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## **ABOUT US**

OUR HISTORY - Arborjet technology was developed in 2000 by arborists, for arborists, in order to effectively manage and control exotic and native insects and diseases threatening our natural and urban forests. Today, as the leading developer of tree care solutions, Arborjet has partnered with Ecologel Solutions to offer an expanded lineup of environmentally responsible plant healthcare products which broaden our expert resources.

Ecologel Solutions LLC. is a long-standing, premier developer and manufacturer of innovative products for water conservation, dust mitigation, plant nutrition, pond and lake management, and protective barrier treatments.

Together, both companies are backed by years of research and provide the most effective and environmentally responsible treatment options available anywhere. As premier solutions providers, we are committed to advancing the industries we serve through thought leadership, product and technology development, scientific research, and exceptional customer service.

OUR RESEARCH - Our unique method of developing formulations includes a pairing process which matches the active ingredient and application method with the physiology of the plant. Our products are backed by university research, field trials, and years of use by industry professionals. Whether treating ash trees in Chicago, palms in Miami, tomatoes in Fresno, or turf in Atlanta, this holistic approach delivers significantly longer residual control and superior overall product performance. Our ability to improve plant quality occurs with maximized uptake efficiency while utilizing sustainable methods and formulations.

OUR TEAM - At Arborjet and Ecologel, we care about you and your success. Many of our staff are Certified Arborists, Agronomists, Pest Control Advisors, and hold board positions in major industry associations. Our decades of technical experience in this industry mean that you benefit from sound advice, environmental responsibility, and creative solutions. Your successful plant health care program helps us realize our mission.



To speak with a customer service representative, call 781-935-9070 or visit us online at www.arborjet.com

#### PROFESSIONAL TURF SOLUTIONS



A complete product line for turf and grounds management.



# Hydretain

## THE HYDRETAIN DIFFERENCE

Hydretain is designed to reduce watering frequency by helping plants utilize soil moisture that would otherwise be lost to evaporation. A proprietary blend of hygroscopic humectant compounds, Hydretain attracts water molecules in the soil to create plant usable water droplets in the root zone.

- Converts soil humidity into plant usable water droplets
- Not a wetting agent or superabsorbent polymer
- Lasts for up to 3 months

## Hydretain

Hydretain attracts moisture vapor in the soil and condenses that vapor back into plant usable water droplets.

### Wetting agents

Wetting agents or surfactants improve the penetration and dispersion of liquid water down to and throughout the soil.

## **Superabsorbent Polymers**

Superabsorbent polymers or hydrogels swell up as they absorb and hold liquid water.

## **BENEFITS OF HYDRETAIN**

- Maximize Irrigation Efficiency
- Reduce Hand Watering
- Decrease Irrigation Costs
- Conserve Water
- Protect Against Drought Stress
- Survive Watering Restrictions
- Minimize Wilt
- Eliminate Dry Spots

- Improve Landscape Health
- Increase Nutrient Uptake
- Improve Sod Establishment
- Enhance Seed Germination
- Increase Seedling Survival
- Accelerate Grow-In
- Improve Transplant Establishment
- Reduce Replacement Cost

## FOR SOIL MOISTURE MANAGEMENT, HYDRETAIN IS YOUR PERFECT PARTNER

Hydretain is a unique soil moisture management solution used to minimize drought stress and control dry spots while considerably reducing watering requirements and costs.



By converting soil humidity into microscopic droplets that plant roots can use, Hydretain protects turf from drying out for longer periods between irrigation cycles. A single Hydretain treatment increases watering efficiency by managing root zone moisture throughout the day. In independent tests Hydretain has reduced watering by up to 50%.

## HYDRETAIN WORKS

From tee to green and goal to goal, Hydretain manages soil moisture to help you maintain healthier turf and landscapes with less water.



#### **REDUCE WATERING**

Maximize soil water availability to reduce irrigation frequency and hand watering



#### SEEDING/OVERSEEDING

Accelerate seed hydration for improved germination rates and faster establishment



#### HIGH TRAFFIC AREAS

Increase moisture and nutrient uptake to improve wear tolerance and reduce damage



#### **GREEN SPEED**

Allow soil to dry down further to increase green speed with minimal stress



#### **LOCALIZED DRY SPOTS**

Maximize soil moisture efficiency to reduce and repair localized dry spots



RECOVERY

From tournaments to aeration, Hydretain reduces stress to speed regrowth



Beyond turf management, Hydretain is also effective for trees, shrubs, bedding plants, containers and hanging baskets.

