



**W.S. CONNELLY**

# **HYDRASmart & GREEN INDUSTRIES TECHNICAL INFORMATION**



**EARLY ORDER PROGRAM**  
2025 - 2026



# PREPARE FOR SUMMER STRESS

**HydraSmart** HydraScape

**Green Industries**

*offer good on any HydraSmart or Green Industries solution*

## 200-500 Gallons Purchased

Receive \$1.00/gallon rebate VISA Card

## 500+ Gallons Purchased

Receive \$1.25/gallon rebate VISA Card

### SUMMER STRESS PROMOTION VOUCHER

Email completed voucher to your sales account manager.\*

\*Customer information required for participation in this promotion.

Sales Order #:

Company Name:

Contact Name:

Street Address:

City, State, Zip:

Phone:

Contact Email:



EARN \$0.50 REBATE ON  
HYDRASCAPE-GRANULAR SOLUTIONS  
\*40 BAG MINIMUM





## Hydra-Fuse 18-0-6

A core fertility foliar NPK combined with phosphite and proprietary biostimulants derived from desert plant extracts. Designed to provide a consistent and lasting color response while enhancing stress resistance and encouraging root growth. Hydra-Fuse contains 6% potassium derived from Potassium Acetate (KA) for superior foliar uptake. Hydra-Fuse's 50% Triazone N provides a tremendous color response with a predictable growth curve. Low salt index. No phosphates. No nitrates. No chlorides.

### Rates:

Cool Season: 3.0 - 8.0 oz./1000 sq. ft.  
Warm Season: 3.0 - 8.0 oz./1000 sq. ft.  
Ornamental: 1.0 - 4.0 qts./100 gal.  
Root Injection: 1.0 - 2.5 gal./100 gal.

## Hydra-Cal

Hydra-Cal is a highly active 3-way blend of acetate, nitrate, and chelated forms of calcium. Hydra-Cal contains a unique bio-stimulant technology derived from desert plant extracts designed to increase plant health and root growth. The combination of highly efficient foliar uptake, root absorption, and chelated calcium maximizes calcium delivery to the leaf tissue as well as to the roots. The addition of boron and magnesium further enhances cell wall strengthening and chlorophyll production. Plant available silica enhances the physical strength and stress resistance of the plant.

### Rates:

Cool Season: 1.5 - 3.0 oz./1000 sq. ft.  
Warm Season: 1.5 - 3.0 oz./1000 sq. ft.  
Ornamental: 2.0 - 4.0 qts./100 gal.

## Hydra-Fe Combo 12-0-0

Give your plant more than just Iron. 6% Fe, 2% Mn, 0.25% Mg. Rapid color response from urea nitrogen and organic acid complexed micronutrients. Because of the scientifically formulated ratio of iron, manganese, and magnesium, Hydra-Fe enhances photosynthesis through nutrition, specifically creating a dramatically enhanced green-up, far more noticeable than the many iron products on the market. Hydra-Fe is amine compatible with reduced risk of staining.

### Rates:

Cool Season: 2.0 - 8.0 oz./1000 sq. ft.  
Warm Season: 2.0 - 8.0 oz./1000 sq. ft.  
Ornamental: 1.0 - 4.0 qts./100 gal.  
Root Injection: 1.0 - 4.0 qts./100 gal.

## Hydra-Phite Plus 0-0-28

A highly concentrated potassium phosphite, Hydra-Phite Plus contains proprietary bio-stimulant technology derived from desert plant extracts, which increases plant strength and growth. In addition, the SAR (systemic acquired resistance) elicitors increase plant vigor and trigger plant defense responses, making the turf stronger even during the most stressful periods of the season. With Hydra-Phite Plus's highly synergistic combinations of desert plant extracts, phosphite and SAR elicitors, the turf becomes impressively resistant to plant stress, while enhancing turf quality.

### Rates:

Cool Season: 3.0 - 4.0 oz./1000 sq. ft.  
Warm Season: 3.0 - 4.0 oz./1000 sq. ft.  
Ornamental: 0.5% solution v/v

## Hydra-Kelp 4-0-0

A supplemental nitrogen and micronutrient fertilizer designed to prevent and/or cure nutrient deficiencies in plants and crops. Hydra-Kelp is enhanced with Ascophyllum Nodosum extracts to enhance turfgrass quality. Hydra-Kelp is a pure biostimulant that ensures your turf has the antioxidants it needs to prepare for summer stress conditions. Hydra-Kelp's overall result is a boosted defense system, carbohydrate reserves for the turf and the infusion of high levels of naturally beneficial cytokinins. As a secondary benefit, Hydra-Kelp contains 1% Mg, 2% Fe, and 1% Mn to provide a tremendous color response.

### Rates:

Cool Season: 1.5 - 6.0 oz./1000 sq. ft.  
Warm Season: 1.5 - 6.0 oz./1000 sq. ft.  
Ornamental: 1.0 - 4.0 qts./100 gal.  
Root Injection: 1.0 - 4.0 qts./100 gal.

## Hydra-Fense 12% Silica

Hydra-Fense 12% plant available silica forms deposits in the cuticle, which provides a physical resistance to stress. During the process, Hydra-Fense accelerates greater rooting and tougher, stress resistant tissue for optimized plant health, performing above and below the soil surface. Easy to use, tank mix stable, clear, pH balanced and highly concentrated. Reduced ball marks, reduced wear, faster greens, and better cut.

### Rates:

Cool Season: 1.5 - 3.0 oz./1000 sq. ft.  
Warm Season: 1.5 - 3.0 oz./1000 sq. ft.

## Hydra-Mn Combo

4% Mn, 3% Fe, 1% Mg. with complexed organic acids. Hydra-Mn is specifically designed to provide the right nutrients to deliver elevated tissue color. The combination of Mn, Fe and Mg in the organic acid chelated form catalyzes the reactors inside the plant to produce unrivaled color response, regardless of soil conditions such as pH. Flexible for foliar and soil applications. Compatible with amine-based herbicides and offers low stain risk.

### Rates:

Cool Season: 1.5 - 3.0 oz./1000 sq. ft.  
Warm Season: 1.5 - 3.0 oz./1000 sq. ft.  
Ornamental: 2.0 - 4.0 qts./100 gal.

## Mineral-Miner 21-0-0

A reacted stabilized, high-efficiency nitrogen formulated with complex carbohydrates and nutrient efficiency polymers, designed to stabilize nitrogen against volatilization loss while increasing plant availability of many soil solution macro and micro nutrients. Has synergistic impacts with residual fertilizers and soil nutrients due to its capability to solubilize and liberate nutrients bound to the soil colloid, making them plant available. Contains carboxylic acids to reduce bicarbonates and sodium. Hydrogen to reduce alkalinity. Carbon to optimize C:N ratios. Oxygen to enhance aerobic soil functions. Carbohydrates to support aerobic soil microbiology.

### Rates:

Cool Season: 1.5 - 3.0 oz./1000 sq. ft.  
Warm Season: 1.5 - 3.0 oz./1000 sq. ft.





## Hydra-Gro 30-0-0

A scientifically formulated blend of quick release and slowly available nitrogen combined with proprietary forms of pigment for foliar uptake, improving general plant health and shoot growth. A very low salt index formulation optimizes root and foliar uptake. The liquid slow-release nitrogen provides an even and consistent 6 to 8 week feed, avoiding issues associated with a surge of growth. Hydra-Gro fastens to the plant, where it is broken down and absorbed by stomatal openings.

### Rates:

Cool Season: 3.0 - 15 oz./1000 sq. ft.

Warm Season: 3.0 - 15 oz./1000 sq. ft.

## Hydra-Minors

The only comprehensive, multi-chelated micronutrient package containing plant available silica, SAR elicitors, and bio-stimulants. Hydra-Minors uses biostimulant technologies derived from desert plant extracts, which are designed to increase plant health and growth, even during times of stress. SAR (systemic acquired resistance) elicitors increase plant vigor and trigger plant defense responses. This highly synergistic combination reduces plant stress and enhances turf quality and color. Hydra-Minors contains 1.0% plant-available silica. This patented process to stabilize plant available silica hardens plant cells, resulting in tenaciously tough turf.

### Rates:

Cool Season: 1.5 - 3.0 oz./1000 sq. ft.

