



PETERS[®]

PRODUCT USE
GUIDE

PETERS[®] A-B-C SELECTION SYSTEM[™]

PETERS
EXCEL[®]
WATER SOLUBLE FERTILIZER

PETERS
PROFESSIONAL[®]
WATER SOLUBLE FERTILIZER



PETERS®

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No matter what plants you grow, Peters® makes choosing the right fertilizers as easy as A-B-C.

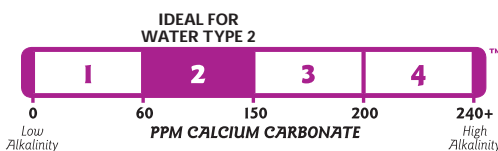
For more than 60 years, the original Peters® water soluble fertilizers from Scotts® have been the right choice in water soluble nutrition. Now they are also the easiest, with the revolutionary patent-pending Peters® A-B-C Selection System.™

Using more than 20,000 water tests and decades of research on water soluble fertilizers, Scotts created the Peters A-B-C Selection System with a focus on water quality, the single most important factor that affects fertilizer performance. This new system quickly identifies the best Peters formulations for your crops, making it easy to select the right product for efficient and effective plant nutrition.

Plus, you'll still get all the things that growers prefer in Peters water soluble fertilizers.

- Superior ingredients
- Exclusive M-77® nutrition package
- Technological advancements that improve solubility and decrease clumping
- Tough quality-assurance standards result in every bag meeting your high expectations
- Year-around technical support and superior service from Scotts professionals help you get the most out of every season

- **Easy:** Water quality is the heart of this new system of fertilizer selection. Once you know if your water is Type 1, 2, 3 or 4, you can quickly identify the best Peters formulations for the plants you're growing.



- **Flexible:** All Peters products are now categorized into A (All-Purpose) formulations, B (Base) formulations or C (Customizing) components, so growers can maintain their current nutrition management practices.



- **Efficient:** Formulas have been refined to provide the most effective mix of N-P-K ratios for the broadest range of crop nutrition. Plus, Scotts' exclusive and proprietary M-77 minor element package improves performance by promoting a favorable root zone and making micronutrients more consistently available to plants.

A heritage of premium plant nutrition.

Every bag of Peters® brand water soluble fertilizer contains the Scotts® legacy of quality and technological advancements. No other horticulture company puts more resources toward product testing and research or shares its expertise more readily than Scotts. That's why the original Peters is a brand that growers trust for consistent performance, reliable innovations and expert technical support.

Over the years, Scotts has continuously improved the original Peters brand with advantages like better grades of ingredients, plastic packaging, the new Peters® A-B-C

Selection System™ and Scotts' exclusive M-77® micronutrient package.

M-77 is a proprietary mixture that provides essential micronutrient nutrition to your plants with trace element sources blended at defined ratios. M-77 delivers optimum nutrition to crops raised in soilless growing media, especially in conditions where water quality is poor and soil pH is high. Only Scotts provides this technologically advanced nutrition package in select Peters water soluble fertilizers.



1947

2007

THE SCOTTS EXCLUSIVE M-77 MICRONUTRIENT SYSTEM

- Provides essential micronutrients more effectively through ratios that match what plants need.
- Formulated with higher levels of B, Cu and Zn for better plant performance when fertilizer rates are low, water quality is poor and pH is high.
- Includes beneficial proprietary additives that enhance micronutrient availability and plant uptake.
- Optimizes plant growth by facilitating nutrient uptake through a more favorable root zone environment.
- Maintains micronutrient availability over a wide soil pH range.
- Coupled with the Excel® technology, the products are easy to mix in the stock tank, improve the clarity of solution and help facilitate a no-clog delivery system.



Water quality is the heart of the new Peters® A-B-C Selection System™

Water quality is the single most important factor in determining solubility and nutrient availability for plants.

In order to choose an appropriate water soluble fertilizer, you need to know exactly what your irrigation water is supplying to plants. It's especially important for growers whose irrigation source is affected by one of the following:

- Well water
- Any change in irrigation water source
- Multiple sources of irrigation water
- Heavy rain, melt-off or flooding
- Ongoing or recent droughts



The real success of the new Peters® A-B-C Selection System™ lies in its use of water quality as the first step in determining which formulations will work the best. Once you know your water, you can automatically narrow your options to the water soluble fertilizers that perform best in your operation.

WATER QUALITY MEASUREMENTS

Alkalinity: Alkalinity, the bicarbonates and carbonates levels in water, is the most critical item to measure because it has a great effect on growing media pH. A certain amount of alkalinity is good, because it will buffer the solution from acidic influences such as peat moss and fertilizer. Excessively high or low alkalinity levels will directly impact the availability of micronutrients in growing media. Low alkalinity may lead to depressed growing media pH's and micronutrient toxicities, while high levels of alkalinity can increase the growing medium pH over time and lead to micronutrient deficiencies.

Soluble Salts (EC): Soluble salts or electrical conductivity (EC) is a general measure of salts dissolved in the water. An irrigation source is best if EC levels fall between 0.2 and 1.2 mmhos/cm. Since the EC measurement does not identify which elements—helpful or harmful—are in the water, a complete nutrient analysis of water is necessary.

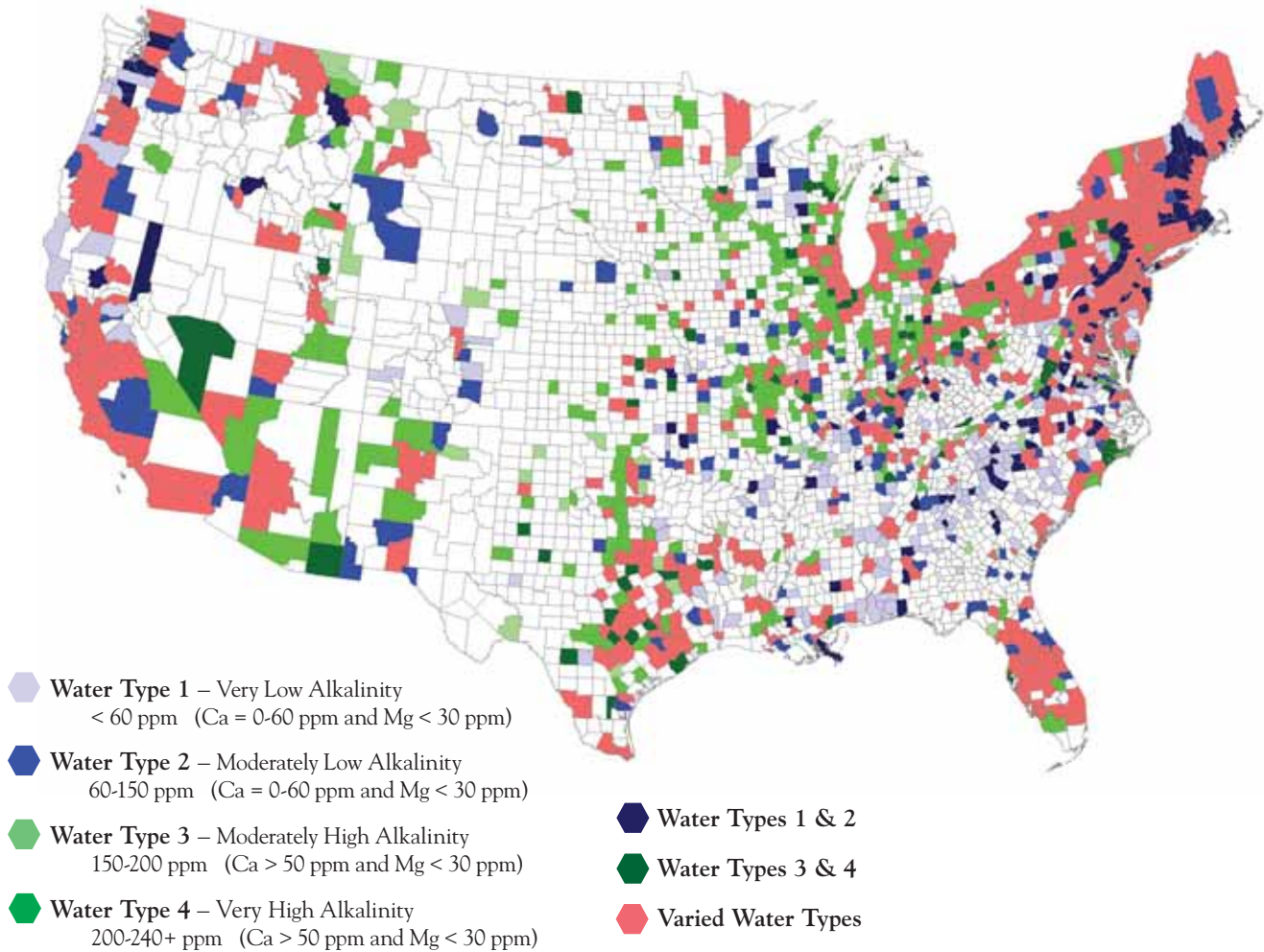
Calcium (Ca): Calcium is an essential element for plant growth that is often present in irrigation waters. Calcium is required in large quantities by young growing tissues, strengthening stems and promoting strong overall plant growth. Low levels will lead to poorly developed younger leaves or buds and other growing point disorders. Scotts recommends that irrigation waters have a minimum of 40 to 75 ppm Ca. When calcium levels are below this range, it's necessary to supplement additional calcium for optimum results.

Magnesium (Mg): Like calcium, magnesium is often found in irrigation waters. Magnesium is an important component of chlorophyll, the green pigment that is responsible for photosynthesis. Irrigation waters should have a minimum 30 to 50 ppm Mg. Pure waters will generally not have sufficient magnesium, and deficiencies may occur unless the nutritional program addresses the need. Symptoms are generally expressed as interveinal chlorosis of the older leaves first. Also, remember to maintain a good calcium-to-magnesium ratio in the growing media (2:1 is recommended).

WATER QUALITY TRENDS

The map below is based on more than 20,000 water analyses performed over the last decade. It was compiled to help identify geographic trends in water quality and to help growers get an idea of what water type or types are most prevalent in their areas. As you can see, water quality can vary greatly within a single county.

To see the variance found in your county, visit www.PetersABC.com and click on "Select a Product." Remember, though, accurate testing of your actual irrigation is the only way to know exactly what your plants are getting from your water.



HOW TO TAKE A WATER SAMPLE

Because water quality is so crucial to fertilizer performance, Scotts® is dedicated to providing accurate, affordable analysis through The Scotts Testing Lab. The Lab provides easy-to-understand reports for irrigation water that will determine your water type.



Call The Scotts Testing Lab toll free at 1-877-HORTLAB to get a sample test kit, then follow these simple steps:

1. Flush out the lines or hoses for several minutes with fresh solution before taking the sample.
2. Fill a clean bucket with water (or nutrient solution) and then submerge the Scotts sample bottle or another clean, unbreakable, leak-proof container in the bucket.
3. Fill the sample bottle completely to the top, making certain there is no air space in the container. Close the lid tightly, clearly label each bottle with a permanent marker and send the solution sample to The Scotts Testing Lab as soon as possible.

New A-B-C designations help growers choose the right formulations for their operations.



Scotts® applied years of research, testing and experience in determining which Peters® products perform best on which plants. We've used this data to help you select the formulations that will help you achieve the healthiest and most beautiful plants possible.

For example, if you have Water Type 2 and are raising bedding plants, the Peters® A-B-C Selection System™ will give you two A—All-Purpose formulation options, and one or more B+C options.

A number of Peters Excel® and Peters Professional® fertilizers are labeled A for All-Purpose formulation. When correctly matched to your water type, A formulations offer one-bag convenience while ensuring perfectly balanced and more complete nutrition, no matter what you're growing.

One A formulation can take the place of several crop-specific fertilizers, because each has been tested and proven to work over a broad range of plant types. Plus, Peters Excel can still be tank-mixed with other Peters Excel formulas for a single-tank solution that keeps emitters

clean while saving labor and delivering superior nutrition. Growers can also opt for the added flexibility of using a B (Base) formulation with one or more C (Customizing) components.

Base formulations are many of the same Peters products that growers have trusted for more than 60 years. Each Base formulation can be used alone or rotated and sometimes tank-mixed with one of the Customizing components to mitigate water quality or address the unique nutritional needs for a certain crop. Customizing components provide a prescriptive boost of nutrients needed to produce healthy, beautiful results. Together with B products, they create the right nutritional balance for your particular growing situation.



Visit www.PetersABC.com to use the online interactive version.

Expanded Package Information

Peters Excel® and Peters Professional® products come in new bags with more details on product use. You will find directions and expanded rate information right at your fingertips when you need it most. The following are general use guidelines you'll also find on the new Peters® packaging.

Directions for Use

Selecting the Correct Fertilizer Program – The chemical composition of the irrigation solutions applied to crops has a major influence on the nutrients available to plants in the long term. First, send a sample of your irrigation water to The Scotts Testing Lab. Test results will indicate your ABC Water Type (1-4)[™] that can be matched with a similar indicator that appears on the front of each bag of Scotts Water Soluble Fertilizer. Selecting a fertilizer based on this water type will ensure you experience the best results from your fertilizer program.

Selecting the Correct Concentration – The correct fertilizer concentration for a particular growing operation will depend on a number of factors including, feeding frequency, crop type, crop stage, growing media, pot size, leaching fraction and environmental conditions. Generally, fertilizer should be applied at concentrations necessary to sustain optimal root zone nutrient levels and quality plant growth. Continuous feeding provides a more uniform plant nutrition program and is recommended over periodic feeding.

Fertilizer Compatibility – All Peters Excel fertilizers are tank mix compatible with each other. However, not all Peters Professional and Peters Excel water soluble fertilizer products are compatible. There can be problems when blending calcium-containing fertilizers with sulfuric acid or sulfate containing fertilizers such as S.T.E.M.[™] or Epsom salts (magnesium sulfate). Refer to Scotts Compatibility Information on our web site.

Solubility – Product components are completely water soluble. However, a number of factors will determine how fast the fertilizer will dissolve (i.e., desired concentration, temperature of irrigation water, agitation, time, irrigation water quality, the fertilizer itself and compatibility of other components in the stock tank). Each product has a stated maximum solubility that is determined under ideal lab conditions—it is physically impossible to maintain solubility above this value.

Water Soluble Fertilizer Appearance – This product is composed from a number of components, varying in size. Some of the products are uniform in appearance while others quite heterogeneous. The tracer dye color intensity and distribution may appear variable in the bag. However, once the product is diluted in a stock tank, the colorant level should be consistent.

Monitoring – The Scotts Testing Laboratory is a reliable source for testing water, growing media or tissue. Injector monitoring and maintenance will help to ensure that you are feeding at optimal levels. Weekly on-site measurements of fertilizer solution and crop media EC and pH can be a valuable tool in managing your crop. A follow-up program of complete media analysis (and tissue in problem-solving situations), should be initiated to optimize your nutritional program.

Storage: Opened bags should be sealed. Unsealed or partially used products may take on moisture from the atmosphere and may subsequently soften or harden in the bag. As long as bags are properly re-sealed, this should in no way diminish nutrient content of the fertilizer. Store product in a cool, dry environment.

Need More Information – To fine-tune your fertilizer selection to your individual growing conditions, you can contact an experienced Scotts horticultural professional or you can refer to the www.PetersABC.com web site to access the Peters® A-B-C Selection System.[™]

Step-by-Step Mixing Information

Suggested Rates for Crop Types

Revised Chart Rates

Mixing for Smaller Quantities (no injectors)

PETERS EXCEL 15-5-15 CAL-MAG SPECIAL

Directions for Use: This product is a water soluble fertilizer. It is designed for use in irrigation systems. It is not to be used in soil applications. It is not to be used in conjunction with other fertilizers. It is not to be used in conjunction with pesticides. It is not to be used in conjunction with herbicides. It is not to be used in conjunction with fungicides. It is not to be used in conjunction with bactericides. It is not to be used in conjunction with nematocides. It is not to be used in conjunction with molluscicides. It is not to be used in conjunction with acaricides. It is not to be used in conjunction with insecticides. It is not to be used in conjunction with miticides. It is not to be used in conjunction with molluscicides. It is not to be used in conjunction with acaricides. It is not to be used in conjunction with insecticides. It is not to be used in conjunction with miticides.

Element	Analysis
Total Nitrogen	15.00%
Total Phosphorus	5.00%
Total Potassium	15.00%
Calcium	1.00%
Magnesium	0.50%
Sulfur	0.50%
Zinc	0.01%
Copper	0.01%
Manganese	0.01%
Boron	0.01%
Iron	0.01%
Silica	0.01%
Chlorine	0.01%
Sodium	0.01%
Fluorine	0.01%
Aluminum	0.01%
Barium	0.01%
Strontium	0.01%
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Bromine	0.01%
Fluorine	0.01%
Aluminum	0.01%
Barium	0

Two easy steps to the best Peters® product.

The Peters® A-B-C Selection System™ quickly identifies the best fertilizer choices for your operation. This section provides detailed information about each

Peters® product, including guaranteed analysis, application rates and a summary of product benefits.



PETERS EXCEL[®] 13-2-13

PLUG & BEDDING PLANT SPECIAL

Ideal for plugs, liners, bedding plants and vegetable transplants with high nitrate and low phosphate levels to encourage healthy, compact growth.

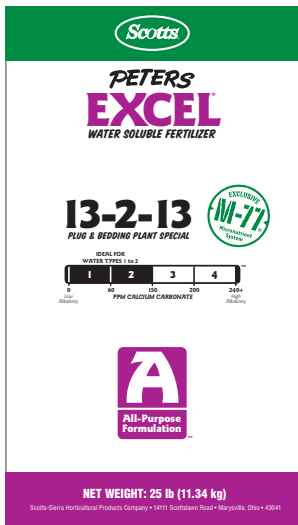
- A (All-Purpose) formulation for constant, balanced nutrition
- Most effective with Water Types 1 and 2
- Contains calcium, magnesium and other minor elements

Guaranteed Analysis

Total nitrogen (N)	13%
12.1% nitrate nitrogen	
0.9% urea nitrogen	
Available phosphate (P ₂ O ₅)	2%
Soluble potash (K ₂ O)	13%
Calcium (Ca)	6%
Magnesium (Mg) (Total)	3%
3.0% water soluble magnesium (Mg)	
Boron (B)	0.0162%
Copper (Cu)	0.0162%
0.0162% water soluble copper (Cu)	
Iron (Fe)	0.0650%
0.0650% chelated iron (Fe)	
Manganese (Mn) (Total)	0.0325%
0.0325% water soluble manganese (Mn)	
Molybdenum (Mo)	0.0065%
Zinc (Zn)	0.0325%
0.0325% water soluble zinc (Zn)	

Derived from: potassium nitrate, calcium nitrate, magnesium nitrate, urea phosphate, boric acid, copper sulfate, iron EDTA, manganese sulfate, ammonium molybdate, zinc sulfate.

99120



Weight (In Ounces) of Product Needed to Mix One Gallon of Concentrate						
Target Fertilizer Concentration (N/ppm) After Dilution	Common Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	0.4	2.6	3.3	5.2	7.8	0.19
50	0.8	5.2	6.6	10.4	15.6	0.38
75	1.2	7.8	10.0	15.6	23.4	0.56
100	1.6	10.4	13.3	20.8	31.1	0.75
125	1.9	13.0	16.6	26.0	38.9	0.94
150	2.3	15.6	19.9	31.1	46.7	1.13
175	2.7	18.2	23.3	36.3	54.5	1.31
200	3.1	20.8	26.6	41.5	62.3	1.50
250	3.9	26.0	33.2	51.9	77.9	1.88
300	4.7	31.1	39.9	62.3	***	2.25
350	5.4	36.3	46.5	72.7	***	2.63
400	6.2	41.5	53.1	***	***	3.00
450	7.0	46.7	59.8	***	***	3.38
500	7.8	51.9	66.4	***	***	3.75
600	9.3	62.3	79.7	***	***	4.50

*** Exceeds maximum solubility.

Mixing For Watering Cans, Spray Tanks (No Injectors)		
Amount of Fertilizer*	+ Amount of Water (gallons)	= ppm N
1 tsp	1	168
1 tbsp	2	252
1 cup	25	323

*level measurements

1 pound of fertilizer + 100 gallons of water = 155.8 ppm N

Product Properties	
Potential Basicity335 lbs calcium carbonate equivalent per ton
Conductivity of 100 ppm	0.75 mmhos/cm
Maximum Solubility	5 lbs/gal

Gallons of Water Required to Dissolve One 25 Lb Bag of Fertilizer						
Target Fertilizer Concentration (N/ppm) After Dilution	Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	1027.6	154.1	120.4	77.1	51.4	0.19
50	513.8	77.1	60.2	38.5	25.7	0.38
75	342.5	51.4	40.1	25.7	17.1	0.56
100	256.9	38.5	30.1	19.3	12.8	0.75
125	205.5	30.8	24.1	15.4	10.3	0.94
150	171.3	25.7	20.1	12.8	8.6	1.13
175	146.8	22.0	17.2	11.0	7.3	1.31
200	128.5	19.3	15.1	9.6	6.4	1.50
250	102.8	15.4	12.0	7.7	5.1	1.88
300	85.6	12.8	10.0	6.4	***	2.25
350	73.4	11.0	8.6	5.5	***	2.63
400	64.2	9.6	7.5	***	***	3.00
450	57.1	8.6	6.7	***	***	3.38
500	51.4	7.7	6.0	***	***	3.75
600	42.8	6.4	5.0	***	***	4.50

*** Exceeds maximum solubility.

PETERS EXCEL[®] 15-2-20

PANSY, SALVIA & VINCA

Formulated for compact growth and bright blossoms on pansy, salvia, vinca, etc. with high nitrate, low phosphate and extra boron.

- A (All-Purpose) formulation for constant, balanced nutrition
- Most effective with Water Types 1 and 2
- Contains calcium, magnesium and other minor elements

Guaranteed Analysis

Total nitrogen (N)	15%
1.4% ammoniacal nitrogen	
12.8% nitrate nitrogen	
0.8% urea nitrogen	
Available phosphate (P ₂ O ₅)	2%
Soluble potash (K ₂ O)	20%
Calcium (Ca)	3.75%
Magnesium (Mg) (Total)	2%
2.0% water soluble magnesium (Mg)	
Boron (B)	0.0300%
Copper (Cu)	0.0187%
0.0187% water soluble copper (Cu)	
Iron (Fe)	0.1000%
0.1000% chelated iron (Fe)	
Manganese (Mn) (Total)	0.0500%
0.0500% water soluble manganese (Mn)	
Molybdenum (Mo)	0.0075%
Zinc (Zn)	0.0375%
0.0375% water soluble zinc (Zn)	

Derived from: ammonium nitrate, potassium nitrate, calcium nitrate, urea phosphate, magnesium nitrate, boric acid, copper sulfate, iron EDTA, manganese sulfate, ammonium molybdate, zinc sulfate.