Hydretain products are available in a multiple sizes. Not all products are available in all states. Please visit hydretain.com.

## **HYDRETAIN SUCCESS**



We get a lot of rain here which causes roots to rot off. My greens usually can't go a day without watering. If we tried to go two days they'd burn up. Since applying Hydretain we can go two, even three days without watering.

99

**Dan Jones**, *Golf Course Superintendent*Banyan Golf Club of Palm Beach

## HYDRETAIN PRODUCTS

#### **HYDRETAIN ES PLUS - 080-4335**

Combines the Hydretain technology with an advanced nonionic surfactant for improved soil penetration.

#### **HYDRETAIN ES PLUS II - 080-4435**

Combines the Hydretain technology with an advanced nonionic surfactant for improved soil penetration and potassium humate for enhanced performance.

Turf: Apply 9 oz. / 1,000 sq. ft. (3 gallons per acre)
Ornamentals: Dilute 2 oz. per gallon of water and drench

#### **HYDRETAIN GRANULAR OC** - **080-4380** (080-4381 CA only)

Puts the power of Hydretain ES Plus in a free-flowing organic compost carrier that can be applied through any traditional dry spreader equipment.

#### **HYDRETAIN GRANULAR QD** - 080-4390

Puts the power of Hydretain ES Plus in a quickly dissolving, free-flowing carrier for dry spreader applications.

Turf: Apply 2.7 lbs per 1,000 sq. ft. (120 lbs per acre) Ornamentals: Apply 1 lb per 100 sq. ft.

## **COMBINATION PRODUCTS**

FOURPLAY™ - 080-6035 Hydretain

Unique blend of four proven technologies that maximize water efficiency, improve water penetration, and increase nutrient availability to collectively eliminate the most severe localized dry spots.

Apply 3 gallons per acre as the initial application and repeat monthly at a 1/3 rate

MULTI-PURPOSE PLUS™ (4-0-2) - 080-57614 Hydretain

Includes seaweed extracts and micronutrients for use as part of a regular maintenance program to enhance color, improve soil water performance, and promote healthy roots.

Apply 2 gallons in 40-80 gallons of water per acre every

Apply 2 gallons in 40-80 gallons of water per acre every two weeks

FourPlay and Multi-Purpose Plus are available in multiple sizes. Not all products are available in all states. Please visit ecologel.com.



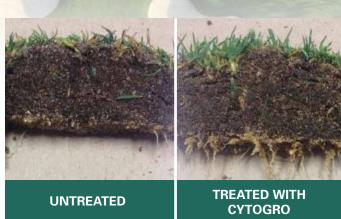
## THE RESULTS ARE MEASURABLE...

Whether you're battling dry spots, labor challenges, irrigation costs or water availability, Hydretain provides results you can see.



- Promotes deeper, denser root systems
- Increases stress tolerance
- Speeds turf recovery and establishment
- Effective for all turf and plants

Apply 0.8 fl. oz. per 1,000 sq. ft. (2 pints per acre) initial application. Follow-up monthly at 0.4 oz. per 1,000 sq. ft. (1 pint per acre)



Sod transplant 6 days after treatment

## CYTOGRO® SUCCESS



It's awesome when you can actually see the results of a product. We did a side by side - half a green with CytoGro and half without. We pulled profiles and saw results within 3 weeks. The product works!

Matt Lean, Director of Agronomy Monterey Yacht & Country Club

## **ROOT & SOIL ENHANCEMENT**

#### BIO MP<sup>™</sup> (5-3-2) - 080-57622

High carbohydrate, molasses-based soil builder designed to stimulate soil biological activity by providing a food source for soil microbes.

#### NA-X™ (5-0-0) WITH 12% CALCIUM - 080-57056

Soluble calcium solution to allow for the rapid flush of excess sodium from soils to restore soil structure and increase water infiltration.



Na-X is a great source of nitrogen and calcium for turf

#### **NUTRALYZ™ (12-0-0)** WITH 26% SULFUR - **080-57060**

Premium ammonium thiosulfate solution designed to breakdown excessive bicarbonate buildup in the soil and reduce the pH of alkaline soils.

#### **ENVIROPLEX™** - 080-57004

Contains 22% humic acids from Leonardite ore.

## SPECIALTY NPK BLENDS

#### **GREENS PLUS™ (14-4-10)** 65% SRN - **080-57123**

Soil applied NPK blend consisting of nitrogen from controlled release urea-triazone, a stable and highly available phosphorus source and a less caustic source of potassium for superior turf management.