Warm Season: 1.5 - 3.0 oz./1000 sq. ft.

Ornamental: 1.0 - 2.0 qts./100 gal.

Root Injection: 1.0 - 4.0 qts./100 gal.

## Hydra-Kace 0-0-29

The highest foliar absorption potassium input on the market. Derived from potassium acetate (KA), Hydra-Kace ensures high tissue levels at low rates, reduced risk of foliar burn, and reduced fertilizer salt loading. It promotes carbohydrate synthesis and translocation, catalyzing numerous enzyme reactions including nitrate reduction, regulating transpiration, nutrient uptake, and respiration rates. Hydra-Kace influences turfgrass rooting, drought, heat and cold tolerance, while reducing the effects of turf stress.

### Rates:

Cool Season: 1.5 - 3.0 oz./1000 sq. ft.

Warm Season: 1.5 - 3.0 oz./1000 sq. ft.

Ornamental: 1.0 - 4.0 qts./100 gal.

## Hydra-Boost 3-10-15

The proprietary combination of phosphite (PO<sub>3</sub>) and phosphate (PO<sub>4</sub>) work together to enhance plant stress resistance while increasing plant energy and metabolism. Hydra-Boost is a catalyst for the plant's defense mechanism, resulting in robust turf, vigorously ready to defend against stress. Hydra-Boost is proven to be a great tool during aerification recovery, grow-in, over-seeding, or declining turf areas. University research has proven the combination of PO<sub>3</sub> and PO<sub>4</sub> create healthier, stronger roots.

### Rates:

Cool Season: 1.5 - 3.0 oz./1000 sq. ft.

Warm Season: 1.5 - 3.0 oz./1000 sq. ft.

Ornamental: 0.5% solution v/v

## Hydra-Phite 0-0-31

One of the purest liquids on the market, Hydra-Phite is a highly concentrated potassium phosphite reacted under strict temperature and quality control for enhanced compatibility and performance. Designed to mobilize in the plant, Hydra-Phite works rapidly to correct deficiencies, enhance plant and root development and improve resistance to environmental factors which favor disease development. Along with enhanced resistance to stress, Hydra-Phite is extremely systemic, rapidly transporting through phloem and xylem to areas of deficiencies or need.

### Rates:

Cool Season: 2.5 - 3.5 oz./1000 sq. ft.

Warm Season: 2.5 - 3.5 oz./1000 sq. ft.

Ornamental: 0.5% solution v/v

## Hydra-Phite 40 2-0-16

A more concentrated solution of phosphite designed to maximize the phosphorous acid delivery to the plant. Contains 5.84 pounds of phosphorous acid per gal.. Designed to improve plant strength and stress resistance, derived from phosphorous acid this formulation is extremely soluble and readily absorbed via the roots and foliar tissue. Studies have shown Hydra-Force enhances the activity of fungicides when jointly applied. In addition, the utilization of other nutrients when mixed and applied together as a supplement to a well-balanced fertilizer program.

### Rates:

Cool Season: 2.5 - 3.5 oz./1000 sq. ft.

Warm Season: 2.5 - 3.5 oz./1000 sq. ft.

Ornamental: 0.5% solution v/v

## Hydra-Base 18-0-6

Low Salt Index. No Phosphates. No Nitrates. No Chlorides. A building block for protein, Hydra-Base 18-0-6 is a phosphate free foliar fertilizer. Potassium derived from potassium acetate (KA) for superior foliar uptake. Hydra-Base Nitrogen is broken down both chemically and biologically, which provides a lower use rate for higher quality results. Tank mix compatible with most pesticides.

### Rates:

Cool Season: 3.0 - 8.0 oz./1000 sq. ft.

Warm Season: 3.0 - 8.0 oz./1000 sq. ft.

Ornamental: 1.0 - 4.0 qts./100 gal.

Root Injection: 1.0 - 4.0 qts./100 gal.

## Hydra-Push 5-0-0

A comprehensive combination of nitrogen, calcium, carboxylic acids, fructose sugars and dual-mode surfactants. Hydra-Push penetrates water through hydrophobic soils, yet moving water latterly where needed. The blend of acids, calcium and proprietary polymers were built for: flushing bicarbonates and sodium off of the colloid, a tremendous surfactant for pushup greens, and its original purpose, a cost-effective nutrition and surfactant for fairway injection.

### Rates:

Push-up Greens: 0.5 - 2.0 oz. / 1000

Injection on Fairways: 0.5 - 3.0 oz. / 1000





## Hydra-Balance 14-2-14

Hydra-Balance is a liquid fertilizer specifically designed for turf. Contains slowly available nitrogen as well as a highly foliar absorbable form of potassium: potassium acetate. 50% Triazone nitrogen provides a tremendous color response with a predictable growth curve.

Low salt index. No nitrates. No chlorides.

## Hydra-Thrive 1-0-1 C.B.S.

Hydra-Thrive is a complete biostimulant formulated with vegetal extracts, protein hydrolysates and amino acid complexed micronutrients. It was designed utilizing our proprietary technologies to help enhance plant growth and relieve stress. Hydra-Thrive is a concentrated formulation, with low use rates that is meant to be added to existing programs where additional drought tolerance, stress recovery and vigor are desired.

### Rates:

Cool & Warm Season Turf: 0.5 – 3 ozs/Acre

Ornamentals: 1 – 2 ozs/100 gal. (Foliar Applications)

1 – 3 ozs/100 gal. (Drenches or Deep Root Injections)

Hydroseeding & Turfgrass Establishment: 2 ozs/Acre

## Hydra-Acre

Hydra-Acre is a balanced foundational fertilizer supplemented with humic substances, beneficial microbes and chelated micronutrients. Hydra-Acre is specifically designed to aid in rapid establishment of erosion control crops and turfgrass species.

### Rates:

Hydroseeding Crop & Turfgrass Establishment:  
2.5 – 5 gal./Acre

## Liberate

This high active ingredient biostimulant contains biochemical microbes, which puts the germination and growth of new plants into overdrive. The premium sources of humic and fulvic acids condition the soil, acting as organic liberators and microbial stimulators. With the addition of the nutrient liberating microbes, Liberate facilitates growth of roots in the soil, mineralizes organic compounds, making them plant available, converts N into biological usable forms, and solubilizes P, leading to its release and availability.

## Hydra-Green 25-0-0

A scientifically formulated blend of quick release, slowly available nitrogen, iron, manganese, and magnesium combined with proprietary forms of pigment for foliar uptake, improving general plant health and shoot growth. A very low salt index formulation optimizes root and foliar uptake. Enhanced with *Ascopylum Nodosum* Kelp extracts to enhance turfgrass quality; a pure bio stimulant that ensures turf has the antioxidants it needs to prepare for summer stress conditions. It boosts the defense system by creating carbohydrate reserves for the turf and infusing high levels of naturally beneficial cytokinins.

## Hydra-Carb 1-0-3

Hydra-Carb is a high brix molasses fertilizer with minors and plant proteins designed to stimulate native soil bacteria, enrich the soil and reduce thatch. Use Hydra-Carb on a regular basis to encourage healthy soil microbial populations, especially in sand based, low organic matter greens. Hydra-Carb is a high carbon, high carbohydrate supplemental fertilizer. Designed to fuel the food web within the root zone, Hydra-Carb provides a high energy food source for rhizosphere bacteria. This dramatic stimulation of biological activity has a direct positive impact on root length, root mass, and turfgrass quality. Hydra-Carb also contains a broad complement of plant proteins, trace micronutrients, vitamins, minerals, amino acids, and other beneficial substances. Applications can result in up to a 75% increase in bacteriological activity.





## Hydra-Knight

Hydra-Knight is a 98% Active Ingredient blend of 3 unique polymers. This universal work-horse contains two block polymers: Penetrant, Uniform hydration + 1 Reverse Block Polymer for water retention. Contains high load of natural biostimulant + SAR Elicitors. Polymers: 45% Wetter. 45% Penetrator. 10% Holder. Natural biostimulant + SAR Elicitors provide foliar uptake; if not watered in (foliar and root absorbed).

