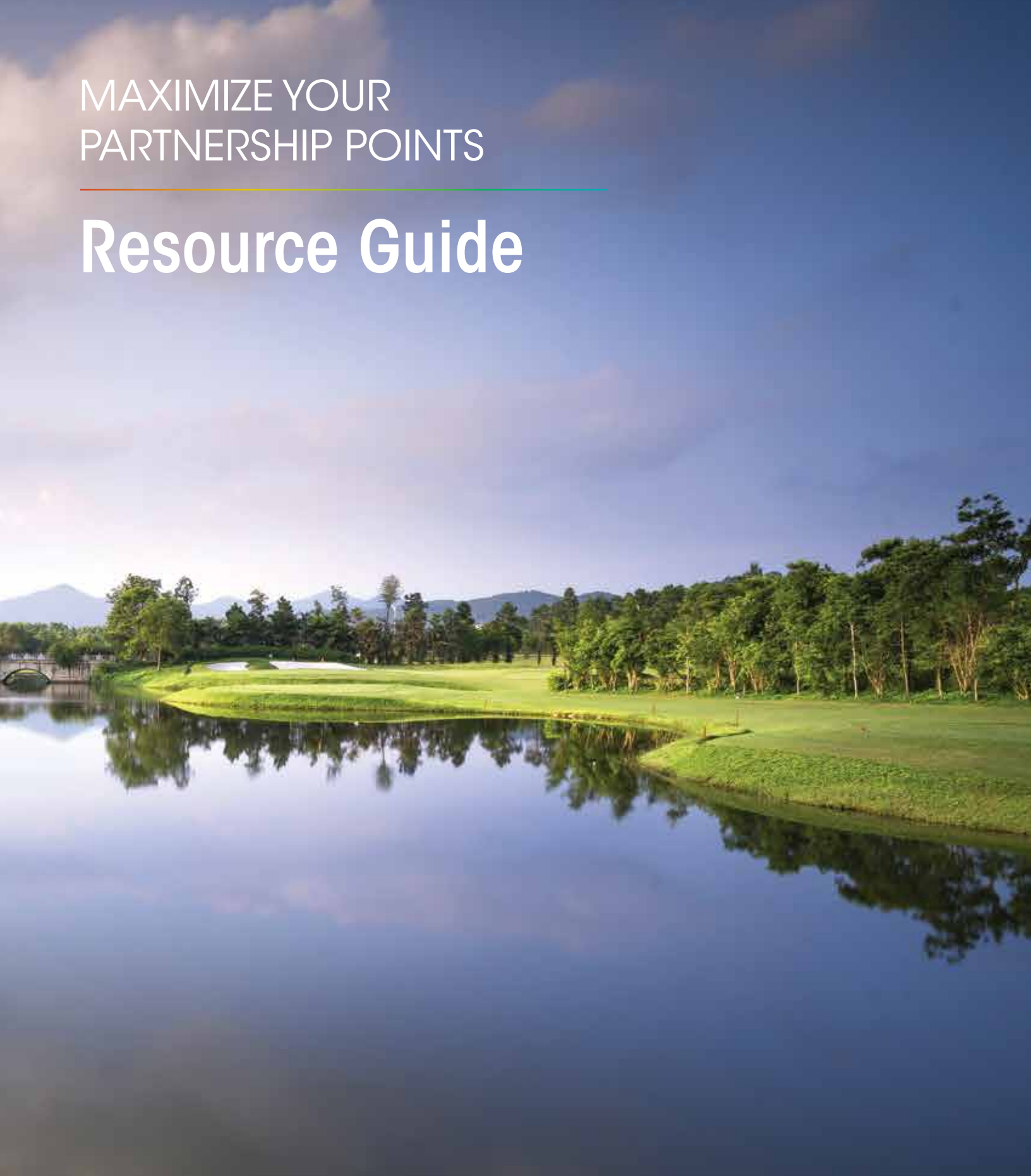


MAXIMIZE YOUR  
PARTNERSHIP POINTS

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# Resource Guide



## Our Brands

# People Powered. Solutions Driven.



The only sustainable competitive advantage any company will ever achieve will be based upon the character and caliber of its people. Good ideas come and go, but it's our people who provide the lasting value. We can't bring lasting value by just being the least expensive. We believe enduring value happens when our solutions grow our

customers' businesses and improve their operation. To that end, improving our environment has increasingly become a core focus of our company. Across the industry segments we serve—golf, landscape, ice melt—we are working hard to solve the challenges facing our customers with an eye on improving our water, our soil and our shared future.

## Step into the future with SynaTek.

Exceeding our customers' expectations today demands that we always look ahead, developing the products and technologies that keep our partners healthy and profitable no matter what the future brings. Find out more at [SynatekSolutions.com](http://SynatekSolutions.com) or contact us at 1-888-408-5433 or [info@SynatekSolutions.com](mailto:info@SynatekSolutions.com).



The distribution arm of SynaTek Solutions channels manufacturers' quality products to local businesses. Reach focuses on what your business needs, not checking boxes and sending invoices.



Fueled by concern for our planet, Branch Creek is committed to creating earth-friendly alternatives to synthetics, designed to perform at the highest level and priced to fit growing efforts big and small.



Our technology arm encompasses hardware—our injection control panel, mix transfer system and control panel—as well as software like taskTracker, a labor tracking software.



A full range of innovative ice melt technologies that balance the demands of safety, cost and efficacy with an awareness of the impact these products can have on the environment.



Our vision is to positively impact every business owner, employee and family in the environments they work, play and live by providing every day products that are safe, effective and environmentally focused and technologies that create operational efficiencies and maximize revenue.





RESOURCE GUIDE

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# Ecotronics



## ECO-Inject Control Panel



### Inject Consistency and Control!

The Ecotronics ECO-6 is the latest in control panels for injection equipment. ECO-6 is very user friendly, allowing you to preprogram your desired inputs in the beginning of the season with little to no adjustments throughout.

### Features & Benefits:

- Accurately pumps up to three products all at different rates.
- Digital timer, digital calculator and flow meter to program the start and stop of your injection cycles to match up to your irrigation schedule.
- Diagnostic software to monitor pumps and usage rates as well as provide standard reporting including water and product usage and pH levels.
- Safety features which automatically shut down the system when not pumping correctly.
- Full team of technicians to support your team with training and troubleshooting, even after installation.



## Mix Transfer System



### Spraying made safe, fast and easy!

Giving you back time during critical parts of your day is the primary focus for the Ecotronics Mix Transfer System (MTS). MTS allows you to fill, mix transfer AND fill your entire liquid spray application at once and in less than 15 minutes.

### Features & Benefits:

- Compact footprint of 10' x 10'.
- Aggressive mix tank agitation for all chemistry formulations.
- Chemical inductor mounted at hip level to allow for safe filling of chemistries.
- Double back flow preventer added to your fresh water line for additional safety precaution.
- Use of quick couplers and ball valves for easy dismantling of system for winterization.
- Flow meter to accurately measure liquid inputs.
- Fills spray tank at 60 gallons per minute.



**taskTracker™**

taskTracker

**Track every task in a fraction of the time!**

Effortlessly manage and track crews, jobs and budgets with taskTracker's digital workboard. Bye-bye whiteboard!

