula with its well balanced chelated micronutrient complex. It tends to be held by the soil particles where it is more readily available for plant up- take. liquid fertilizer.

TALL THE PARTY OF THE	•	TOTAL NITROGEN (N)
到1997年1998年1998年1	•	Nitrate Nitrogen
	•	Ammoniacal Nitrogen NONE
	•	Urea Nitrogen
A TOP STATE OF THE	٠	Water Insoluble Nitrogen NONE
	•	AVAILABLE PHOSHORIC ACID (P2O5)28%
ALL DESCRIPTION OF THE PARTY OF	•	Soluble Phosphorus (P)12.3%
	•	Insoluble Phosphous
	•	<u>SOLUBLE POTASH (K2O)</u>
	•	Soluble Potassium (K)
	•	Chlorine, less than
	٠	TOTAL AVAILABLE PRIMARY
	•	PLANT FOOD





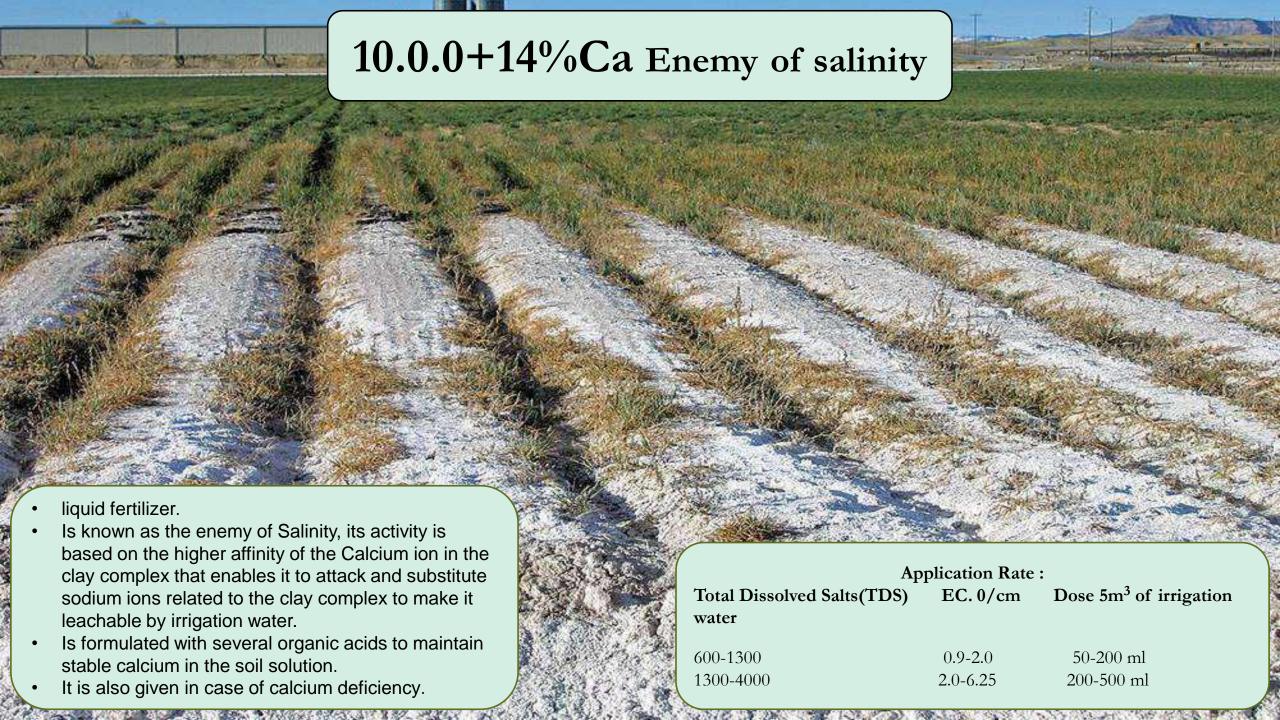
## Specialty Fertilizer 10-0-0+14%CaO

# Nitrate free , Urea free (Enemy of salinity )

This formula is designed for use during periods of vegetative growth, when plants have a high nitrogen requirement. Where soil or tissue tests show low nitrogen, this formulation helps to correct the deficiency.

The potential acidity is very high liquid fertilizer.