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## Hydra-Last

90 day soil surfactant. A blend of three high-performance branched polymers designed for unmatched soil surfactant longevity. This unique chemistry is extremely safe for applications on cool and warm season turf. Perfect for fairways and areas that have limited access where turf managers would prefer to make only one or two applications a year. Delivers uniform hydration, penetration, and rewetting with extremely low risk of phytotoxicity.

### Rates:

16 oz. / 1000 - one application  
8 oz. + 8 oz. - (1 to 2 week intervals)

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## Hydra-Firm

100% active ingredient product formulated to deliver uniform hydration, rapid rewetting, and a firm, dry playing surface. A premium product for turfgrass managers who want a very high-performance putting surface. Hydra-Firm is a blend of two capped tri-block polymers. This tri-block configuration means that there are three attachment points per molecule that secure the polymers to the soil particle for more uniform and thorough hydration than other competitive products while resisting microbial degradation and surfactant failure.

### Rates:

5.0 - 8.0 oz. / 1000 every 30 days  
2.5 oz. / 1000 every 14 days

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## Hydra-Push 5-0-0

A comprehensive combination of dual-mode surfactants, sulfuric and amino acids, calcium, and HydraSmart's exclusive nutrient efficiency polymer. Penetrates water through hydrophobic soils and moves water latterly where needed. Flushes bicarbonates and sodium off the colloid. Strategically developed for push-up greens, Hydra-Push is a cost-effective surfactant for fairway injections.

### Rates:

Push-Up Greens: 0.5-2.0 oz. / 1000  
Injection: 0.5 to 2.0 oz. / 1000

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## Hydra-Plex

Hydra-Plex is designed for spray or injection applications to enhance the infiltration of water through thatch and into the soil profile. Use in conjunction with existing wetting agent program to increase water infiltration. Use as an adjuvant for insecticide and fungicide applications that require thatch infiltration to reach target sites.

### Rates:

Injection or Spray Applications: 20 ozs/Acre every 7 – 14 days  
Pesticide Adjuvant: 16 ozs/Acre

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## Hydra-Entre - For Systemic Pesticides

Entre is a blend of lecithin and penetrating technologies designed to increase pesticide and nutritional performance. Used with systemic fungicides, growth regulators and insecticides, this foliar adjuvant serves as an activator, penetrant, anti-drift, and deposition aid. **To the Plant:** Drift reduction with performing sized droplets. **Cover the Plant:** Droplet retention by adhesion & spreading. **Entry:** Increased penetration without cuticle disruption. **pH Buffer:** Reduced spray solutions pH with acidification properties.

### Rates:

16 - 32 oz. / 100 gal.

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## Hydra-Stik - For Contact Pesticides

A blend of organosilicone-based spreaders and latex-based stickers. This combination of high-performance chemistries ensures unmatched spreading and leaf coverage, combined with a superior stick and rainfastness. Rainfast in 30 minutes. Enhances pesticide performance by ensuring droplet retention and reduced pesticide wash off in both low and high volume spray applications.

### Rates:

8 - 32 oz. / 100 gal. Package Size: 12 x 6 oz.

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## Hydra-80

This low-foaming, nonionic surfactant provides superior coverage and penetration of spray solutions on tough-to-control weeds. In addition, Hydra-80/20 contains a proprietary blend of humectants, which have proven to keep the herbicide wet to allow full penetration into the cuticle. Traditional 80/20 blends do not assist in this process, leading to the herbicide drying out on the plant too fast.

### Rates:

1 - 4 pints / 100 gal.

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## Hydra-Tonic MSO

A 100% high concentrate methylated seed oil (MSO) surfactant, Hydra-Tonic is designed to improve performance of post-emergence herbicides and other pesticides. This first-class product is ideal in areas where critical coverage is a must. When it comes to Hydra-Tonic, less is more. This high concentrate formula was specially designed for a low use rate – saving you time and money.

### Rates:

1 - 2 pints per acre

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## Hydra-pHix

A spray tank citric-based, pH reducer. Hydra-pHix modifies spray solution when breakdown from alkaline hydrolysis can reduce pesticide performance.

### Use Rate:

4 to 8 ounces per 100 gal. of water.

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## Hydra-Nix-It

Foam suppressant quickly defoams spray solutions containing nonionic surfactants, silicone surfactants or crop oil concentrates. General purpose antifoamer and defoamer. Prevents foam spillover.

### Use Rate:

Add in at 2 oz. increments until foam dissipates





### Hydra-Pellets

Our 'Classic' formulation non-foaming pelletized soil surfactant with 99% active ingredient engineered for corrective spot treatment of hydrophobic areas and "hot spots" on greens. Designed for applications in industry standard hand-watering pellet applicators, like the Underhill 'Pellet Pro', Hydra-Pellets are safe to apply on greens, will not crumble during use and will treat two greens per pellet. 'Classic' Hydra-Pellets are packaged in cases of 12 x 8 oz pellets.

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### Hydra-HumPel (Bicarbonate/Contaminant Mitigation)

Introducing a new take on our 'Classic' formulation tablet enhanced with Humic Acid. Hydra-HumPel is a non-foaming pelletized soil surfactant powered by bicarbonate mitigating Humic Acid that contains 100% active ingredient. Hydra-HumPels are engineered for corrective spot treatment of hydrophobic areas and "hot spots" on greens while providing the additional benefits of a concentrated Humic Acid package to help mitigate soil contaminants like sodium and bicarbonates. Designed for applications in industry standard hand-watering pellet applicators, like the Underhill 'Pellet Pro', Hydra-HumPels are safe to apply on greens, will not crumble during use, will last 20 – 30 minutes and potentially spot treat 6 – 7 average sized golf greens per pellet. Hydra-HumPels are packaged in cases of 16 x 8 oz pellets. 8 oz. + 8 oz. - (1 to 2 week intervals)

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### Hydra-SeaPel (Stress Management/Recovery)

Introducing a new take on our 'Classic' formulation tablet enhanced with Sea Plant Extracts. Hydra-SeaPel is a non-foaming pelletized soil surfactant powered by stress mitigating Sea Plant Extracts that contains 100% active ingredient. Hydra-SeaPels are engineered for corrective spot treatment of hydrophobic areas and "hot spots" on greens while providing the additional benefits of a concentrated biostimulant to aid in recovery. Designed for applications in industry standard hand-watering pellet applicators, like the Underhill 'Pellet Pro', Hydra-SeaPels are safe to apply on greens, will not crumble during use, will last 20 – 30 minutes and potentially spot treat 6 – 7 average sized golf greens per pellet. Hydra-SeaPels are packaged in cases of 16 x 8 oz pellets.





## **Component Core 1-5-4** Powered by RLS Technologies

Component Core is a well-balanced nutritional package containing key plant nutrients and highly available carbon. Component Core is carbon based to provide a strong microbial food source, excellent complexing/chelation properties and available carbon for plant uptake. It has a low Nitrogen content, which allows for greater control of growth and response. As a key component of greens fertility programs, Component Core requires only Nitrogen and Calcium for optimal nutrition in a general maintenance program.

### **Rates:**

Cool Season: 1.5 – 3.0 ozs/1,000 sq. ft.

Warm Season: 1.5 – 3.0 ozs/1,000 sq. ft.

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## **Component CaB** Powered by Charger Technologies

Component CaB strengthens the cellular walls, ultimately reducing wear and improving plant resistance to stress. Component CaB contains 18% Calcium plus 0.5% Boron for maximum response. Use in programs to enhance cell wall integrity as well as stimulate greater root mass. Formulated using a proprietary blend of amino acids and carbohydrates to feed microbial growth, enhancing nutrient availability and increase soil health.

### **Rates:**

Cool Season: 1.5 – 6.0 ozs/1,000 sq. ft.

Warm Season: 1.5 – 6.0 ozs/1,000 sq. ft.

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## **Component CL 18-3-4** Powered by RLS Technologies

Component CL delivers a complete blend of NPK and micronutrients for dependable turfgrass strength and color as part of standard maintenance. Component CL is carbon based to provide a strong microbial food source, excellent complexing properties and available carbon for plant uptake. Proprietary blend of amino acids and sugars provide essential “food” to enhance the microbial activity that is critical for nutrient availability and plant uptake. Contains fully-chelated Iron, and Manganese for enhanced color and response on greens.

### **Rates:**

Cool Season: 3.0 – 6.0 ozs/1,000 sq. ft.