Phosphorus Free Alternative:

GREENS PLUS™ (12-0-12) 70% SRN - 080-57126

#### TURFPLEX™ (20-2-3) WITH SEAXTRA - 080-57507

True foliar nutrient blend for excellent turf color and quality. Ideal for spoon-feeding green, tees, and other high traffic areas.

Phosphorus Free Alternative:

TURFPLEX NOPHOS™ (20-0-3) WITH SEAXTRA - 080-57517

Additional NPK Blends:

ENVIRO N<sup>™</sup> (28-0-0) - 080-57129

ENVIRO P™ (7-21-0) - 080-57135

ENVIRO K™ (0-0-30) - 080-57132

**ALL K™ (0-0-25)** WITH 17% SULFUR - **080-56100** 

TURF STARTER™ (8-16-5) WITH SEAXTRA - 080-57527

## **SEAWEED EXTRACTS**

#### **SEAXTRA™ NUTRITIONAL SUPPLEMENT (1-0-3)** -080-57332

Superior seaweed extract derived from Ascophyllum nodosum.

#### **SEAXTRA™ WATER PENETRATING PELLET** - 080-57329

Non-ionic surfactant blend enhanced with seaweed extracts to recover localized dry spots. Safe for all types of turf.



SeaXtra products contain seaweed extract sourced from the cold nutrient rich waters of the Bay of Fundy.

## **MICRONUTRIENTS**

#### NUTRISOLVE™ WITH SEAXTRA - 080-57180

Foliar micronutrient blend of boron, copper, iron, manganese, molybdenum, and zinc designed to correct or prevent a wide range of micronutrient deficiencies without additional nitrogen.

#### **SPECTRUM™ (8-0-0)** WITH SEAXTRA - **080-57183**

Blend of iron, manganese, magnesium, and sulfur with nitrogen designed to provide fast, deep, and extended color without causing a surge in top growth.

#### TUFF GREENS™ (0-0-13) - 080-57502

Unique solution of potassium, calcium, silica, and iron designed to promote green-speed, turf uniformity, wear tolerance, and stress resistance.

Additional Micronutrients:

**BORON PLUS™** 5% BORON - **080-57200** 

**CALCIUM PLUS™ (8-0-0)** 10% CALCIUM - **080-57189** 

IRON PLUS™ (15-0-0) 6% IRON WITH SEAXTRA - 080-57195

IRON PLUS MN™ (12-0-0) 6% IRON AND 2% MANGANESE WITH SEAXTRA - 080-57198

MANGANESE PLUS™ 5% MANGANESE WITH SEAXTRA -080-57201

MAGNESIUM PLUS™ (7-0-0) 6% MAGNESIUM - 080-57186 SILICA (0-0-2) 5% SILICA - 080-57676

BioPro products are available in multiple sizes. Not all products are available in all states. For more product information visit ecologel.com.



## THE ARBORJET DIFFERENCE

Initially developed by arborists, for arborists, Arborjet products have also been used on some of the finest golf courses and sports complexes around the country. Trees provide your guests with protection from the elements, as well as aesthetic beauty. Arborjet protects these valuable assets without disrupting the game.

- Injections are sealed in the tree, limiting exposure to guests and the environment
- No lost rounds: treat while players are on the course

## DRILL, PLUG, AND INJECT METHOD

The Drill, Plug, and Inject method injects or infuses treatments directly into the tree's vascular system assuring the dose is rapidly carried to the target area.









INJECT

## **ARBORJET SUCCESS**



We chose to use the Arboriet treatment methodology to protect the health of the trees on our historic course. Mature trees are valued by the members and add to their overall experience on the course.

Corey Kuhl, Golf Course Superintendent Riverside Golf Club, IL

## INJECTABLE INSECT CONTROL

## TREE-ÄGE® G4 & TREE-ÄGE® R10 - 040-4120 & 040-4130

General use & restricted use, provides two-year control for listed insects and mites. Available in 4% and 9.7% formulations.

Effective For: Emerald Ash Borer, Invasive Shot Hole Borer; Western, Southern, and Mountain Pine Beetles; Leaf feeding caterpillars, Bagworms, Webworms, Leafminers, Conifer mites, and more

1 quart of G4 treats 27 trees (10" DBH) at the medium rate 1 pint of R10 treats 24 trees (10" DBH) at the medium rate

#### IMA-JET® & IMA-JET 10® - 040-2003 & 040-20010

Particularly effective on piercing/sucking insects. Provides season long control. Available in a 5% and 10% formulations.