•	TOTAL CaO
•	TOTAL NITROGEN (N)10%
•	Nitrate Nitrogen NONE
<u> </u>	Ammoniacal Nitrogen NONE
	Urea NitrogenNONE
•	Water Insoluble Nitrogen NONE
•	AVAILABLE PHOSHORIC ACID (P2O5)0%
•	Soluble Phosphorus (P) NONE
•	Insoluble Phosphous NONE
•	SOLUBLE POTASH (K2O)
•	Soluble Potassium (K)NONE
•	Chlorine, less than
•	PLANT FOOD

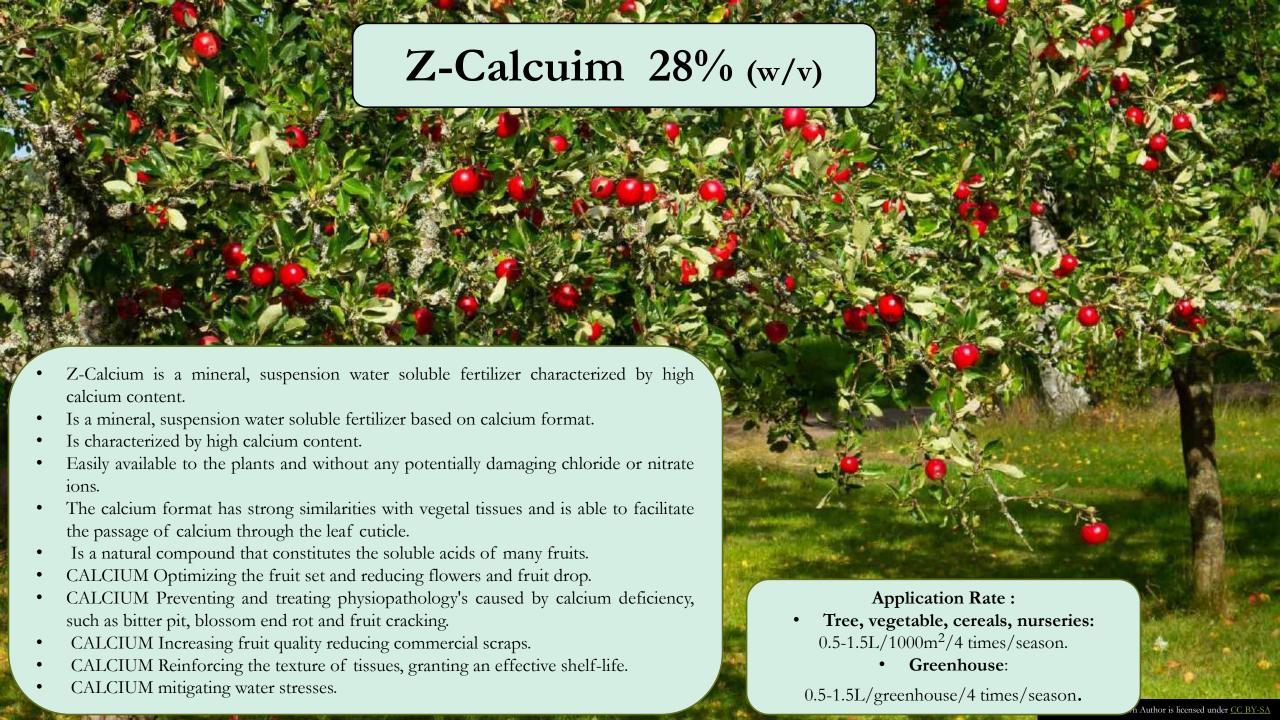




# Specialty Fertilizer Z-Calcuim 28%

Z-Calcium is a mineral, suspension water soluble fertilizer characterized by high calcium content.

•	TOTAL CALCUIM (Ca)
•	TOTAL NITROGEN (N)
•	Nitrate Nitrogen NONE
•	Ammoniacal Nitrogen NONE
•	Urea NitroNONE
•	Water Insoluble Nitrogen NONE
•	AVAILABLE PHOSHORIC ACID (P2O5)0%
•	Soluble Phosphorus (P)NONE
•	Insoluble Phosphous NONE
•	SOLUBLE POTASH (K2O)
•	Soluble Potassium (K) NONE
•	Chlorine ,less than NONE
•	TOTAL AVAILABLE PRIMARY
•	PLANT FOOD



## **HUMIC ACID**

#### **HUMIC ACID**

- Humic acid is an organic compounds that is important components of humus, the major organic fraction of soil.
- Humic acid is a group of molecules that bind to plant roots and help them get water and nutrients.

#### **BENEFITS OF HUMIC ACID:**

- made the clay more porous, soft, and aerobic, with better drainage, resulting in deeper root growth of all plants.
- Retain water, bind to clays and reduces soil salinity.
- No synthetic material can match humic acid's physical and chemical versatility.

### **Soil Application:**

- Stimulate plant growth (increased biomass production).
- Increase yield and improves quality of plants.
- Improve nutrient uptake through the leaves and roots.
- Improve the effectiveness of pesticides.
- Improve the soil structure.
- Reduce nutrient losses.
- Improve nutrient uptake by the root system, Promote root development.
- Increase microbiological activity of soil.
- Increase capacities of water holding and cation exchange.