Warm Season: 3.0 – 6.0 ozs/1,000 sq. ft.

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## **Component K 0-0-19** Powered by Charger Technologies

Component K is specially designed to enhance Potassium uptake and performance, utilizing carbon based technology to maximize turf strength. Contains ‘Charger’ which is a soluble carbon technology designed to enhance microbial activity in the root zone. Provides abundant organic acids and is derived from a low salt content potassium source. Component K activates enzymes, regulates stomate function and facilitates nutrient and water transport in the plant.

### **Rates:**

Cool Season: 1.5 – 3.0 ozs/1,000 sq. ft.

Warm Season: 1.5 – 3.0 ozs/1,000 sq. ft.

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## **Component M 2-0-0** Powered by

Component M generates vibrant turf color through a well balanced package of four micronutrients and amino acids, supported by carbon technology. Contains ‘Charger’ which is a soluble carbon technology designed to enhance microbial activity in the root zone. The micronutrients in Component M are specifically balanced to enhance color, facilitate the plant’s synthesis of chlorophyll and enhance enzyme activation.

### **Rates:**

Cool Season: 1.5 – 3.0 ozs/1,000 sq. ft.

Warm Season: 1.5 – 3.0 ozs/1,000 sq. ft.

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## **Component N 20-0-0** Powered by

Component N provides predictable nitrogen technology that is engineered to deliver nitrogen balanced with soluble carbon for optimum efficiency.

Contains ‘Charger’ which is a soluble carbon technology designed to enhance microbial activity in the root zone. Stabilized Urea improves efficiency by reducing volatility and leaching. Fortified with Magnesium to support Chlorophyll production and enhance color response. Multi-source Nitrogen stimulates early green-up for great looking greens.

### **Rates:**

Cool Season: 3.0 – 6.0 ozs/1,000 sq. ft.

Warm Season: 3.0 – 6.0 ozs/1,000 sq. ft.

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## **Component PK 0-3-18**

Component PK enhances stress resistance and provides the nutrients for stress relief, along with elements to encourage controlled growth. Combines 15% phosphite and 3% phosphate to alleviate plant stress and enhance overall plant strength. Component PK enhances root development and root mass, increasing your turf’s viability in stress conditions and its ability to absorb soil nutrients. Easy-to-use formulation means more reliable tank mixes and minimizes solubility concerns.

### **Rates:**

Cool Season: 3.0 – 6.0 ozs/1,000 sq. ft.

Warm Season: 3.0 – 6.0 ozs/1,000 sq. ft.

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## **Component R 0-0-6**

Component R is specifically designed to aid in plant root development, particularly after establishment, giving you stronger and more vibrant turf. Root-promoting technology which combines humic acids, Ascophyllum Nodosum (seaweed extract), and micro catalysts to deliver enhanced root development and performance. Component R enhances root development and root mass, increasing your turf’s viability in stress conditions and its ability to absorb soil nutrients. A great combo with Component PK to relieve summer stress.

### **Rates:**

Cool Season: 0.75 – 3.0 ozs/1,000 sq. ft.

Warm Season: 0.75 – 3.0 ozs/1,000 sq. ft.

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## Ruckus 0-6-12

Powered by **RLS** Technologies

Ruckus redefines fairway programs by providing essential nutrition for maintenance, keeping grass strong and vibrant, while boosting root density and stress resistance. Highly efficient – 1 gal. per acre every 30 days gives you a full input of Carbon-Chelated P & K, plus a complete Micro package. Zero nitrogen content, allowing turf managers to take control of growth. Complexed and chelated nutrients are protected from soil and chemical tie-up, increasing response from very low inputs. Aids in photosynthesis, enhances root development and plant metabolism, while also improving biological activity to access nutrients in the soil.

### Rates:

Cool Season: 1.5 – 3.0 ozs/1,000 sq. ft.

Warm Season: 1.5 – 3.0 ozs/1,000 sq. ft.

## Fairway N 24-0-0

Fairway N provides the superior Nitrogen package for your fairways, combined with Magnesium to maximize color response and quality. Revolutionary nitrogen nutrition engineered with three forms of nitrogen technologies (nitrate, ammoniacal stabilized, and urea stabilized) to deliver balanced nitrogen nutrition for optimal plant utilization. Enhanced non-staining Magnesium formulation to stimulate and maximize chlorophyll production for improved plant color, vigor, and quality.

### Rates:

Cool Season: 3.0 – 6.0 ozs/1,000 sq. ft.

Warm Season: 3.0 – 6.0 ozs/1,000 sq. ft.

## Backbone 0-0-6

Powered by **RLS** Technologies

Backbone provides a unique tool for soil nutrient management, with longer carbon chains for extended soil and nutrient benefits. Chelated nutrients ensure greater availability and higher plant uptake. Formulated to improve nutrient and moisture-holding capacity. Chelated nutrients are protected from soil and chemical tie-up, increasing response from very low inputs. Provides excellent microbial benefits.

### Rates:

Cool Season: 0.75 – 3.0 ozs/1,000 sq. ft.

Warm Season: 0.75 – 3.0 ozs/1,000 sq. ft.



**Protecting And  
Releasing Nutrients  
For Greater Efficiency**

**RLS** is a purified Humic Acid input, derived from the smallest 2% of Humic molecules.

RLS complexes nutrients, allowing for lower inputs rates and reducing tie-up and fixation.

Beyond its capabilities as a complexing agent, RLS also releases tied-up nutrients in the soil. It also promotes beneficial microbial activity, increasing plant availability of nutrients.



**Learn More  
About RLS  
Technology:**



**Carbon Technology  
Ensuring Stronger  
Plant Growth**



In the form of Amino Acids, **Charger** is a soluble Carbon technology designed to enhance microbial activity in the root zone of your Turfgrass.

This Carbon technology, which is an integral part of Component fertilizers, complexes and chelates nutrients, provides microbial food sources, improves soil stability, buffers chemistry and is available for plant uptake.

What this means to you is greater nutrient uptake and efficiency, enhanced microbial activity, and stronger plant growth to maximize the genetic potential of your turfgrass.

## Cycle

Cycle contains a proprietary blend of 90% non-ionic surfactants and 5% carboxylic acid and is designed to rapidly re-wet root zones. Manages hydrophobic soils and reduces LDS (localized dry spot). Improves irrigation efficiency by dissolving bicarbonate salts and providing uniform water infiltration utilizing the carboxylic acids component. Excellent tank mix partner and buffer.

### Rates:

Bi-Weekly Target: 2.0 ozs/1,000 sq. ft.

Monthly Target: 4.0 ozs/1,000 sq. ft.

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## MultiPath

MultiPath is a high-efficiency surfactant, reducing surface tension and increasing water infiltration into the micropore areas where roots uptake nutrients. MultiPath reduces surface tension, improving water movement into compact soils and difficult to hydrate micropore space. Contains 3 types of carboxylic acids that aid in solubilizing bicarbonates, alleviating sealed off surfaces. Ideal to spray with growth regulators and products benefiting from improved contact, increasing uptake. MultiPath does not require immediate irrigation to be effective, and is approved for fertigation and injection systems.

### Rates:

Bi-Weekly Maintenance Target: 0.375 – 1.5 ozs/1,000 sq. ft.

Soil Flush Target: 1.5 – 3.0 ozs/1,000 sq. ft.

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## NutriPath Powered by **RLS** Technologies

NutriPath is a high-efficiency surfactant with the added dimension of releasing plant available nutrients within the root zone. NutriPath reduces surface tension, improving water movement into compact soils and difficult to hydrate micropore space. It complexes and chelates nutrients, reducing tie up and fixation while also increasing nutrient availability and supporting additional nutritional inputs. Ideal in spray programs with growth regulators, contact and soil based chemistry. NutriPath does not require immediate irrigation, is approved for and effective in fertigation systems and improves biological activity.

### Rates:

Bi-Weekly Maintenance Target: 0.375 – 1.5 ozs/1,000 sq. ft.

Soil Flush Target: 1.5 – 3.0 ozs/1,000 sq. ft.

## CalciPath

CalciPath is a superior surfactant reinforced with chelated Calcium. This combination creates soil conditions that increase root mass and facilitates nutrient uptake. Contains 10% Calcium for enhanced soil structure and 6% Surfactant to improve water movement in the soil. Chelated Calcium remains available and useful in the root zone.