Effective For: Adelgids, Scale Insects, Spotted Lanternfly, Whiteflies, Borers (including Emerald Ash Borer, Asian Longhorned Beetle and Bronze Birch Borer), Leaf Beetles, and more

1 liter of IMA-jet treats 25 trees (10" DBH)

#### ACE-JET™ - 040-2011

Water soluble granular provides a fast knockdown of a broad spectrum of insects and mites with a shorter residual

Effective For: Leaf feeding Caterpillars, Armored and Soft Scales, Adelgids, Leafminers, Spider Mites, and more

One 15 gram packet treats 2 trees (10" DBH)

## **INJECTABLE NUTRIENTS**

#### MN-JET FE™ - 030-4160

Balanced source of micronutrients for injection or foliar spray; works for chlorosis caused by micronutrient deficiency or as a good choice for general tree nutrition.

Effective For: Micronutrient deficiencies in hardwoods, conifers, palms, and ground covers

1 liter treats 20 trees (10" DBH)

#### PALM-JET MG™ - 030-4130

Specially formulated to alleviate iron and manganese deficiencies in palms and hardwoods.

Effective For: Iron & Manganese Deficiencies, Nutrient Deficiencies, Leaf Yellowing, Interveinal Chlorosis, Alkaline Soils, Sandy Soils, and Arid Soils

1 liter treats approximately 50 medium sized palms or 25 hardwoods

Arborjet formulations and equipment are available in multiple sizes and kits. Not all products are available in all states. Please visit arborjet.com.

## INJECTABLE DISEASE CONTROL

#### PROPIZOL® - 040-6300

For suppression and control of various diseases. Can be used as trunk injection or spray on trees, grasses, shrubs, and flowers.

Effective For: Oak Wilt, Anthracnose, Diplodia Tip Blight, Fusarium Dieback, Pitch Canker, Bur Oak Blight, and more.

1 liter treats 10 trees (10" DBH), up to 1.5 acres for turfgrass applications, and makes up to 1,700 gallons

#### PHOSPHO-JET™ - 040-3011



A plant resistance activator for the suppression of various diseases. Can be used as trunk injection, spray, or soil drench.

Effective For: Sudden Oak Death, Anthracnose, Phytophthora, Black Spot, Scab, Fire Blight in Apple, Root Rot and more One liter treats 20 trees (10" DBH)

#### ARBOR-OTC® - 040-7500

Water soluble, systemic antibiotic for the treatment of bacterial infections of trees and palms.

Effective For: Ash Yellows, Bacterial Leaf Scorch, Fire Blight, Leaf Spot, Lethal Bronzing (Texas Phoenix Palm Decline), and more

1 oz. (28 g.) container treats 10 trees (10" DBH)

## PLANT GROWTH REGULATOR

#### SHORTSTOP® 2SC - 040-1120

Systemic, soil applied, plant growth regulator that slows above ground vegetative growth in trees and shrubs.

Effective For: Reduces pruning frequency, drought stress, and construction damage, and enhancing fine root hair growth

1 gallon treats approximately 52 trees (10" DBH) at the medium rate

## **EQUIPMENT**

#### **OUIK-JET AIR® - 070-2350**

Lightweight, air-powered injection system, featuring a one-thumb switch operation, precise dose measuring in a rugged aluminum body weighing less than 2 pounds.

#### FSERIES® TREE I.V. - 070-0055

The first ever 120 psi micro-infusion system, designed for injecting trees with maximum speed, accuracy, and ease Comes with two bottle sizes and an easy fill cap.

#### ARBORPLUGS® - 070-0150 & 070-0156

The Arborplug is a key component of the Arborjet injection methodology ensuring a tight seal for fast, consistent, and complete injection.

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## TREE & ORNAMENTAL FERTILIZERS

NUTRIROOT® (2-2-3) - 030-4103 Hydretain



Unique blend of nutrients, seaweed extract, humic acid, surfactants, and humectants designed to increase root development and reduce water stress in trees, shrubs, bedding plants, installs, and transplants.

32 fl. oz. makes up 25 gallons

#### **ARBORPLEX™** (14-4-5) 50% SRN - 080-57513

Blend of slow-release nitrogen with macro and micronutrients to provide consistent, extended feeding for trees and shrubs.

1 gallon contains 1.48 lbs N. May be applied through root injection, soil drench, or foliar spray

#### BLOOMPLEX™ (8-16-5) - 080-57534

Specially formulated with high quality sources of phosphorus and chelated micronutrients to promote flowering and fruiting.