**Features & Benefits:**

- Designed to be friendly and familiar, even for those who avoid technology.
- Do it all dashboard to assign a full day's task to every employee and store those tasks for later use.
- Crystal clear communications with synced calendars, messaging and notes to your team as well as other course departments.
- Control from anywhere with the cloud based app.
- One touch reporting to output detailed labor and expense reports for the current day, yesterday and months ago.



YOUR DAILY PURCHASES



**Ecotronics®**  
WHERE TURF MEETS TECHNOLOGY

CONVERTED TO REWARDS

# **1P** Partnership Points

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## Turning Daily Purchases Into Lasting Value

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The golf industry needs technologies that can propel the sport into the future. The challenge becomes how do we invest in tomorrow while we pay for today? The answer to this pivotal question is Partnership Points.

**Partnership Points were designed to turn daily purchases into lasting value.**

SynaTek's Partnership Points Program allows participants to utilize their purchases to access technologies offered through Ecotronics. Ecotronics has technologies that range from labor tracking software to control panel technology that allow your course to manage water and nutrient applications through irrigation.







## Featured Product

MicroTek™ is a complete foliar iron nutritional with a balanced analysis of the essential micronutrients needed to make grass green and healthy without additional growth.

It contains the non-plant food ingredient of Fulvic acid to improve nutrient availability to the crop, enhance photosynthesis, magnify root growth, and increase oxygen uptake as well as chlorophyll production.



### Product Highlights

MicroTek™ boasts an 8:5 Iron to Magnesium ratio which is one of the best in this product category. Magnesium increases the Iron utilization and availability. Similar products measure at a 6:1.25 ratio meaning MicroTek™ outpaces the competition in both available nutrients and quick green up.

This product comes in an easy to use 5 lb bag which covers anywhere from 10 to 50 Acres depending on desired results. The cost works out to a range of \$9 - \$18 per Acre. This flexibility in rate provides golf course superintendents and landscape contractors with a cost effective full spectrum micronutrient solution.





### Guaranteed Analysis

Magnesium (Mg).....	5.000%
Boron (B).....	0.025%
Cobalt (Co).....	0.005%
Copper (Cu).....	0.050%
Iron (Fe).....	8.000%
Manganese (Mn).....	2.500%
Molybdenum (Mo).....	0.005%
Zinc (Zn).....	0.150%

**Derived From:** Sodium Borate, Cobalt Sulfate, Copper Sulfate, Magnesium Sulfate, Iron Sulfate, Manganese Sulfate, Sodium Molybdate, and Zinc Sulfate. Also contains Citric Acid as a chelating agent.  
Also contains the non-plant food ingredient: 2.00% Fulvic Acid derived from Humate.

### Application Rates

Fairway and Tees – 1 - 2 lb per Acre Monthly  
Greens – 2 ½ - 5 lb per Acre Monthly  
Sports Turf – 2 - 4 lb per Acre Monthly

### Partnership Point Value



Product: MicroTek

Unit of Measure: 10 x 5 Pound Case

Purchase Increment: 1

Partnership Points: 30

Earn Partnership Points on the control products you use on a daily basis from leading manufacturers such as Corteva, Nufarm and Prime Source. A chart of the Partnership Points award levels are provided below.

## Partnership Points

### Dollars Spent on Control Products

From Eligible Manufacturers(1)	Partnership Points Earned
\$0- \$4,999	0
\$5,000	50
Every \$1,000 spent beyond \$5,000	15

(1) Eligible Manufacturers Include: Brandt, Verdesian, Andersons, Lebanon, Precision Labs, FMC, SePro, Prime Source / Albaugh, Quali-Pro, UPL, Rightline, NuFarm, Atticus, PBI Gordon, Corteva

### Shipping & Payment

#### Payment

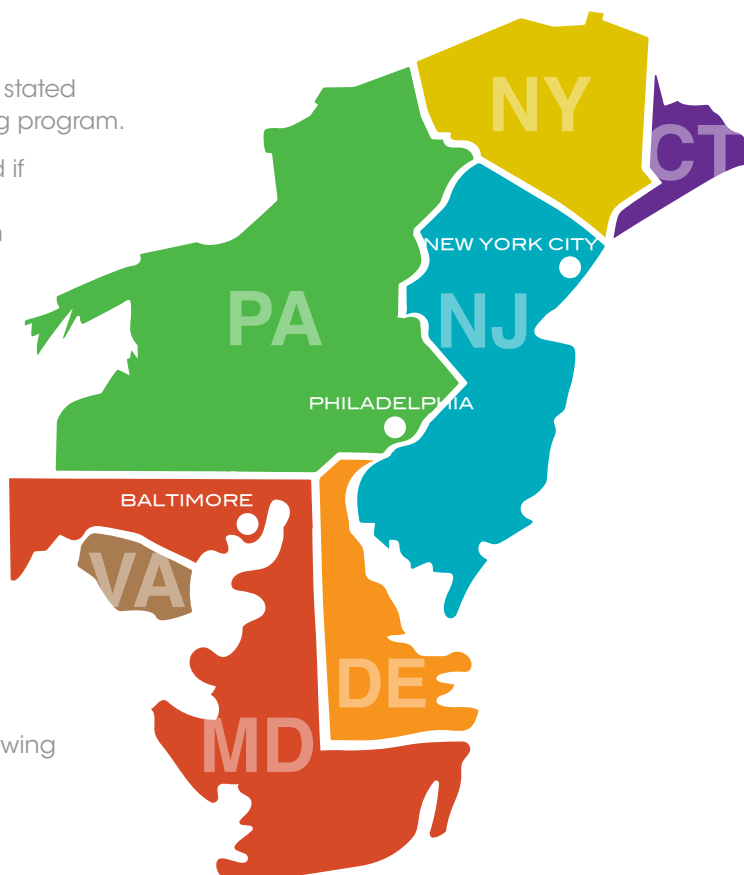
- Standard payment terms are 30 days unless otherwise stated through a pre-approved arrangement or early stacking program.
- Payment with Mastercard or Visa will only be accepted if payment is made within 15 days from date of invoice. Mastercard or Visa payments made after 15 days from date of invoice will incur a 2% convenience fee.

#### Shipping

- Free delivery on all orders of at least \$750. A \$75 delivery fee will be assessed on any order that does not meet the \$750 minimum.
- All in-stock orders will ship within five business days. Expedited service may be available at no additional charge when requested.
- Liftgate and Pallet Jack service is available at no additional charge when requested.

#### Custom Blending

- Custom fertilizer blends are available provided the following quantity minimums are met:
- Granular Fertilizer 150 or 240 SGN - 5 tons
- Granular Fertilizer with Control Product 150 or 240 SGN
- Liquid Fertilizer - 1,000 Gallons





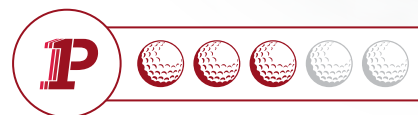
RESOURCE GUIDE

# Calcium Enhancements





Partnership Point Value



## More Soluble & Available

PhysioCal® contains a naturally soft and porous marine calcium source called Calcimer. This unique porosity and surface area allows PhysioCal® to be 5 times more soluble and 4 times more available than other liming materials, saving time and money. Further, PhysioCal® is different from traditional lime based soil conditioners in that it contains the biostimulant Humistim. Together, the Calcimer and Humistim work to stimulate soil microbes to breakdown organic material into plant available nutrients, with an enhanced micro pH, and more complete nutrition with additional N, Ca, S, and Mg.