### Rates:

Bi-Weekly Maintenance Target: 0.375 – 1.5 ozs/1,000 sq. ft.

Monthly Maintenance Target: 0.375 – 3.0 ozs/1,000 sq. ft.





# BEAT THE HEAT

*Hydration Solutions that Deliver*

- **Hydra-Pellet**

Our 'Classic' formulation non-foaming pelletized soil surfactant with 99% active ingredient engineered for corrective spot treatment of hydrophobic areas and "hot spots" on greens. Designed for applications in industry standard hand-watering pellet applicators, like the Underhill 'Pellet Pro', Hydra-Pellets are safe to apply on greens, will not crumble during use and will treat two greens per pellet. 'Classic' Hydra-Pellets are packaged in cases of 12 x 8 oz pellets.



- **Hydra-HumPel (Bicarbonate/Contaminant Mitigation)**

Introducing a new take on our 'Classic' formulation tablet enhanced with Humic Acid. Hydra-HumPel is a non-foaming pelletized soil surfactant powered by bicarbonate mitigating Humic Acid that contains 100% active ingredient. Hydra-HumPels are engineered for corrective spot treatment of hydrophobic areas and "hot spots" on greens while providing the additional benefits of a concentrated Humic Acid package to help mitigate soil contaminants like sodium and bicarbonates. Designed for applications in industry standard hand-watering pellet applicators, like the Underhill 'Pellet Pro', Hydra-HumPels are safe to apply on greens, will not crumble during use, will last 20 – 30 minutes and potentially spot treat 6 – 7 average sized golf greens per pellet. Hydra-HumPels are packaged in cases of 16 x 8 oz pellets.



- **Hydra-SeaPel (Stress Management/Recovery)**

Introducing a new take on our 'Classic' formulation tablet enhanced with Sea Plant Extracts. Hydra-SeaPel is a non-foaming pelletized soil surfactant powered by stress mitigating Sea Plant Extracts that contains 100% active ingredient. Hydra-SeaPels are engineered for corrective spot treatment of hydrophobic areas and "hot spots" on greens while providing the additional benefits of a concentrated biostimulant to aid in recovery. Designed for applications in industry standard hand-watering pellet applicators, like the Underhill 'Pellet Pro', Hydra-SeaPels are safe to apply on greens, will not crumble during use, will last 20 – 30 minutes and potentially spot treat 6 – 7 average sized golf greens per pellet. Hydra-SeaPels are packaged in cases of 16 x 8 oz pellets.





## Emerald Isle From the Label

HydraSmart/GI Product	Derived From	Emerald Isle Product	Derived From	HydraSmart/GI Advantage
Hydra-Fuse 18-0-6 50% Triazone Urea	Urea, Urea-triazone, potassium phosphite, potassium acetate, Desert Plant Extracts + SAR Elicitors	Coron 14-2-14	Urea, Methelyne diurea, monomethyl urea, potassium carbonate, dipotassium phosphate	Very similar slow release technologies (methelyne urea VS triazone). Potassium Acetate VS Potassium Carbonate: acetates superior absorption; Acetate VS Hydroxide. Hydroxide is very, very dangerous chemical. 3% Phosphite VS dipotassium phosphate - 3% phosphite serves far better purpose than 3% phosphorous + nutrient management laws. SAR elicitors = Plant Health VS nothing. Desert Plant Extracts VS no biostimulants.
Hydra-Minors 1% Mg, .02% B, .01% Cu, 3% Fe, 1% Mn, .02% Mo, 0.5% Zn	Magnesium Glucoheptonate, boric acid, copper citrate Iron Glucoheptonate, Manganese Glucoheptonate, Sodium Molybdate, Zinc Glucoheptonate + Amino Acids	Coron 18-3-6 + 0.5% Fe	Urea, Methylene diurea, methylene ureas, monopotassium phosphate, dipotassium phosphate, potassium carbonate, and iron EDTA	
		Coron Gold 12-3-12	Urea, methelyne diurea, methylene ureas, dipotassium phosphate, potassium hydroxide	
Hydra-Phite Plus 0-0-28	Potassium phosphite, desert plant extracts, oligosaccharides, alginate extracts	Ele-Max 0-0-26	Potassium Hydroxide + phosphoric acid	Potassium acetate = 5X greater absorption. VS Potassium Hydroxide; very dangerous. Desert Plant Extracts VS nothing.
Hydra-Cal 4-0-0 8% Calcium	Calcium acetate, Calcium glucoheptonate, Magnesium acetate, Calcium nitrate, boric acid, desert plant extracts + 1% Plant Available Silica + SAR Elicitors	Ele-Max Calcium 4-0-0 23.8% Calcium	Urea and Calcium Carbonate	3 forms of calcium: acetate, glucoheptonate, nitrate VS carbonate which is basically liquid lime, must be taken up by soil - not through foliage.
Hydra-Kace 0-0-29	Potassium Acetate	K-Leaf 0-0-30	Potassium Hydroxide	Huge difference. Acetate VS Hydroxide. Hydroxide is very dangerous. Acetate absorbs 5X compared to all other chelators.
Hydra-Gro 30-0-0	Urea-Triazone (50% SRN)	Coron 28-0-0	Urea, Methelyne diurea, methylene ureas (70% SRN)	Very similar. 50% SRN VS 70% SRN.
Hydra-Fe Combo 6% Fe, 0.25% Mg, 2% Mn	urea, magnesium citrate ferrous citrate manganese citrate	Ele-Max Turf Nectar AC	Urea and Ferros sulfate	6% Fe + 0.25% Mg + 2% Mn all citrates VS 4% Fe as a sulfate (Salt!)

HydraSmart/GI Product	Derived From	EnP Fertilizer	Derived From HydraSmart/GI Advantage	HydraSmart/GI Advantage
Hydra-Smart 18-0-6 50% Triazone Urea	Urea, Urea-triazone, potassium phosphite, potassium acetate, Desert Plant Extracts + SAR Elicitors	Zeta-Plex 18-3-4	Urea, Ammonium Nitrate, Ammonium Phosphate, Potassium Nitrate, soy protein hydrolysate	Urea Triazone + potassium phosphite + K-acetate + SAR + Desert Plant Extracts VS Ammonium Nitrate and K-Nitrate. UAN (urea-ammonium nitrate) is a low cost agricultural nitrogen source that is prone to volatilization.
Hydra-Minors 1% Mg, .02% B, .01% Cu, 3% Fe, 1% Mn, .02% Mo, 0.5% Zn)	Magnesium Glucoheptonate, boric acid, copper citrate Iron Glucoheptonate, Manganese Glucoheptonate, Sodium Molybdate, Zinc Glucoheptonate + Amino Acids	Zeta-Plex Liquid Trace 1-0-0 0.5% Mg, 2.5% S, 0.5% B, 1.5% Fe, 0.1% Cu, 1% Mn, 0.4% Zn	soy protein hydrolysate, magnesium sulfate, sodium borate, copper sulfate, ferrous sulfate, manganese sulfate, sodium, molybdate, zinc sulfate, 1.5% Seaweed Extracts	Glucoheptonate, Plant available Silica, Desert Plant Extracts VS Sulfates
Hydra-Cal 4-0-0 8% Calcium	Calcium acetate, Calcium glucoheptonate, Magnesium acetate, Calcium nitrate, boric acid, desert plant extracts + 1% Plant Available Silica + SAR Elicitors	Zeta-Plex Calcium 7-0-0 7% Calcium	Calcium Nitrate	3 Forms of Calcium to include acetate and glucoheptonate, plus SAR, Plant available Si, desert plants VS Nitrates, Citrates, or Limestone Nano Cal is a completely insoluble suspension of limestone. This will increase soil pH and is not soluble at all. It's probably pretty alkaline also.
		Cal-Pull	6% Calcium Citrate	
		NanoCal	Calcium Carbonate (25%) Limestone	
Hydra-Kace 0-0-29	Potassium Acetate	Zeta-Plex Potassium 1-0-15	soy protein hydrolysate, urea, potassium thiosulfate, iron EDTA, manganese EDTA	Potassium Acetate VS thiosulfate
Hydra-Mn Combo 4% Mn, 3% Fe, 1% Mg	Ferrous citrate magnesium citrate manganese citrate complexed with citric acid	Zeta-Plex Mn 1% Mg, 3% Mn	soy protein hydrolysate, magnesium nitrate, manganese sulfate	4% Mn VS 3% Mn; 3% Fe VS 0%; citric acid VS nitrates and sulfates
Hydra-Fe Combo 12-0-0 6% Fe, 0.25% Mg, 2% Mn	urea, magnesium citrate ferrous citrate manganese citrate	Bullseye Iron	iron polysaccharide, Protein Hydrolysates	6% Fe + Mg + 2% Mn VS Far less trace elements.
		Zeta-Plex Iron 5-0-0 4% Fe, 1% Mn, 2.5% S	urea, soy protein hydrolysate, ferrous sulfate, manganese sulfate	
		High Drive 12-0-0 1% Fe, 1% S, 0.75% Mg, 0.35% Zn	Urea, Ferrous Sulfate, Manganese Sulfate, Zinc Sulfate, Citric Acid	
Hydra-Boost 3-26-15	16% Phosphite + 10% Phosphate ammonium polyphosphate, potassium phosphite + vegetal extracts	Foliar Relief 3-7-18	14% Phosphite + 7% Phosphate + Small minors package	16% Phosphite + 10% Phosphate VS 14% Phosphite and 7% Phosphate
Hydra-Gro 30-0-0	Urea-Triazone	Persist 30-0-0	Urea-Triazone	Same