99130



Weight (In Ounces) of Product Needed to Mix One Gallon of Concentrate						
Target Fertilizer Concentration (N/ppm) After Dilution	Common Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	0.3	2.3	2.9	4.5	6.8	0.19
50	0.7	4.5	5.8	9.0	13.5	0.39
75	1.0	6.8	8.6	13.5	20.3	0.58
100	1.4	9.0	11.5	18.0	27.0	0.77
125	1.7	11.3	14.4	22.5	33.8	0.96
150	2.0	13.5	17.3	27.0	40.5	1.16
175	2.4	15.8	20.2	31.5	47.3	1.35
200	2.7	18.0	23.0	36.0	54.0	1.54
250	3.4	22.5	28.8	45.0	***	1.93
300	4.1	27.0	34.6	54.0	***	2.31
350	4.7	31.5	40.3	***	***	2.70
400	5.4	36.0	46.1	***	***	3.08
450	6.1	40.5	51.8	***	***	3.47
500	6.8	45.0	***	***	***	3.85
600	8.1	54.0	***	***	***	4.62

*** Exceeds maximum solubility.

Mixing For Watering Cans, Spray Tanks (No Injectors)		
Amount of Fertilizer*	+ Amount of Water (gallons)	= ppm N
1 tsp	1	219
1 tbsp	2	329
1 cup	25	421

*level measurements

1 pound of fertilizer + 100 gallons of water = 179.8 ppm N

Product Properties	
Potential Basicity234 lbs calcium carbonate equivalent per ton
Conductivity of 100 ppm	0.77 mmhos/cm
Maximum Solubility	3.5 lbs/gal

Gallons of Water Required to Dissolve One 25 Lb Bag of Fertilizer						
Target Fertilizer Concentration (N/ppm) After Dilution	Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	1185.2	177.8	138.9	88.9	59.3	0.19
50	592.6	88.9	69.4	44.4	29.6	0.39
75	395.1	59.3	46.3	29.6	19.8	0.58
100	296.3	44.4	34.7	22.2	14.8	0.77
125	237.0	35.6	27.8	17.8	11.9	0.96
150	197.5	29.6	23.1	14.8	9.9	1.16
175	169.3	25.4	19.8	12.7	8.5	1.35
200	148.1	22.2	17.4	11.1	7.4	1.54
250	118.5	17.8	13.9	8.9	***	1.93
300	98.8	14.8	11.6	7.4	***	2.31
350	84.7	12.7	9.9	***	***	2.70
400	74.1	11.1	8.7	***	***	3.08
450	65.8	9.9	7.7	***	***	3.47
500	59.3	8.9	***	***	***	3.85
600	49.4	7.4	***	***	***	4.62

*** Exceeds maximum solubility.

PETERS EXCEL[®] 15-5-15 CAL-MAG SPECIAL

Excellent all-purpose formulation combines high nitrate and low phosphate with extra calcium and magnesium for Type 2 irrigation water.

- A (All-Purpose) formulation for constant, balanced nutrition
- Ideal in operations irrigating with Water Type 2
- Contains a complete range of essential micronutrients

Guaranteed Analysis

Total nitrogen (N)	15%
1.1% ammoniacal nitrogen	
11.8% nitrate nitrogen	
2.1% urea nitrogen	
Available phosphate (P ₂ O ₅)5%
Soluble potash (K ₂ O)	15%
Calcium (Ca)5%
Magnesium (Mg) (Total)2%
2.0% water soluble magnesium (Mg)	
Boron (B)	0.0187%
Copper (Cu)	0.0187%
0.0187% water soluble copper (Cu)	
Iron (Fe)	0.0750%
0.0750% chelated iron (Fe)	
Manganese (Mn) (Total)	0.0375%
0.0375% water soluble manganese (Mn)	
Molybdenum (Mo)	0.0075%
Zinc (Zn)	0.0375%
0.0375% water soluble zinc (Zn)	

Derived from: ammonium nitrate, potassium nitrate, calcium nitrate, magnesium nitrate, urea phosphate, magnesium sulfate, boric acid, copper sulfate, iron EDTA, manganese sulfate, ammonium molybdate, zinc sulfate.

99140



Weight (In Ounces) of Product Needed to Mix One Gallon of Concentrate						
Target Fertilizer Concentration (N/ppm) After Dilution	Common Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	0.3	2.3	2.9	4.5	6.8	0.17
50	0.7	4.5	5.8	9.0	13.5	0.35
75	1.0	6.8	8.6	13.5	20.3	0.52
100	1.4	9.0	11.5	18.0	27.0	0.69
125	1.7	11.3	14.4	22.5	33.8	0.86
150	2.0	13.5	17.3	27.0	40.5	1.04
175	2.4	15.8	20.2	31.5	47.3	1.21
200	2.7	18.0	23.0	36.0	***	1.38
250	3.4	22.5	28.8	45.0	***	1.73
300	4.1	27.0	34.6	***	***	2.07
350	4.7	31.5	40.3	***	***	2.42
400	5.4	36.0	46.1	***	***	2.76
450	6.1	40.5	***	***	***	3.11
500	6.8	45.0	***	***	***	3.45
600	8.1	***	***	***	***	4.14

*** Exceeds maximum solubility.

Mixing For Watering Cans, Spray Tanks (No Injectors)		
Amount of Fertilizer*	+ Amount of Water (gallons)	= ppm N
1 tsp	1	194
1 tbsp	2	291
1 cup	25	372

*level measurements

1 pound of fertilizer + 100 gallons of water = 179.8 ppm N

Product Properties	
Potential Basicity	131 lbs calcium carbonate equivalent per ton
Conductivity of 100 ppm	0.69 mmhos/cm
Maximum Solubility	3 lbs/gal

Gallons of Water Required to Dissolve One 25 Lb Bag of Fertilizer						
Target Fertilizer Concentration (N/ppm) After Dilution	Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	1185.2	177.8	138.9	88.9	59.3	0.17
50	592.6	88.9	69.4	44.4	29.6	0.35
75	395.1	59.3	46.3	29.6	19.8	0.52
100	296.3	44.4	34.7	22.2	14.8	0.69
125	237.0	35.6	27.8	17.8	11.9	0.86
150	197.5	29.6	23.1	14.8	9.9	1.04
175	169.3	25.4	19.8	12.7	8.5	1.21
200	148.1	22.2	17.4	11.1	***	1.38
250	118.5	17.8	13.9	8.9	***	1.73
300	98.8	14.8	11.6	***	***	2.07
350	84.7	12.7	9.9	***	***	2.42
400	74.1	11.1	8.7	***	***	2.76
450	65.8	9.9	***	***	***	3.11
500	59.3	8.9	***	***	***	3.45
600	49.4	***	***	***	***	4.14

*** Exceeds maximum solubility.

PETERS EXCEL[®] 21-5-20 MULTI PURPOSE

Moderately acidic formulation serves as an excellent all-purpose fertilizer for Types 3 and 4 irrigation water.

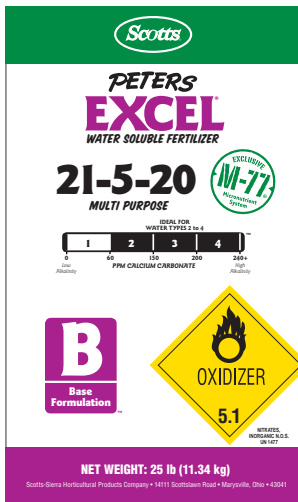
- B (Base) formulation can be used alone or rotated with a C (Customizing) component
- Appropriate for Water Types 2, 3 and 4
- Contains a complete range of essential micronutrients

Guaranteed Analysis

Total nitrogen (N)	21%
7.3% ammoniacal nitrogen	
12.6% nitrate nitrogen	
1.1% urea nitrogen	
Available phosphate (P ₂ O ₅)	5%
Soluble potash (K ₂ O)	20%
Boron (B)	0.0262%
Copper (Cu)	0.0262%
0.0262% water soluble copper (Cu)	
Iron (Fe)	0.1050%
0.1050% chelated iron (Fe)	
Manganese (Mn) (Total)	0.0525%
0.0525% water soluble manganese (Mn)	
Molybdenum (Mo)	0.0105%
Zinc (Zn)	0.0525%
0.0525% water soluble zinc (Zn)	

Derived from: ammonium nitrate, ammonium phosphate, potassium nitrate, urea phosphate, boric acid, copper sulfate, iron EDTA, manganese sulfate, ammonium molybdate, zinc sulfate.

99150



Weight (In Ounces) of Product Needed to Mix One Gallon of Concentrate						
Target Fertilizer Concentration (N/ppm) After Dilution	Common Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	0.2	1.6	2.1	3.2	4.8	0.16
50	0.5	3.2	4.1	6.4	9.6	0.32
75	0.7	4.8	6.2	9.6	14.5	0.47
100	1.0	6.4	8.2	12.9	19.3	0.63
125	1.2	8.0	10.3	16.1	24.1	0.79
150	1.4	9.6	12.3	19.3	28.9	0.95
175	1.7	11.3	14.4	22.5	33.8	1.10
200	1.9	12.9	16.5	25.7	38.6	1.26
250	2.4	16.1	20.6	32.2	48.2	1.58
300	2.9	19.3	24.7	38.6	57.9	1.89
350	3.4	22.5	28.8	45.0	***	2.21
400	3.9	25.7	32.9	51.4	***	2.52
450	4.3	28.9	37.0	57.9	***	2.84
500	4.8	32.2	41.2	***	***	3.15
600	5.8	38.6	49.4	***	***	3.78

*** Exceeds maximum solubility.

Mixing For Watering Cans, Spray Tanks (No Injectors)				
Amount of Fertilizer*	+	Amount of Water (gallons)	=	ppm N
1 tsp		1		320
1 tbsp		2		480
1 cup		25		614

*level measurements

1 pound of fertilizer + 100 gallons of water = 251.7 ppm N

Product Properties	
Potential Acidity390 lbs calcium carbonate equivalent per ton
Conductivity of 100 ppm	0.63 mmhos/cm
Maximum Solubility	4 lbs/gal

Gallons of Water Required to Dissolve One 25 Lb Bag of Fertilizer						
Target Fertilizer Concentration (N/ppm) After Dilution	Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	1658.9	248.8	194.4	124.4	82.9	0.16
50	829.4	124.4	97.2	62.2	41.5	0.32
75	553.0	82.9	64.8	41.5	27.6	0.47
100	414.7	62.2	48.6	31.1	20.7	0.63
125	331.8	49.8	38.9	24.9	16.6	0.79
150	276.5	41.5	32.4	20.7	13.8	0.95
175	237.0	35.5	27.8	17.8	11.8	1.10
200	207.4	31.1	24.3	15.6	10.4	1.26
250	165.9	24.9	19.4	12.4	8.3	1.58
300	138.2	20.7	16.2	10.4	6.9	1.89
350	118.5	17.8	13.9	8.9	***	2.21
400	103.7	15.6	12.2	7.8	***	2.52
450	92.2	13.8	10.8	6.9	***	2.84
500	82.9	12.4	9.7	***	***	3.15
600	69.1	10.4	8.1	***	***	3.78

*** Exceeds maximum solubility.

PETERS EXCEL[®] 21-5-20

MULTI-PURPOSE NO BORON

Moderately acidic boron-free formulation delivers high nitrate, low phosphate nutrition best with Types 3 and 4 irrigation water.

- B (Base) formulation can be used alone or rotated with a C (Customizing) component
- Appropriate for Water Types 2, 3 and 4
- Contains a full range of essential micronutrients

Guaranteed Analysis

Total nitrogen (N)	21%
7.2% ammoniacal nitrogen	
12.7% nitrate nitrogen	
1.1% urea nitrogen	
Available phosphate (P ₂ O ₅)	5%
Soluble potash (K ₂ O)	20%
Copper (Cu)	0.0262%
0.0262% water soluble copper (Cu)	
Iron (Fe)	0.1050%
0.1050% chelated iron (Fe)	
Manganese (Mn) (Total)	0.0525%
0.0525% water soluble manganese (Mn)	
Molybdenum (Mo)	0.0105%
Zinc (Zn)	0.0525%
0.0525% water soluble zinc (Zn)	

Derived from: ammonium nitrate, ammonium phosphate, potassium nitrate, urea phosphate, boric acid, copper sulfate, iron EDTA, manganese sulfate, ammonium molybdate, zinc sulfate.

99152



Weight (In Ounces) of Product Needed to Mix One Gallon of Concentrate						
Target Fertilizer Concentration (N/ppm) After Dilution	Common Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	0.2	1.6	2.1	3.2	4.8	0.16
50	0.5	3.2	4.1	6.4	9.6	0.32
75	0.7	4.8	6.2	9.6	14.5	0.47
100	1.0	6.4	8.2	12.9	19.3	0.63
125	1.2	8.0	10.3	16.1	24.1	0.79
150	1.4	9.6	12.3	19.3	28.9	0.95
175	1.7	11.3	14.4	22.5	33.8	1.10
200	1.9	12.9	16.5	25.7	38.6	1.26
250	2.4	16.1	20.6	32.2	48.2	1.58
300	2.9	19.3	24.7	38.6	57.9	1.89
350	3.4	22.5	28.8	45.0	***	2.21
400	3.9	25.7	32.9	51.4	***	2.52
450	4.3	28.9	37.0	57.9	***	2.84
500	4.8	32.2	41.2	***	***	3.15
600	5.8	38.6	49.4	***	***	3.78

*** Exceeds maximum solubility.

Mixing For Watering Cans, Spray Tanks (No Injectors)		
Amount of Fertilizer*	Amount of Water (gallons)	= ppm N
1 tsp	1	298
1 tbsp	2	447
1 cup	25	572

*level measurements

1 pound of fertilizer + 100 gallons of water = 251.7 ppm N

Product Properties	
Potential Acidity	377 lbs calcium carbonate equivalent per ton
Conductivity of 100 ppm	0.64 mmhos/cm
Maximum Solubility	4 lbs/gal

Gallons of Water Required to Dissolve One 25 Lb Bag of Fertilizer						
Target Fertilizer Concentration (N/ppm) After Dilution	Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	1658.9	248.8	194.4	124.4	82.9	0.16
50	829.4	124.4	97.2	62.2	41.5	0.32
75	553.0	82.9	64.8	41.5	27.6	0.47
100	414.7	62.2	48.6	31.1	20.7	0.63
125	331.8	49.8	38.9	24.9	16.6	0.79
150	276.5	41.5	32.4	20.7	13.8	0.95
175	237.0	35.5	27.8	17.8	11.8	1.10
200	207.4	31.1	24.3	15.6	10.4	1.26
250	165.9	24.9	19.4	12.4	8.3	1.58
300	138.2	20.7	16.2	10.4	6.9	1.89
350	118.5	17.8	13.9	8.9	***	2.21
400	103.7	15.6	12.2	7.8	***	2.52
450	92.2	13.8	10.8	6.9	***	2.84
500	82.9	12.4	9.7	***	***	3.15
600	69.1	10.4	8.1	***	***	3.78

*** Exceeds maximum solubility.

PETERS EXCEL[®] 10-0-0 MAGNITRATE SPECIAL

A premium choice for all crops that require supplemental magnesium.

- C (Customizing) component provides steady nitrogen uptake
- Effective for all Water Types
- Contains a complete range of essential micronutrients

Guaranteed Analysis

Total nitrogen (N)	10%
10% nitrate nitrogen	
Magnesium (Mg) (Total)	9%
9.0% water soluble magnesium (Mg)	
Boron (B)	0.0125%
Copper (Cu)	0.0125%
0.0125% water soluble copper (Cu)	
Iron (Fe)	0.0500%
0.0500% chelated iron (Fe)	
Manganese (Mn)	0.0250%
0.0250% water soluble manganese (Mn)	
Molybdenum (Mo)	0.0050%
Zinc (Zn)	0.0250%
0.0250% water soluble zinc (Zn)	

Derived from: magnesium nitrate, boric acid, copper sulfate, iron EDTA, manganese sulfate, ammonium molybdate, zinc sulfate.

99160

Target Fertilizer Concentration (N/ppm) After Dilution	Common Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	0.5	3.4	4.3	6.8	10.1	0.18
50	1.0	6.8	8.6	13.5	20.3	0.35
75	1.5	10.1	13.0	20.3	30.4	0.53
100	2.0	13.5	17.3	27.0	40.5	0.70
125	2.5	16.9	21.6	33.8	50.6	0.88
150	3.0	20.3	25.9	40.5	60.8	1.05
175	3.5	23.6	30.2	47.3	70.9	1.23
200	4.1	27.0	34.6	54.0	***	1.40
250	5.1	33.8	43.2	67.5	***	1.75
300	6.1	40.5	51.8	***	***	2.10
350	7.1	47.3	60.5	***	***	2.45
400	8.1	54.0	69.1	***	***	2.80
450	9.1	60.8	77.8	***	***	3.15
500	10.1	67.5	***	***	***	3.50
600	12.2	***	***	***	***	4.20

*** Exceeds maximum solubility.

Mixing For Watering Cans, Spray Tanks (No Injectors)		
Amount of Fertilizer*	Amount of Water (gallons)	= ppm N
1 tsp	3	35
1 tbsp	10	31
1 cup	100	50

*level measurements

1 pound of fertilizer + 100 gallons of water = 119.8 ppm N

Product Properties	
Potential Basicity	357 lbs calcium carbonate equivalent per ton
Conductivity of 100 ppm	0.70 mmhos/cm
Maximum Solubility	5 lbs/gal

Target Fertilizer Concentration (N/ppm) After Dilution	Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	790.1	118.5	92.6	59.3	39.5	0.18
50	395.1	59.3	46.3	29.6	19.8	0.35
75	263.4	39.5	30.9	19.8	13.2	0.53
100	197.5	29.6	23.1	14.8	9.9	0.70
125	158.0	23.7	18.5	11.9	7.9	0.88
150	131.7	19.8	15.4	9.9	6.6	1.05
175	112.9	16.9	13.2	8.5	5.6	1.23
200	98.8	14.8	11.6	7.4	***	1.40
250	79.0	11.9	9.3	5.9	***	1.75
300	65.8	9.9	7.7	***	***	2.10
350	56.4	8.5	6.6	***	***	2.45
400	49.4	7.4	5.8	***	***	2.80
450	43.9	6.6	5.1	***	***	3.15
500	39.5	5.9	***	***	***	3.50
600	32.9	***	***	***	***	4.20

*** Exceeds maximum solubility.

PETERS PROFESSIONAL

17-3-17

PEAT-LITE® NEUTRAL CAL-MAG

Premium all-purpose formulation produces a nearly neutral reaction to help maintain steady pH in growing media.

- A (All-Purpose) formulation for constant, balanced nutrition
- Ideal for Water Types 1 and 2
- Contains calcium, magnesium and other minor elements

Guaranteed Analysis

Total nitrogen (N)	17%
4.0% ammoniacal nitrogen	
13.0% nitrate nitrogen	
Available phosphate (P ₂ O ₅)	3%
Soluble potash (K ₂ O)	17%
Calcium (Ca)	4.00%
Magnesium (Mg) (Total)	1.25%
1.25% water soluble magnesium (Mg)	
Boron (B)	0.0212%
Copper (Cu)	0.0212%
0.0212% chelated copper (Cu)	
Iron (Fe)	0.0850%
0.0850% chelated iron (Fe)	
Manganese (Mn) (Total)	0.0425%
0.0425% chelated manganese (Mn)	
Molybdenum (Mo)	0.0085%
Zinc (Zn)	0.0425%
0.0425% chelated zinc (Zn)	

Derived from: ammonium nitrate, ammonium phosphate, potassium nitrate, calcium nitrate, magnesium nitrate, boric acid, copper EDTA, iron EDTA, manganese EDTA, ammonium molybdate, zinc EDTA.

99230



Weight (In Ounces) of Product Needed to Mix One Gallon of Concentrate						
Target Fertilizer Concentration (N/ppm) After Dilution	Common Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	0.3	2.0	2.5	3.9	5.9	0.16
50	0.6	3.9	5.0	7.9	11.8	0.33
75	0.9	5.9	7.5	11.8	17.7	0.49
100	1.2	7.9	10.0	15.7	23.6	0.65
125	1.5	9.8	12.6	19.6	29.4	0.81
150	1.8	11.8	15.1	23.6	35.3	0.98
175	2.1	13.7	17.6	27.5	41.2	1.14
200	2.4	15.7	20.1	31.4	47.1	1.30
250	2.9	19.6	25.1	39.3	58.9	1.63
300	3.5	23.6	30.1	47.1	70.7	1.95
350	4.1	27.5	35.2	55.0	***	2.28
400	4.7	31.4	40.2	62.8	***	2.60
450	5.3	35.3	45.2	70.7	***	2.93
500	5.9	39.2	50.2	78.5	***	3.25
600	7.1	47.1	60.3	***	***	3.90

*** Exceeds maximum solubility.

Mixing For Watering Cans, Spray Tanks (No Injectors)		
Amount of Fertilizer*	+ Amount of Water (gallons)	= ppm N
1 tsp	1	216
1 tbsp	2	324
1 cup	25	415

*level measurements

1 pound of fertilizer + 100 gallons of water = 203.7 ppm N

Product Properties	
Potential Basicity	27 lbs calcium carbonate equivalent per ton
Conductivity of 100 ppm	0.65 mmhos/cm
Maximum Solubility	5 lbs/gal

Gallons of Water Required to Dissolve One 25 Lb Bag of Fertilizer						
Target Fertilizer Concentration (N/ppm) After Dilution	Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	1358.8	203.8	159.2	101.9	67.9	0.16
50	679.4	101.9	79.6	51.0	34.0	0.33
75	452.9	67.9	53.1	34.0	22.6	0.49
100	339.7	51.0	39.8	25.5	17.0	0.65
125	271.8	40.8	31.8	20.4	13.6	0.81
150	226.5	34.0	26.5	17.0	11.3	0.98
175	194.1	29.1	22.7	14.6	9.7	1.14
200	169.9	25.5	19.9	12.7	8.5	1.30
250	135.9	20.4	15.9	10.2	6.8	1.63
300	113.2	17.0	13.3	8.5	5.7	1.95
350	97.1	14.6	11.4	7.3	***	2.28
400	84.9	12.7	10.0	6.4	***	2.60
450	75.5	11.3	8.8	5.7	***	2.93
500	67.9	10.2	8.0	5.1	***	3.25
600	56.6	8.5	6.6	***	***	3.90

*** Exceeds maximum solubility.

PETERS PROFESSIONAL®

10-30-20

PEAT-LITE® PLANT STARTER

Useful when transplanting, before bloom initiation or whenever more phosphate is required.