1 gallon contains 1.69 lbs P<sub>2</sub>0<sub>e</sub> and 0.85 lbs N. May be applied through fertigation, soil drench, or foliar spray



## PRESCRIPTIVE FERTILIZATION AND SOIL ENHANCEMENT PROGRAM

Designed to maximize tree and shrub health by combining plant nutrition with products to enhance soil quality, stimulate root growth and improve water availability.



Check out our new program at MyArborRx.com



## ORGANIC INSECT & DISEASE CONTROL





Broad spectrum, botanical, systemic insect growth regulator, derived from Neem. A non-oil based water soluble powder that can be used as a spray, soil drench, tree injection, or through chemigation.

Effective For: Whiteflies, Leafminers, Scale, Mealybugs, Thrips, Aphids, Psyllids, Caterpillars, and more

6 oz. treats approximately 43 trees (10" DBH) as a trunk injection and makes up to 168 gallons

ECO-1® 40 - 040-9040 OMRI





Broad spectrum, contact insecticide, miticide, and fungicide. 40% Lindseed, Rosemary, and Thyme oils in a soap base for commercial use on edible to ornamental plants.

**Effective For:** A wide range of mites and soft-bodied insects such as aphids and whiteflies. Prevent and control various fungal diseases such as powdery mildew.

1 gallon makes up to 128 gallons



I'm amazed at the results. No odor, no petal burn and best of all...NO THRIPS. I'm a believer."

- Keith F. Denver, CO





## POND CLARIFIER

#### AOUA-T™ - 080-57229

Special blend of naturally-occurring bacteria that digests organic waste and excess nutrients to clarify the water, reduce sludge, and eliminate pond odors.

Apply 6 bags per acre foot of water as the initial application and maintain with 1 bag per acre foot every two weeks



## **DUST SUPPRESSANT**

#### GELTRAK® - 080-7035

Environmentally responsible solution designed to reduce dust by keeping soils nominally damp for extended periods between watering or rainfall.

Dilute with water at rate of 25:1, apply diluted material at a rate of 55 gallons per 1,000 sq. ft.



## PROTECTIVE BARRIER TREATMENT

#### FUNGISHIELD® - 080-3020

Clear barrier treatment that provides long term protection against the unsightly adhesion of mold, mildew, fungus, and algae.

SPF 5+ - 1 gallon covers 200-300 sq. ft., last up to 5+ years





Perfect for use on walls, walkways, patios, drives, fences, roofs, decks -Most any hard surface.

## **SPECIALTY EQUIPMENT**

#### ACCUFLO® - 070-3050

Durable and lightweight flow rate meter, attaches to the user's wrist, offering consistent and repeatable bark and soil applications of plant growth regulators, liquid nutrients, insecticides, and fungicides.



10

NutriRoot, AzaSol & Eco-1 40 are available in multiple sizes. Not all products are available in all states. Please visit arboriet.com.

Arborplex, Bloomplex, Aqua-T, GelTrak, and FungiShield are available in multiple sizes. Please visit ecologel.com.

## 2-STEP PLANT HEALTHCARE PROGRAM

		Maple	Pear	Crab Apple	Ash	Elm
AATES	Tree					S
DER CLIMATI	Issue	Galls, Gypsy Moth, Winter Moth, Caterpillars, Bacterial Leaf Scorch, Anthracnose	Aphid, Bacterial Leaf Scorch, Gypsy Moth Winter Moth, Fire Blight, Chlorosis	Aphids, Fire Blight, Apple Scab	Emerald Ash Borer, Clear Wing Borer, Galls, Fire Blight, Ash Yellows, Anthracnose	Scale, Dutch Elm Disease, Elm Leaf Beetle
	Step 1	TREE-äge® G4/R10	IMA-jet®	IMA-jet	TREE-äge G4/R10	IMA-jet
ပ	Step 2	Propizol <sup>®</sup>	PHOSPHO-jet™	Propizol	Propizol	Propizol
	Comments*	Substitute Arbor-OTC in Step 2 for Bacterial leaf scorch	Substitute Arbor-OTC in Step 2 for Fire Blight and Bacterial Leaf Scorch	Substitute Arbor-OTC in Step 2 for Fire Blight	Substitute Arbor-OTC in Step 2 for Fire Blight and Ash Yellows	