	PhysioCal®	PhysioCal Zero®	Gypsum®	Verde-Cal G®
<b>Analysis</b>	4-0-0	0-0-0	0-0-0	0-0-0
<b>Calcium %</b>	23%	23%	20%	22.5%
<b>SGN</b>	250 SGN, 125 SGN	70 SGN	250 SGN, 100 SGN	85 SGN & 185 SGN
<b>Sieve Analysis Before Granulation</b>	100% Passing 400 Mesh	100% Passing 400 Mesh	55% Passing 200 Mesh 80% Passing 50 Mesh 100% Passing 8 Mesh	75% Passing 40 Mesh 90% Passing 10 Mesh 100% Passing 4 Mesh
<b>Active Ingredient</b>	Calcified Seaweed	Calcified Seaweed	Calcium	Calcium
<b>Micro Nutrients</b>	Mg, S, B, Cu, Zn, Cl, Fe Na	Mg, S, B, Cu, Zn, Cl, Fe Na	S	S
<b>Bio-Stimulants</b>	Cytokinin, Gibberllins, Auxin, Humistart	Cytokinin, Gibberllins, Auxin, Humistart	Not on the label	Trihydroxycarboxylic Acid

### Application Rates

Maintenance Rate:

Apply 50-100 lb per Acre

\*PhysioCal is a naturally derived product and has calcium variations between 20-23%

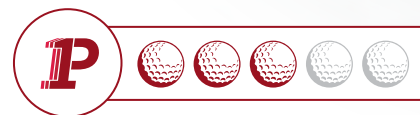
\*PhysioCal is a registered trademark of Timac USA, Inc.

\*Verde-Cal G is a registered trademark of Aqua-Aid Inc.





## Partnership Point Value



## Electrify your Soil

- Increases Cation Exchange Capacity
- Improves the Soil Structure
- Acts as a Long Term Calcium Insurance
- Safe for Season Long Applications
- 4 Times More Available than Traditional Liming Products

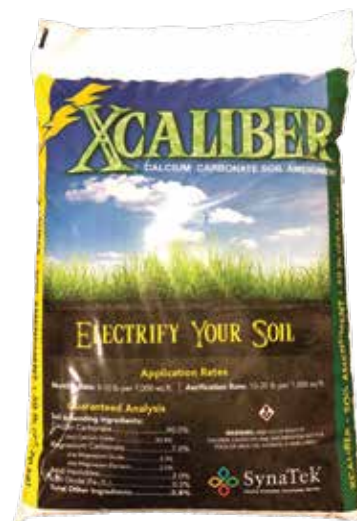
### Typical Properties

Specific Gravity.....	2.7
Hardness (Mohs' Scale).....	3.0
Bulk Density (Packed) lb/cu.ft.....	89.0
Bulk Density (Loose) lb/cu.ft.....	86.0

### Application Rates

Monthly Rate: 5.5 lb per 1,000 sq. ft.

Aerification Rate: 10-25 lb per 1,000 sq. ft.



### Typical Chemical Analysis

Calcium Carbonate.....	90.0%
(As) Calcium Oxide.....	50.4%
(As) Calcium Element.....	36.0%
Magnesium Carbonate.....	7.0%
(As) Magnesium Oxide.....	3.3%
(As) Magnesium Element.....	2.0%
Acid Insolubles.....	2.0%
Iron Oxide (Fe <sub>2</sub> O <sub>3</sub> ).....	0.2%

### Typical Physical Analysis

U.S. Standard Mesh	% Passing
10.....	100
20.....	100
60.....	8.0
200.....	2.0

Partnership Point Value

# Calcium Enhancement



Product	Unit of Measure	Purchase Increment	<i>P</i>
Xcaliber (80 SGN)	50 Pounds	1	2
PhysioCal Zero (70 SGN)	55.125 Pounds	1	3
PhysioCal (125 SGN)	50 Pounds	1	1
PhysioCal (250 SGN)	40 Pounds	1	1



RESOURCE GUIDE

# Branch Creek®





## Partnership Point Value



## Acts as an Organic Catalyst

Paleo is a blend of Humic, Fulvic and Ulmic acid that acts as an organic chelator and microbial stimulator. It has a unique carbon matrix which includes a high concentration of trace minerals and organic acids. Humic acid enhances the plant's ability to take in essential nutrients and improves soil structure.



## Product Highlights

- Humates feed the soil microbes which in turn release the nutrients such as nitrogen, phosphates and other trace elements
- **Humic acids** - enable the plants to extract nutrients from the soil
- **Ulmic acids** - stimulate and increase root formation and growth
- **Fulvic acids** - give plants strength to withstand stresses caused by pest, drought and mowing
- Natural chelating and complexing agent to help magnify nutrient absorption

## Application Rates

### Turf (Golf Tees and Greens)

- Overall: 1 gallon per Acre every month
- Program: 64 oz. per Acre every 2 weeks

### Turf (Residential, Commercial, Fairways)

- Initial Application: 3 oz. per 1,000 sq.ft. (1 gallon per Acre)
- Maintenance: 3 oz. per 1,000 sq.ft. every 2 weeks

### Ornamental Maintenance Program

- 2 Applications Annually: Mix .78 gallons per 200 gallons of water
- Stress Recovery Rate: Mix 1.56 gallons per 200 gallons of water  
Drench soil to saturation or 1 gallon of finished product per 1 inch DBH.  
Spring and Fall application suggested.

## Guaranteed Analysis

Soluble Potash (K <sub>2</sub> O).....	5%
Humic Acid.....	16%
Fulvic Acid.....	9%
Ulmic Acid.....	3%
Total other ingredients (inert).....	67%

## Other Ingredients

Sulfur, Magnesium, Calcium, Sodium, Iron, Manganese, Copper, Zinc

## 10 Micronutrients (ppm)

Sulfur (S) 2000
Magnesium (Mg) 2000
Calcium (C) 300
Sodium (Na) 300
Iron (Fe) 974
Manganese (Mn) 34
Copper (Cu) 4.0
Zinc (Zn) 9





## Partnership Point Value



## Promotes Nitrogen Absorption

Colony Complete is produced by a fermentation process utilizing a consortium of microbes that promotes a highly productive microbial system in the soil. Colony Complete can be used in conjunction with fertilizer to promote the absorption of nitrogen and critical minerals in order to increase the level of bioavailable nutrients to the root system. Colony Complete provides several unique advantages including, industry leading shelf-life stability and efficacy across many soils and environments.



## Product Highlights

- Supports root biomass formation resulting in a more vigorous root system.
- Contains a unique, complex and multifunctional microbial ecosystem to support a healthy soil microbiome
- Application to plants tips the rhizosphere microbiome in favor of beneficial microbes
- Creating a rhizosphere with robust beneficial microbes enhances the plants' ability to overcome stresses
- Includes microbes from different microbial families – including aerobic and anaerobic microbes – to deliver a broad range of benefits
- Proprietary co-fermentation process of the consortium results in very stable product

## Application Rates SHAKE / AGITATE before use

Apply during growing season when soil temperatures are above 45 degrees. Mix with water at no less than 1 qt. per 1,000 sq.ft. or 11 gallons per Acre.