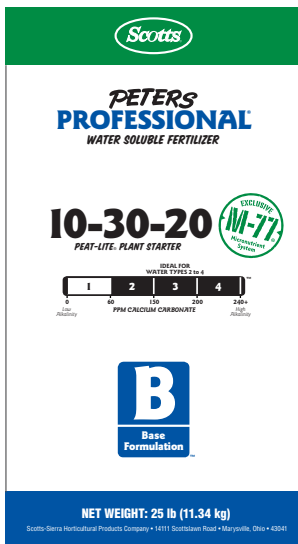
- B (Base) formulation can be used alone or rotated with a C (Customizing) component
- Appropriate for Water Types 2, 3 and 4
- Contains a full range of essential micronutrients

Guaranteed Analysis

Total nitrogen (N)	10%
5.0% ammoniacal nitrogen	
5.0% nitrate nitrogen	
Available phosphate (P ₂ O ₅)	30%
Soluble potash (K ₂ O)	20%
Magnesium (Mg) (Total)	1.30%
1.30% water soluble magnesium (Mg)	
Boron (B)	0.0125%
Copper (Cu)	0.0125%
0.0125% chelated copper (Cu)	
Iron (Fe)	0.0500%
0.0500% chelated iron (Fe)	
Manganese (Mn) (Total)	0.0250%
0.0250% chelated manganese (Mn)	
Molybdenum (Mo)	0.0050%
Zinc (Zn)	0.0250%
0.0250% water soluble zinc (Zn)	

Derived from: ammonium phosphate, potassium nitrate, potassium phosphate, magnesium sulfate, boric acid, copper EDTA, iron EDTA, manganese EDTA, ammonium molybdate, zinc EDTA.

99350



Weight (In Ounces) of Product Needed to Mix One Gallon of Concentrate						
Target Fertilizer Concentration (N/ppm) After Dilution	Common Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	0.5	3.4	4.3	6.8	10.1	0.22
50	1.0	6.8	8.6	13.5	20.3	0.43
75	1.5	10.1	13.0	20.3	30.4	0.65
100	2.0	13.5	17.3	27.0	40.5	0.86
125	2.5	16.9	21.6	33.8	50.6	1.08
150	3.0	20.3	25.9	40.5	***	1.29
175	3.5	23.6	30.2	47.3	***	1.51
200	4.1	27.0	34.6	***	***	1.72
250	5.1	33.8	43.2	***	***	2.15
300	6.1	40.5	51.8	***	***	2.58
350	7.1	47.3	***	***	***	3.01
400	8.1	***	***	***	***	3.44
450	9.1	***	***	***	***	3.87
500	10.1	***	***	***	***	4.30
600	12.2	***	***	***	***	5.16

*** Exceeds maximum solubility.

Mixing For Watering Cans, Spray Tanks (No Injectors)		
Amount of Fertilizer*	+ Amount of Water (gallons)	= ppm N
1 tsp	1	129
1 tbsp	2	194
1 cup	25	248

*level measurements
1 pound of fertilizer + 100 gallons of water = 119.8 ppm N

Product Properties	
Potential Acidity	...365 lbs calcium carbonate equivalent per ton
Conductivity of 100 ppm	...0.86 mmhos/cm
Maximum Solubility	...3.25 lbs/gal

Gallons of Water Required to Dissolve One 25 Lb Bag of Fertilizer						
Target Fertilizer Concentration (N/ppm) After Dilution	Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	790.1	118.5	92.6	59.3	39.5	0.22
50	395.1	59.3	46.3	29.6	19.8	0.43
75	263.4	39.5	30.9	19.8	13.2	0.65
100	197.5	29.6	23.1	14.8	9.9	0.86
125	158.0	23.7	18.5	11.9	7.9	1.08
150	131.7	19.8	15.4	9.9	***	1.29
175	112.9	16.9	13.2	8.5	***	1.51
200	98.8	14.8	11.6	***	***	1.72
250	79.0	11.9	9.3	***	***	2.15
300	65.8	9.9	7.7	***	***	2.58
350	56.4	8.5	***	***	***	3.01
400	49.4	***	***	***	***	3.44
450	43.9	***	***	***	***	3.87
500	39.5	***	***	***	***	4.30
600	32.9	***	***	***	***	5.16

*** Exceeds maximum solubility.

PETERS PROFESSIONAL®

15-3-25

PEAT-LITE® FLOWERING CROP SPECIAL PLUS IRON

New extra-iron formula for crops like vegetative petunias that thrive in growing media with lower pH.

- B (Base) formulation can be used alone or rotated with a C (Customizing) component
- Effective for all Water Types
- Contains extra magnesium plus a full range of essential micronutrients

Guaranteed Analysis

Total nitrogen (N)	15%
4% ammonium nitrogen	
11% nitrate nitrogen	
Available phosphate (P ₂ O ₅)	3%
Soluble potash (K ₂ O)	25%
Magnesium (Mg) (Total)	2.5%
2.5% water soluble magnesium (Mg)	
Sulfur (S)	1.70%
1.70% combined sulfur (S)	
Boron (B)	0.0187%
Copper (Cu)	0.0187%
0.0187% chelated copper (Cu)	
Iron (Fe)	0.1500%
0.1500% chelated iron (Fe)	
Manganese (Mn)	0.0375%
0.0375% chelated manganese (Mn)	
Molybdenum (Mo)	0.0075%
Zinc (Zn)	0.0375%
0.0375% chelated zinc (Zn)	

Derived from: ammonium nitrate, ammonium phosphate, potassium nitrate, magnesium sulfate, boric acid, copper EDTA, iron EDTA, manganese EDTA, ammonium molybdate, zinc EDTA.

99320

Target Fertilizer Concentration (N/ppm) After Dilution	Common Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	0.3	2.3	2.9	4.5	6.8	0.20
50	0.7	4.5	5.8	9.0	13.5	0.40
75	1.0	6.8	8.6	13.5	20.3	0.59
100	1.4	9.0	11.5	18.0	27.0	0.79
125	1.7	11.3	14.4	22.5	33.8	0.99
150	2.0	13.5	17.3	27.0	***	1.19
175	2.4	15.8	20.2	31.5	***	1.38
200	2.7	18.0	23.0	36.0	***	1.58
250	3.4	22.5	28.8	***	***	1.98
300	4.1	27.0	34.6	***	***	2.37
350	4.7	31.5	***	***	***	2.77
400	5.4	36.0	***	***	***	3.16
450	6.1	***	***	***	***	3.56
500	6.8	***	***	***	***	3.95
600	8.1	***	***	***	***	4.74

*** Exceeds maximum solubility.

Mixing For Watering Cans, Spray Tanks (No Injectors)		
Amount of Fertilizer*	Amount of Water (gallons)	= ppm N
1 tsp	1	232
1 tbscp	2	347
1 cup	25	445

*level measurements

1 pound of fertilizer + 100 gallons of water = 179.8 ppm N

Product Properties	
Potential Acidity	13 lbs calcium carbonate equivalent per ton
Conductivity of 100 ppm	0.79 mmhos/cm
Maximum Solubility	2.5 lbs/gal

Target Fertilizer Concentration (N/ppm) After Dilution	Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	1185.2	177.8	138.9	88.9	59.3	0.20
50	592.6	88.9	69.4	44.4	29.6	0.40
75	395.1	59.3	46.3	29.6	19.8	0.59
100	296.3	44.4	34.7	22.2	14.8	0.79
125	237.0	35.6	27.8	17.8	11.9	0.99
150	197.5	29.6	23.1	14.8	***	1.19
175	169.3	25.4	19.8	12.7	***	1.38
200	148.1	22.2	17.4	11.1	***	1.58
250	118.5	17.8	13.9	***	***	1.98
300	98.8	14.8	11.6	***	***	2.37
350	84.7	12.7	***	***	***	2.77
400	74.1	11.1	***	***	***	3.16
450	65.8	***	***	***	***	3.56
500	59.3	***	***	***	***	3.95
600	49.4	***	***	***	***	4.74

*** Exceeds maximum solubility.

PETERS PROFESSIONAL®

15-5-25

PEAT-LITE® FLOWERING CROP SPECIAL

Proven high-nitrate, low-phosphate formula for poinsettias and many other flowering crops that are sensitive to boron.

- B (Base) formulation can be used alone or rotated with a C (Customizing) component
- Effective for all Water Types
- Contains extra magnesium plus a full range of essential micronutrients

Guaranteed Analysis

Total nitrogen (N)	15%
4.3% ammoniacal nitrogen	
10.7% nitrate nitrogen	
Available phosphate (P ₂ O ₅)	.5%
Soluble potash (K ₂ O)	.25%
Magnesium (Mg) (Total)	2.50%
2.50% water soluble magnesium (Mg)	
Sulfur (S)	1.00%
1.0% combined sulfur (S)	
Boron (B)	0.0068%
Copper (Cu)	0.0187%
0.0187% chelated copper (Cu)	
Iron (Fe)	0.075%
0.075% chelated iron (Fe)	
Manganese (Mn) (Total)	0.0375%
0.0375% chelated manganese (Mn)	
Molybdenum (Mo)	0.075%
Zinc (Zn)	0.0375%
0.0375% chelated zinc (Zn)	

Derived from: ammonium phosphate, ammonium nitrate, potassium nitrate, magnesium sulfate, boric acid, copper EDTA, iron EDTA, manganese EDTA, ammonium molybdate, zinc EDTA.

99220



Weight (In Ounces) of Product Needed to Mix One Gallon of Concentrate						
Target Fertilizer Concentration (N/ppm) After Dilution	Common Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	0.3	2.3	2.9	4.5	6.8	0.19
50	0.7	4.5	5.8	9.0	13.5	0.39
75	1.0	6.8	8.6	13.5	20.3	0.58
100	1.4	9.0	11.5	18.0	27.0	0.77
125	1.7	11.3	14.4	22.5	33.8	0.96
150	2.0	13.5	17.3	27.0	***	1.16
175	2.4	15.8	20.2	31.5	***	1.35
200	2.7	18.0	23.0	36.0	***	1.54
250	3.4	22.5	28.8	***	***	1.93
300	4.1	27.0	34.6	***	***	2.31
350	4.7	31.5	***	***	***	2.70
400	5.4	36.0	***	***	***	3.08
450	6.1	***	***	***	***	3.47
500	6.8	***	***	***	***	3.85
600	8.1	***	***	***	***	4.62

*** Exceeds maximum solubility.

Mixing For Watering Cans, Spray Tanks (No Injectors)		
Amount of Fertilizer*	+ Amount of Water (gallons)	= ppm N
1 tsp	1	225
1 tbs	2	338
1 cup	25	433

*level measurements

1 pound of fertilizer + 100 gallons of water = 179.8 ppm N

Product Properties	
Potential Acidity	48 lbs calcium carbonate equivalent per ton
Conductivity of 100 ppm	0.77 mmhos/cm
Maximum Solubility	2.5 lbs/gal

Gallons of Water Required to Dissolve One 25 Lb Bag of Fertilizer						
Target Fertilizer Concentration (N/ppm) After Dilution	Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	1185.2	177.8	138.9	88.9	59.3	0.19
50	592.6	88.9	69.4	44.4	29.6	0.39
75	395.1	59.3	46.3	29.6	19.8	0.58
100	296.3	44.4	34.7	22.2	14.8	0.77
125	237.0	35.6	27.8	17.8	11.9	0.96
150	197.5	29.6	23.1	14.8	***	1.16
175	169.3	25.4	19.8	12.7	***	1.35
200	148.1	22.2	17.4	11.1	***	1.54
250	118.5	17.8	13.9	***	***	1.93
300	98.8	14.8	11.6	***	***	2.31
350	84.7	12.7	***	***	***	2.70
400	74.1	11.1	***	***	***	3.08
450	65.8	***	***	***	***	3.47
500	59.3	***	***	***	***	3.85
600	49.4	***	***	***	***	4.62

*** Exceeds maximum solubility.

PETERS PROFESSIONAL® 15-16-17 PEAT-LITE SPECIAL®

The perfect 1:1:1 N-P-K formulation for geraniums raised in soilless growing media.

- B (Base) formulation can be used alone or rotated with a C (Customizing) component
- Appropriate for Water Types 2, 3 and 4
- Contains a full range of essential micronutrients

Guaranteed Analysis

Total nitrogen (N)	15%
3.1% ammoniacal nitrogen	
7.9% nitrate nitrogen	
4.0% urea nitrogen	
Available phosphate (P ₂ O ₅)	16%
Soluble potash (K ₂ O)	17%
Magnesium (Mg) (Total)	0.10%
0.10% water soluble magnesium (Mg)	
Boron (B)	0.0187%
Copper (Cu)	0.0187%
0.0187% chelated copper (Cu)	
Iron (Fe)	0.0750%
0.0750% chelated iron (Fe)	
Manganese (Mn) (Total)	0.0375%
0.0375% chelated manganese (Mn)	
Molybdenum (Mo)	0.0075%
Zinc (Zn)	0.0375%
0.0375% chelated zinc (Zn)	

Derived from: ammonium phosphate, potassium nitrate, sodium nitrate, urea, magnesium sulfate, boric acid, copper EDTA, iron EDTA, manganese EDTA, ammonium molybdate, zinc EDTA.

99210



Weight (In Ounces) of Product Needed to Mix One Gallon of Concentrate						
Target Fertilizer Concentration (N/ppm) After Dilution	Common Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	0.3	2.3	2.9	4.5	6.8	0.16
50	0.7	4.5	5.8	9.0	13.5	0.31
75	1.0	6.8	8.6	13.5	20.3	0.47
100	1.4	9.0	11.5	18.0	27.0	0.62
125	1.7	11.3	14.4	22.5	33.8	0.78
150	2.0	13.5	17.3	27.0	40.5	0.93
175	2.4	15.8	20.2	31.5	47.3	1.09
200	2.7	18.0	23.0	36.0	54.0	1.24
250	3.4	22.5	28.8	45.0	67.5	1.55
300	4.1	27.0	34.6	54.0	***	1.86
350	4.7	31.5	40.3	63.0	***	2.17
400	5.4	36.0	46.1	***	***	2.48
450	6.1	40.5	51.8	***	***	2.79
500	6.8	45.0	57.6	***	***	3.10
600	8.1	54.0	***	***	***	3.72

*** Exceeds maximum solubility.

Mixing For Watering Cans, Spray Tanks (No Injectors)		
Amount of Fertilizer*	+ Amount of Water (gallons)	= ppm N
1 tsp	1	197
1 tbsp	2	296
1 cup	25	378

*level measurements

1 pound of fertilizer + 100 gallons of water = 179.8 ppm N

Product Properties	
Potential Acidity202 lbs calcium carbonate equivalent per ton
Conductivity of 100 ppm	0.62 mmhos/cm
Maximum Solubility	4.25 lbs/gal

Gallons of Water Required to Dissolve One 25 Lb Bag of Fertilizer						
Target Fertilizer Concentration (N/ppm) After Dilution	Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	1185.2	177.8	138.9	88.9	59.3	0.16
50	592.6	88.9	69.4	44.4	29.6	0.31
75	395.1	59.3	46.3	29.6	19.8	0.47
100	296.3	44.4	34.7	22.2	14.8	0.62
125	237.0	35.6	27.8	17.8	11.9	0.78
150	197.5	29.6	23.1	14.8	9.9	0.93
175	169.3	25.4	19.8	12.7	8.5	1.09
200	148.1	22.2	17.4	11.1	7.4	1.24
250	118.5	17.8	13.9	8.9	5.9	1.55
300	98.8	14.8	11.6	7.4	***	1.86
350	84.7	12.7	9.9	6.3	***	2.17
400	74.1	11.1	8.7	***	***	2.48
450	65.8	9.9	7.7	***	***	2.79
500	59.3	8.9	6.9	***	***	3.10
600	49.4	7.4	***	***	***	3.72

*** Exceeds maximum solubility.

PETERS PROFESSIONAL®

18-8-17

PEAT-LITE® HIGH MAG SPECIAL

Highly effective stand-alone fertilizer with extra magnesium to maintain deep green foliage.

- B (Base) formulation for constant, balanced nutrition
- Excellent stand-alone for Water Types 3 and 4; use as a base in Water Types 1 and 2
- Contains a complete range of essential micronutrients

Guaranteed Analysis

Total nitrogen (N)	18%
7.3% ammoniacal nitrogen	
10.7% nitrate nitrogen	
Available phosphate (P ₂ O ₅)	.8%
Soluble potash (K ₂ O)	17%
Magnesium (Mg) (Total)	2.50%
2.50% water soluble magnesium (Mg)	
Sulfur (S)	1.00%
1.00% combined sulfur (S)	
Boron (B)	0.0225%
Copper (Cu)	0.0225%
0.0225% chelated copper (Cu)	
Iron (Fe)	0.0900%
0.09% chelated iron (Fe)	
Manganese (Mn) (Total)	0.0450%
0.0450% chelated manganese (Mn)	
Molybdenum (Mo)	0.0090%
Zinc (Zn)	0.0450%
0.0450% chelated zinc (Zn)	

Derived from: ammonium nitrate, ammonium phosphate, potassium nitrate, magnesium sulfate, boric acid, copper EDTA, iron EDTA, manganese EDTA, ammonium molybdate, zinc EDTA.

99240



Weight (In Ounces) of Product Needed to Mix One Gallon of Concentrate						
Target Fertilizer Concentration (N/ppm) After Dilution	Common Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	0.3	1.9	2.4	3.8	5.6	0.16
50	0.6	3.8	4.8	7.5	11.3	0.33
75	0.8	5.6	7.2	11.3	16.9	0.49
100	1.1	7.5	9.6	15.0	22.5	0.65
125	1.4	9.4	12.0	18.8	28.1	0.81
150	1.7	11.3	14.4	22.5	33.8	0.98
175	2.0	13.1	16.8	26.3	39.4	1.14
200	2.3	15.0	19.2	30.0	45.0	1.30
250	2.8	18.8	24.0	37.5	***	1.63
300	3.4	22.5	28.8	45.0	***	1.95
350	3.9	26.3	33.6	***	***	2.28
400	4.5	30.0	38.4	***	***	2.60
450	5.1	33.8	43.2	***	***	2.93
500	5.6	37.5	48.0	***	***	3.25
600	6.8	45.0	***	***	***	3.90

*** Exceeds maximum solubility.

Mixing For Watering Cans, Spray Tanks (No Injectors)		
Amount of Fertilizer*	+ Amount of Water (gallons)	= ppm N
1 tsp	1	267
1 tbsp	2	400
1 cup	25	512

*level measurements
1 pound of fertilizer + 100 gallons of water = 215.7 ppm N

Product Properties	
Potential Acidity	.381 lbs calcium carbonate equivalent per ton
Conductivity of 100 ppm	0.65 mmhos/cm
Maximum Solubility	3 lbs/gal

Gallons of Water Required to Dissolve One 25 Lb Bag of Fertilizer						
Target Fertilizer Concentration (N/ppm) After Dilution	Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	1422.2	213.3	166.7	106.7	71.1	0.16
50	711.1	106.7	83.3	53.3	35.6	0.33
75	474.1	71.1	55.6	35.6	23.7	0.49
100	355.6	53.3	41.7	26.7	17.8	0.65
125	284.4	42.7	33.3	21.3	14.2	0.81
150	237.0	35.6	27.8	17.8	11.9	0.98
175	203.2	30.5	23.8	15.2	10.2	1.14
200	177.8	26.7	20.8	13.3	8.9	1.30
250	142.2	21.3	16.7	10.7	7.1	1.63
300	118.5	17.8	13.9	8.9	***	1.95
350	101.6	15.2	11.9	***	***	2.28
400	88.9	13.3	10.4	***	***	2.60
450	79.0	11.9	9.3	***	***	2.93
500	71.1	10.7	8.3	***	***	3.25
600	59.3	8.9	***	***	***	3.90

*** Exceeds maximum solubility.

PETERS PROFESSIONAL®

20-2-20

PEAT-LITE® LOW PHOS SPECIAL

A low-phosphate feed that encourages dense, compact, healthy growth in plugs, liners, bedding plants and vegetable transplants.

- B (Base) formulation can be used alone or rotated with a C (Customizing) component
- Effective for all Water Types
- Contains a full range of essential micronutrients

Guaranteed Analysis

Total nitrogen (N)	7.2% ammonical nitrogen	12.8% nitrate nitrogen	0.2%
Available phosphate (P ₂ O ₅)	0.250%		
Soluble potash (K ₂ O)	1.10%		
Magnesium (Mg) (Total)	1.10%	0.74% combined sulfur (S)	
Sulfur (S)	0.74%		
Boron (B)	0.0250%		
Copper (Cu)	0.0250%	0.0250% chelated copper (Cu)	
Iron (Fe)	0.1000%	0.1000% chelated iron (Fe)	
Manganese (Mn)	0.0500%	0.0500% chelated manganese (Mn)	
Molybdenum (Mo)	0.0100%		
Zinc (Zn)	0.0500%	0.0500% chelated zinc (Zn)	

Derived from: ammonium nitrate, potassium nitrate, potassium phosphate, magnesium sulfate, boric acid, copper EDTA, iron EDTA, manganese EDTA, ammonium molybdate, zinc EDTA.

99270



Target Fertilizer Concentration (N/ppm) After Dilution	Common Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	0.3	1.7	2.2	3.4	5.1	0.15
50	0.5	3.4	4.3	6.8	10.1	0.30
75	0.8	5.1	6.5	10.1	15.2	0.45
100	1.0	6.8	8.6	13.5	20.3	0.60
125	1.3	8.4	10.8	16.9	25.3	0.75
150	1.5	10.1	13.0	20.3	30.4	0.90
175	1.8	11.8	15.1	23.6	35.4	1.05
200	2.0	13.5	17.3	27.0	40.5	1.20
250	2.5	16.9	21.6	33.8	***	1.50
300	3.0	20.3	25.9	40.5	***	1.80
350	3.5	23.6	30.2	47.3	***	2.10
400	4.1	27.0	34.6	***	***	2.40
450	4.6	30.4	38.9	***	***	2.70
500	5.1	33.8	43.2	***	***	3.00
600	6.1	40.5	***	***	***	3.60

*** Exceeds maximum solubility.

Mixing For Watering Cans, Spray Tanks (No Injectors)		
Amount of Fertilizer*	Amount of Water (gallons)	= ppm N
1 tsp	1	305
1 tbsp	2	457
1 cup	25	585

*level measurements

1 pound of fertilizer + 100 gallons of water = 239.7 ppm N

Product Properties	
Potential Acidity	.290 lbs calcium carbonate equivalent per ton
Conductivity of 100 ppm	0.60 mmhos/cm
Maximum Solubility	3 lbs/gal

Target Fertilizer Concentration (N/ppm) After Dilution	Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	1580.2	237.0	185.2	118.5	79.0	0.15
50	790.1	118.5	92.6	59.3	39.5	0.30
75	526.7	79.0	61.7	39.5	26.3	0.45
100	395.1	59.3	46.3	29.6	19.8	0.60
125	316.0	47.4	37.0	23.7	15.8	0.75
150	263.4	39.5	30.9	19.8	13.2	0.90
175	225.7	33.9	26.5	16.9	11.3	1.05
200	197.5	29.6	23.1	14.8	9.9	1.20
250	158.0	23.7	18.5	11.9	***	1.50
300	131.7	19.8	15.4	9.9	***	1.80
350	112.9	16.9	13.2	8.5	***	2.10
400	98.8	14.8	11.6	***	***	2.40
450	87.8	13.2	10.3	***	***	2.70
500	79.0	11.9	9.3	***	***	3.00
600	65.8	9.9	***	***	***	3.60

*** Exceeds maximum solubility.

PETERS PROFESSIONAL® 20-10-20 PEAT-LITE SPECIAL®

Versatile formula can be used in year-around operations; acidifying action corrects excessive pH in growing media.