CLIMATES	Tree	Various Oaks	Sycamore	Pine/Spruce	Eucalyptus	Magnolia
TO MOST	Issue	Galls, Gypsy Moth, Winter Moth, Oak Wilt, Caterpillars, Bur Oak Blight, Bacterial Leaf Scorch	Invasive Shot Hole Borer, Anthracnose	Pine Bark Beetles, Mites, Diplodia, Hemlock Wooly Adelgid	Red Gum Lerp Psyllid, Tortoise Beetle, Eucalyptus Beetle, Phytophthora	Scale, Mealybug
ONJ	Step 1	TREE-äge G4/R10	TREE-äge G4/R10	TREE-äge G4/R10	IMA-jet	IMA-jet
MMC	Step 2	Propizol	Propizol	Propizol	PHOSPHO-jet	PHOSPHO-jet
ວ	Comments*	Substitute Arbor-OTC in Step 2 for Bacterial Leaf Scorch				

CLIMATES	Tree	Palm	Ficus/Banyan	Crape Myrtle	Monkey Pod	Plumeria
ROPICAL (	Issue	Whitefly, Scale, Skeletonizer, Palm Weevils, Bud Rot, Lethal Bronzing, Lethal Yellowing	Whitefly, Scale, Twig Gall, Leaf Gall, Root Rot	Scale, Aphid, Mealybug	Monkey Pod Caterpillar, Root Rot	Whitefly, Mealybug
	Step 1	IMA-jet	IMA-jet	IMA-jet	TREE-äge G4/R10	IMA-jet
E	Step 2	PHOSPHO-jet	PHOSPHO-jet	PHOSPHO-jet	PHOSPHO-jet	PHOSPHO-jet
HO	Comments*	Substitute Arbor-OTC in Step 2 for Lethal Bronzing and Lethal Yellowing				

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## **BIOPRO APPLICATION GUIDE**

Values expressed are for general turf application - refer to product labeling for complete application instructions.

PRODUCTS	POUNDS / GALLON	OZ PRODUCT / 1,000 SQ. FT.	GALLONS H2O/ 1,000 SQ. FT.	GALLONS PRODUCT/ ACRE	GALLONS H2O/ ACRE
Seaweed Supplements					
SeaXtra™ Nutritional Supplement (1-0-3)	9.0	0.8 / 0.4 initial / maintenance	1	32 oz. / 16 oz. initial / maintenance	40
SeaXtra™ Water Penetrating Pellets	N/A	1 Pellet per 12,000 sq. ft.	N/A	N/A	N/A
Soil Conditioners					
EnviroPlex™	8.96	3-6	1-2	1-2	40-80
Bio MP <sup>™</sup> (5-3-2)	9.65	6-15	2-2.5	2-5	80-100
Soil Remediation					
Na-X <sup>™</sup> (5-0-0)	11.68	32-64	2	10-22	80
Nutralyz™ (12-0-0)	11.0	13	2	4.3	80
Specialty NPK Blends					
Enviro N™ (28-0-0)	10.56	4.3 (0.1 lbs. N / 1,000 sq. ft.)	2	1.5 (0.1 lbs. N / 1,000 sq. ft.)	80
Enviro P™ (7-21-0)	10.58	$14.4$ (0.25 lbs. $P_2O_5/1,000$ sq. ft.)	2	$4.9$ (0.25 lbs. $P_2O_5$ / 1,000 sq. ft.)	80
Enviro K™ (0-0-25)	12.26	8.6 (0.25 lbs. K <sub>2</sub> O / 1,000 sq. ft.)	2	2.9 (0.25 lbs. K <sub>2</sub> 0 / 1,000 sq. ft.)	80
All K (0-0-25-17S)	12.21	10.5 (0.25 lbs. K <sub>2</sub> O / 1,000 sq. ft.)	2	3.6 (0.25 lbs. K <sub>2</sub> O / 1,000 sq. ft.)	80
Greens Plus™ (14-4-10)	10.88	8.4 (0.1 lbs. N / 1,000 sq. ft.)	2	2.9 (0.1 lbs. N / 1,000 sq. ft.)	80
Greens Plus™ (12-0-12)	10.80	9.8 (0.1 lbs. N / 1,000 sq. ft.)	2	3.3 (0.1 lbs. N / 1,000 sq. ft.)	80
TurfPlex™ (20-2-3)	10.61	6.0 (0.1 lbs. N / 1,000 sq. ft.)	1	2.0 (0.1 lbs. N / 1,000 sq. ft.)	40
TurfPlex™ NoPhos (20-0-3)	10.54	6.0 (0.1 lbs. N / 1,000 sq. ft.)	1	2.0 (0.1 lbs. N / 1,000 sq. ft.)	40
Turf Starter™ (8-16-5)	10.94	18.2 (0.25 lbs. P <sub>2</sub> O <sub>5</sub> / 1,000 sq. ft.)	2	6.2 (0.25 lbs. P <sub>2</sub> O <sub>c</sub> / 1,000 sq. ft.)	80
Micronutrients		2 0		2 0	
Boron Plus™	8.55	0.5-1	1	22-44 oz.	40
Calcium Plus™ (8-0-0)	11.85	12	2	4	80
Iron Plus™ (15-0-0)	10.78	3-6* / 6-12**	1	2	40
Iron Plus Mn™ (12-0-0)	11.46	3-6* / 6-12**	1	2	40
Magnesium Plus™ (7-0-0)	11.06	6	2	2	80
Manganese Plus™	10.47	3	1	1	40
Silica (0-0-2)	8.96	0.1	1	4.4 oz.	40
NutriSolve™	10.21	3-6* / 6-12**	1	2	40
Spectrum™ (8-0-0)	10.78	3-6* / 6-12**	1	2	40
Tuff Greens <sup>™</sup> (0-0-13)	10.23	3-6	1	1-2	40