### Turf (Golf) Tees and Greens:

- Initial Application: 2 oz. per 1,000 sq.ft. (2.75 qt. per Acre)
- Maintenance: 1 oz. per 1,000 sq.ft. (1.4 qt. per Acre) every 21-30 days

### Turf (Residential, Commercial + Fairways):

- Initial Application: 1.5 oz. per 1,000 sq.ft. (2.0 qt. per Acre)
- Maintenance: .75 oz. per 1,000 sq.ft. (1 qt. per Acre) every 30-45 days

## Guaranteed Analysis

Soluble Potash ( $K_2O$ ).....12%

Derived from: Molasses

## Non-plant Food Ingredients

Active Ingredients:

*Azotobacter vinelandii*

300,000 CFU/ml. minimum

*Clostridium pasteurianum*

300,000 CFU/ml. minimum



## Partnership Point Value



## The Total Microbial Package

Colony North is a microbial package that includes biology whose primary purpose is to solubilize nitrogen, phosphorus, potassium and calcium as well as increase chitinolytic and cellulolytic activity.

### Product Highlights

- Increase of nutrient availability allowing for reduction in fertilizer usage.
- Creates a natural reduction of thatch through organic matter breakdown.
- Degradation of toxic substances by taking pollutants out of the air, through digestion, and removing them from the soil
- The increase of good soil micro-organisms allows for better plant development and prevention of plant disease
- Formation of soil aggregates as bacteria produces cellulose which helps to accumulate Organic Matter. A 1% increase in Organic Matter increases the soils watering holding capacity by 25,000 gallons per Acre.
- Beneficial Bacteria communicate with the plant and trigger enzyme releases that tell the plant to develop roots, absorb nutrients that they are lacking, and prepare for a fungus trying to invade.
- Increases the rigidity and structure of cell walls which provides added drought tolerance as well as disease tolerance.
- Works to detach the Carbon molecule from Carbon Dioxide (CO<sub>2</sub>) made in the soil and begins the linkage of carbon atoms.

### Application Rates SHAKE / AGITATE before use

#### Turf (Golf - Tees and Greens)

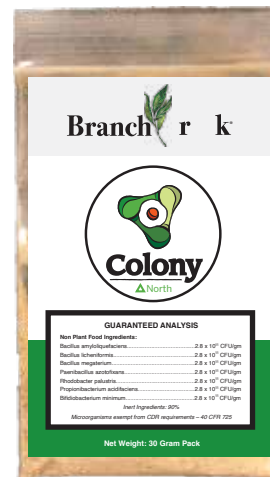
- Initial Annual Inoculation Application: 15 gm per Acre (1 packet per 2 Acres)
- Maintenance: 10 gm per Acre (1 packet per 3 Acres) every 21-30 days

#### Turf (Residential, Commercial, Fairways)

- Initial Annual Inoculation Application: 15 gm per Acre (1 packet per 2 Acres)
- Maintenance: 10 gm per Acre (1 packet per 3 Acres) every 21-30 days

#### Ornamental Maintenance Program

- Mix one 30 gm packet of Colony North per 200 gallons of water. Drench soil to saturation or 1 gallon of finished product per 1 inch DBH. Spring and Fall applications suggested.
- Tank mix with 16-3-3 Arbor Flo at desired fertilizer rate for added effectiveness.



### Guaranteed Analysis

#### Non-Plant Food Ingredients:

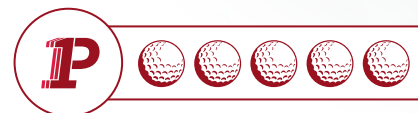
Bacillus amyloliquefaciens.....	2.8 x 10 <sup>11</sup> CFU/gm
Bacillus licheniformis.....	2.8 x 10 <sup>11</sup> CFU/gm
Bacillus megaterium.....	2.8 x 10 <sup>11</sup> CFU/gm
Paenibacillus azotofixans.....	2.8 x 10 <sup>11</sup> CFU/gm
Rhodobacter palustris.....	2.8 x 10 <sup>11</sup> CFU/gm
Propionibacterium acidifaciens.....	2.8 x 10 <sup>11</sup> CFU/gm
Bifidobacterium minimum.....	2.8 x 10 <sup>11</sup> CFU/gm

#### Inert Ingredients: 90%

Microorganisms exempt from CDR requirements - 40 CFR 725



#### Partnership Point Value



## Plant Nutrient **Enhancer**

BioGrowth NE/O is a natural broad spectrum plant nutrient enhancer with a wide application window on a variety of turf grass types. It is biologically active in the plant improving plant respiration in the mitochondria. The net result is enhanced internal movement of nutrients and hormones, leading to increased root development.

### Product Highlights

- New Organic Formulation
- Stronger Root Development
- Higher Chlorophyll Density
- More Efficient Uptake and Utilization of Nutrients
- Does not change the genes
- BioGrowth NE/O does have an effect on how plant genes function within the plant
- BioGrowth NE/O sends a message to the plant to use its genetic code and resources in a different manner
  - 1) For improved growth
  - 2) For better nutrient uptake and movement
  - 3) For improved plant response to stress

### COMPETITIVE ADVANTAGE - COMPARABLE PERFORMANCE

- Plant active, is highly concentrated with very high unit activity
- No known fertilizer pH compatibility issues
- Does not require any special handling procedures or equipment
- Can be formulated into both dry and liquid fertilizers
- This technology has application potential across all crop types, cropping systems, climate and soil types
- Environmentally-safe, non-disruptive and exceptionally suited to all application methods
- Improves the efficiency and utilization of all crop nutrients, not just one or two



### Guaranteed Analysis

#### Active Ingredients:

Complex Polymeric Polyhydroxy Acids..0.18%

Other Ingredients.....99.82%

Total.....100.00%

### Application Rate

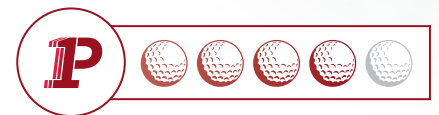
8 to 12 oz. per Acre use rate, per application.

(Check label for specific rates)





#### Partnership Point Value



### Product Highlights

Chemical fertilizers bypass and ultimately deplete soil biology. TriForce™ PC is designed to reinstate growing as God intended by restoring soil's depleted biology. Without chemical interference the biology in soil is able to break down naturally occurring nutrients to feed the plant. As the health of soil improves we are able to reduce and ultimately eliminate the need for chemical fertilizers and toxic pesticides. It's a win for our health, our planet and our wallets.