- B (Base) formulation can be used alone or rotated with a C (Customizing) component
- Effective for all Water Types
- Contains a full range of essential micronutrients

Guaranteed Analysis

Total nitrogen (N)	20%
8.1% ammoniacal nitrogen	
11.9% nitrate nitrogen	
Available phosphate (P ₂ O ₅)	10%
Soluble potash (K ₂ O)	20%
Magnesium (Mg) (Total)	0.15%
0.15% water soluble magnesium (Mg)	
Boron (B)	0.0250%
Copper (Cu)	0.0250%
0.0250% chelated copper (Cu)	
Iron (Fe)	0.1000%
0.1000% chelated iron (Fe)	
Manganese (Mn) (Total)	0.0500%
0.0500% chelated manganese (Mn)	
Molybdenum (Mo)	0.0100%
Zinc (Zn)	0.0500%
0.0500% chelated zinc (Zn)	

Derived from: ammonium nitrate, potassium nitrate, potassium phosphate, magnesium sulfate, boric acid, copper EDTA, iron EDTA, manganese EDTA, ammonium molybdate, zinc EDTA.

99250



Weight (In Ounces) of Product Needed to Mix One Gallon of Concentrate						
Target Fertilizer Concentration (N/ppm) After Dilution	Common Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	0.3	1.7	2.2	3.4	5.1	0.15
50	0.5	3.4	4.3	6.8	10.1	0.30
75	0.8	5.1	6.5	10.1	15.2	0.44
100	1.0	6.8	8.6	13.5	20.3	0.59
125	1.3	8.4	10.8	16.9	25.3	0.74
150	1.5	10.1	13.0	20.3	30.4	0.89
175	1.8	11.8	15.1	23.6	35.4	1.03
200	2.0	13.5	17.3	27.0	40.5	1.18
250	2.5	16.9	21.6	33.8	***	1.48
300	3.0	20.3	25.9	40.5	***	1.77
350	3.5	23.6	30.2	47.3	***	2.07
400	4.1	27.0	34.6	***	***	2.36
450	4.6	30.4	38.9	***	***	2.66
500	5.1	33.8	43.2	***	***	2.95
600	6.1	40.5	***	***	***	3.54

*** Exceeds maximum solubility.

Mixing For Watering Cans, Spray Tanks (No Injectors)		
Amount of Fertilizer*	+ Amount of Water (gallons)	= ppm N
1 tsp	1	284
1 tbsp	2	426
1 cup	25	545

*level measurements

1 pound of fertilizer + 100 gallons of water = 239.7 ppm N

Product Properties	
Potential Acidity	415 lbs calcium carbonate equivalent per ton
Conductivity of 100 ppm	0.59 mmhos/cm
Maximum Solubility	3 lbs/gal

Gallons of Water Required to Dissolve One 25 Lb Bag of Fertilizer						
Target Fertilizer Concentration (N/ppm) After Dilution	Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	1580.2	237.0	185.2	118.5	79.0	0.15
50	790.1	118.5	92.6	59.3	39.5	0.30
75	526.7	79.0	61.7	39.5	26.3	0.44
100	395.1	59.3	46.3	29.6	19.8	0.59
125	316.0	47.4	37.0	23.7	15.8	0.74
150	263.4	39.5	30.9	19.8	13.2	0.89
175	225.7	33.9	26.5	16.9	11.3	1.03
200	197.5	29.6	23.1	14.8	9.9	1.18
250	158.0	23.7	18.5	11.9	***	1.48
300	131.7	19.8	15.4	9.9	***	1.77
350	112.9	16.9	13.2	8.5	***	2.07
400	98.8	14.8	11.6	***	***	2.36
450	87.8	13.2	10.3	***	***	2.66
500	79.0	11.9	9.3	***	***	2.95
600	65.8	9.9	***	***	***	3.54

*** Exceeds maximum solubility.

PETERS PROFESSIONAL® 20-10-20 PEAT-LITE SPECIAL® NO BORON

Classic balance of nutrition in a no-boron option either to match irrigation waters that are high in boron or to reduce boron levels in growing media.

- B (Base) formulation can be used alone or rotated with a C (Customizing) component
- Effective for all Water Types
- Contains a full range of essential micronutrients

Guaranteed Analysis

Total nitrogen (N)	20%
8.0% ammoniacal nitrogen	
12.0% nitrate nitrogen	
Available phosphate (P ₂ O ₅)	10%
Soluble potash (K ₂ O)	20%
Magnesium (Mg) (Total)	0.15%
0.15% water soluble magnesium (Mg)	
Sulfur (S)	0.10%
0.10% combined sulfur (S)	
Copper (Cu)	0.0250%
0.0250% chelated copper (Cu)	
Iron (Fe)	0.1000%
0.1000% chelated iron (Fe)	
Manganese (Mn)	0.0500%
0.0500% chelated manganese (Mn)	
Molybdenum (Mo)	0.0100%
Zinc (Zn)	0.0500%
0.0500% chelated zinc (Zn)	

Derived from: ammonium nitrate, potassium nitrate, potassium phosphate, magnesium sulfate, copper EDTA, iron EDTA, manganese EDTA, ammonium molybdate, zinc EDTA.

99252



Weight (In Ounces) of Product Needed to Mix One Gallon of Concentrate						
Target Fertilizer Concentration (N/ppm) After Dilution	Common Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	0.3	1.7	2.2	3.4	5.1	0.15
50	0.5	3.4	4.3	6.8	10.1	0.30
75	0.8	5.1	6.5	10.1	15.2	0.44
100	1.0	6.8	8.6	13.5	20.2	0.59
125	1.3	8.4	10.8	16.9	25.3	0.74
150	1.5	10.1	13.0	20.3	30.4	0.89
175	1.8	11.8	15.1	23.6	35.4	1.03
200	2.0	13.5	17.3	27.0	40.5	1.18
250	2.5	16.9	21.6	33.8	***	1.48
300	3.0	20.3	25.9	40.5	***	1.77
350	3.5	23.6	30.2	47.3	***	2.07
400	4.1	27.0	34.6	***	***	2.36
450	4.6	30.4	38.9	***	***	2.66
500	5.1	33.8	43.2	***	***	2.95
600	6.1	40.5	***	***	***	3.54

*** Exceeds maximum solubility.

Mixing For Watering Cans, Spray Tanks (No Injectors)		
Amount of Fertilizer*	Amount of Water (gallons)	= ppm N
1 tsp	1	284
1 tbsp	2	426
1 cup	25	545

*level measurements

1 pound of fertilizer + 100 gallons of water = 239.7 ppm N

Product Properties	
Potential Acidity	402 lbs calcium carbonate equivalent per ton
Conductivity of 100 ppm	0.59 mmhos/cm
Maximum Solubility	3 lbs/gal

Gallons of Water Required to Dissolve One 25 Lb Bag of Fertilizer						
Target Fertilizer Concentration (N/ppm) After Dilution	Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	1580.2	237.0	185.2	118.5	79.0	0.15
50	790.1	118.5	92.6	59.3	39.5	0.30
75	526.7	79.0	61.7	39.5	26.3	0.44
100	395.1	59.3	46.3	29.6	19.8	0.59
125	316.0	47.4	37.0	23.7	15.8	0.74
150	263.4	39.5	30.9	19.8	13.2	0.89
175	225.7	33.9	26.5	16.9	11.3	1.03
200	197.5	29.6	23.1	14.8	9.9	1.18
250	158.0	23.7	18.5	11.9	***	1.48
300	131.7	19.8	15.4	9.9	***	1.77
350	112.9	16.9	13.2	8.5	***	2.07
400	98.8	14.8	11.6	***	***	2.36
450	87.8	13.2	10.3	***	***	2.66
500	79.0	11.9	9.3	***	***	2.95
600	65.8	9.9	***	***	***	3.54

*** Exceeds maximum solubility.

PETERS PROFESSIONAL®

15-0-15

PEAT-LITE® DARK WEATHER FEED

Classic high-nitrate formula for bulbs or any crop that needs extra calcium and magnesium, lower phosphate and slightly higher growing media pH.

- C (Customizing) component
- Ideal for Water Types 1 and 2
- Provides a full range of micronutrients

Guaranteed Analysis

Total nitrogen (N)	15%
2.0% ammoniacal nitrogen	
13.0% nitrate nitrogen	
Soluble potash (K ₂ O)	15%
Calcium (Ca)	5.00%
Magnesium (Mg) (Total)	2.00%
2.00% water soluble magnesium (MG)	
Boron (B)	0.0187%
Copper (Cu)	0.0187%
0.0187% chelated copper (Cu)	
Iron (Fe)	0.0750%
0.0750% chelated iron (Fe)	
Manganese (Mn) (Total)	0.0375%
0.0375% chelated manganese (Mn)	
Molybdenum (Mo)	0.0075%
Zinc (Zn)	0.0375%
0.0375% chelated zinc (Zn)	

Derived from: ammonium nitrate, potassium nitrate, calcium nitrate, magnesium nitrate, boric acid, copper EDTA, iron EDTA, manganese EDTA, ammonium molybdate, zinc EDTA.

99260



Weight (In Ounces) of Product Needed to Mix One Gallon of Concentrate						
Target Fertilizer Concentration (N/ppm) After Dilution	Common Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	0.3	2.3	2.9	4.5	6.8	0.18
50	0.7	4.5	5.8	9.0	13.5	0.36
75	1.0	6.8	8.6	13.5	20.3	0.53
100	1.4	9.0	11.5	18.0	27.0	0.71
125	1.7	11.3	14.4	22.5	33.8	0.89
150	2.0	13.5	17.3	27.0	40.5	1.07
175	2.4	15.8	20.2	31.5	47.3	1.24
200	2.7	18.0	23.0	36.0	54.0	1.42
250	3.4	22.5	28.8	45.0	67.5	1.78
300	4.1	27.0	34.6	54.0	***	2.13
350	4.7	31.5	40.3	63.0	***	2.49
400	5.4	36.0	46.1	72.0	***	2.84
450	6.1	40.5	51.8	***	***	3.20
500	6.8	45.0	57.6	***	***	3.55
600	8.1	54.0	69.1	***	***	4.26

*** Exceeds maximum solubility.

Mixing For Watering Cans, Spray Tanks (No Injectors)		
Amount of Fertilizer*	+ Amount of Water (gallons)	= ppm N
1 tsp	1	188
1 tbs	2	282
1 cup	25	360

*level measurements
1 pound of fertilizer + 100 gallons of water = 179.8 ppm N

Gallons of Water Required to Dissolve One 25 Lb Bag of Fertilizer						
Target Fertilizer Concentration (N/ppm) After Dilution	Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	1185.2	177.8	138.9	88.9	59.3	0.18
50	592.6	88.9	69.4	44.4	29.6	0.36
75	395.1	59.3	46.3	29.6	19.8	0.53
100	296.3	44.4	34.7	22.2	14.8	0.71
125	237.0	35.6	27.8	17.8	11.9	0.89
150	197.5	29.6	23.1	14.8	9.9	1.07
175	169.3	25.4	19.8	12.7	8.5	1.24
200	148.1	22.2	17.4	11.1	7.4	1.42
250	118.5	17.8	13.9	8.9	5.9	1.78
300	98.8	14.8	11.6	7.4	***	2.13
350	84.7	12.7	9.9	6.3	***	2.49
400	74.1	11.1	8.7	5.6	***	2.84
450	65.8	9.9	7.7	***	***	3.20
500	59.3	8.9	6.9	***	***	3.55
600	49.4	7.4	5.8	***	***	4.26

*** Exceeds maximum solubility.

Product Properties	
Potential Basicity221 lbs calcium carbonate equivalent per ton
Conductivity of 100 ppm	0.71 mmhos/cm
Maximum Solubility	5 lbs/gal

PETERS PROFESSIONAL[®]

5-11-26

HYDROPONIC SPECIAL

Designed exclusively for hydroponic culture, this classic formula is ideal for most hydroponic crops, especially tomatoes, cucumbers and lettuce.

- Flexible B (Base) formulation is easily augmented to meet unique plant needs
- Effective for all Water Types
- Buffered to help maintain acceptable working solution pH

Guaranteed Analysis

Total nitrogen (N)	5%
5% nitrate nitrogen	
Available phosphate (P ₂ O ₅)	11%
Soluble potash (K ₂ O)	26%
Magnesium (Mg) (Total)	3.10%
3.10% water soluble magnesium (Mg)	
Sulfur (S)	4.00%
4.00% combined sulfur (S)	
Boron (B)	0.0500%
Copper (Cu)	0.0150%
0.0150% chelated copper (Cu)	
Iron (Fe)	0.3000%
0.3000% chelated iron (Fe)	
Manganese (Mn)	0.0500%
0.0500% chelated manganese (Mn)	
Molybdenum (Mo)	0.0100%
Zinc (Zn)	0.0150%
0.0150% chelated zinc (Zn)	

Derived from: potassium nitrate, potassium phosphate, magnesium sulfate, boric acid, copper EDTA, iron EDTA, manganese EDTA, ammonium molybdate, zinc EDTA.

99310

PETERS PROFESSIONAL[®] WATER SOLUBLE FERTILIZER

B 5-11-26 HYDROPONIC SPECIAL

GUARANTEED ANALYSIS

Total nitrogen (N)	5%	5% nitrate nitrogen	5%
Available phosphate (P ₂ O ₅)	11%	Soluble potash (K ₂ O)	26%
Magnesium (Mg) (Total)	3.10%	3.10% water soluble magnesium (Mg)	3.10%
Sulfur (S)	4.00%	4.00% combined sulfur (S)	4.00%
Boron (B)	0.0500%	Copper (Cu)	0.0150%
0.0150% chelated copper (Cu)	0.0150%	Iron (Fe)	0.3000%
0.3000% chelated iron (Fe)	0.3000%	Manganese (Mn)	0.0500%
0.0500% chelated manganese (Mn)	0.0500%	Zinc (Zn)	0.0150%
0.0150% chelated zinc (Zn)	0.0150%		

FOR PROFESSIONAL USE ONLY

99310

STEP 1: Dissolve 130 ounces or 8 pounds 2 ounces of this material in 1000 gallons to obtain the following concentrations:

	Total	ppm
Nitrogen (All Nitrate)	N	50
Phosphorus	P	48
Potassium	K	216
Magnesium	Mg	31
Sulfate	SO ₄	125
Iron	Fe	3
Manganese	Mn	0.50
Zinc	Zn	0.15
Copper	Cu	0.15
Boron	B	0.50
Molybdenum	Mo	0.10

Product Properties

Potential Basicity 215 lbs calcium carbonate equivalent per ton

Conductivity of 100 ppm 1.45 mmhos/cm

Maximum Solubility 3 lbs/gal

STEP 2: Based on the results of a current water test, determine if additional magnesium is required. An average of 50 ppm magnesium in the final solution is desirable for most crops. If water test results indicate that additional magnesium is required, dissolve Epsom salts. One ounce of Epsom salts dissolved in 100 gallons (10 oz/1000 gallons) supplies 7.5 ppm magnesium. Water with very low magnesium levels may require the addition of up to 2 oz/100 gallons (20 oz/1000 gallons) of Epsom salts.

STEP 3: After the Hydroponic Special and any Epsom salts needed have been dissolved in the tank, proceed as follows:

- Dissolve 86 ounces of calcium nitrate in the same 1000 gallons. Total nutrient concentration will then be: Nitrogen as N: 150 ppm N, Calcium as Ca: 116 ppm Ca.

PETERS PROFESSIONAL®

13-2-13

PLUG & BEDDING PLANT SPECIAL NO MINORS, NO DYE

Ideal for plugs, liners, bedding plants and vegetable transplants with high nitrate and low phosphate levels to encourage healthy, compact growth.

- B (Base) formulation for constant, balanced nutrition
- Most effective with Water Types 1 and 2
- Contains calcium and magnesium
- For growers who prefer to add their own micronutrient package

Guaranteed Analysis

Total nitrogen (N)	13%
0.4% ammoniacal nitrogen	
12.6% nitrate nitrogen	
Available phosphate (P ₂ O ₅)	2%
Soluble potash (K ₂ O)	13%
Calcium (Ca)	6.0%
Magnesium (Mg) (Total)	3.0%
3.0% water soluble magnesium (Mg)	

Derived from: ammonium phosphate, potassium nitrate, calcium nitrate, magnesium nitrate.

99340

Target Fertilizer Concentration (N/ppm) After Dilution	Common Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	0.4	2.6	3.3	5.2	7.8	0.19
50	0.8	5.2	6.6	10.4	15.6	0.37
75	1.2	7.8	10.0	15.6	23.4	0.56
100	1.6	10.4	13.3	20.8	31.1	0.74
125	1.9	13.0	16.6	26.0	38.9	0.93
150	2.3	15.6	19.9	31.1	46.7	1.11
175	2.7	18.2	23.3	36.3	***	1.30
200	3.1	20.8	26.6	41.5	***	1.48
250	3.9	26.0	33.2	***	***	1.85
300	4.7	31.1	39.9	***	***	2.22
350	5.4	36.3	46.5	***	***	2.59
400	6.2	41.5	***	***	***	2.96
450	7.0	46.7	***	***	***	3.33
500	7.8	***	***	***	***	3.70
600	9.3	***	***	***	***	4.44

*** Exceeds maximum solubility.

Mixing For Watering Cans, Spray Tanks (No Injectors)		
Amount of Fertilizer*	Amount of Water (gallons)	= ppm N
1 tsp	1	160
1 tbsp	2	240
1 cup	25	307

*level measurements

1 pound of fertilizer + 100 gallons of water = 155.8 ppm N

Product Properties	
Potential Basicity	356 lbs calcium carbonate equivalent per ton
Conductivity of 100 ppm	0.74 mmhos/cm
Maximum Solubility	3 lbs/gal

Target Fertilizer Concentration (N/ppm) After Dilution	Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	1027.6	154.1	120.4	77.1	51.4	0.19
50	513.8	77.1	60.2	38.5	25.7	0.37
75	342.5	51.4	40.1	25.7	17.1	0.56
100	256.9	38.5	30.1	19.3	12.8	0.74
125	205.5	30.8	24.1	15.4	10.3	0.93
150	171.3	25.7	20.1	12.8	8.6	1.11
175	146.8	22.0	17.2	11.0	***	1.30
200	128.5	19.3	15.1	9.6	***	1.48
250	102.8	15.4	12.0	***	***	1.85
300	85.6	12.8	10.0	***	***	2.22
350	73.4	11.0	8.6	***	***	2.59
400	64.2	9.6	***	***	***	2.96
450	57.1	8.6	***	***	***	3.33
500	51.4	***	***	***	***	3.70
600	42.8	***	***	***	***	4.44

*** Exceeds maximum solubility.

PETERS PROFESSIONAL® 20-10-20 GP

Crops that are sensitive to excess micronutrients thrive with this classic formula with its acidifying action that corrects an overload of growing media pH.

- B (Base) formulation can be used alone or rotated with a C (Customizing) component
- Effective for all Water Types
- Contains a full range of essential micronutrients

Guaranteed Analysis

Total nitrogen (N)	20%
8.0% ammoniacal nitrogen	
12.0% nitrate nitrogen	
Available phosphate (P ₂ O ₅)	10%
Soluble potash (K ₂ O)	20%
Magnesium (Mg) (Total)	0.15%
0.15% water soluble magnesium (Mg)	
Boron (B)	0.0125%
Copper (Cu)	0.0125%
0.0125% chelated copper (Cu)	
Iron (Fe)	0.0500%
0.0500% chelated iron (Fe)	
Manganese (Mn) (Total)	0.0250%
0.0250% chelated manganese (Mn)	
Molybdenum (Mo)	0.0050%
Zinc (Zn)	0.0250%
0.0250% chelated zinc (Zn)	

Derived from: ammonium nitrate, potassium nitrate, potassium phosphate, magnesium sulfate, boric acid, copper EDTA, iron EDTA, manganese EDTA, ammonium molybdate, zinc EDTA.

99300



Weight (In Ounces) of Product Needed to Mix One Gallon of Concentrate						
Target Fertilizer Concentration (N/ppm) After Dilution	Common Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	0.3	1.7	2.2	3.4	5.1	0.16
50	0.5	3.4	4.3	6.8	10.1	0.31
75	0.8	5.1	6.5	10.1	15.2	0.47
100	1.0	6.8	8.6	13.5	20.3	0.62
125	1.3	8.4	10.8	16.9	25.3	0.78
150	1.5	10.1	13.0	20.3	30.4	0.93
175	1.8	11.8	15.1	23.6	35.4	1.09
200	2.0	13.5	17.3	27.0	40.5	1.24
250	2.5	16.9	21.6	33.8	50.6	1.55
300	3.0	20.3	25.9	40.5	***	1.86
350	3.5	23.6	30.2	47.3	***	2.17
400	4.1	27.0	34.6	54.0	***	2.48
450	4.6	30.4	38.9	***	***	2.79
500	5.1	33.8	43.2	***	***	3.10
600	6.1	40.5	51.8	***	***	3.72

*** Exceeds maximum solubility.

Mixing For Watering Cans, Spray Tanks (No Injectors)		
Amount of Fertilizer*	+ Amount of Water (gallons)	= ppm N
1 tsp	1	305
1 tbs	2	457
1 cup	25	585

*level measurements

1 pound of fertilizer + 100 gallons of water = 239.7 ppm N

Product Properties	
Potential Acidity	.404 lbs calcium carbonate equivalent per ton
Conductivity of 100 ppm	.062 mmhos/cm
Maximum Solubility	3.5 lbs/gal

Gallons of Water Required to Dissolve One 25 Lb Bag of Fertilizer						
Target Fertilizer Concentration (N/ppm) After Dilution	Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	1580.2	237.0	185.2	118.5	79.0	0.16
50	790.1	118.5	92.6	59.3	39.5	0.31
75	526.7	79.0	61.7	39.5	26.3	0.47
100	395.1	59.3	46.3	29.6	19.8	0.62
125	316.0	47.4	37.0	23.7	15.8	0.78
150	263.4	39.5	30.9	19.8	13.2	0.93
175	225.7	33.9	26.5	16.9	11.3	1.09
200	197.5	29.6	23.1	14.8	9.9	1.24
250	158.0	23.7	18.5	11.9	7.9	1.55
300	131.7	19.8	15.4	9.9	***	1.86
350	112.9	16.9	13.2	8.5	***	2.17
400	98.8	14.8	11.6	7.4	***	2.48
450	87.8	13.2	10.3	***	***	2.79
500	79.0	11.9	9.3	***	***	3.10
600	65.8	9.9	7.7	***	***	3.72

*** Exceeds maximum solubility.

PETERS PROFESSIONAL® 20-20-20 AG & LANDSCAPE SPECIAL

Classic formula designed for in-ground field use on transplants, strawberries, fruit and nut trees, vining fruit and vegetable crops, row crops including corn and potatoes, grains, forages and landscapes.