<sup>\*</sup>Greens and Tees \*\*Fairways, Lawns, Athletic Fields and Other Turf

#### SAMPLE CALCULATION FOR NITROGEN RATES FROM LIQUID FERTILIZERS

- 1) Calculate pounds of N in 1 gallon of product by multiplying the product weight in lbs./gal. by the % N in the guaranteed analysis.
- 2) For ounces of product per 1,000 sq. ft.: Divide the desired application rate in pounds of N/1,000 sq. ft. by the pounds of N/gal. calculated in Step 1. Multiply the resulting fraction by 128 (fl. oz./gal.) to get the number of ounces of product to be applied to 1,000 sq. ft. of turf for the desired rate of N.
- 3) For gallons of product per acre: Multiply the same fraction in Step 2 by 43.56 (1,000s of sq. ft./acre) to get the number of gallons of product to be applied to one acre of

Example: Enviro N (28-0-0) weighs 10.6 lbs./gal. and contains 28% N. Therefore, it contains 10.6 X 0.28 = 2.97 lbs. of N per gallon of product. For 0.1 lbs. N/1,000 sq. ft.:  $0.1 \div 2.97 = 0.033$ ;  $0.033 \times 128 = 4.3$  oz. of product per 1,000 sq. ft. For the amount of product for one acre at 0.1 lbs. N/1,000 sq. ft. rate:  $0.1 \div 2.97 = 0.033$ ;  $0.033 \times 43.56$ = 1.5 gal. of product per acre.

#### FERTILIZER & HELPFUL CONVERSIONS

#### Fertilizers:

### P to $P_2O_5$ - multiply by 2.30 $P_2O_5$ to P - multiply by 0.44 K to K<sub>2</sub>O - multiply by 1.20 K<sub>2</sub>O to K - multiply by 0.83

lbs. per acre X 1.12 = kg per ha 1 metric ton = 1,000 kg = 2205 lbs. 1 gallon of water = 8.34 lbs. = 3.78 kg

#### Fluid Volume:

1 teaspoon = 1/3 tablespoon = 0.17 oz. = 5 milliliter 1 tablespoon = 1/16 cup = 1/2 fl. oz. = 15 milliliter 1 ounce = 1/8 cup = 30 milliliter 1 cup = 1/2 pint = 8 fluid ounces = 237 milliliter

#### 1 acre = 0.40 hectares

 $^{\circ}F = (^{\circ}C \times 1.8) + 32$   $^{\circ}C = (^{\circ}F - 32) / 1.8$ 

10.76 square feet = 1 square meter

1 square foot = 0.09 square meters

lbs. per 1,000 sq.ft. X 0.49 = kg per 100 m<sup>2</sup>

1 pint = 1/2 quart = 16 fluid ounces = 473 milliliter 1 quart = 1/4 gallon = 32 fluid ounces = 946 milliliter

1 gallon = 128 fluid ounces = 3.8 Liter

Temperature

2.47 acres = 1 hectare

## WATER MANAGEMENT & NUTRITION PROGRAMS

These programs are designed to provide superior drought stress protection while maintaining optimal nutrition throughout the entire playing season.

Additional programs are available. Email info@ecologel.com for a complete list of program options.