### Application Rates

#### Turf (Golf) Tees and Greens:

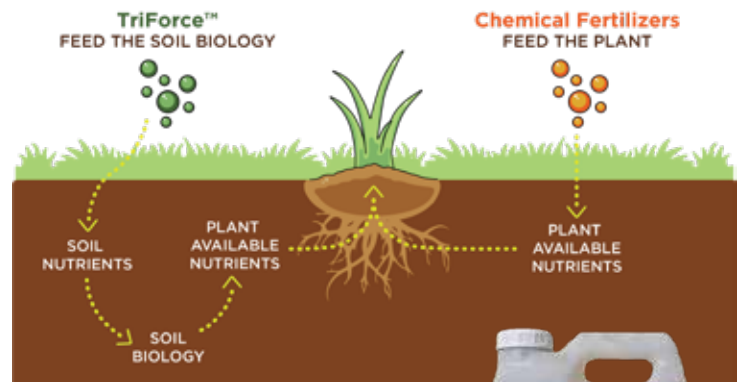
Initial Application: 6 oz. per 1,000 sq.ft. (2 gallons/acre)

Maintenance: 3 oz. per 1,000 sq.ft. (1 gallon/acre) every 21-30 days

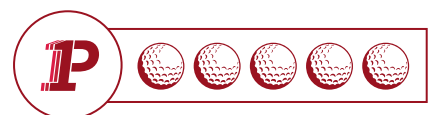
#### Turf (Residential, Commercial, Fairways & Roughs):

Severely Depleted Soil Application: 3 oz. per 1,000 sq.ft. (1 gallon/acre) every 30-45 days

Maintenance: 2 oz. per 1,000 sq.ft. (2.75 quarts/acre) every 30-45 days



#### Partnership Point Value



Product	Unit of Measure	Purchase Increment	
Paleo	2.5 Gallons	1	4
Colony Complete	2.5 Gallons	1	11
Colony North	30 Gram Pack	1	2
BioGrowth NE/O	1 Gallon	1	13

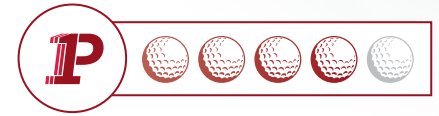


RESOURCE GUIDE

# Water Quality Amendments (Volution™)



Partnership Point Value



## Maximize Infiltration

Volution™ Maxx is a flexible soil surfactant blend that allows turf managers to customize their water management and irrigation programs. Volution™ Maxx increases the infiltration of water into the soil while uniformly holding it in the rootzone over time. Volution™ Maxx provides performance across a variety of turf and soil types.

**VOLUTION™ MAXX IS DESIGNED FOR USE ON GOLF COURSES, ATHLETIC FIELDS AND RESIDENTIAL OR COMMERCIAL TURF, UNDER THE SUPERVISION OF GOLF COURSE SUPERINTENDENTS, SPORTS TURF MANAGERS OR PROFESSIONAL LANDSCAPE CONTRACTORS.**

### Product Highlights

- Prevent or cure localized dry spot
- Manage water in coarse-textured soils
- Help plants survive drought
- Improved irrigation efficiency

### Application Rates

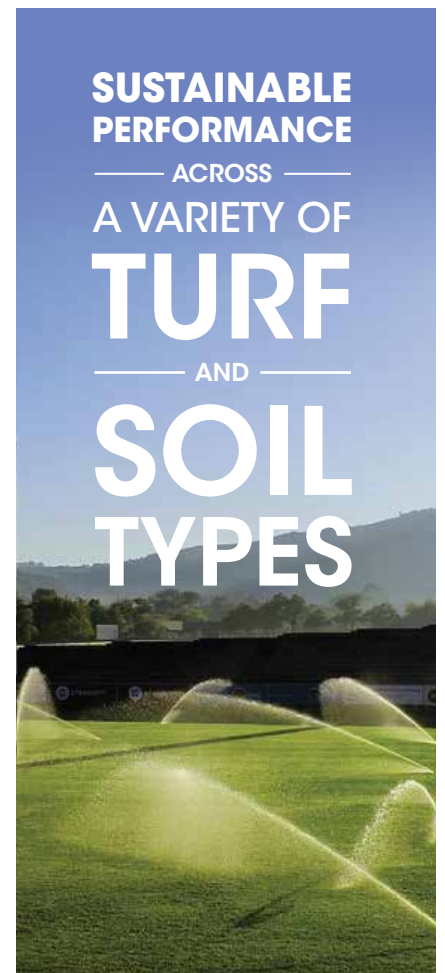
- Apply Volution™ Maxx at 4 oz. per 1,000 sq. ft. for performance up to 30 days.
- Apply Volution™ Maxx at 6 oz. per 1,000 sq. ft. for performance up to 45 days.
- Apply Volution™ Maxx at 8 oz. per 1,000 sq. ft. for performance up to 60 days.
- Apply Volution™ Maxx at 8 oz. per 1,000 sq. ft. in split applications, 2 weeks apart (for a total of 16 oz.), for performance up to 90 days.



**SUSTAINABLE  
PERFORMANCE**

— ACROSS —  
**A VARIETY OF  
TURF  
— AND —**

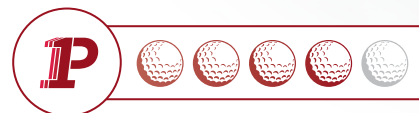
**SOIL  
TYPES**







#### Partnership Point Value



## Reduce Interfacial Tension

Managing water in the root zone of turf and ornamental plants represents a challenge for turfgrass managers, ornamental growers and landscape contractors. Volution™ P/C reduces the interfacial tension between water and the plant and soil surface, allowing water to spread on the plant leaf blade and improving the penetration of irrigation and rainfall into and throughout the plant root zone.

DESIGNED BY SYNATEK, FOR APPLICATION THROUGH AN ECOTRONICS® INJECTION SYSTEM, VOLUTION™ P/C IS A UNIQUE FORMULATION OF SURFACTANT CHEMISTRIES AND WATER CONDITIONERS FOR USE ON GOLF COURSES, RESIDENTIAL OR COMMERCIAL SITES, SPORTS COMPLEXES, AS WELL AS LANDSCAPES, NURSERIES AND ORNAMENTAL PLANTINGS.



### Product Highlights

- Injected through Ecotronics® Injection System – accurate and easy to apply
- Reduces water's surface tension – reduces runoff and improves plant health and vigor
- Conditions hard water – Improves performance of water and soil active chemistries
- Labeled for use on turf and ornamentals – flexible

### Application Rates

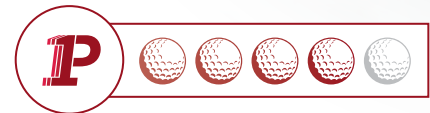
As a soil penetrant, apply Volution™ P/C throughout the growing season, starting prior to plant stress. As a water conditioner, used in a sprayer or Ecotronics Mix Transfer System, Volution™ P/C improves the performance of herbicides, plant growth regulators, fungicides, insecticides and liquid fertilizers, affected by pH or water quality.

**Reducing**  
Interfacial Tension  
**BETWEEN**  
Water, the Plant  
and Soil Surface





Partnership Point Value



## Improved Irrigation Water

Volution™ Affect (15-0-0 16% S) is a urea-sulfuric reaction product, produced in our state-of-the-art, controlled reaction facility. Volution™ Affect is designed as a spray equipment cleaner, soil conditioner, water treatment product and irrigation system cleaner. It is also a supplemental supply of urea-based nitrogen and sulfur. Volution™ Affect contains 15% urea nitrogen and 16% sulfur while providing a safer alternative to pure acid products.

Poor quality irrigation water?

Poor cation exchange?

Not getting efficiency out of Mg and Ca amendments?

Reduced porosity and drainage? High sodium and/or bicarbonates?