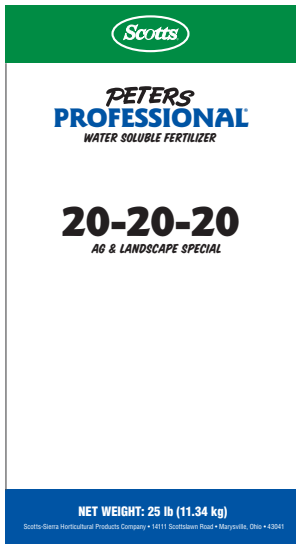
- General-purpose fertilizer contains balanced N-P-K and micronutrients for a wide range of plants
- Acidifying action can help combat excessively high soil pH
- Can be used as a foliar feed

Guaranteed Analysis

Total nitrogen (N)	20%
4.8% ammoniacal nitrogen	
5.4% nitrate nitrogen	
9.8% urea nitrogen	
Available phosphate (P ₂ O ₅)	20%
Soluble potash (K ₂ O)	20%
Boron (B)	0.02%
Copper (Cu)	0.0500%
0.0500% chelated copper (Cu)	
Iron (Fe)	0.1000%
0.1000% chelated iron (Fe)	
Manganese (Mn) (Total)	0.0500%
0.0500% chelated manganese (Mn)	
Molybdenum (Mo)	0.0005%
Zinc (Zn)	0.0500%
0.0500% chelated zinc (Zn)	

Derived from: urea, potassium nitrate, potassium phosphate, ammonium phosphate, boric acid, copper EDTA, iron EDTA, manganese EDTA, ammonium molybdate, zinc EDTA.

99700



Mixing For Watering Cans, Spray Tanks (No Injectors)

Amount of Fertilizer*	+	Amount of Water (gallons)	=	ppm N
1 tsp		1		242
1 tbs		2		363
1 cup		25		465

*level measurements

1 pound of fertilizer + 100 gallons of water = 239.7 ppm N

Product Properties

Potential Acidity	570 lbs calcium carbonate equivalent per ton
Conductivity of 100 ppm	0.51 mmhos/cm
Maximum Solubility	3.5 lbs/gal

Crop	Fertilizer Recommendations for Peters Professional® 20-20-20 General Ag
Transplants	As a starter solution, use at a concentration of 4-5 lbs per 100 gallons. Apply enough solution to drench entire root system. (1 cup per transplant or 200 to 300 gallons per acre).
Strawberries	Use at the concentration of 5-10 lbs per acre when fruit buds are first visible in the crown of the plant. Make three more applications 7 to 10 days apart.
Fruit and Nut Tree Crops: Apples, Peaches, Pears, Plums, Apricots, Nectarines, Cherries, Citrus, Figs, Avacados, Mangoes, Papaya, Kiwi, Filberts, Chestnuts, Macadamia Nuts, Walnuts, Pecans, Almonds	Use at the concentration of 2 lbs per 100 gallons of water. If low volume sprays are made, use at the concentration of 5 to 10 lbs per acre. Apply early in the season and reapply as necessary (3 to 5 times) during the growing season. Use caution with tree fruits where fruit color and maturity are delayed by additional nitrogen and avoid late season sprays.
Grapes, Blackberries, Raspberries, Blueberries, Cranberries	5-10 lbs per acre early in the season and thereafter as necessary. DO NOT apply within 8 weeks of ripening if fruit color or maturity is delayed by applications of nitrogen.
Tomatoes, Peppers, Cucumbers, Squash, Melons	5-10 lbs per acre with first application made when plants are 3-4 weeks old. Make 5-7 applications at 7-10 day intervals.
Beans, Peas, Sweet Corn, Lentils, Onions	5-10 lbs per acre with first application made when plants are 3-4 weeks old. Make 5-7 applications at 7-10 day intervals.
Celery, Lettuce, Endive, Broccoli, Cabbage, Cauliflower, Brussels Sprouts, Kale, Spinach	Use 5 lbs per 100 gallons at transplant. As a foliar spray, use at a concentration of 5-10 lbs per 100 gallons at 7-10 day intervals beginning 3 weeks after transplanting. Make 3-6 sprays per season.
Carrots, Parsley, Asparagus	Foliar applications of 10-15 lbs per acre are efficient, depending on weather conditions and stage of growth.
Row Crops: Legumes, Corns, Beets, Potatoes, Sweet Potatoes, Pineapples	Use at a concentration of 5-10 lbs per acre. Apply when plants are young and reapply at 7 to 10 day intervals.
Wheat, Barley, Oats, Rye, Rice, Sunflower, Sugarcane	5-10 lbs per acre through the season, depending on desired growth and vigor. For small grains, apply at tillering or when 10% of heads are visible.
Forage and Hay Crops	Foliar sprays at the concentration of 5-10 lbs per acre improves plant vigor and stimulates growth. Reapply at 7 to 10 day intervals as needed.
Landscape	Drench trees and shrubs every 7 to 10 days with a solution made with 1.5 to 2.0 lbs of Peters 20-20-20 per 100 gallons of water (approx. concentration = 400 to 600 ppm N).

PETERS PROFESSIONAL® 20-20-20 GP

When growing media contains mineral soil, this formula provides acidifying action to help combat excessive pH.

- B (Base) formulation can be used alone or rotated with a C (Customizing) component
- Appropriate for Water Types 2, 3 and 4 as a drip, drench or foliar feed
- Contains a full range of essential micronutrients
- Available in no dye formulation

Guaranteed Analysis

Total nitrogen (N)	20%
4.1% ammoniacal nitrogen	
5.5% nitrate nitrogen	
10.4% urea nitrogen	
Available phosphate (P ₂ O ₅)	20%
Soluble potash (K ₂ O)	20%
Magnesium (Mg) (Total)	0.05%
0.05% water soluble magnesium (Mg)	
Boron (B)	0.0125%
Copper (Cu)	0.0125%
0.0125% chelated copper (Cu)	
Iron (Fe)	0.0500%
0.0500% chelated iron (Fe)	
Manganese (Mn) (Total)	0.0250%
0.0250% chelated manganese (Mn)	
Molybdenum (Mo)	0.0050%
Zinc (Zn)	0.0250%
0.0250% chelated zinc (Zn)	

Derived from: ammonium phosphate, potassium nitrate, urea, potassium phosphate, magnesium sulfate, boric acid, copper EDTA, iron EDTA, manganese EDTA, ammonium molybdate, zinc EDTA.

99290



Weight (In Ounces) of Product Needed to Mix One Gallon of Concentrate						
Target Fertilizer Concentration (N/ppm) After Dilution	Common Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	0.3	1.7	2.2	3.4	5.1	0.10
50	0.5	3.4	4.3	6.8	10.1	0.21
75	0.8	5.1	6.5	10.1	15.2	0.31
100	1.0	6.8	8.6	13.5	20.2	0.41
125	1.3	8.4	10.8	16.9	25.3	0.51
150	1.5	10.1	13.0	20.3	30.4	0.62
175	1.8	11.8	15.1	23.6	35.4	0.72
200	2.0	13.5	17.3	27.0	40.5	0.82
250	2.5	16.9	21.6	33.8	50.6	1.03
300	3.0	20.3	25.9	40.5	***	1.23
350	3.5	23.6	30.2	47.3	***	1.44
400	4.1	27.0	34.6	54.0	***	1.64
450	4.6	30.4	38.9	***	***	1.85
500	5.1	33.8	43.2	***	***	2.05
600	6.1	40.5	51.8	***	***	2.46

*** Exceeds maximum solubility.

Mixing For Watering Cans, Spray Tanks (No Injectors)		
Amount of Fertilizer*	+ Amount of Water (gallons)	= ppm N
1 tsp	1	238
1 tbsp	2	357
1 cup	25	457

*level measurements

1 pound of fertilizer + 100 gallons of water = 239.7 ppm N

Product Properties	
Potential Acidity	...532 lbs calcium carbonate equivalent per ton
Conductivity of 100 ppm	...0.41 mmhos/cm
Maximum Solubility	...3.5 lbs/gal

Gallons of Water Required to Dissolve One 25 Lb Bag of Fertilizer						
Target Fertilizer Concentration (N/ppm) After Dilution	Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	1580.2	237.0	185.2	118.5	79.0	0.10
50	790.1	118.5	92.6	59.3	39.5	0.21
75	526.7	79.0	61.7	39.5	26.3	0.31
100	395.1	59.3	46.3	29.6	19.8	0.41
125	316.1	47.4	37.0	23.7	15.8	0.51
150	263.4	39.5	30.9	19.8	13.2	0.62
175	225.7	33.9	26.5	16.9	11.3	0.72
200	197.5	29.6	23.1	14.8	9.9	0.82
250	158.0	23.7	18.5	11.9	7.9	1.03
300	131.7	19.8	15.4	9.9	***	1.23
350	112.9	16.9	13.2	8.5	***	1.44
400	98.8	14.8	11.6	7.4	***	1.64
450	87.8	13.2	10.3	***	***	1.85
500	79.0	11.9	9.3	***	***	2.05
600	65.8	9.9	7.7	***	***	2.46

*** Exceeds maximum solubility.

PETERS PROFESSIONAL®

21-7-7 ACID SPECIAL

Produce healthy acid-loving crops with this formula's high potential acidity that offsets high water alkalinity or lowers pH levels in growing media.

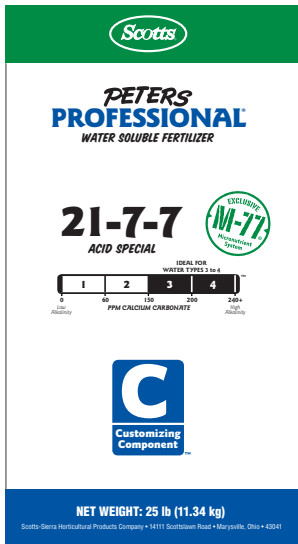
- C (Customizing) component can be used with a variety of B (Base) formulations
- Excellent choice for Water Types 3 and 4
- Contains a full range of essential micronutrients plus extra iron to promote greening

Guaranteed Analysis

Total nitrogen (N)	21%
10.4% ammoniacal nitrogen	
10.6% urea nitrogen	
Available phosphate (P ₂ O ₅)	7%
Soluble potash (K ₂ O)	7%
Magnesium (Mg) (Total)	0.60%
0.60% water soluble magnesium (Mg)	
Sulfur (S)	13.0%
13.0% combined sulfur (S)	
Boron (B)	0.0262%
Copper (Cu)	0.0262%
0.0262% chelated copper (Cu)	
Iron (Fe)	0.1500%
0.1500% chelated iron (Fe)	
Manganese (Mn) (Total)	0.0500%
0.0500% chelated manganese (Mn)	
Molybdenum (Mo)	0.0100%
Zinc (Zn)	0.0500%
0.0500% chelated zinc (Zn)	

Derived from: ammonium phosphate, ammonium sulfate, urea, potassium sulfate, magnesium sulfate, boric acid, copper EDTA, iron EDTA, manganese EDTA, ammonium molybdate, zinc EDTA.

99330



Weight (In Ounces) of Product Needed to Mix One Gallon of Concentrate						
Target Fertilizer Concentration (N/ppm) After Dilution	Common Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	0.2	1.6	2.1	3.2	4.8	0.13
50	0.5	3.2	4.1	6.4	9.6	0.26
75	0.7	4.8	6.2	9.6	14.5	0.39
100	1.0	6.4	8.2	12.9	19.3	0.52
125	1.2	8.0	10.3	16.1	24.1	0.65
150	1.4	9.6	12.3	19.3	28.9	0.78
175	1.7	11.3	14.4	22.5	33.8	0.91
200	1.9	12.9	16.5	25.7	38.6	1.04
250	2.4	16.1	20.6	32.2	48.2	1.30
300	2.9	19.3	24.7	38.6	57.9	1.56
350	3.4	22.5	28.8	45.0	***	1.82
400	3.9	25.7	32.9	51.4	***	2.08
450	4.3	28.9	37.0	57.9	***	2.34
500	4.8	32.2	41.2	***	***	2.60
600	5.8	38.6	49.4	***	***	3.12

*** Exceeds maximum solubility.

Mixing For Watering Cans, Spray Tanks (No Injectors)		
Amount of Fertilizer*	+ Amount of Water (gallons)	= ppm N
1 tsp	1	245
1 tbsp	2	368
1 cup	25	471

*level measurements

1 pound of fertilizer + 100 gallons of water = 251.7 ppm N

Product Properties	
Potential Acidity	1518 lbs calcium carbonate equivalent per ton
Conductivity of 100 ppm	0.52 mmhos/cm
Maximum Solubility	4 lbs/gal

Gallons of Water Required to Dissolve One 25 Lb Bag of Fertilizer						
Target Fertilizer Concentration (N/ppm) After Dilution	Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	1658.9	248.8	194.4	124.4	82.9	0.13
50	829.4	124.4	97.2	62.2	41.5	0.26
75	553.0	82.9	64.8	41.5	27.6	0.39
100	414.7	62.2	48.6	31.1	20.7	0.52
125	331.8	49.8	38.9	24.9	16.6	0.65
150	276.5	41.5	32.4	20.7	13.8	0.78
175	237.0	35.5	27.8	17.8	11.8	0.91
200	207.4	31.1	24.3	15.6	10.4	1.04
250	165.9	24.9	19.4	12.4	8.3	1.30
300	138.2	20.7	16.2	10.4	6.9	1.56
350	118.5	17.8	13.9	8.9	***	1.82
400	103.7	15.6	12.2	7.8	***	2.08
450	92.2	13.8	10.8	6.9	***	2.34
500	82.9	12.4	9.7	***	***	2.60
600	69.1	10.4	8.1	***	***	3.12

*** Exceeds maximum solubility.

PETERS PROFESSIONAL®

24-8-16

FOLIAGE SPECIAL

Classic low-phosphate ratio proven by Florida researches for tropical foliage and hanging baskets. Excellent choice for interiorscapes.

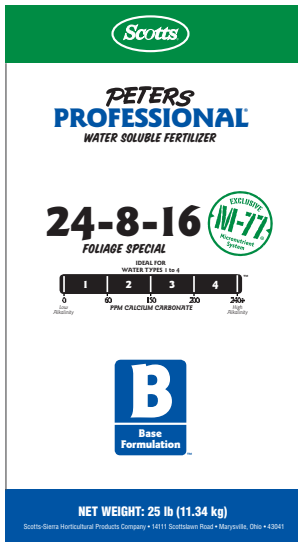
- B (Base) formulation can be used alone or rotated with a C (Customizing) component
- Effective for all Water Types
- Contains a full range of essential micronutrients

Guaranteed Analysis

Total nitrogen (N)	24%
7.1% ammoniacal nitrogen	
8.7% nitrate nitrogen	
8.2% urea nitrogen	
Available phosphate (P ₂ O ₅)	8%
Soluble potash (K ₂ O)	16%
Magnesium (Mg) (Total)	0.35%
0.35% water soluble magnesium (Mg)	
Sulfur (S)	2.00%
2.00% combined sulfur (S)	
Boron (B)	0.0150%
Copper (Cu)	0.0150%
0.0150% chelated copper (Cu)	
Iron (Fe)	0.0600%
0.0600% chelated iron (Fe)	
Manganese (Mn) (Total)	0.0300%
0.0300% chelated manganese (Mn)	
Molybdenum (Mo)	0.0060%
Zinc (Zn)	0.0300%
0.0300% chelated zinc (Zn)	

Derived from: ammonium nitrate, ammonium phosphate, ammonium sulfate, potassium nitrate, urea, potassium phosphate, magnesium sulfate, boric acid, copper EDTA, iron EDTA, manganese EDTA, ammonium molybdate, zinc EDTA.

99720



Weight (In Ounces) of Product Needed to Mix One Gallon of Concentrate						
Target Fertilizer Concentration (N/ppm) After Dilution	Common Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	0.2	1.4	1.8	2.8	4.2	0.11
50	0.4	2.8	3.6	5.6	8.4	0.23
75	0.6	4.2	5.4	8.4	12.7	0.34
100	0.8	5.6	7.2	11.3	16.9	0.45
125	1.1	7.0	9.0	14.1	21.1	0.56
150	1.3	8.4	10.8	16.9	25.3	0.68
175	1.5	9.9	12.6	19.7	29.6	0.79
200	1.7	11.3	14.4	22.5	33.8	0.90
250	2.1	14.1	18.0	28.2	42.2	1.13
300	2.5	16.9	21.6	33.8	***	1.35
350	3.0	19.7	25.2	39.4	***	1.58
400	3.4	22.5	28.8	45.0	***	1.80
450	3.8	25.3	32.4	***	***	2.03
500	4.2	28.2	36.0	***	***	2.25
600	5.1	33.8	43.2	***	***	2.70

*** Exceeds maximum solubility.

Mixing For Watering Cans, Spray Tanks (No Injectors)		
Amount of Fertilizer*	+ Amount of Water (gallons)	= ppm N
1 tsp	1	300
1 tbs	2	451
1 cup	25	577

*level measurements

1 pound of fertilizer + 100 gallons of water = 359.5 ppm N

Product Properties	
Potential Acidity	1043 lbs calcium carbonate equivalent per ton
Conductivity of 100 ppm	0.18 mmhos/cm
Maximum Solubility	4.25 lbs/gal

Gallons of Water Required to Dissolve One 25 Lb Bag of Fertilizer						
Target Fertilizer Concentration (N/ppm) After Dilution	Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	1894.6	284.2	222.0	142.1	94.7	0.11
50	947.3	142.1	111.0	71.0	47.4	0.23
75	631.5	94.7	74.0	47.4	31.6	0.34
100	473.7	71.0	55.5	35.5	23.7	0.45
125	378.9	56.8	44.4	28.4	18.9	0.56
150	315.8	47.4	37.0	23.7	15.8	0.68
175	270.7	40.6	31.7	20.3	13.5	0.79
200	236.8	35.5	27.8	17.8	11.8	0.90
250	189.5	28.4	22.2	14.2	9.5	1.13
300	157.9	23.7	18.5	11.8	***	1.35
350	135.3	20.3	15.9	10.1	***	1.58
400	118.4	17.8	13.9	8.9	***	1.80
450	105.3	15.8	12.3	***	***	2.03
500	94.7	14.2	11.1	***	***	2.25
600	78.9	11.8	9.3	***	***	2.70

*** Exceeds maximum solubility.

PETERS PROFESSIONAL®

30-10-10

HI NITRO FOLIAR FEED

Ideal for in-ground field use, this classic formula provides extra nitrogen for bedding plants, containerized woody plants, flowering pot crops, potted foliage and landscape applications, plus plugs of all types.

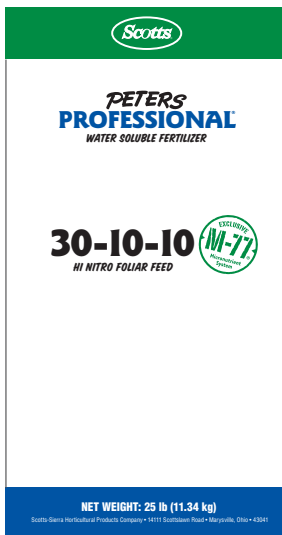
- General-purpose fertilizer contains high nitrogen ration plus Scotts' exclusive M-77® micronutrient system
- Acidifying action can help combat excessively high soil pH
- Can be used as a foliar feed

Guaranteed Analysis

Total nitrogen (N)	30%
2.1% ammoniacal nitrogen	
3.1% nitrate nitrogen	
24.8% urea nitrogen	
Available phosphate (P ₂ O ₅)	10%
Soluble potash (K ₂ O)	10%
Boron (B)	0.0200%
Copper (Cu)	0.0500%
0.0500% chelated copper (Cu)	
Iron (Fe)	0.1000%
0.1000% chelated iron (Fe)	
Manganese (Mn) (Total)	0.0500%
0.0500% chelated manganese (Mn)	
Molybdenum (Mo)	0.0005%
Zinc (Zn)	0.0500%
0.0500% chelated zinc (Zn)	

Derived from: potassium nitrate, urea, ammonium phosphate, boric acid, copper EDTA, iron EDTA, manganese EDTA, ammonium molybdate, zinc EDTA.

99710



Product Properties

Potential Acidity	1043 lbs calcium carbonate equivalent per ton
Conductivity of 100 ppm	0.18 mmhos/cm
Maximum Solubility	4.25 lbs/gal

Recommended Feeding Rates		
Crop Type	Constant Liquid Feeding ppm N	Periodic Feeding ppm N
Bedding Plants	50 - 150	150 - 250
Containerized Woody Plants	50 - 100	200 - 350
Flowering Pot Crops	200 - 300	300 - 450
Potted Foliage	150 - 200	250 - 300
Plugs (All Types)	50 - 125	175 - 225
Landscape/Outdoors	200 - 300	400 - 600

Weight (In Ounces) of Product Needed To Mix One Gallon of Concentrate				
Target Fertilizer Concentration (ppm N) After Dilution	Injector Rates			EC mmhos/cm of Target Feed Rate After Dilution
	1:15	1:100	1:200	
50	0.3	2.3	4.5	0.09
100	0.7	4.5	9.0	0.18
200	1.4	9.0	18.0	0.36
300	2.0	13.5	27.0	0.54

Gallons of Water Required To Dissolve One 25 Lb Bag of Fertilizer			
Target Fertilizer Concentration (ppm N) After Dilution	Injector Rates		
	1:100	1:200	
50	177.8	88.9	
100	88.9	44.4	
200	44.4	22.2	
300	29.6	14.8	

Foliar Feeding – Trial a small plot before spraying the entire area. Suggested starting concentrations are between 1 to 3 lbs of 30-10-10 per 100 gallons of water (360 to 1078 ppm N). Avoid spraying plants that are heat or drought stressed and the addition of a compatible foliar surfactant spreader may increase both safety and effectiveness.

Mixing For Watering Cans, Spray Tanks (No Injectors)					
Amount of Fertilizer*	=	Grams	+ Amount of Water (gallons)	=	ppm N
1 tsp		3.8	1		300
1 tbsp		11.4	2		451
1 cup		181.9	25		577
2 cups		363.8	50		577
3 cups		545.7	75		577
4 cups		727.6	100		577

*level measurements

1 pound of fertilizer + 100 gallons of water = 359.5 ppm N

CHAMPION®

21-8-18

Economic and versatile for all plants grown in soilless media.