HydraSmart/GI Product	Derived From	Floratine Product	Derived From HydraSmart/GI Advantage	HydraSmart/GI Advantage
Hydra-Fuse 18-0-6 50% Triazone Urea	Urea, Urea-triazone, potassium phosphite, potassium acetate, Desert Plant Extracts + SAR Elicitors	Per4Max 13-0-0	urea, magnesium sulfate, ferrous sulfate and manganese sulfate.	Triazone Urea + Potassium Acetate VS thiosulfates + No Nitrates + phosphite + Desert Plant Extracts + SAR Elicitors, Floratine is all fast-release nitrogen which has higher salt index and stimulates excessive canopy growth at the expense of root growth and carbohydrate production
		Power 12-0-12	urea and potassium thiosulfate.	
		Protesyn 6-2-3	urea, ammonium phosphate, and potassium thiosulfate.	
		Power 12-6-0	urea, ammonium phosphate, and ammonium nitrate.	
Hydra-Fe Combo 12-0-0	urea, magnesium citrate, ferrous citrate manganese citrate	Knife Plus 12-0-0	Urea, copper sulfate, ferrous sulfate heptahydrate, manganese sulfate, sodium molybdate and zinc sulfate.	Citrates VS Sulfates
		Largo 12-0-0 Fairway	urea, ferrous sulfate heptahydrate, manganese sulfate, and zinc sulfate.	
		Iron Maid 15-0-0	urea and ferrous sulfate heptahydrate.	
Hydra-Cal 4-0-0	calcium acetate, calcium glucoheptonate, magnesium acetate, calcium nitrate, boric acid, desert plant extracts + 1% Plant Available Silica + SAR Elicitors	50 Cal	5% Calcium glucoheptonate	Glucoheptonate VS Sulfates, Acetates VS Sulfates, Desert Plant Extracts + SAR Elicitors + 1% Silica.
		Astron	calcium gluconate, magnesium sulfate, boric acid, copper sulfate, ferrous sulfate and zinc sulfate.	
Hydra-Kace 0-0-29	Potassium Acetate	Power 0-0-22	potassium thiosulfate.	Acetate VS Thiosulfate Potassium thiosulfate can cause tip burn / bronzing and has 1/5 the foliar uptake of potassium acetate.
		Power 4-4-16	urea, ammonium phosphate, and potassium thiosulfate.	
Hydra-Mn Combo 4% Mn, 3% Fe, 1% Mg	Ferrous citrate magnesium citrate manganese citrate complexed with citric acid	Phlex-Man 5% Mn	manganese sulfate sequestered with citric acid.	Better balance of Mn and Mg. Addition of Iron. Complexed citric acid.
Hydra-Minors	Magnesium Glucoheptonate, boric acid, copper citrate Iron Glucoheptonate, Manganese Glucoheptonate, Sodium Molybdate, Zinc Glucoheptonate + Amino Acids	Phlex-Mag 5% Mg	magnesium sulfate sequestered with citric acid.	Glucoheptonates VS Sulfates. Amino Acids VS nothing. Glucoheptonate are really "dual chelated" because they have both glucoheptonate as well as citric acid. This enhances uptake and gives flexibility for soil as well as foliar uptake
		Prolific - RC (2% Ca, 0.5% Mg, 0.06% B, 0.15% Cu, 1.3% Fe, 0.335% Zn)	calcium gluconate, magnesium sulfate, boric acid, copper sulfate, ferrous sulfate, and zinc sulfate.	
Hydra-Gro 30-0-0	Urea-Triazone	Power 24-0-0 + Mo	Urea ammonium nitrate and sodium molybdate.	Urea-triazone VS Ammonium Nitrate UAN (urea-ammonium nitrate) is a low cost agricultural nitrogen source that is prone to volatilization. Also, it is 100% fast release so you don't get lasting results, the salt index is much higher, and it stimulates unwanted canopy growth at the expense of root growth and carbohydrate production
		Power 23-0-0 + Mo	urea ammonium nitrate and sodium molybdate.	
Hydra-Phite Plus 0-0-28	potassium phosphite, desert plant extracts, oligosaccharides, alginate extracts + Desert Plant Extracts + SAR Elicitors	PK Phite 0-0-28	potassium phosphite.	Potassium Phosphite + desert plant extracts + SAR elicitors VS potassium phosphite