Crops	Fertilizer	Application Fertilizer date	Dosage	Note.
Tree Fruits	10-52-10+TE	Pre-season.	40-100 g/Tree	(2) applications until flowering.
	20-20-20+TE 10-52-10+TE	Growing season Growing season	25-100g/Tree 25-100g/Tree	<ul><li>2-3 applications</li><li>2-3 applications</li></ul>
	<b>12-12-36</b> +TE	Matures season	25-100g/Tree	3-5 applications during the maturity stages
	<b>10-10-40</b> +TE	Matures season	25-100g/Tree	3-5 applications
Strawberries	15-30-15+TE	Pre- flowering	2.5-4kg/1000m <sup>2</sup>	2-3 applications
	<b>20-20-20</b> +TE	Until the first picking	$2.5-4 \text{kg}/1000 \text{m}^2$	2-3 applications
	<b>12-02-45</b> +TE	After each piking	2-3kg/1000m <sup>2</sup>	*Succession fertilization with 15-15-30
	<b>10-10-40</b> +TE	Until the crop is finished	5kg/1000m <sup>2</sup>	3 or more applications during the growing season.
Grapes, Berries	15-30-15+TE	For establishing new canes	2.5-4kg/1000m <sup>2</sup>	2-3 applications
	<b>20-20-20</b> +TE	During the growing season	2-5kg/1000m <sup>2</sup>	Where fruit color and maturity are delayed by nitrogen applications, do not use foliar fertilizer within 60 days of ripening.
	<b>12-12-36</b> +TE	Matures season	2.5-4kg/1000m <sup>2</sup>	3-5 applications during the maturity stages
	<b>10-10-40</b> +TE	Matures season	2.5-4kg/1000m <sup>2</sup>	3-5 applications

Crops	Fertilizer	Application Fertilizer date	Dosage	Note.
Tomatoes, Peppers, Cucumbers, Melons	<b>10-52-10</b> +TE	Beginning of farming	2.5-4kg/1000m <sup>2</sup>	2-3 applications
	<b>28-14-14</b> +TE	3-4 weeks after germination	2.5-4kg/1000m <sup>2</sup>	2-3 applications
	<b>20-20-20</b> +TE	Pre-mature	2.5-5kg/1000m <sup>2</sup>	*Succession fertilization with 20-05-30
	<b>20-05-30</b> +TE	Matures season	$2.5-4 \text{kg}/1000 \text{m}^2$	1-2 applications
	<b>9-9-41</b> +TE	Matures season	$2.5-4 \text{kg}/1000 \text{m}^2$	1-2 applications
Carrots, Parsley	15-30-15+TE	2 weeks after germination	2.5-5kg/1000m <sup>2</sup>	2-3 applications.
	<b>20-20-20</b> +TE	Growing season	2.5-5kg/1000m <sup>2</sup>	2-3 applications.
	<b>12-12-36</b> +TE	Matures season	2.5-5kg/1000m <sup>2</sup>	2-3 applications
Avocado	<b>10-52-10</b> +TE	Pre-season	2.5-4 kg/1000m <sup>2</sup>	2-3 applications every 2 weeks
	<b>25-10-10</b> +TE	Growth season	$2.5-4 \text{kg}/1000 \text{m}^2$	5 applications during the season of growth
	<b>20-20-20</b> +TE	Growth season	2.5-4kg/1000m <sup>2</sup>	2-3 applications during the season of growth .
	<b>12-2-45</b> +TE	Maturity season	2.5-4kg/1000m <sup>2</sup>	1-2 applications

Crops	Fertilizer	Application Fertilizer date	Dosage	Note.
Celery, Lettuce, Broccoli, Cauliflower	10-52-10 +TE	Pre-farming.	2.5-4kg/1000m <sup>2</sup>	2-3 applications.
	15-30-15+TE	10 days after germination.	5kg/ in 1000m <sup>2</sup>	2-3 applications.
	<b>20-20-20</b> +TE	Growing season.	5kg/1000m <sup>2</sup>	1-2 applications during the growing season .
	<b>28-14-14</b> +TE	Growing season.	2.5-4kg/1000m <sup>2</sup>	Use this formula If higher nitrogen levels are required .
Beans, Peas, Sweet Corn	15-30-15+TE	When plants are 10-12cm high	2.5-4kg/1000m <sup>2</sup>	2-3 applications.
	<b>20-20-20</b> +TE	Growing season	$2.5-4 \text{kg}/1000 \text{m}^2$	*succession fertilization
	<b>28-14-14</b> +TE	During the growing season	2.5-4kg/1000m <sup>2</sup>	application should be repeated every 7-10 days .
Beets, Onions, garlic	15-30-15+TE	When the plants are 10-15cm high	2-5kg/1000m <sup>2</sup>	2-3 applications.
	<b>20-20-20</b> +TE	Growing season	2-5kg/1000m <sup>2</sup>	1-2 application during the development of the bulbs or tubers.