- Effective for all Water Types
- Contains a full range of essential micronutrients

Guaranteed Analysis

Total nitrogen (N)	21%
8.7% ammoniacal nitrogen	
12.3% nitrate nitrogen	
Available phosphate (P ₂ O ₅)	.8%
Soluble potash (K ₂ O)	18%
Magnesium (Mg) (Total)	0.15%
0.15% water soluble magnesium (Mg)	
Boron (B)	0.0262%
Copper (Cu)	0.0262%
0.0262% water soluble copper (Cu)	
Iron (Fe)	0.1050%
0.1050% chelated iron (Fe)	
Manganese (Mn) (Total)	0.0525%
0.0525% water soluble manganese (Mn)	0.0105%
Molybdenum (Mo)	0.0105%
Zinc (Zn)	0.0525%
0.0525% water soluble zinc (Zn)	

Derived from: ammonium nitrate, potassium nitrate, ammonium phosphate, magnesium sulfate, boric acid, copper EDTA, iron EDTA, manganese EDTA, ammonium molybdate, zinc EDTA.

99611



Weight (In Ounces) of Product Needed to Mix One Gallon of Concentrate						
Target Fertilizer Concentration (N/ppm) After Dilution	Common Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	0.2	1.6	2.1	3.2	4.8	0.15
50	0.5	3.2	4.1	6.4	9.6	0.30
75	0.7	4.8	6.2	9.6	14.5	0.44
100	1.0	6.4	8.2	12.9	19.3	0.59
125	1.2	8.0	10.3	16.1	24.1	0.74
150	1.4	9.6	12.3	19.3	28.9	0.89
175	1.7	11.3	14.4	22.5	33.8	1.03
200	1.9	12.9	16.5	25.7	38.6	1.18
250	2.4	16.1	20.6	32.2	48.2	1.48
300	2.9	19.3	24.7	38.6	***	1.77
350	3.4	22.5	28.8	45.0	***	2.07
400	3.9	25.7	32.9	51.4	***	2.36
450	4.3	28.9	37.0	***	***	2.66
500	4.8	32.2	41.2	***	***	2.95
600	5.8	38.6	49.4	***	***	3.54

*** Exceeds maximum solubility.

Mixing For Watering Cans, Spray Tanks (No Injectors)		
Amount of Fertilizer*	+ Amount of Water (gallons)	= ppm N
1 tsp	1	324
1 tbsp	2	486
1 cup	25	622

*level measurements

1 pound of fertilizer + 100 gallons of water = 251.7 ppm N

Product Properties	
Potential Acidity	.481 lbs calcium carbonate equivalent per ton
Conductivity of 100 ppm	0.59 mmhos/cm
Maximum Solubility	3 lbs/gal

Gallons of Water Required to Dissolve One 25 Lb Bag of Fertilizer						
Target Fertilizer Concentration (N/ppm) After Dilution	Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	1658.9	248.8	194.4	124.4	82.9	0.15
50	829.4	124.4	97.2	62.2	41.5	0.30
75	553.0	82.9	64.8	41.5	27.6	0.44
100	414.7	62.2	48.6	31.1	20.7	0.59
125	331.8	49.8	38.9	24.9	16.6	0.74
150	276.5	41.5	32.4	20.7	13.8	0.89
175	237.0	35.5	27.8	17.8	11.8	1.03
200	207.4	31.1	24.3	15.6	10.4	1.18
250	165.9	24.9	19.4	12.4	8.3	1.48
300	138.2	20.7	16.2	10.4	***	1.77
350	118.5	17.8	13.9	8.9	***	2.07
400	103.7	15.6	12.2	7.8	***	2.36
450	92.2	13.8	10.8	***	***	2.66
500	82.9	12.4	9.7	***	***	2.95
600	69.1	10.4	8.1	***	***	3.54

*** Exceeds maximum solubility.

CHAMPION®

21-18-18

Versatile, economic all-purpose formula for plants grown in the field or in growing media with mineral soil.

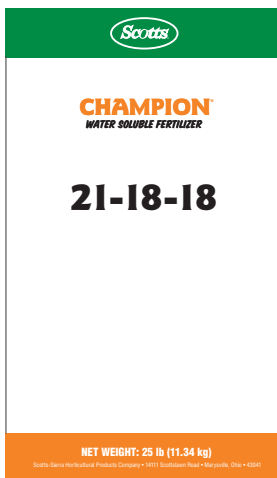
- Effective for all Water Types
- Low micronutrients for crops that are sensitive

Guaranteed Analysis

Total nitrogen (N)	21%
3.5% ammoniacal nitrogen	
5.3% nitrate nitrogen	
12.2% urea nitrogen	
Available phosphate (P ₂ O ₅)	18%
Soluble potash (K ₂ O)	18%
Magnesium (Mg) (Total)	0.05%
0.05% water soluble magnesium (Mg)	
Boron (B)	0.0131%
Copper (Cu)	0.0131%
0.0131% chelated copper (Cu)	
Iron (Fe)	0.0525%
0.0525% chelated iron (Fe)	
Manganese (Mn) (Total)	0.0263%
0.0263% chelated manganese (Mn)	
Molybdenum (Mo)	0.0053%
Zinc (Zn)	0.0263%
0.0263% chelated zinc (Zn)	

Derived from: ammonium phosphate, potassium nitrate, urea, magnesium sulfate, boric acid, copper EDTA, iron EDTA, manganese EDTA, ammonium molybdate, zinc EDTA.

99621



Weight (In Ounces) of Product Needed to Mix One Gallon of Concentrate						
Target Fertilizer Concentration (N/ppm) After Dilution	Common Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	0.2	1.6	2.1	3.2	4.8	0.09
50	0.5	3.2	4.1	6.4	9.6	0.19
75	0.7	4.8	6.2	9.6	14.5	0.28
100	1.0	6.4	8.2	12.9	19.3	0.37
125	1.2	8.0	10.3	16.1	24.1	0.46
150	1.4	9.6	12.3	19.3	28.9	0.56
175	1.7	11.3	14.4	22.5	33.8	0.65
200	1.9	12.9	16.5	25.7	38.6	0.74
250	2.4	16.1	20.6	32.2	48.2	0.93
300	2.9	19.3	24.7	38.6	***	1.11
350	3.4	22.5	28.8	45.0	***	1.30
400	3.9	25.7	32.9	51.4	***	1.48
450	4.3	28.9	37.0	***	***	1.67
500	4.8	32.2	41.2	***	***	1.85
600	5.8	38.6	49.4	***	***	2.22

*** Exceeds maximum solubility.

Mixing For Watering Cans, Spray Tanks (No Injectors)		
Amount of Fertilizer*	+ Amount of Water (gallons)	= ppm N
1 tsp	1	250
1 tbsp	2	375
1 cup	25	479

*level measurements

1 pound of fertilizer + 100 gallons of water = 251.7 ppm N

Product Properties	
Potential Acidity648 lbs calcium carbonate equivalent per ton
Conductivity of 100 ppm	0.37 mmhos/cm
Maximum Solubility	3.5 lbs/gal

Gallons of Water Required to Dissolve One 25 Lb Bag of Fertilizer						
Target Fertilizer Concentration (N/ppm) After Dilution	Injector Ratios					EC (mmhos/cm) of Target Feed Rate After Dilution
	1:15	1:100	1:128	1:200	1:300	
25	1658.9	248.8	194.4	124.4	82.9	0.09
50	829.4	124.4	97.2	62.2	41.5	0.19
75	553.0	82.9	64.8	41.5	27.6	0.28
100	414.7	62.2	48.6	31.1	20.7	0.37
125	331.8	49.8	38.9	24.9	16.6	0.46
150	276.5	41.5	32.4	20.7	13.8	0.56
175	237.0	35.5	27.8	17.8	11.8	0.65
200	207.4	31.1	24.3	15.6	10.4	0.74
250	165.9	24.9	19.4	12.4	8.3	0.93
300	138.2	20.7	16.2	10.4	***	1.11
350	118.5	17.8	13.9	8.9	***	1.30
400	103.7	15.6	12.2	7.8	***	1.48
450	92.2	13.8	10.8	***	***	1.67
500	82.9	12.4	9.7	***	***	1.85
600	69.1	10.4	8.1	***	***	2.22

*** Exceeds maximum solubility.

PETERS PROFESSIONAL[®] S.T.E.M.[™] SOLUBLE TRACE ELEMENT MIX

The industry's standard micronutrient supplement, providing the all-important "quick fix" nutrition for more than 50 years.

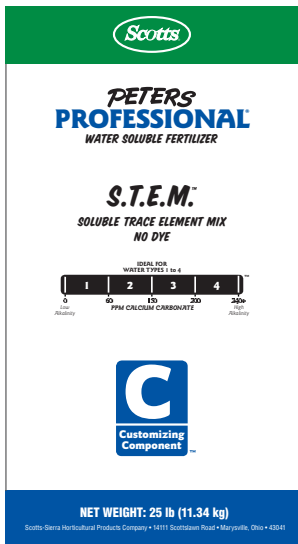
- C (Customizing) component can be used with a variety of B (Base) formulations
- Effective for all Water Types
- Contains the ideal balance of all essential micronutrients

Guaranteed Analysis

Sulfur (S)	13.0%
13.0% combined sulfur (S)	
Boron (B)	1.35%
Copper (Cu)	2.30%
2.30% water soluble copper (Cu)	
Iron (Fe)	7.50%
7.50% water soluble iron (Fe)	
Manganese (Mn) (Total)	8.00%
8.00% water soluble manganese (Mn)	
Molybdenum (Mo)	0.04%
Zinc (Zn)	4.50%
4.50% water soluble zinc (Zn)	

Derived from: magnesium sulfate, boric acid, copper sulfate, iron sulfate, manganese sulfate, ammonium molybdate, zinc sulfate.

99900



Drench one time, corrective application: Add 2 to 8 oz of Peters Professional S.T.E.M. per 100 gallons of water.

Minor Element Levels (ppm) Achieved				
Application Rate (oz/100 gal)	2	4	6	8
Sulfur (S)	21	42	63	84
Boron (B)	2	4	6	8
Copper (Cu)	4.8	9.6	14.4	19.2
Iron (Fe)	11.25	22.5	33.75	45
Manganese (Mn)	12	24	36	48
Molybdenum (Mo)	0.06	0.12	0.18	0.24
Zinc (Zn)	6.75	13.5	20.25	27
E.C. mmhos/cm	0.12	0.24	0.36	0.48

Continuous Feeding: Boost trace elements with every feeding—add 0.1 oz (2.8 grams) to 0.3 oz (8.5 grams) of Peters Professional S.T.E.M. per 100 gallons of water. One-half level teaspoon holds approximately 0.1 oz.

Minor Element Levels (ppm) Achieved			
Application Rate (oz/100 gal)	0.1	0.2	0.3
Sulfur (S)	1.05	2.10	3.15
Boron (B)	0.10	0.20	0.30
Copper (Cu)	0.24	0.48	0.72
Iron (Fe)	0.56	1.13	1.69
Manganese (Mn)	0.6	1.2	1.8
Molybdenum (Mo)	0.003	0.006	0.009
Zinc (Zn)	0.34	0.68	1.01

Mixing For Watering Cans, Spray Tanks (No Injectors) using Approximate Volume Measures			
Amount of Fertilizer*	Low Application Rate	Medium Application Rate	High Application Rate
1 tsp	9 gallons	4.5 gallons	2.25 gallons
1 tbsp	27 gallons	13.5 gallons	6.75 gallons
1 cup	432 gallons	216 gallons	108 gallons

*level measurements

1. Fill the tank to approximately 1/3 tank volume. (Note: if possible use warm water to more quickly dissolve the fertilizer.)
2. Add mineral acid only if necessary (addition may be required with alkalinity levels greater than 250 mg/L calcium carbonate).
3. Add S.T.E.M. and any other compatible fertilizer and stir vigorously.
4. Top off the tank volume with water.

PETERS PROFESSIONAL®

11-5-11

UNI-MIX®

(GROWING MEDIA NUTRIENT CHARGE)

Nutrient charge contains all essential major, secondary and micro-elements. Flexible granular formula can be either incorporated in growing media or used in a continuous liquid feed program.

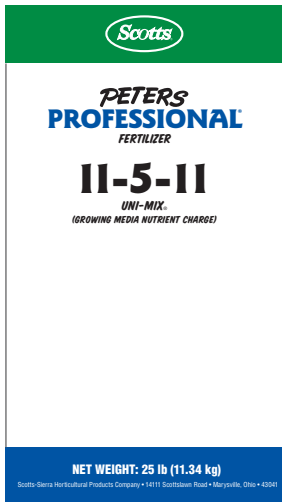
- Provides immediate and slow release nutrient characteristics
- Granular nature allows easy, uniform distribution when incorporated into growing media
- Excellent solubility for liquid feeding

Guaranteed Analysis

Total nitrogen (N)	11%
4.6% nitrate nitrogen	
0.7% urea nitrogen	
1.2 other water soluble nitrogen	
4.5 water insoluble nitrogen	
Available phosphate (P ₂ O ₅)	.5%
Soluble potash (K ₂ O)	11%
Calcium (Ca)	7.20%
Magnesium (Mg) (Total)	2.90%
2.90% water soluble magnesium (Mg)	
Sulfur (S)	7.00%
7.00% combined sulfur (S)	
Boron (B)	0.0200%
Copper (Cu)	0.0500%
0.0500% water soluble copper (Cu)	
Iron (Fe)	1.0000%
1.0000% water soluble iron (Fe)	
Manganese (Mn) (Total)	0.1400%
0.1400% water soluble manganese (Mn)	
Molybdenum (Mo)	0.0040%
Zinc (Zn)	0.1500%
0.1500% water soluble zinc (Zn)	

Derived from: potassium nitrate, calcium nitrate, methyleneurea, calcium phosphate, sulfate of potash magnesia, calcium sulfate, magnesium sulfate, boric acid, copper sulfate, iron sulfate, manganese sulfate, ammonium molybdate, zinc sulfate.

99930



- Incorporate at 2 pounds per cubic yard in addition to limestone, if required. Gypsum may be substituted for some of the limestone for acid-loving plants.
- Start using Peters® fertilizer as a liquid application at planting or no later than two weeks after planting.
- Never steam-sterilize or heat mixes containing Uni-Mix.

The patent-pending Peters® A-B-C Selection System™ works for every crop or crop type.

Try the new Peters® A-B-C Selection System™ online at www.PetersABC.com or use the following tables to find the best Peters® brand fertilizer for your crop(s). Simply select the chart based on your water type and

find the crop(s) you grow. Read across for recommendations of A (All-Purpose) formulations or B (Base) formulations to rotate or combine with C (Customizing) components.



Bedding Plants

Suggested Constant Liquid Feeding Concentration: 50-150 ppm N Suggested Periodic Liquid Feeding Concentration: 200-350 ppm N				
Water Type(s)	A Stand Alone Products		B + C Combination or Rotation Products	
	Option I	Option II	Option I	Option II
Type 1	Peters Excel 13-2-13 Plug & Bedding Plant Special	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 20-2-20 Peat-Lite Low Phos Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Type 2	Peters Excel 15-5-15 Cal-Mag Special	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 20-2-20 Peat-Lite Low Phos Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Types 1 & 2	Peters Excel 13-2-13 Plug & Bedding Plant Special	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 20-2-20 Peat-Lite Low Phos Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Type 3	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 20-2-20 Peat-Lite Low Phos Special + Peters Excel 10-0-0 Magnitrate Special
Type 4	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 20-2-20 Peat-Lite Low Phos Special + Peters Excel 10-0-0 Magnitrate Special
Types 3 & 4	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 20-2-20 Peat-Lite Low Phos Special + Peters Excel 10-0-0 Magnitrate Special
Variable Types/Unknown	TEST YOUR WATER FIRST, THEN SELECT THE BEST FERTILIZER SUITED FOR YOUR SPECIFIC WATER QUALITY TYPE.			

* These two products cannot be tank mixed; use in a rotation or use a multiple-headed injector.

BEST MANAGEMENT PRACTICES: Lower phosphorus inputs can help keep plants compact. Monitor soluble salt levels frequently to make sure fertility levels are adequate. Consider supplementing with controlled release fertilizers for heavy feeders. Apply S.T.E.M. if growing media pH is high or micronutrient levels are lacking.

Chrysanthemum

Suggested Constant Liquid Feeding Concentration: 200-300 ppm N Suggested Periodic Liquid Feeding Concentration: 300-400 ppm N				
Water Type(s)	A Stand Alone Products		B + C Combination or Rotation Products	
	Option I	Option II	Option I	Option II
Type 1	Peters Excel 13-2-13 Plug & Bedding Plant Special	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 20-10-20 Peat-Lite Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Type 2	Peters Excel 15-5-15 Cal-Mag Special	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 20-10-20 Peat-Lite Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Types 1 & 2	Peters Excel 13-2-13 Plug & Bedding Plant Special	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 20-10-20 Peat-Lite Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Type 3	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 20-10-20 Peat-Lite Special + Peters Excel 10-0-0 Magnitrate Special
Type 4	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 20-10-20 Peat-Lite Special + Peters Excel 10-0-0 Magnitrate Special
Types 3 & 4	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 20-10-20 Peat-Lite Special + Peters Excel 10-0-0 Magnitrate Special
Variable Types/Unknown	TEST YOUR WATER FIRST, THEN SELECT THE BEST FERTILIZER SUITED FOR YOUR SPECIFIC WATER QUALITY TYPE.			

* These two products cannot be tank mixed; use in a rotation or use a multiple-headed injector.

BEST MANAGEMENT PRACTICES: Lower phosphorus inputs can help keep plants compact. Monitor soluble salt levels frequently to make sure fertility levels are adequate. Consider supplementing with controlled release fertilizers for heavy feeders. Apply S.T.E.M. if growing media pH is high or micronutrient levels are lacking. Reduce fertilizer concentration after flower color is showing.

Flowering Pot Crops

Suggested Constant Liquid Feeding Concentration: 200-300 ppm N Suggested Periodic Liquid Feeding Concentration: 300-400 ppm N				
Water Type(s)	A Stand Alone Products		B + C Combination or Rotation Products	
	Option I	Option II	Option I	Option II
Type 1	Peters Excel 13-2-13 Plug & Bedding Plant Special	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 20-10-20 Peat-Lite Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Type 2	Peters Excel 15-5-15 Cal-Mag Special	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 20-10-20 Peat-Lite Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Types 1 & 2	Peters Excel 13-2-13 Plug & Bedding Plant Special	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 20-10-20 Peat-Lite Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Type 3	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 20-10-20 Peat-Lite Special + Peters Excel 10-0-0 Magnitrate Special
Type 4	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 20-10-20 Peat-Lite Special + Peters Excel 10-0-0 Magnitrate Special
Types 3 & 4	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 20-10-20 Peat-Lite Special + Peters Excel 10-0-0 Magnitrate Special
Variable Types/Unknown	TEST YOUR WATER FIRST, THEN SELECT THE BEST FERTILIZER SUITED FOR YOUR SPECIFIC WATER QUALITY TYPE.			

* These two products cannot be tank mixed; use in a rotation or use a multiple-headed injector.

BEST MANAGEMENT PRACTICES: Lower phosphorus inputs can help keep plants compact. Monitor soluble salt levels frequently to make sure fertility levels are adequate. Consider supplementing with controlled release fertilizers for heavy feeders. Maintain growing media pHs above 5.8 to avoid micronutrient toxicity syndrome on iron-sensitive plants.

Foliage (General)

Suggested Constant Liquid Feeding Concentration: 150-200 ppm N Suggested Periodic Liquid Feeding Concentration: 250-300 ppm N				
Water Type(s)	A Stand Alone Products		B + C Combination or Rotation Products	
	Option I	Option II	Option I	Option II
Type 1	Peters Excel 13-2-13 Plug & Bedding Plant Special	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 24-8-16 Foliage Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Type 2	Peters Excel 15-5-15 Cal-Mag Special	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 24-8-16 Foliage Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Types 1 & 2	Peters Excel 13-2-13 Plug & Bedding Plant Special	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 24-8-16 Foliage Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Type 3	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 20-10-20 Peat-Lite Special + Peters Excel 10-0-0 Magnitrate
Type 4	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 20-10-20 Peat-Lite Special + Peters Excel 10-0-0 Magnitrate
Types 3 & 4	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 20-10-20 Peat-Lite Special + Peters Excel 10-0-0 Magnitrate
Variable Types/Unknown	TEST YOUR WATER FIRST, THEN SELECT THE BEST FERTILIZER SUITED FOR YOUR SPECIFIC WATER QUALITY TYPE.			

* These two products cannot be tank mixed; use in a rotation or use a multiple-headed injector.

BEST MANAGEMENT PRACTICES: Lower phosphorus inputs can help keep plants compact. Monitor soluble salt levels frequently to make sure fertility levels are adequate. Consider supplementing with controlled release fertilizers for heavy feeders. Apply S.T.E.M. if growing media pH is high or micronutrient levels are lacking.

Geranium

Suggested Constant Liquid Feeding Concentration: 200-300 ppm N Suggested Periodic Liquid Feeding Concentration: 300-400 ppm N				
Water Type(s)	A Stand Alone Products		B + C Combination or Rotation Products	
	Option I	Option II	Option I	Option II
Type 1	Peters Excel 13-2-13 Plug & Bedding Plant Special	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 20-10-20 Peat-Lite Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Type 2	Peters Excel 15-5-15 Cal-Mag Special	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 20-10-20 Peat-Lite Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Types 1 & 2	Peters Excel 13-2-13 Plug & Bedding Plant Special	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 20-10-20 Peat-Lite Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Type 3	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 15-16-17 Peat-Lite Special + Peters Excel 10-0-0 Magnitrate
Type 4	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 15-16-17 Peat-Lite Special + Peters Excel 10-0-0 Magnitrate
Types 3 & 4	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 15-16-17 Peat-Lite Special + Peters Excel 10-0-0 Magnitrate
Variable Types/Unknown	TEST YOUR WATER FIRST, THEN SELECT THE BEST FERTILIZER SUITED FOR YOUR SPECIFIC WATER QUALITY TYPE.			

* These two products cannot be tank mixed; use in a rotation or use a multiple-headed injector.

BEST MANAGEMENT PRACTICES: Lower phosphorus inputs can help keep plants compact. Monitor soluble salt levels frequently to make sure fertility levels are adequate. Consider supplementing with controlled release fertilizers for heavy feeders. Maintain growing media pH's above 5.8 to avoid micronutrient toxicity syndrome on iron-sensitive plants.