14

RM SEASON TURF		MARCH			APR	IL			M	AY		JUNE				JU	ILY			AUG	UST		SEPT	EMBER		OC	TOBER	
	WEEK 1 WE	EK 2 WEEK	WEEK 4	4 WE	EK 1 WEEK 2 V	WEEK 3	WEEK 4	WEEK 1	WEEK 2	WEEK 3 WEEK 4	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 1 WEEK	2 WEEK 3	WEEK 4 WEE	K 1 WEEK	2 WEEK 3	WEEK
CytoGro					0	0.4oz/M				0.4oz/M																		
Hydretain ES Plus						9oz/M				3oz/M			3oz/M				3oz/M				3oz/M			3oz/M			3oz/M	
Turf Starter		18oz/N	I																								18oz/M	
Greens Plus (14-4-10)*					2	21oz/M				21oz/M			21oz/M				21oz/M				21oz/M			21oz/M	Cor	Continue based on field use, sp and season		ise, sport
TuffGreens										6oz/M			6oz/M				6oz/M				6oz/M			6oz/M				
EnviroPlex		6oz/M																									6oz/M	
NutriSolve													12oz/M				12oz/M				12oz/M			12oz/M				
CytoGro		0.8oz/N	1		0	0.4oz/M																		0.4oz/M				
Hydretain ES Plus						9oz/M				3oz/M			3oz/M				3oz/M				3oz/M			3oz/M		Ì	3oz/M	
Enviro P		15oz/N	1		1	15oz/M																		15oz/M			15oz/M	
Greens Plus (12-0-12)										25oz/M			25oz/M				25oz/M				25oz/M							
Silica										0.1oz/M			0.1oz/M				0.1oz/M				0.1oz/M							
Spectrum										12oz/M			12oz/M				12oz/M				12oz/M			12oz/M			12oz/M	
CytoGro		0.8oz/N	1		0	0.4oz/M				0.4oz/M			0.4oz/M				0.4oz/M				0.4oz/M			0.4oz/M			0.4oz/M	1
CytoGro Hydretain ES Plus Enviro N Enviro P						9oz/M				3oz/M			3oz/M				3oz/M				3oz/M			3oz/M			3oz/M	
Enviro N					1	11oz/M				11oz/M			11oz/M				11oz/M				11oz/M			11oz/M				
Enviro P		15oz/N	ı																		15oz/M			15oz/M			15oz/M	

DL SEASON TURF	APRIL	M	AY	JUNE			JULY				AUG	UST			SEPTE	MBER		ОСТО	BER		NOV	EMBER	
	WEEK 1 WEEK 2 WEEK 3 WEEK 4	WEEK 1 WEEK 2	WEEK 3 WEEK 4	WEEK 1 WEEK 2 WEEK 3	WEEK 4	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 1	WEEK 2	WEEK 3 WEEK	4 WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 1 WEEK	2 WEEK 3	WEEK
CytoGro		0.8oz/M															0.4oz/N	1			0.4oz/M		
Hydretain ES Plus		9oz/M		3oz/M		3oz/M				3oz/M				3oz/M			3oz/M				3oz/M		
Turf Starter	9oz/M													9oz/M									
Greens Plus (14-4-10)*		21oz/M		21oz/M		21oz/M				21oz/M				21oz/M			42oz/N				42oz/M		
TuffGreens		6oz/M		6oz/M		6oz/M				6oz/M				6oz/M									
EnviroPlex	6oz/M	3oz/M		3oz/M		3oz/M				3oz/M				3oz/M			3oz/M						
NutriSolve				12oz/M		12oz/M				12oz/M				12oz/M									
CytoGro	0.8oz/M	0.4oz/M		0.4oz/M		0.4oz/M				0.4oz/M				0.4oz/M			0.4oz/N	1			0.4oz/M		
Hydretain ES Plus		9oz/M		3oz/M		3oz/M				3oz/M				3oz/M			3oz/M				3oz/M		
Enviro P	14oz/M																						
Greens Plus (14-4-10)*		42oz/M		21oz/M		21oz/M				21oz/M				42oz/M			42oz/N				42oz/M		
Silica				0.1oz/M		0.1oz/M				0.1oz/M				0.1oz/M									
S CytoGro		0.8oz/M		0.4oz/M		0.4oz/M				0.4oz/M				0.4oz/M			0.4oz/N	1					
CytoGro Hydretain ES Plus Enviro N Enviro P		9oz/M		3oz/M		3oz/M				3oz/M				3oz/M			3oz/M						
Enviro N		11oz/M		11oz/M		11oz/M				11oz/M				11oz/M							11oz/M		
Enviro P	14oz/M													14oz/M			14oz/M						

<sup>\*</sup>Greens Plus™ (12-0-12) may be used as a substitute in Phosphorus restricted areas.