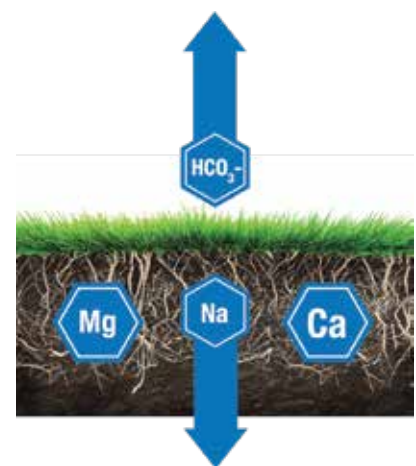


## Product Highlights

- Neutralize the negative effects of high bicarbonate and carbonate levels in irrigation water and the soil solution
- Lower pH of irrigation water and soil water
- Maintain the solubility of Ca and Mg in irrigation and soil water
- Dissolve calcium carbonate and magnesium carbonate salts on the surface (crusts) and in the soil profile
- Improve the ability of soil-applied Ca-based amendments to produce soluble Ca
- Flocculate dispersed colloidal-sized clay particles
- Improve percolation and infiltration characteristics of the soil profile
- Clean and remediate clogged irrigation lines and emitters

## Soil Restoration

In many cases, soil issues start with irrigation water. Volution™ Affect can be used as a key tool to restore the ratio of Ca, Mg, and Na in the soil. Excess sodium can degrade the soil structure and displace other key elements from the soil particle. Volution™ Affect will assist in flushing out undesirable Na and will "burn off" bicarbonates.



**VOLUTION™**  
**AFFECT**  
**IS YOUR ANSWER!**

# The Volution™ Solution

The goal of any spray application whether in lawn care, sports turf, or golf course management is to ensure the active ingredients that your invested in gives you the desired results you expect.

Oftentimes these results cannot be achieved by just adding them to water. Follow these easy four steps to manage the performance and safety of your spray mixes.

## STEP 1: CLEAN Your Tank Before Each New Spray Batch

Equipment can house ingredients left over from a previous spray which could impact the compatibility and safety of your next spray. Ensure that ALL spray equipment being used during your spray application has been cleaned.

The best way to ensure these components are effectively cleaned is by using a tank cleaner.

You also want to ensure that your tank cleaner contains a corrosive resistant formula. Many cleaners on the market contain ingredients like ammonia that can be potentially corrosive to your hoses and fittings.

## Step 2: START Your Mix Out Right

Poor water quality can negatively affect the performance of your mix batch chemistries. Most sprays in turf applications function best between a pH from 5-7.

Water with a pH above 7 can lead to alkaline hydrolysis, which causes your pesticide molecules to split apart. Once split apart other elements in your water, like hard water ions calcium, magnesium and iron recombine with the split pesticide molecule to form ineffective compounds.

Pool pH test strips or a digital pH tester make it easy to test your water. Once pH of your water is determined using an acidifying water conditioner will ensure your water stays in the desired pH range of 5-7 throughout your spray mixing process.

## Step 3: CONTROL Your Spray Droplet

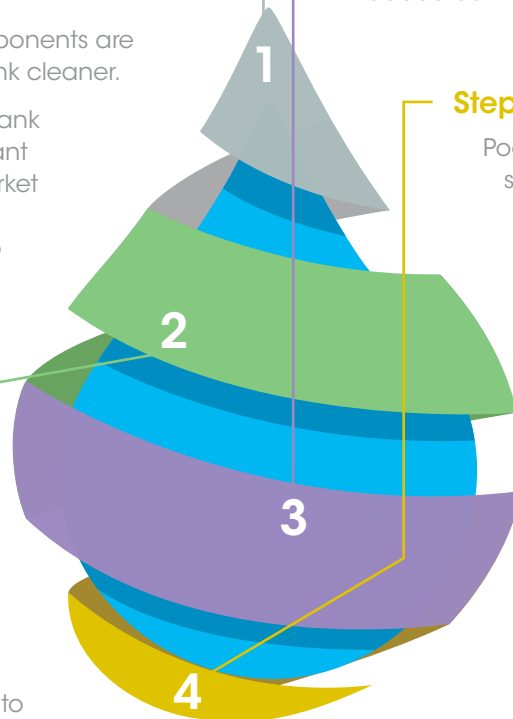
Drift and other forms of off-target movement can cause smaller droplet sizes to miss their intended destination. Most spray application products are only effective if they reach and are retained on the leaf.

Adding a spray adjuvant to your tank mix will give you added control of your spray application.

## Step 4: ACTIVATE Your Spray

Poor coverage and penetration of your spray solution can lead to unsatisfactory performance. This is particularly relevant to waxy leaf surfaces that inhibit good coverage and penetration.

Using a non-ionic surfactant will increase the effectiveness of both contact and systemic chemistries.

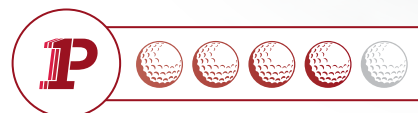


The Volution™ products Clean, Start, Control and Activate will provide you with the necessary adjuvants for an effective and economical spray application.





#### Partnership Point Value



### Step 1: CLEAN Your Tank Before Each New Batch

Residues from previous sprays often hide in the nooks and crannies of your tanks and hoses. This residue may not always play well with the active ingredients in your new tank mix, causing physical and chemical incompatibilities.

Volution™ Clean is a high performing and easy to use mix tank and spray system cleaner. Clean is formulated with a combination of detergents and emulsifiers that helps to clean and solubilize residues. Clean will penetrate dried on residues to free them up and get it back into a sprayable solution.

Clean also helps to solubilize oily residues from emulsifiable concentrates or oil based formulations to ensure that any leftover active ingredient is eliminated.

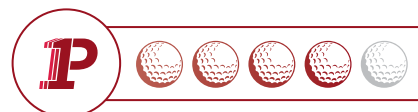
Clean is a non-corrosive formula which can have negative effect on your pumps, hoses and fittings.

#### Application Rates

- 2 qt. per 100 gallons of water for heavier residue removal and cleaning.
- Use 1 qt. per 100 gallons of water for more frequent maintenance cleaning.



#### Partnership Point Value



### Step 2: START Your Mix Out Right

Poor water quality can negatively affect the performance of your mix batch chemistries. Most sprays in turf applications function best between a pH from 5-7.

Volution™ Start is a pH acidifier that protects spray mixes from loss of performance associated with high pH. Start is formulated with a citric acid that safely lowers pH to ensure performance of sensitive chemistries. It also contains a surfactant that reduces the surface tension of your spray solution to allow less soluble products to get into a good homogenous mix.

Start includes an antifoam to reduce foaming during agitation.

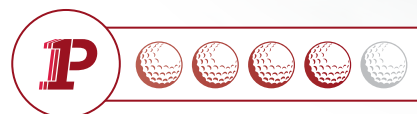
#### Application Rates

The chart below indicates the pH reduction capabilities of Start

Solution pH Before	oz. of Start/100 gallon of Spray Solution	% Volume	Solution pH After
8.0	0	0.000	8.0
8.0	8	0.063	5.7
8.0	16	0.125	4.5
8.0	24	0.187	4.0
8.0	32	0.250	3.6
8.0	40	0.313	3.4



#### Partnership Point Value



### Step 3: Control Your Spray Droplet

Drift and other forms of off-target movement can cause smaller droplet sizes to miss their intended destination. Most spray application products are only effective if they reach and are retained on the leaf.

Volution™ Control is formulated with a combination of modified vegetable oils to reduce driftable fines and get more of the intended product to the targeted leaf surface.

Control also reduces droplet bounce for your spray solution by absorbing the kinetic energy that a spray droplet gains when leaving the nozzle and heading towards the plant.