Hanging Baskets (General)

Suggested Constant Liquid Feeding Concentration: 200-300 ppm N Suggested Periodic Liquid Feeding Concentration: 300-400 ppm N				
Water Type(s)	A Stand Alone Products		B + C Combination or Rotation Products	
	Option I	Option II	Option I	Option II
Type 1	Peters Excel 13-2-13 Plug & Bedding Plant Special	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 20-10-20 Peat-Lite Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Type 2	Peters Excel 15-5-15 Cal-Mag Special	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 20-10-20 Peat-Lite Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Types 1 & 2	Peters Excel 13-2-13 Plug & Bedding Plant Special	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 20-10-20 Peat-Lite Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Type 3	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 20-10-20 Peat-Lite Special + Peters Excel 10-0-0 Magnitrate Special
Type 4	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 20-10-20 Peat-Lite Special + Peters Excel 10-0-0 Magnitrate Special
Types 3 & 4	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 20-10-20 Peat-Lite Special + Peters Excel 10-0-0 Magnitrate Special
Variable Types/Unknown	TEST YOUR WATER FIRST, THEN SELECT THE BEST FERTILIZER SUITED FOR YOUR SPECIFIC WATER QUALITY TYPE.			

* These two products cannot be tank mixed; use in a rotation or use a multiple-headed injector.

BEST MANAGEMENT PRACTICES: Lower phosphorus inputs can help keep plants compact. Monitor soluble salt levels frequently to make sure fertility levels are adequate. Consider supplementing with controlled release fertilizers for heavy feeders. Maintain growing media pH's above 5.8 to avoid micronutrient toxicity syndrome on iron-sensitive plants.

Hydroponics (General)

Suggested Constant Liquid Feeding Concentration: 150-300 ppm N Suggested Periodic Liquid Feeding Concentration: N/A				
Water Type(s)	A Stand Alone Products		B + C Combination or Rotation Products	
	Option I	Option II	Option I	Option II
Type 1	Peters Excel 13-2-13 Plug & Bedding Plant Special	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 5-11-26 Hydroponic Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 5-11-26 Hydroponic Special + Calcium Nitrate + Potassium Nitrate + Peters Excel 10-0-0*
Type 2	Peters Excel 15-5-15 Cal-Mag Special	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 5-11-26 Hydroponic Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 5-11-26 Hydroponic Special + Calcium Nitrate + Potassium Nitrate + Peters Excel 10-0-0*
Types 1 & 2	Peters Excel 13-2-13 Plug & Bedding Plant Special	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 5-11-26 Hydroponic Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 5-11-26 Hydroponic Special + Calcium Nitrate + Potassium Nitrate + Peters Excel 10-0-0*
Type 3	Peters Professional 15-3-25 Peat-Lite Flowering Crop Special Plus Iron	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Professional 5-11-26 Hydroponic Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 5-11-26 Hydroponic Special + Potassium Nitrate + Peters Excel 10-0-0
Type 4	Peters Professional 15-3-25 Peat-Lite Flowering Crop Special Plus Iron	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Professional 5-11-26 Hydroponic Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 5-11-26 Hydroponic Special + Potassium Nitrate + Peters Excel 10-0-0
Types 3 & 4	Peters Professional 15-3-25 Peat-Lite Flowering Crop Special Plus Iron	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Professional 5-11-26 Hydroponic Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 5-11-26 Hydroponic Special + Potassium Nitrate + Peters Excel 10-0-0
Variable Types/Unknown	TEST YOUR WATER FIRST, THEN SELECT THE BEST FERTILIZER SUITED FOR YOUR SPECIFIC WATER QUALITY TYPE.			

* These two products cannot be tank mixed; use in a rotation or use a multiple-headed injector.

BEST MANAGEMENT PRACTICES: Monitor pH and soluble salt levels frequently to make sure fertility levels are adequate. Concentrations and nutrient levels will depend on specific crops and timing during the production cycle.

Pansy, Vinca & Salvia

Suggested Constant Liquid Feeding Concentration: 100-150 ppm N Suggested Periodic Liquid Feeding Concentration: 225-275 ppm N				
Water Type(s)	A Stand Alone Products		B + C Combination or Rotation Products	
	Option I	Option II	Option I	Option II
Type 1	Peters Excel 15-2-20 Pansy, Salvia & Vinca	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-3-25 Peat-Lite Flowering Crop Special Plus Iron + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 20-2-20 Peat-Lite Low Phos Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Type 2	Peters Excel 15-2-20 Pansy, Salvia & Vinca	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-3-25 Peat-Lite Flowering Crop Special Plus Iron + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 20-2-20 Peat-Lite Low Phos Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Types 1 & 2	Peters Excel 15-2-20 Pansy, Salvia & Vinca	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-3-25 Peat-Lite Flowering Crop Special Plus Iron + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 20-2-20 Peat-Lite Low Phos Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Type 3	Peters Professional 15-3-25 Peat-Lite Flowering Crop Special Plus Iron	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 20-2-20 Peat-Lite Low Phos Special + Peters Excel 10-0-0 Magnitrate Special
Type 4	Peters Professional 15-3-25 Peat-Lite Flowering Crop Special Plus Iron	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 20-2-20 Peat-Lite Low Phos Special + Peters Excel 10-0-0 Magnitrate Special
Types 3 & 4	Peters Professional 15-3-25 Peat-Lite Flowering Crop Special Plus Iron	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 20-2-20 Peat-Lite Low Phos Special + Peters Excel 10-0-0 Magnitrate Special
Variable Types/Unknown	TEST YOUR WATER FIRST, THEN SELECT THE BEST FERTILIZER SUITED FOR YOUR SPECIFIC WATER QUALITY TYPE.			

* These two products cannot be tank mixed; use in a rotation or use a multiple-headed injector.

BEST MANAGEMENT PRACTICES: Lower phosphorus inputs can help keep plants compact. Monitor soluble salt levels frequently to make sure fertility levels are adequate. Consider supplementing with controlled release fertilizers for heavy feeders. Apply S.T.E.M. if growing media pH is high or micronutrient levels are lacking. Occasional Boron supplements may help.

Plugs / Liners

Suggested Constant Liquid Feeding Concentration: 50-150 ppm N Suggested Periodic Liquid Feeding Concentration: 150-250 ppm N				
Water Type(s)	A Stand Alone Products		B + C Combination or Rotation Products	
	Option I	Option II	Option I	Option II
Type 1	Peters Excel 13-2-13 Plug & Bedding Plant Special	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 20-2-20 Peat-Lite Low Phos Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Type 2	Peters Excel 15-5-15 Cal-Mag Special	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 20-2-20 Peat-Lite Low Phos Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Types 1 & 2	Peters Excel 13-2-13 Plug & Bedding Plant Special	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 20-2-20 Peat-Lite Low Phos Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Type 3	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 20-2-20 Peat-Lite Low Phos Special + Peters Excel 10-0-0 Magnitrate Special
Type 4	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 20-2-20 Peat-Lite Low Phos Special + Peters Excel 10-0-0 Magnitrate Special
Types 3 & 4	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 20-2-20 Peat-Lite Low Phos Special + Peters Excel 10-0-0 Magnitrate Special
Variable Types/Unknown	TEST YOUR WATER FIRST, THEN SELECT THE BEST FERTILIZER SUITED FOR YOUR SPECIFIC WATER QUALITY TYPE.			

* These two products cannot be tank mixed; use in a rotation or use a multiple-headed injector.

BEST MANAGEMENT PRACTICES: Lower phosphorus inputs can help keep plants compact. Monitor soluble salt levels frequently to make sure fertility levels are adequate.

Perennials (General)

Suggested Constant Liquid Feeding Concentration: 150-200 ppm N Suggested Periodic Liquid Feeding Concentration: 250-300 ppm N				
Water Type(s)	A Stand Alone Products		B + C Combination or Rotation Products	
	Option I	Option II	Option I	Option II
Type 1	Peters Excel 13-2-13 Plug & Bedding Plant Special	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 20-10-20 Peat-Lite Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Type 2	Peters Excel 15-5-15 Cal-Mag Special	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 20-10-20 Peat-Lite Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Types 1 & 2	Peters Excel 13-2-13 Plug & Bedding Plant Special	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 20-10-20 Peat-Lite Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Type 3	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 20-10-20 Peat-Lite Special + Peters Excel 10-0-0 Magnitrate Special
Type 4	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 20-10-20 Peat-Lite Special + Peters Excel 10-0-0 Magnitrate Special
Types 3 & 4	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 20-10-20 Peat-Lite Special + Peters Excel 10-0-0 Magnitrate Special
Variable Types/Unknown	TEST YOUR WATER FIRST, THEN SELECT THE BEST FERTILIZER SUITED FOR YOUR SPECIFIC WATER QUALITY TYPE.			

* These two products cannot be tank mixed; use in a rotation or use a multiple-headed injector.

BEST MANAGEMENT PRACTICES: Lower phosphorus inputs can help keep plants compact. Monitor soluble salt levels frequently to make sure fertility levels are adequate. Consider supplementing with controlled release fertilizers for heavy feeders. Apply S.T.E.M. if growing media pH is high or micronutrient levels are lacking.

Poinsettia

Suggested Constant Liquid Feeding Concentration: 200-300 ppm N Suggested Periodic Liquid Feeding Concentration: 300-400 ppm N				
Water Type(s)	A Stand Alone Products		B + C Combination or Rotation Products	
	Option I	Option II	Option I	Option II
Type 1	Peters Excel 13-2-13 Plug & Bedding Plant Special	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 20-10-20 Peat-Lite Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Type 2	Peters Excel 15-5-15 Cal-Mag Special	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 20-10-20 Peat-Lite Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Types 1 & 2	Peters Excel 13-2-13 Plug & Bedding Plant Special	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 20-10-20 Peat-Lite Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Type 3	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 20-10-20 Peat-Lite Special + Peters Excel 10-0-0 Magnitrate Special
Type 4	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 20-10-20 Peat-Lite Special + Peters Excel 10-0-0 Magnitrate Special
Types 3 & 4	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 20-10-20 Peat-Lite Special + Peters Excel 10-0-0 Magnitrate Special
Variable Types/Unknown	TEST YOUR WATER FIRST, THEN SELECT THE BEST FERTILIZER SUITED FOR YOUR SPECIFIC WATER QUALITY TYPE.			

* These two products cannot be tank mixed; use in a rotation or use a multiple-headed injector.

BEST MANAGEMENT PRACTICES: Consider lower concentrations for dark leaf cultivars. Apply a 1 to 2 oz/100 gal supplement of S.T.E.M. on Oct. 1 and Nov. 1 to maintain good foliage color. Spoon feed with Ammonium molybdate in October and November. Calcium sprays may be beneficial during leaf and bract development. Reduce fertilizer to 50 to 75 ppm N during the last two weeks of production.

Trees & Shrubs (General)

Suggested Constant Liquid Feeding Concentration: 50-100 ppm N Suggested Periodic Liquid Feeding Concentration: 200-350 ppm N				
Water Type(s)	A Stand Alone Products		B + C Combination or Rotation Products	
	Option I	Option II	Option I	Option II
Type 1	Peters Excel 13-2-13 Plug & Bedding Plant Special	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 20-10-20 Peat-Lite Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Type 2	Peters Excel 15-5-15 Cal-Mag Special	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 20-10-20 Peat-Lite Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Types 1 & 2	Peters Excel 13-2-13 Plug & Bedding Plant Special	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 20-10-20 Peat-Lite Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Type 3	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 20-10-20 Peat-Lite Special + Peters Excel 10-0-0 Magnitrate Special
Type 4	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 20-10-20 Peat-Lite Special + Peters Excel 10-0-0 Magnitrate Special
Types 3 & 4	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 20-10-20 Peat-Lite Special + Peters Excel 10-0-0 Magnitrate Special
Variable Types/Unknown	TEST YOUR WATER FIRST, THEN SELECT THE BEST FERTILIZER SUITED FOR YOUR SPECIFIC WATER QUALITY TYPE.			

* These two products cannot be tank mixed; use in a rotation or use a multiple-headed injector.

BEST MANAGEMENT PRACTICES: Monitor soluble salt levels frequently to make sure fertility levels are adequate. Consider supplementing with controlled release fertilizers for heavy feeders. Apply S.T.E.M. if growing media pH is high or micronutrient levels are lacking.

Vegetable Transplants (General)

Suggested Constant Liquid Feeding Concentration: 50-100 ppm N Suggested Periodic Liquid Feeding Concentration: 200-350 ppm N				
Water Type(s)	A Stand Alone Products		B + C Combination or Rotation Products	
	Option I	Option II	Option I	Option II
Type 1	Peters Excel 13-2-13 Plug & Bedding Plant Special	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 20-2-20 Peat-Lite Low Phos Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Type 2	Peters Excel 15-5-15 Cal-Mag Special	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 20-2-20 Peat-Lite Low Phos Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Types 1 & 2	Peters Excel 13-2-13 Plug & Bedding Plant Special	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 20-2-20 Peat-Lite Low Phos Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Type 3	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 20-2-20 Peat-Lite Low Phos Special + Peters Excel 10-0-0 Magnitrate Special
Type 4	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 20-2-20 Peat-Lite Low Phos Special + Peters Excel 10-0-0 Magnitrate Special
Types 3 & 4	Peters Professional 15-5-25 Peat-Lite Flowering Crop Special	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 20-2-20 Peat-Lite Low Phos Special + Peters Excel 10-0-0 Magnitrate Special
Variable Types/Unknown	TEST YOUR WATER FIRST, THEN SELECT THE BEST FERTILIZER SUITED FOR YOUR SPECIFIC WATER QUALITY TYPE.			

* These two products cannot be tank mixed; use in a rotation or use a multiple-headed injector.

BEST MANAGEMENT PRACTICES: Lower phosphorus inputs can help keep plants compact. Monitor soluble salt levels frequently to make sure fertility levels are adequate. Consider supplementing with controlled release fertilizers for heavy feeders. Apply S.T.E.M. if growing media pH is high or micronutrient levels are lacking.

Vegetative Spring Crops (Heavy Feeders)

Suggested Constant Liquid Feeding Concentration: 250-400 ppm N Suggested Periodic Liquid Feeding Concentration: 350-500 ppm N				
Water Type(s)	A Stand Alone Products		B + C Combination or Rotation Products	
	Option I	Option II	Option I	Option II
Type 1	Peters Excel 15-2-20 Pansy, Salvia & Vinca	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-3-25 Peat-Lite Flowering Crop Special Plus Iron + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 20-10-20 Peat-Lite Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Type 2	Peters Excel 15-5-15 Cal-Mag Special	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-3-25 Peat-Lite Flowering Crop Special Plus Iron + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 20-10-20 Peat-Lite Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Types 1 & 2	Peters Excel 15-2-20 Pansy, Salvia & Vinca	Peters Professional 17-3-17 Peat-Lite Neutral Cal-Mag	Peters Professional 15-3-25 Peat-Lite Flowering Crop Special Plus Iron + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*	Peters Professional 20-10-20 Peat-Lite Special + Peters Professional 15-0-15 Peat-Lite Dark Weather Feed*
Type 3	Peters Professional 15-3-25 Peat-Lite Flowering Crop Special Plus Iron	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 20-10-20 Peat-Lite Special + Peters Excel 10-0-0 Magnitrate Special
Type 4	Peters Professional 15-3-25 Peat-Lite Flowering Crop Special Plus Iron	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 20-10-20 Peat-Lite Special + Peters Excel 10-0-0 Magnitrate Special
Types 3 & 4	Peters Professional 15-3-25 Peat-Lite Flowering Crop Special Plus Iron	Peters Professional 18-8-17 Peat-Lite High Mag Special	Peters Excel 21-5-20 Multi Purpose + Peters Excel 10-0-0 Magnitrate Special	Peters Professional 20-10-20 Peat-Lite Special + Peters Excel 10-0-0 Magnitrate Special
Variable Types/Unknown	TEST YOUR WATER FIRST, THEN SELECT THE BEST FERTILIZER SUITED FOR YOUR SPECIFIC WATER QUALITY TYPE.			

* These two products cannot be tank mixed; use in a rotation or use a multiple-headed injector.

BEST MANAGEMENT PRACTICES: Lower phosphorus inputs can help keep plants compact. Monitor soluble salt levels frequently to make sure fertility levels are adequate. Consider supplementing with controlled release fertilizers for heavy feeders. Maintain growing media pH's below 6.0 to avoid micronutrient deficiency syptoms. Apply S.T.E.M. if growing media pH is high or micronutrient levels are lacking.

Selecting and Handling Water Soluble Fertilizers

Water soluble fertilizer (WSF) products have evolved over time to address changing industry practices and conditions including:

- Wide-scale acceptance of soilless peat and/or bark-based growing media.
- Increased attention to nutrient run-off issues (especially nitrates and phosphorus).
- Regulation of fertilizer programs.
- Skyrocketing costs of some fertilizer raw materials.
- The huge proliferation in available new crop plant species and varieties.

WSF formulations have changed from a simple “one size fits all” Peters® 20-20-20 General Purpose fertilizer to a wide variety of higher nitrate, lower Phosphorus (P) and more Calcium (Ca) containing “complete” fertilizers. While there are many more WSF options out there today, there seems to be more confusion regarding proper product selection and usage of them. Newer formulations may require more complex handling. Also any particular WSF formula may not be suitable for all situations. Growers often call Scotts with perceived problems with their fertilizer that are often linked to other factors. Below is a brief discussion of best management practices that will help growers achieve maximum success from their WSF fertilizer programs.

WSF FORMULA SELECTION

When you choose a particular WSF formula, you are selecting the nutrient diet for your crops. Understand what you are getting and how it fits with your whole growing system:

- Read the guaranteed analysis on the bag label—all claimed nutrients must be listed on the label. There are still predominant misconceptions about particular WSF formulations, e.g. some growers still think 20-20-20 or 20-10-20 contains adequate Ca and Mg for crop needs—this is not so and these products generally need to be modified.
- You need to provide an adequate level of all essential nutrients in your system of water, fertilizer and mix. An annual complete analysis of your irrigation water is essential to managing your crop nutrition.
- Select a fertilizer program based on water quality type will ensure you experience the best results from your fertilizer program. The unique Peters® A-B-C Selection

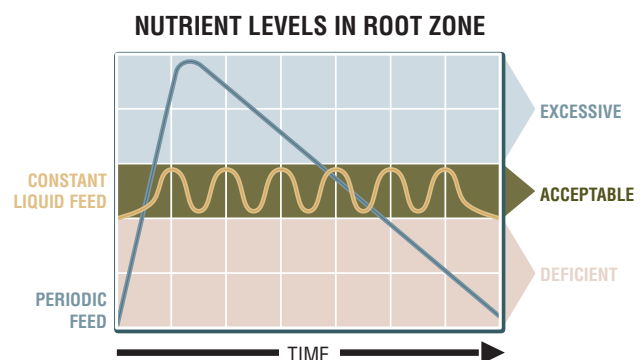
System™ from The Scotts Company easily matches your irrigation water type with the correct Scotts® Water Soluble Fertilizer type.

- Peters “A” All-Purpose formulations are your best choice since they will provide all the nutrients lacking in your growing systems in the convenience of one bag.
- Lower P contents can help minimize plant stretch.
- Potential acidity/ammonium levels can impact growing media pH.
- Crop specific WSF formulations generally contain some slight modification to standard formulations—e.g. a higher level of specific micronutrients. Unless you are a mono-culture grower or have systems that allow for different feed programs to different growing zones, it may be better to stick with your standard feed program and make prescriptive treatments to a particular crop.
- Your fertilizer company should offer you free consultation on fitting fertilizers to your irrigation water to optimize the nutrient delivery program.

WSF CONCENTRATION SELECTION

Once you choose the correct WSF formulation(s), it is important to deliver the proper amount of nutrients in a timely manner.

- Constant liquid feed is always better than periodic feeding (where fertilizer is only applied on 7 to 10 day intervals). Periodic feeding can lead to “feast and famine” conditions especially if you are rotating fertilizers types over time—invariably some nutrients will be lacking or too high with this imprecise application method. The best practice to optimize plant nutrition is to constantly provide all necessary nutrients at required levels with each irrigation as illustrated in the graph below.



By feeding small quantities of fertilizer constantly you are able to avoid great fluctuations in growing media that occur when feeding is done on a periodic basis.

- There has been a trend toward lower feed rates from historical recommendations. While older recommendations probably resulted in luxurious consumption of some nutrients, it is a fact that plants need sufficient nutrients for optimal growth. It is foolish to save a few dollars on fertilizer and grow a sub-optimal crop.
- Even in low feed crops (short term bedding plants), a few WSF feedings right after planting will equalize nutritional status across the crop.
- Other factors that will impact how you target WSF concentrations include: specific crops needs, sub-irrigation versus top-watering, leaching fraction and presence of controlled release fertilizer.
- Clear watering will not only reduce salts in the growing media, but also will wash out essential nutrients in the root zone and contribute to nutrient stress. Use clear water only when salt levels are extremely high in the soil.

MIXING FERTILIZERS

WSF products are designed to readily dissolve so they can easily be applied in liquid form through injectors, sprinklers, drip tubes, etc. However there are some steps you can take to make this process more friendly:

- Companies publish maximum solubility values for each WSF formula. This value is the best-case scenario and a grower in the real world using bucket chemistry, coffee cans, guesstimated volumes and variable irrigation water can expect less than perfect results.
- Concentrations are weight-to-volume measurements and (at least once) determine exactly how much weight of fertilizer you are adding to a given volume of water in your stock tank.
- Sometimes at high proportioning ratios (1:200 and above), the grower may be pushing the limits of solubility, especially if more than one component is being added to the tank.
- Dissolving WSFs is an endothermic reaction (it uses up thermal energy in the stock tank water). To demonstrate this, add a pound of fertilizer to a 1/2 gallon of water and you will quickly feel the solution get very cool. This cooling can slow down the dissolving reaction and this is why we suggest growers use hot water and agitation to speed up the dissolving reaction of the fertilizer concentrate.
- Make sure stock tanks are cleaned out prior to mixing up a fertilizer batch—tank residues from previous stock solutions can cause incompatibilities.
- Irrigation water quality can dramatically impact solubility. High levels of Calcium (Ca) in the irrigation water can precipitate out phosphates or sulfates in the concentrate tank.
- Granularity of the fertilizer – While grinding will speed up the time it takes the fertilizer to dissolve, it contributes to caking. Prilled or coarse granular fertilizer made up of water soluble components will dissolve; it just takes longer for these particles to do so.

STORAGE/MONITORING OF WSF

WSF products can be harder to use if not stored properly and the effectiveness of your feed program can definitely be improved with an effective monitoring program.