Crops	Fertilizer	Application Fertilizer date	Dosage	Note.
Potatoes	<b>10-52-10</b> + TE	Beginning of farming	2.5-4kg/1000m <sup>2</sup>	2-3 applications.
	15-30-15+ TE	When plants are 6-8cm high	2.5-4kg/1000m <sup>2</sup>	1-2 applications during the growing season .
	<b>30-15-15</b> + TE	After flowering	2.5-4kg/1000m <sup>2</sup>	Should be made 7 days apart.
	20-20-20+ TE 17-07-27+ TE	Growing season Growing season	2.5-5kg/1000m <sup>2</sup> 2.5-5kg/1000m <sup>2</sup>	2-3 applications .
Clover, Alfalfa	15-30-15+ TE	Before the first cut is taken	2.5-5kg/1000m <sup>2</sup>	2-3 applications.
	20-20-20+ TE succession fertilization with 15-30-15+ TE	After each cutting	2.5-5 kg/1000m <sup>2</sup>	2-3 applications.
Cotton, Soybeans, Peanuts, Cereal Grains	<b>20-20-20</b> + TE	Beginning of farming	2.5-4kg/1000m <sup>2</sup>	2-3 applications.
	15-30-15+ TE succession fertilization with 20-20-20+ TE	Growing season	2.5-5kg/1000m <sup>2</sup>	* succession fertilization
	<b>28-14-14</b> + TE		2.5-4 kg/1000m <sup>2</sup>	The analysis chosen should depend on the specific nutrient requirements of the crop grown.

Crops	Fertilizer	Application Fertilizer date	Dosage	Note.
Coffee	<b>10-52-10</b> +TE	At the time of transplanting	2.5-5kg/1000m <sup>2</sup>	2-3 time while plants are flowering
	28-14-14+TE	Growing season	2.5-5kg/1000m <sup>2</sup>	1-2 applications.
	<b>20-20-20</b> +TE	Growing season	2.5-5kg/1000m <sup>2</sup>	1-2 applications.
	<b>12-12-36</b> +TE	Matures season	2.5-5kg/1000m <sup>2</sup>	1-2 applications.
	<b>15-5-30</b> + 2%MgO+TE	Matures season	2.5-5kg/1000m <sup>2</sup>	1-2 applications.
Tea	10-52-10+TE	Beginning of farming	6.5-13kg/ha	1-2 applications
	28-14-14+TE	Growing season	15-30 kg/ha	(7) applications during the season

Crops	Fertilizer	Application Fertilizer date	Dosage	Note.
Nursery Ornamentals	15-30-15 + TE	establish young plants	250g/100 L	2-3 applications.
	<b>20-20-20</b> + TE	Growing season	250g/100L/3weeks	If alkalinity is problem, use 21-7-7 For several application to reduce the PH of the soil .
	28-14-14+ TE	Growing season	250g/100L /3 weeks	<ul> <li>Every 2-3 weeks</li> <li>If higher nitrogen levels are required .</li> <li>For field grown plants use 6kg/ha/400L</li> </ul>
Lawns, Golf Courses, Turf	10-52-10+ TE	Beginning of farming	560g/100m <sup>2</sup>	2-3 applications.
	20-8-20+ TE	For golf greens and tees	200-600g/100m <sup>2</sup>	*high nitrate.
	20-5-30+ TE	forestry Special .	560g/100m <sup>2</sup>	*succession fertilization
	35-5-10+ TE	<ul><li>Golf fairways</li><li>Lawns</li></ul>	<ul> <li>320g/100m²</li> <li>1kg/100m²</li> </ul>	<ul><li>Every 2 weeks</li><li>Every 4-6 weeks</li></ul>
	<b>20-5-10</b> + TE	Growing season.	2kg/100m <sup>2</sup>	Use this formula under hot/dry condition .  * All turf fertilizer application should be done in 10-20L of water/100m <sup>2</sup>

Crops	Fertilizer	Application Fertilizer date	Dosage	Note.
Seedling starter	<b>11-41-8</b> + TE	Beginning of farming.	20-80g/100 L	*Every irrigation
Seedling Special	<b>20-8-20</b> + TE	Growing season	50-125 g /100 L	*Every 2 weeks
Seedling Finisher	8-20-30+ TE	Growing season .	20-80 g / 100 L	* Every irrigation
Interior Landscape	<b>20-10-20</b> + TE	All stages of growth	100-25g / 100L	*Every 2 weeks