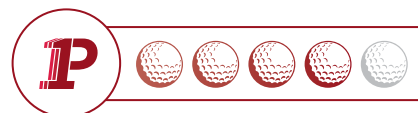
Control has low use rates and mixes very well with limited agitation.

#### Application Rates

- 4-6 oz. per Acre in 5-20 GPA applications
- 6-8 oz. per Acre in 20-40 GPA applications
- 8-10 oz. per Acre in 40-80 GPA applications



#### Partnership Point Value



### Step 4: Activate Your Spray

Poor coverage and penetration of your spray droplet into the leaf can lead to unsatisfactory performance. Volution™ Activate is an adjuvant formulated to increase the effectiveness of both contact and systemic chemistries. Whether used with an oil, water or flowable based formulation, Activate can be used across a variety of different situations.

Activate is a non-ionic surfactant that increases coverage for better uptake. It also uses a unique and advanced polymeric component that safely increases penetration across waxy cuticles for plant better utilization.

#### Application Rates

Apply Volution™ Activate at 1 pt. per 100 gallons or 0.125% Volution™ Activate of spray solution.



## Water Quality Amendments

Product	Unit of Measure	Minimum Delivery Quantity	<b>1P</b>
Volution™ Affect	Bulk Gallon	100 Gallons	1
Volution™ P/C	2.5 Gallons	N/A	2
Volution™ P/C	20 Gallon Drum	N/A	29
Volution™ P/C	275 Gallon Tote	N/A	425
Volution™ Maxx	2.5 Gallons	N/A	5
Volution™ Maxx	20 Gallon Drum	N/A	42
Volution™ Maxx	275 Gallon Tote	N/A	480
Volution™ Clean	1 Gallon	N/A	1
Volution™ Start	1 Gallon	N/A	1
Volution™ Control	1 Gallon	N/A	2
Volution™ Activate	1 Gallon	N/A	2



RESOURCE GUIDE

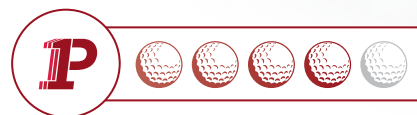
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# Liquid Fertilizer





## Partnership Point Value



## Safe, Summer-Long Foliar Applications

FertAminos® was developed to meet the needs of customers who wanted a “complete” high quality bio-fertilizer to use all season long and on all heights of cut. This balanced formulation is ideal for managers who want to have safe, summer-long foliar applications with the purpose of excellent tank mix compatibility and turf performance.



## Product Highlights

### Base Nutrients

Derived from urea and potassium chloride as well as the slow release of N-(n-butyl) Thiophosphoric Triamide and urea dicyandiamide.

### Complementary Elements

All of our products contain the unique and proprietary blend Proactin, a matrix of L-form amino acids, vitamins and stress metabolites with over twenty years of recognized industry results.

### L-form Amino Acids

Contains a high concentration of preselected L-form amino acids rather than a generalized profile. These selected amino acids are specific to turf creating a greater biological impact on the plant to stimulate nutrient uptake, reduce plant stress and to increase root mass.

### Vitamins

Complementing the amino acids is a targeted premix of vitamins combining b-complex and antioxidants. This blend creates the ideal ratio for optimum biological activity within the plant.

### Stress Metabolites

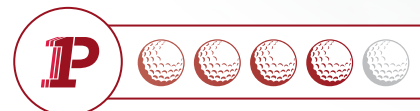
Times of stress leave your turf susceptible to other diseases, so keeping your plant healthy is important. Our 2-way blend of complex polysaccharides works synergistically with the vitamins aiding in maintaining even growth all season long. Additionally, they provide an ideal food source for beneficial bacterial within the soil and play a key role in the uptake of nutrients into the plant health by both foliar and root.

Analysis	lb of N per 1,000 sq.ft.	oz. per 1,000 sq.ft.	Gallons per Acre
<b>10-0-10 (50% SCR/N)</b> 1:1 balanced all-purpose fertilizer.	0.10 lb	12.93 oz.	4.45 Gallons
<b>14-4-9 (50% SCR/N)</b> All purpose fertilizer that includes phosphorus for turf's healthy root development.	0.10 lb	9.12 oz.	3.13 Gallons
<b>16-0-8 (50% SCR/N) 2% Fe</b> 2:1 balanced ratio with the added benefit of a fully chelated iron source resulting in excellent turf color.	0.10 lb	7.53 oz.	2.59 Gallons



**Turf Flo®**  
Premium Liquid Turf Fertilizer

Partnership Point Value



Turf Flo® products are homogenous clear liquid fertilizers that are odorless and easy to handle. Turf Flo® can be used in all standard spray equipment and tank mix well with pesticide and micronutrients.

All of our products are derived from urea, ammonium polyphosphate, potassium chloride and iron sulfate. When specified the two slow release nitrogen sources are used.

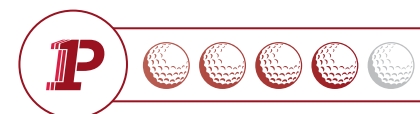
- CRN -Urea Triazone
- SCRN (n-butyl) Thiophosphoric Triamide and Dicyandiamide Urea

Analysis	lb of N per 1,000 sq.ft.	oz. per 1,000 sq.ft.	Gallons per Acre
9-18-5 Starter	0.10 lb	13.94 oz.	4.74 Gallons
19-0-4 (35% CRN) w/TriForce	0.10 lb	6.88 oz.	2.37 Gallons
17-0-5 (100% UN)	0.10 lb	7.66 oz.	2.40 Gallons
20-0-3 (50% SCRN)	0.10 lb	6.67 oz.	2.30 Gallons
20-0-5 (35% CRN) (50% NBN) 2% Fe	0.10 lb	6.82 oz.	2.30 Gallons
28-0-0	0.10 lb	4.30 oz.	1.50 Gallons



**Arbor Flo®**  
Premium Tree & Shrub Fertilizer

Partnership Point Value



Designed specifically for annuals and perennials in mind, 16-3-3 (50% CRN) is formulated to encourage growth and create healthy, vigorous, attractive plants that will produce an abundance of flowers.

A complete fertilizer blend that combines the three main plant nutrients: Nitrogen (N), Phosphorus (P) and Potassium (K). Nitrogen stimulates the production of chlorophyll which promotes healthy leaf growth. Phosphorus supports the development of some of the most important parts of the plant: roots, stems, blossoms and fruits. Potassium is used in plants to help them digest and manufacture their foods as well as maximize health during heat stress.

ArborFlo® is derived from urea, potassium chloride and ammonium polyphosphate. It also contains the slowly available nitrogen, urea-triazone.

### Application Rates

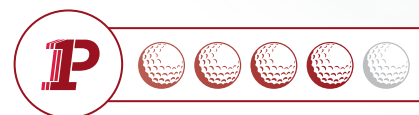
Surface Application: Mix 1 gallon (128 oz.) of ArborFlo® in 5 gallons of water per 1,000 sq. ft. of canopy. Make two applications per year, one in spring and an additional application in summer or fall.

Soil Injection: Mix 5 gallons (640 oz.) of ArborFlo® 16-3-3 in 100 gallons of water per 1,000 sq. ft. of canopy. Injections should be made on 12"-18" centers in a grid pattern over the root system of the tree. Injections should be no more the 3"- 8" deep to maximize fertilizer efficiency. Make two applications in the year, one in early spring (February - March) and again in mid to late fall (September - October).