HydraSmart/GI Product	Derived From	Foliar Pak Product	Derived From	HydraSmart/GI Advantage
Hydra-Fuse 18-0-6 50% Triazone Urea	Urea, Urea-triazone, potassium phosphite, potassium acetate, High concentration of Desert Plant Extracts biostimulants + SAR Elicitors	Foliar Pak 14-2-14	Urea, Urea Triazone, Potassium Nitrate, Iron EDTA, Manganese EDTA, Potassium Phosphate	HydraSmart: 3% Phosphite: Drives roots; SAR Elicitors: stress management; Improved Desert Plant Extracts Foliar Pak: Potassium Nitrate - Salt, EDTA Micros - No foliar absorption, molecule too big.
		Foliar Pak 18-3-4	Urea, Ammonium Nitrate, Potassium Nitrate	Nitrates contain salt. They hang around in soil. Apply a GA (Primo) and you receive tremendous Nitrate bursts. Plant has to use a lot of energy after Nitrates are applied. HS contains Acetate, Urea Triazone, Biostimulant, SAR Elicitors, 3% Phosphite
Hydra-Green 25-0-0 + Kelp	Urea; Urea-triazone; NBPT, iron glucoheptonate, Kelp Extracts	Foliar Pak 22-0-4	soy protein hydrolysate, urea-triazone solution, low biuret urea, potassium phosphate, potassium nitrate, iron EDTA, manganese EDTA	HydraSmart: Glucoheptonate minors + Kelp Extracts Foliar Pak: More Nitrates and More EDTA (EDTA molecule too big to be foliar absorbed, can only be taken up by roots.)
Hydra-Kace 0-0-29	Potassium Acetate	Foliar Pak 1-0-15	15% Potassium Thiosulfate	1/2 the potassium + Thiosulfate has a very large salt load. Put's plant under tremendous stress. Potassium Acetate is 5X more absorbable by plant than Thiosulfate (Texas A&M Research) Contains EDTA micros. EDTA are not foliar, only taken up through the soil.
Hydra-Gro 30-0-0	Urea-Triazone	Foliar Pak 30-0-0	Urea-Triazone	Same
Hydra-Phite 40 2-0-16	Urea, potassium phosphite + Nutri-Charge Nutrient Efficiency Polymer	45 Karat 10-0-0	Urea + L-argininium phosphite	Hydra-Phite 40: 47% Phos Acid. Contains Nutri-Charge Nutrient Efficiency Polymer. Hydra- Nutrient Availability Polymer (Nutri-Charge) is a negatively charged polymer that sequesters cations such as calcium and others, allowing readily availability + far better mixing capabilities.
Hydra-Cal 4-0-0 8% Calcium	Calcium acetate, Calcium glucoheptonate, Magnesium acetate, Calcium nitrate, boric acid, 10% Kelp Extracts + 1% Plant Available Silica + SAR Elicitors	Foliar Pak Calcium	Calcium Nitrate - 7%	HydraSmart Multiple sources of calcium for root and foliar uptake. 2X Kelp Extracts. Plant available Silica. SAR Elicitors for stress defense. Foliar Pak: More Nitrates!!!
Hydra-Fe Combo 12-0-0 6% Fe, 0.25% Mg, 2% Mn	Urea, magnesium citrate; ferrous citrate manganese citrate	Foliar Pak Full Throttle 12-0-0	Ferrous sulfate + Manganese Sulfate + Zinc Sulfate	HydraSmart: Citrates are more absorbable by stomata than sulfates. 2% Mn VS 0.75% Mn. 6% Fe VS 1% Fe. 0.25% Mg. Combination of Mg+Mn+Iron give superior color.
		Foliar Pak Iron 5-0-0	urea, soy protein hydrolysate, ferrous sulfate, manganese sulfate	HS: More iron. More Mn. More Mg. All Citrate based. More foliar absorption. Proven.
Hydra-Fense 12% Silica	Plant Available Silicon dioxide + SAR Elicitors	CSiL 25%	Silicon Dioxide	Same Silicon Dioxide. Both seem to be great products. HydraSmart contains SAR Elicitors - More plant defense activators. CSiL contains 2X silica. Rates can fix that.
Hydra-Minors	Magnesium Glucoheptonate, boric acid, copper citrate Iron Glucoheptonate, Manganese Glucoheptonate, Sodium Molybdate, Zinc Glucoheptonate + Amino Acids	Foundation 40 4-0-8	Potassium Acetate, Soy Protein Hydrolysate	HydraSmart: Glucoheptonates. Contains highest quality biostimulant; plant available Silica, SAR Elicitors. Foundation 40: Where is the N coming from? Not on label? Contains K-Acetate - You already get that from a pure K source.
Hydra-Kelp 4-0-0	Urea, Magnesium Acetate; Iron Citrate; Manganese Citrate, Fulvic Acids	Carbosential Fe 0.30-0-0	soy protein hydrolysates, iron polysaccharide	HydraSmart: ascophyllum nodosum kelp. Most superior form of Kelp on market + quality micros package. Foliar Pak: Sugars + Iron + Amino acids.
Ammonium Sulfate 21-0-0	21% Ammonium Sulfate	AS Fusion	soy protein hydrolysate, ammonium sulfate, manganese sulfate	AS Fusion = Ammonium Sulfate + Manganese. You can melt down Ammonium sulfate far less expensively.
Hydra-Liberate	15% Kelp Extracts, 15% Humic Acid + Phosphorus Liberating Microbes	BioDrive	4% Humic Acid; derived from Leonardite Ore	Simple: 20% Humic Acid + Fulvic Acid VS 4% Humic Acid
Hydra-Kace 0-0-29	29% Potassium Acetate	Aramament K 0-0-24	24% Potassium Acetate	Same Chemistry. 29% VS 24%
Hydra-Minors	Magnesium Glucoheptonate, boric acid, copper citrate Iron Glucoheptonate, Manganese Glucoheptonate, Sodium Molybdate, Zinc Glucoheptonate + Amino Acids	Amperage 5-0-0	soy protein hydrolysate, urea, ferrous sulfate, manganese sulfate, zinc sulfate, molasses	HydraSmart: Glucoheptonates. Contains highest quality biostimulant; plant available Silica, SAR Elicitors.
Hydra-Kelp 4-0-0	Urea, Magnesium Acetate; Iron Citrate; Manganese Citrate, Fulvic Acids			HydraSmart: ascophyllum nodosum kelp. Most superior form of Kelp on market + quality micros package. Amperage: Sulfate micros + Amino Acids.



## Grigg Brothers

HydraSmart/ GI Product	Derived From	Grigg Product	Derived From	HydraSmart/GI Advantage
Hydra-Smart 18-0-6 50% Triazone Urea	Urea, Urea-triazone, potassium phosphite, potassium acetate, Desert Plant Extracts + SAR Elicitors	Gary's Green 18-3-4 + Iron	Urea, Ammonium Phosphate, Potassium Phosphate, Potassium Nitrate, Magnesium Sulfate, Iron, Manganese, Zinc glucoheptonates	Urea-Triazone VS Urea; Potassium Acetate VS Potassium Sulfate or Potassium Nitrate. Glucoheptonate VS Sulfates. SAR Elicitors VS nothing comparable.
Hydra-Minors 1% Mg, .02% B, .01% Cu, 3% Fe, 1% Mn, .02% Mo, 0.5% Zn)	Magnesium Glucoheptonate, boric acid, copper citrate Iron Glucoheptonate, Manganese Glucoheptonate, Sodium Molybdate, Zinc Glucoheptonate + Amino Acids	Gary's Green Ultra 13-2-3 + Iron	Urea, Ammonium Phosphate, Di-Potassium Phosphate, Potassium Nitrate, Magnesium, Iron, Copper, Manganese, Zinc Sulfate + Ascophyllum Nodosum	
		Suprema 12- 0-12	Urea, Potassium Nitrate, Potassium Carbonate, Potassium Sulfate, Iron, Zinc and Manganese Glucoheptonates.	
Hydra-Minors 1% Mg, .02% B, .01% Cu, 3% Fe, 1% Mn, .02% Mo, 0.5% Zn)	Magnesium Glucoheptonate, boric acid, copper citrate Iron Glucoheptonate, Manganese Glucoheptonate, Sodium Molybdate, Zinc Glucoheptonate + Amino Acids	Low N Plus 0.05% B, .05% Co, 0.05% Cu, 0.1% Fe, 0.1% Mn, 0.05% Mo, 0.1% Zn	Ammonium Phosphate, Potassium Phosphate, Potassium Nitrate, Iron, Copper, Manganese, Zinc Glucoheptonates, Boric Acid, Cobalt and Molybdenum Sulphates.	Much higher load of Micronutrients. Glucoheptonate + Amino Acids VS Sulfates, Nitrates
Hydra-Cal 4-0-0 8% Calcium	Calcium acetate, Calcium glucoheptonate, Magnesium acetate, Calcium nitrate, boric acid, desert plant extracts + 1% Plant Available Silica + SAR Elicitors	Sili-Kal B 8-0-4 10% Calcium	Calcium Nitrate, Urea, Potassium Nitrate, Boric Acid, Silicon	Calcium acetate and glucoheptonate VS Calcium Nitrate and Potassium Nitrate. Desert Plant Extracts + SAR Elicitors VS Nothing. Plant Available Silica VS Non-Plant food Silicon. Sili-Kal B contains virtually ZERO silica, they only claim 0.01% on the label.
Hydra-Kace 0-0-29	Potassium Acetate	A-O-K 1-0-24	Potassium organic acids (Sulfate)	Potassium Acetate VS Potassium Sulfate
Hydra-Fense 12% Si	Plant Available Silicon dioxide + SAR Elicitors	Tuff Turf 1-0- 14 Si	Urea, Ammonium Nitrate, Potassium Hydroxide, Iron, Magnesium Glucoheptonate + Non-Plant Food Potassium Silicate	Plant available Silica + SAR Elicitors VS Non Plant Food Silicate and Potassium Hydroxide Only contains 0.05% silica and the potassium hydroxide in there will make this an aggressively alkaline product
Hydra-Fe Combo 12-0-0 6% Fe, 0.25% Mg, 2% Mn	urea, magnesium citrate ferrous citrate manganese citrate	Amino Iron = 12-0-0 5% Fe, 0.5% Mg, 0.5% Zn	Urea, ferrous amino acid complex, Manganese amino acid complex, and Zinc amino acid complex.	Higher Micro Content: 6% Fe VS 5% Fe; 2.0% Mn VS 0% Mn
Hydra-Boost 3-10-15	16% Phosphite + 10% Phosphate ammonium polyphosphate, potassium phosphite + vegetal extracts	P-K Plus 3-7- 15	14% Phosphite + 7% Phosphate Urea, Ammonium Sulfate, Ammonium Phosphate, Potassium Phosphate, Boric acid, Cobalt Sulfate, Molybdenum Sulfate	16% Phosphite + 10% Phosphate VS 14% Phosphite + 7% Phosphate
Hydra-Gro 30-0-0	Urea-Triazone	Burly Green 18-2-3	Urea, Ammonium Sulphate, Ammonium Phosphate, Triazone, Dipotassium Phosphate, Phosphoric Acid.	
Hydra-Base 18-0-6	Urea, Urea-Triazone, Potassium Acetate			