- WSF products absorb water over time. This can impact the solubility as product becomes hard over time. Also dye color can be affected as products become soupy. Store WSF products in a temperature-controlled, dry storage area for best results. We have found that plastic packaging has helped prevent products from becoming too moist during storage. If you do not use an entire bag, reseal it tightly to prevent the uptake of atmosphere moisture into the WSF bag.
- Injector monitoring and maintenance will help ensure that you are feeding at optimal levels. Weekly on-site measurements of fertilizer solution and crop EC and pH can be a valuable tool in managing your crop.
- Soluble salts or electrical conductivity (EC) is a general measure of salts dissolved in solutions. EC is especially useful for monitoring the functionality of an injector system and to make sure the fertilizer recipe is at the expected concentration. Ideally, injectors should be checked weekly and this can easily be done by first capturing some fertilizer-injected water out of the hose or drip tubes, and then measuring the EC with a conductivity meter. See Scotts water soluble product sheets for information on EC tied to specific concentrations (ppm N).
- A follow-up program of complete media analysis (and tissue in a problem-solving situation) should be initiated to optimize your nutritional program. Your fertilizer company should be able to provide you with support in this area.

Incompatibility of Water Soluble Fertilizer

Water soluble fertilizers are designed to be completely soluble when mixed at appropriate concentrations. Since fertilizer takes significant heat energy to dissolve, products will take longer to dissolve in cold water. However, since professional growers use concentrated solutions in large stock tanks, care must be taken to avoid mixing incompatible materials. When such incompatible products are mixed together in a stock tank, insoluble precipitates will form that can clog injectors, filters and spray equipment. To ascertain if a combination of fertilizer products are compatible, it is suggested that you first mix up a small quantity in a jar, agitate it, let it sit, then look for precipitate once the sample has heated up to room temperature.

COMPATIBILITY RULES OF THUMB

- Generally don't mix calcium-containing products with products containing phosphates or sulfate; they are incompatible.
- Calcium-containing fertilizers include: calcium nitrate, Peters Professional® 15-0-15, 13-2-13, 17-3-17 and Peters Excel® 15-5-15, 15-2-20, 13-2-13. Some irrigation waters contain high levels of calcium.
- Phosphate-containing fertilizers include most Peters Excel and Peters Professional fertilizers. Phosphoric acid also contains a high percentage of phosphorus.
- Sulfate-containing fertilizers include ammonium sulfate and fertilizers such as Peters Professional® 21-7-7 or S.T.E.M. Epsom salts contain a high level of sulfates and sulfuric acid also contains a high percentage of sulfur.
- Peters Excel products are an exception. Because of the patented Excel technology, all Excel products can be blended with each other without resulting in precipitate in the stock tank.
- Peters Excel® 10-0-0 Magnitrate can be blended with all Peters products to provide extra Magnesium (Mg).
- If you want to add calcium to a Peters fertilizer containing phosphates (such as 20-10-20 Peat-Lite), you need to use a twin-headed injector or rotate between two fertilizer stock tanks (e.g. two applications 20-10-20 Peat-Lite alternated with one application of Peters Professional 15-0-15).

Physical Characteristics of Water Soluble Fertilizer

The Peters brands of professional water soluble fertilizers are made from the best raw materials available. However, some products contain raw materials that when mixed together at certain ratios result in chemical reactions that affect the physical appearance of the product. Below are some recommended solutions to help minimize these physical characteristics. The factors outlined below should have no effect on plant safety.

DYE CONSISTENCY – All raw material sources have different degrees of surface porosity and result in dye absorption at different levels. There are some formulas that are more prone to a gray or light purple color when the material is dry. However, when the material is dissolved in the stock tank, the blue color will provide the trace indicator in the growers' water source. A jar test should be performed to validate dye presence prior to documenting a complaint.

PARTICLE UNIFORMITY – Raw materials are available in many different sizes. Some formulas have a wide range of particle sizes and may not appear to be as uniform as other formulations. All products

manufactured are tested to ensure that what's claimed on the package is what's inside the bag.

OXIDIZER PLACARDS – Any fertilizers that contain nitrates must be tested and labeled based on strict transportation guidelines. Scotts® utilizes a reputable testing lab and adheres to the strictest of standards. Other companies may have similar formulations that are not labeled as oxidizers, but this is an area where we are extremely conservative. We want to be sure to comply with all regulatory requirements and feel that safety in transporting all materials should always come first.

CLUMPS OR CAKED PRODUCTS – Formulas clump or cake for a few primary reasons: 1) Raw materials are exposed to humid, moist conditions; 2) Raw materials that are mixed together at certain ratios that are chemically incompatible; 3) Pressure is applied to the mixed product; and 4) The length of time between manufacture and grower use.

While these products that clump or cake are still effective to use, there are some

measures that can be taken that will help minimize this inconvenience:

- For best results, use the entire bag. If using a partial bag, be sure to reseal tightly. Keep in mind that products begin to absorb moisture as soon as the bag is opened.
- Utilize your fertilizer inventory with a "first in, first out" approach to prevent clumping that can come from long storage times.
- If you buy full pallets of product, avoid stacking any other material on top of the pallet to prevent compression.

SOLUBILITY – All Peters products are completely soluble as long as compatible materials are added to the stock tanks. If the stock tank solution is made with cold water, a longer mixing time is required. Be patient and keep agitating the solution, all material will go into solution. Additional adjuvants are added to Scotts products to aid in reducing caking or improving nutrient availability. These may result in a slight skim layer at the top of the concentrate tank, but this should not impact solubility or injection functionality.

Adjusting Excess Alkalinity Through Acid Injection

BEFORE ADOPTING ANY WATER TREATMENT FOR ALKALINITY, DETERMINE YOUR CROP NEEDS BY:

- Having water tested to verify alkalinity.
- Comparing Scotts Testing Lab's guidelines for acceptable alkalinity versus container sizes used.
- Examining past media analyses to assess the degree of pH increase throughout crop life.

ADDITIONAL POINTS TO CONSIDER BEFORE ADJUSTING ALKALINITY WITH MINERAL ACIDS:

- Moderately excessive alkalinity may be neutralized by using the appropriate Peters Excel® fertilizers.
- Make sure that your injector is designed for handling acids.
- Determine the type of acid needed to adjust your water alkalinity. High alkalinity (> 250 ppm CaCO₃) may necessitate using sulfuric acid versus the weaker phosphoric acid.
- Estimate the amount of acid you may need based on crop timing and pot size. (As a general rule, higher alkalinities have more impact on smaller pots and on crops with longer growth cycles.
- Remember that phosphoric acid can be safely used with all Peters® and Peters Excel formulations in the stock solution; even those containing calcium such as 15-0-15 and 20-0-20.
- Sulfuric acid should *not* be mixed in a concentrate or stock solution with ANY calcium-containing fertilizer such as Peters® 17-3-17, 15-0-15, 13-2-13 and Peters Excel® 15-5-15, 15-2-20 and 13-2-13.

• Acid injection could corrode metal pipes and release toxic levels of iron or zinc. Plastic pipes are preferred.

• Do not use water treated with phosphoric acid for overhead misting of poinsettias. Hardened growth and deformed foliage may result.

FOR PROPER APPLICATION AND HANDLING OF ACIDS:

- Remember that these mineral acids are extremely corrosive.
- Read and follow all product labels and MSDS sheets before mixing.
- Use caution when measuring, mixing and storing acids.
- Always wear protective eyewear, clothing, respirator (if needed) and gloves when measuring and mixing acids. The injection area should be equipped with an emergency shower and an eye wash station.
- Always add acid to water. A violent reaction could occur if water is added to acid.
- Add acid to water before fertilizer is added. If desired, fertilizer could be dissolved in another container before adding to the acidified water to avoid splashing.
- Verify the proper amount of acid added by testing final alkalinity of acidified water without fertilizer added. You may use on-site alkalinity tests or submit acidified water to The Scotts Testing Lab.

Neutralizing Excess Alkalinity

Excessive water alkalinity can be neutralized with acid. Use the table below to determine the amount of acid needed to reduce alkalinity to a desired level.

Example: Your alkalinity is 225 ppm CaCO_3 . You want to reduce the alkalinity to 125.

225-125 = 100 ppm CaCO_3 to neutralize. (Find 100 ppm in the far left column.)

From the table you can choose to use 0.744 ounces of 93% sulfuric acid *or* 2.096 ounces 33% sulfuric acid *or* 1.748 ounces 85% phosphoric acid *or* 2.120 ounces 75% phosphoric acid *or* 3.120 ounces of nitric acid *PER 100 GALLONS OF WATER* to reduce your alkalinity.

Fluid Ounces of Acid/100 Gallons of Water to Neutralize (ppm CaCO_3 *)					
ppm CaCO_3 to Neutralize	Sulfuric Acid 93%	Sulfuric Acid 33% or Battery	Phosphoric Acid 85%	Phosphoric Acid 75%	Nitric Acid 61%
10	0.074	0.210	0.175	0.212	0.312
25	0.186	0.524	0.437	0.530	0.780
50	0.372	1.048	0.874	1.060	1.560
75	0.558	1.572	1.311	1.590	2.340
100	0.744	2.096	1.748	2.120	3.120
125	0.930	2.620	2.185	**	3.900
150	1.116	3.144	**	**	4.680
175	1.302	3.668	**	**	5.460
200	1.488	4.192	**	**	6.240
225	1.674	4.716	**	**	7.020
250	1.860	5.240	**	**	7.800

*Use as a guideline only. Follow up adjustments with testing to verify alkalinity and pH changes.
 **Phosphoric Acid is relatively ineffective at these higher rates.

MINERAL ACID NUTRITIONAL CONTRIBUTIONS TO FERTILIZER SOLUTIONS:

One fluid ounce of acid per 100 gallons of water will contribute the following nutrients:

93% Sulfuric acid	42 ppm Sulfur
33% Sulfuric acid	15 ppm Sulfur
85% Phosphoric acid	35.5 ppm Phosphorus
75% Phosphoric acid	29.3 ppm Phosphorus
61% Nitric acid	14 ppm Nitrogen

Useful General Information

HELPFUL WEIGHTS AND MEASURES CHARTS

<p>AMERICAN FLUID MEASURE 80 drops = 1 teaspoonful (tsp) 3 teaspoons = 1 tablespoonful (tbsp) 2 tablespoons = 1 fluid ounce (fl oz) 8 fluid ounces = 1 cup (c) 2 cups = 1 pint (pt) 2 pints = 1 quart (qt) 4 quarts = 1 gallon (gal)</p> <p>AMERICAN DRY MEASURE 3 teaspoons = 1 tablespoon 16 tablespoons = 1 cup 2 cups = 1 pint 2 pints = 1 quart</p>	<table> <thead> <tr> <th>WHEN YOU KNOW:</th> <th>MULTIPLY BY:</th> <th>TO FIND:</th> </tr> </thead> <tbody> <tr><td>inches</td><td>25</td><td>millimeters</td></tr> <tr><td>feet</td><td>30</td><td>centimeters</td></tr> <tr><td>yards</td><td>0.9</td><td>meters</td></tr> <tr><td>miles</td><td>1.6</td><td>kilometers</td></tr> <tr><td>centimeters</td><td>0.393</td><td>inches</td></tr> <tr><td>meters</td><td>1.1</td><td>yards</td></tr> <tr><td>kilometers</td><td>0.6</td><td>miles</td></tr> <tr><td>ounces/gallon</td><td>7.5</td><td>grams/liter</td></tr> <tr><td>ounces</td><td>28</td><td>grams</td></tr> <tr><td>pounds</td><td>0.45</td><td>kilograms</td></tr> <tr><td>short tons</td><td>0.9</td><td>metric tons</td></tr> <tr><td>grams</td><td>0.035</td><td>ounces</td></tr> <tr><td>kilograms</td><td>2.2</td><td>pounds</td></tr> <tr><td>metric tons</td><td>1.1</td><td>short tons</td></tr> <tr><td>fluid ounces</td><td>30</td><td>milliliters</td></tr> <tr><td>pints, U.S.</td><td>0.47</td><td>liters</td></tr> <tr><td>pints, Imp.</td><td>0.568</td><td>liters</td></tr> <tr><td>quarts, U.S.</td><td>0.95</td><td>liters</td></tr> <tr><td>quarts, Imp.</td><td>1.137</td><td>liters</td></tr> <tr><td>gallons, U.S.</td><td>3.8</td><td>liters</td></tr> <tr><td>gallons, Imp.</td><td>4.546</td><td>liters</td></tr> <tr><td>milliliters</td><td>0.034</td><td>fluid ounces</td></tr> <tr><td>liters</td><td>2.1</td><td>pints, U.S.</td></tr> <tr><td>liters</td><td>1.76</td><td>pints, Imp.</td></tr> <tr><td>liters</td><td>1.06</td><td>quarts, U.S.</td></tr> <tr><td>liters</td><td>0.88</td><td>quarts, Imp.</td></tr> <tr><td>liters</td><td>0.26</td><td>gallons, U.S.</td></tr> <tr><td>liters</td><td>0.22</td><td>gallons, Imp.</td></tr> </tbody> </table>	WHEN YOU KNOW:	MULTIPLY BY:	TO FIND:	inches	25	millimeters	feet	30	centimeters	yards	0.9	meters	miles	1.6	kilometers	centimeters	0.393	inches	meters	1.1	yards	kilometers	0.6	miles	ounces/gallon	7.5	grams/liter	ounces	28	grams	pounds	0.45	kilograms	short tons	0.9	metric tons	grams	0.035	ounces	kilograms	2.2	pounds	metric tons	1.1	short tons	fluid ounces	30	milliliters	pints, U.S.	0.47	liters	pints, Imp.	0.568	liters	quarts, U.S.	0.95	liters	quarts, Imp.	1.137	liters	gallons, U.S.	3.8	liters	gallons, Imp.	4.546	liters	milliliters	0.034	fluid ounces	liters	2.1	pints, U.S.	liters	1.76	pints, Imp.	liters	1.06	quarts, U.S.	liters	0.88	quarts, Imp.	liters	0.26	gallons, U.S.	liters	0.22	gallons, Imp.
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OUNCES/GRAMS CONVERSION

1 ounce = 28.350 grams	4 ounces = 113.398 grams	7 ounces = 198.447 grams
2 ounces = 56.699 grams	5 ounces = 141.748 grams	8 ounces = 226.796 grams
3 ounces = 85.049 grams	6 ounces = 170.097 grams	9 ounces = 255.146 grams

GRAMS/OUNCES CONVERSION

1 gram = 0.035 ounces	4 grams = 0.141 ounces	7 grams = 0.247 ounces
2 grams = 0.071 ounces	5 grams = 0.176 ounces	8 grams = 0.282 ounces
3 grams = 0.106 ounces	6 grams = 0.212 ounces	9 grams = 0.317 ounces

POUNDS/KILOGRAMS CONVERSION

1 pound = 0.454 kilograms	4 pounds = 1.814 kilograms	7 pounds = 3.175 kilograms
2 pounds = 0.907 kilograms	5 pounds = 2.268 kilograms	8 pounds = 3.629 kilograms
3 pounds = 1.361 kilograms	6 pounds = 2.722 kilograms	9 pounds = 4.082 kilograms

KILOGRAMS/POUNDS CONVERSION

1 kilogram = 2.205 pounds	4 kilograms = 8.819 pounds	7 kilograms = 15.432 pounds
2 kilograms = 4.409 pounds	5 kilograms = 11.023 pounds	8 kilograms = 17.637 pounds
3 kilograms = 6.614 pounds	6 kilograms = 13.226 pounds	9 kilograms = 19.842 pounds

Scotts® Water Soluble Fertilizer Summary Chart

Brand	Product Name	Page #	New Stock #	Ideally Suited for Water Type(s)	Potential Acidity (A) / Basicity (B) (GCE/ton)	Maximum Solubility (lb/gal)	EC per 100 ppm N (mS/cm)	Oz/gal to obtain 100 ppm N	1 level tsp/gal = approx. ppm N	Elemental ppm contained in a 100 ppm N solution														
										NH4-N	Urea-N	NO3-N	P	K	Ca	Mg	S	B	Cu	Fe	Mn	Mo	Zn	
Peters Excel®	13-2-13 Plug & Bedding Plant Special	10	99120	A	1 to 2	335 B	5.00	0.75	10.4	168	0.0	6.9	93.1	6.7	83.3	46.2	23.1	0.0	0.125	0.125	0.500	0.250	0.0500	0.250
	15-2-20 Pansy, Salvia & Vinca	11	99130	A	1 to 2	234 B	3.50	0.77	9.0	219	18.0	5.3	76.7	5.8	111.1	25.0	13.3	0.0	0.200	0.125	0.667	0.333	0.0500	0.250
	15-5-15 Cal-Mag Special	12	99140	A	2	131 B	3.00	0.69	9.0	194	7.3	14.0	78.7	14.5	83.3	33.3	13.3	0.0	0.125	0.125	0.500	0.250	0.0500	0.250
	21-5-20 Multi Purpose	13	99150	B	2 to 4	390 A	4.00	0.63	6.4	320	34.8	5.2	60.0	10.4	79.4	0.0	0.0	0.0	0.125	0.125	0.500	0.250	0.0500	0.250
	21-5-20 Multi Purpose No Boron	14	99152	B	2 to 4	377 A	4.00	0.63	6.4	320	34.3	5.2	60.5	10.4	79.4	0.0	0.0	0.0	0.000	0.125	0.500	0.250	0.0500	0.250
	10-0-0 Magnitrate Special	15	99160	C	1 to 4	357 B	5.00	0.70	13.5	35	0.0	0.0	100.0	0.0	0.0	0.0	90.0	0.0	0.125	0.125	0.500	0.250	0.0500	0.250
	17-3-17 Peat-Lite® Neutral Cal-Mag	16	99230	A	1 to 2	27 B	5.00	0.65	7.9	216	23.5	0.0	76.5	7.7	83.3	23.5	7.4	0.0	0.125	0.125	0.500	0.250	0.0500	0.250
	10-30-20 Peat-Lite® Plant Starter	17	99350	B	2 to 4	365 A	3.25	0.86	13.5	129	50.0	0.0	50.0	130.4	166.7	0.0	13.0	0.0	0.125	0.125	0.500	0.250	0.0500	0.250
	15-3-25 Peat-Lite® Flowering Crop Special Plus Iron	18	99320	B	1 to 4	13 A	2.50	0.79	9.0	232	26.7	0.0	73.3	8.7	138.9	0.0	16.7	6.7	0.125	0.125	1.000	0.250	0.0500	0.250
	15-5-25 Peat-Lite® Flowering Crop Special	19	99220	B	1 to 4	48 A	2.50	0.77	9.0	225	28.7	0.0	71.3	14.5	138.9	0.0	16.7	6.7	0.045	0.125	0.500	0.250	0.0500	0.250
	15-16-17 Peat-Lite Special®	20	99210	B	2 to 4	202 A	4.25	0.62	9.0	197	20.7	26.7	52.7	46.4	94.4	0.0	0.7	0.0	0.125	0.125	0.500	0.250	0.0500	0.250
	18-8-17 Peat-Lite® High Mag Special	21	99240	B	1 to 4	381 A	3.00	0.65	7.5	267	40.6	0.0	59.4	19.3	78.7	0.0	13.9	5.6	0.125	0.125	0.500	0.250	0.0500	0.250
	20-2-20 Peat-Lite® Low Phos Special	22	99270	B	1 to 4	290 A	3.00	0.60	6.8	305	36.0	0.0	64.0	4.3	83.3	0.0	5.5	0.0	0.125	0.125	0.500	0.250	0.0500	0.250
	20-10-20 Peat-Lite Special®	23	99250	B	1 to 4	415 A	3.00	0.59	6.8	284	40.5	0.0	59.5	21.7	83.3	0.0	0.8	0.0	0.125	0.125	0.500	0.250	0.0500	0.250
	20-10-20 Peat-Lite Special® No Boron	24	99252	B	1 to 4	402 A	3.00	0.57	6.8	284	40.0	0.0	60.0	21.7	83.3	0.0	0.8	0.0	0.000	0.125	0.500	0.250	0.0500	0.250
15-0-15 Peat-Lite® Dark Weather Feed	25	99260	C	1 to 2	221 B	5.00	0.71	9.0	188	13.3	0.0	86.7	0.0	83.3	33.3	13.3	0.0	0.125	0.125	0.500	0.250	0.0500	0.250	
5-11-26 Hydroponic Special	26	99310	B	1 to 4	215 B	3.00	1.45	27.0	*	0.0	0.0	100.0	95.7	433.3	0.0	62.0	80.0	1.000	0.300	6.000	1.000	0.2000	0.300	
13-2-13 Plug & Bedding Plant Special No Minors, No Dye	27	99340	B	1 to 2	356 B	3.00	0.74	10.4	160	3.1	0.0	96.9	6.7	83.3	46.2	23.1	0.0	0.000	0.000	0.000	0.000	0.0000	0.000	
20-10-20 GP	28	99300	B	1 to 4	404 A	3.50	0.62	6.8	305	40.0	0.0	60.0	21.7	83.3	0.0	0.8	0.0	0.063	0.063	0.250	0.125	0.0250	0.125	
20-20-20 Ag & Landscape Special	29	99700	*	*	570 A	3.50	0.51	6.8	247	24.0	49.0	27.0	43.5	83.3	0.0	0.0	0.0	0.100	0.250	0.500	0.250	0.0025	0.250	
20-20-20 GP	30	99290	B	2 to 4	532 A	3.50	0.41	6.8	238	20.5	52.0	27.5	43.5	83.3	0.0	0.3	0.0	0.063	0.063	0.250	0.125	0.0250	0.125	
20-20-20 GP No Dye	30	99291	B	2 to 4	532 A	3.50	0.41	6.8	238	20.5	52.0	27.5	43.5	83.3	0.0	0.3	0.0	0.063	0.063	0.250	0.125	0.0250	0.125	
21-7-7 Acid Special	31	99330	C	3 to 4	1518 A	4.00	0.52	6.4	245	49.5	50.5	0.0	14.5	27.8	0.0	2.9	61.9	0.125	0.125	0.714	0.238	0.0476	0.238	
24-8-16 Foliage Special	32	99720	B	1 to 4	726 A	3.00	0.45	5.6	238	29.6	34.2	36.3	14.5	55.6	0.0	1.5	8.3	0.063	0.063	0.250	0.125	0.0250	0.125	
30-10-10 Hi Nitro Foliar Feed	33	99710	*	*	1043 A	4.25	0.18	4.5	300	7.0	82.7	10.3	14.5	27.8	0.0	0.0	0.0	0.067	0.167	0.333	0.167	0.0017	0.167	
21-8-18	34	99611	*	*	481 Acidic	3.50	0.59	6.4	324	41.4	0.0	58.6	16.6	71.4	0.0	0.7	0.0	0.125	0.125	0.500	0.250	0.0500	0.250	
21-18-18	35	99621	*	*	648 Acidic	3.50	0.37	6.4	250	16.7	58.1	25.2	37.3	71.4	0.0	0.2	0.0	0.063	0.063	0.250	0.125	0.0250	0.125	

For more information on Peters Professional® S.T.E.M.™ (99900, page 36) and Peters Professional® Uni-Mix® 11-5-11 (99930, page 37), see individual product labels.

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