## Partnership Point Value



## Maintain Optimum Playability

Providing small, consistent amounts of nutrients (spoon-feeding) to your turf will help to strengthen your plant during times of stress, re-energize during tournament time and aid in disease recovery, all while maintaining optimum playability.



SynaTek® provides a full suite of injectable liquid fertilizers that will result in uniform growth and consistent playability. All of our products are derived from urea, ammonium polyphosphate and potassium chloride. While custom mixes are available our most popular blends are included here.

Analysis	lb of N per 1,000 sq.ft.	oz. per 1,000 sq.ft.	Gallons per Acre
<b>2-0-12</b> High potassium blend ideal for situations that need low amounts of nitrogen.	0.10 lb	10.67 oz.	3.630 Gallons
<b>10-0-10</b> Season-long fertigation blend for applications that need a balance ratio of nitrogen & potassium.	0.10 lb	12.80 oz.	4.356 Gallons
<b>3.5-0-11</b> Plant available potassium nitrate that enhances traffic wear tolerance of turf. Protects turf to be disease resistant.	0.10 lb	11.64 oz.	3.960 Gallons
<b>9-9-9</b> Completely balanced fertility blend ideal for overseeding or grow-in applications.	0.10 lb	14.22 oz.	4.840 Gallons

All Pumphouse Fertilizers can be blended with any of the following minors and additives. Our blends are tested and blended to ensure nutrient compatibility and reduce settling.

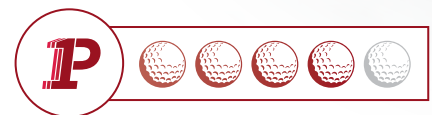
- L-Form Amino Acids
- Iron
- Manganese

SynaTek® is the exclusive distributor of Ecotronics Injection Technologies. Learn more about our Ecotronics technologies on page 4-5 or by visiting us at [turfmeetstechnology.com](http://turfmeetstechnology.com)



# SYNA-PHITE 0-0-26

Partnership Point Value



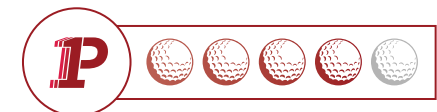
**SYNA-PHITE 0-0-26** is a highly concentrated soluble nutrient solution containing mono and di-potassium salts of phosphorous acid intended to be used as a supplemental foliar treatment. It is readily absorbed through leaf or root tissue and quickly corrects deficiencies and enhances plant vigor, crop development, quality, and yield. **SYNA-PHITE 0-0-26** contains 4.08 pounds of phosphorous acid per gallon.

**Application Rates:** Fairways/rough: 1-2 Quarts Per Acre  
Tees/greens: 2-6 Oz Per 1,000




# VOLUTION Si10

Partnership Point Value



## Enhance Plant Quality & Yield



**Volution Si 10** is a 10% supplemental silica source compatible with low pH tank mixes and most common pesticides and fertilizers.

**Volution Si 10** provides a supplemental plant-available silica which serves to physically harden and protect the plant from stress and physical damage. Increasing soluble silica in plant tissue has shown beneficial growth, health and production responses within plants as well as enhancing post-harvest quality.

**Available Sizes:** 2.5 Gallon, 250 Gallon Tote

**Application Rates:** 1-3 oz per 1,000 sq.ft. every 7-14 days



Product	Unit of Measure	Delivery Quantity	
2-0-12 PumpHouse®	Bulk Ton	5 Tons	36
9-9-9 PumpHouse®	Bulk Ton	5 Tons	64
10-0-10 PumpHouse®	Bulk Ton	3 Tons	37
3.5-0-11 PumpHouse®	Bulk Ton	5 Tons	54
14-4-9 FertAminos® (50% SCR N)	Bulk Gallon	200 Gallons	1
16-0-8 FertAminos® w/Fe (50% SCR N)	Bulk Gallon	200 Gallons	1
16-3-3 Arbor Flo® (50% CR N)	Bulk Gallon	200 Gallons	1
20-0-3 Turf Flo® (50% SCR N)	Bulk Gallon	200 Gallons	1
20-0-5 Turf Flo® (35% CR N)(50% NBN)(2% Fe)	Bulk Gallon	200 Gallons	1
Product	Unit of Measure	Purchase Increment	
10-0-10 FertAminos® (50% SCR N)	2.5 Gallon	1	3
10-0-10 FertAminos® (50% SCR N)	55 Gallon Drum	1	57
10-0-10 FertAminos® (50% SCR N)	250 Gallon Tote	1	238
14-4-9 FertAminos® (50% SCR N)	2.5 Gallon	1	3
14-4-9 FertAminos® (50% SCR N)	55 Gallon Drum	1	58
14-4-9 FertAminos® (50% SCR N)	250 Gallon Tote	1	240
16-0-8 FertAminos® w/Fe (50% SCR N)	2.5 Gallon	1	3
16-0-8 FertAminos® w/Fe (50% SCR N)	55 Gallon Drum	1	53
16-0-8 FertAminos® w/Fe (50% SCR N)	250 Gallon Tote	1	220
9-18-5 Root Flo	2.5 Gallon	1	2
9-18-5 Root Flo	55 Gallon Drum	1	29
9-18-5 Root Flo	250 Gallon Tote	1	115





Product	Unit of Measure	Purchase Increment	
16-3-3 Arbor Flo® (50% CRN)	2.5 Gallon	1	3
16-3-3 Arbor Flo® (50% CRN)	55 Gallon Drum	1	50
16-3-3 Arbor Flo® (50% CRN) 17-0-5 (100% UN)	250 Gallon Tote	1	205
Turf Flo® Quick Release	2.5 Gallon	1	1
17-0-5 (100% UN) Turf Flo® Quick Release	55 Gallon Drum	1	19
17-0-5 (100% UN) Turf Flo® Quick Release	250 Gallon Tote	1	69
19-0-4 Turf Flo® (35% CRN) w/ TriForce	2.5 Gallon	1	2
19-0-4 Turf Flo® (35% CRN) w/ TriForce	55 Gallon Drum	1	32
19-0-4 Turf Flo® (35% CRN) w/ TriForce	250 Gallon Tote	1	126
20-0-3 Turf Flo® (50% SCRN)	2.5 Gallon	1	3
20-0-3 Turf Flo® (50% SCRN)	55 Gallon Drum	1	46
20-0-3 Turf Flo® (50% SCRN)	250 Gallon Tote	1	189
20-0-5 Turf Flo® (35% CRN) (50% NBN)(2% Fe)	2.5 Gallon	1	3
20-0-5 Turf Flo® (35% CRN) (50% NBN)(2% Fe)	55 Gallon Drum	1	53
20-0-5 Turf Flo® (35% CRN) (50% NBN)(2% Fe)	250 Gallon Tote	1	219
28-0-0 Turf Flo® (72% CRN) (100% NBN-X)	2.5 Gallon	1	2
28-0-0 Turf Flo® (72% CRN) (100% NBN-X)	55 Gallon Drum	1	37
28-0-0 Turf Flo® (72% CRN) (100% NBN-X)	250 Gallon Tote	1	109
SynaPhite	2.5 Gallon	1	4
SynaPhite	250 Gallon Tote	1	321
Volution Si 10	2.5 Gallon	1	3
Volution Si 10	250 Gallon Tote	1	225



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