HydraSmart/GI Product	Derived From	Harrell's Product	Derived From	HydraSmart/GI Advantage
Hydra-Smart 18-0-6 50% Triazone Urea	Urea, Urea-triazone, potassium phosphite, potassium acetate, Desert Plant Extracts + SAR Elicitors	12-0-6 w/ UMAXX	Urea, Potassium Citrate, Iron Citrate, Manganese Citrate + 17% Kelp Extract from Ascophyllum Nodosum	Urea-triazone, potassium acetate, SAR elicitors, VS Urea and Potassium Citrate. Not a true SRN source... this is just urea with a urease inhibitor added. These inhibitors only have benefit in reducing volatilization of urea in dry and / or alkaline soils. They still have higher salt index and they still stimulate canopy growth
Hydra-Minors (1% Mg, .02% B, .01% Cu, 3% Fe, 1% Mn, .02% Mo, 0.5% Zn)	Magnesium Glucoheptonate, boric acid, copper citrate Iron Glucoheptonate, Manganese Glucoheptonate, Sodium Molybdate, Zinc Glucoheptonate + Amino Acids	Harrells Maxx Minors (1% Mg, 3.5% S, 0.02% B, 4% Fe, 1% Mn, 0.60% Zn)	Magnesium Sulfate, Sodium Borate, Copper Glucoheptonate, Iron Glucoheptonate, Manganese Glucoheptonate, Zinc Glucoheptonate, and Sodium Molybdate	Mg glucoheptonate VS Mg Sulfate. Amino Acids VS None
Hydra-Cal 4-0-0 8% Calcium	Calcium acetate, Calcium glucoheptonate, Magnesium acetate, Calcium nitrate, boric acid, desert plant extracts + 1% Plant Available Silica + SAR Elicitors	Caclium 6-0-0 8.25%	Calcium Nitrate, Calcium Glucoheptonate	3 forms of Calcium VS 2 forms. Plant Available Silica, SAR Elicitors and Desert Plant Extracts
Hydra-Kace 0-0-29	Potassium Acetate	Stress Relefe 0-0-25	Potassium Acetate	29% VS 25%. Same formulation
Hydra-Mn Combo 4% Mn 3% Fe, 1% Mg	Ferrous citrate magnesium citrate manganese citrate complexed with citric acid	Manganese 5% Magnesium 4%	Manganese glucoheptonate Magnesium glucoheptonate	1 Product VS 2. Synergy of Mn and Mg + Iron VS 1 linear product
Hydra-Fe Combo 12-0-0 6% Fe, 0.25% Mg, 2% Mn	urea, magnesium citrate ferrous citrate manganese citrate	Long Iron 15-0-0 with UMAXX	Urea and Iron Glucoheptonate	Combination of Mg and Mn catalyze iron to work more efficiently. Harrell's uses glucohepotnate + Umaxx (positive)



## Helena From the Label

HydraSmart/ GI Product	Derived From	Helena Product	Derived From	HydraSmart/GI Advantage
Hydra-Fuse 18-0-6 50% Triazone Urea	Urea, Urea-triazone, potassium phosphite, potassium acetate, Desert Plant Extracts + SAR Elicitors	Coron 14-2-14	Urea, Methelyne diurea, monomethyl urea, potassium carbonate, dipotassium phosphate	Very similar slow release technologies (methelyne urea VS triazone). Potassium Acetate VS Potassium Carbonate: acetates superior absorption; Acetate VS Hydroxide. Hydroxide is very, very dangerous chemical. 3% Phosphite VS dipotassium phosphate - 3% phosphite serves far better purpose than 3% phosphorous + nutrient management laws. SAR elicitors = Plant Health VS nothing. Desert Plant Extracts VS no biostimulants.
Hydra-Minors 1% Mg, .02% B, .01% Cu, 3% Fe, 1% Mn, .02% Mo, 0.5% Zn)	Magnesium Glucoheptonate, boric acid, copper citrate Iron Glucoheptonate, Manganese Glucoheptonate, Sodium Molybdate, Zinc Glucoheptonate + Amino Acids	Coron 18-3-6 + 0.5% Fe	Urea, Methylene diurea, methylene ureas, monopotassium phosphate, dipotassium phosphate, potassium carbonate, and iron EDTA	
		Coron Gold 12-3-12	Urea, methelyne diurea, methylene ureas, dipotassium phosphate, potassium hydroxide	
Hydra-Phite Plus 0-0-28	Potassium phosphite, desert plant extracts, oligosaccharides, alginate extracts	Ele-Max 0-0-26	Potassium Hydroxide + phosphoric acid	Potassium acetate = 5X greater absorption. VS Potassium Hydroxide; very dangerous. Desert Plant Extracts VS nothing.
Hydra-Cal 4-0-0 8% Calcium	Calcium acetate, Calcium glucoheptonate, Magnesium acetate, Calcium nitrate, boric acid, desert plant extracts + 1% Plant Available Silica + SAR Elicitors	Ele-Max Calcum 4-0-0 23.8% Calcium	Urea and Calcium Carbonate	3 forms of calcium: acetate, glucoheptonate, nitrate VS carbonate which is basically liquid lime, must be taken up by soil - not through foliage.
Hydra-Kace 0-0-29	Potassium Acetate	K-Leaf 0-0-30	Potassium Hydroxide	Huge difference. Acetate VS Hydroxide. Hydroxide is very dangerous. Acetate absorbs 5X compared to all other chelators.
Hydra-Gro 30-0-0	Urea-Triazone (50% SRN)	Coron 28-0-0	Urea, Methelyne diurea, methylene ureas (70% SRN)	Very similar. 50% SRN VS 70% SRN.
Hydra-Fe Combo 6% Fe, 0.25% Mg, 2% Mn	urea, magnesium citrate ferrous citrate manganese citrate	Ele-Max Turf Nectar AC	Urea and Ferros sulfate	6% Fe + 0.25% Mg + 2% Mn all citrates VS 4% Fe as a sulfate (Salt!)

HydraSmart/ GI Product	Derived From	Plant Food Product	Derived From	HydraSmart/GI Advantage
Hydra-Smart 18-0-6 50% Triazone Urea	Urea, Urea-triazone, potassium phosphite, potassium acetate, Desert Plant Extracts + SAR Elicitors	Green-T 18-3-3	Ammonium Nitrate, Urea, Tech Grade Phosphoric Acid, and Potassium Hydroxide	Urea Triazone VS Nitrates. Potassium Acetate VS Potassium Hydroxide. SAR Elicitors VS nothing. Desert Plant Extracts VS nothing. Glucoheptonate VS thiosulfate, EDTA, potassium hydroxide.
Hydra-Minors 1% Mg, .02% B, .01% Cu, 3% Fe, 1% Mn, .02% Mo, 0.5% Zn)	Magnesium Glucoheptonate, boric acid, copper citrate Iron Glucoheptonate, Manganese Glucoheptonate, Sodium Molybdate, Zinc Glucoheptonate + Amino Acids	Green-T Super MK 18-3-4	Ammonium Nitrate, Urea, Tech Grade Phosphoric Acid, Potassium Carbonate, Potassium Hydroxide, Copper, Iron, Manganese, and Zinc EDTA Chelate + Amino Acids, Carbohydrates	
		Green-T 18-3-6 50% SRN	Urea, Triazone, Tech Grade Phosphoric Acid, Potassium Hydroxide, Potassium Thiosulfate, Boric Acid, Copper, Iron, Zinc EDTA Chelate	
Hydra-Phite Plus 0-0-28	Potassium phosphite, desert plant extracts, oligosaccharides, alginate extracts	PolyPhosphite 0-0-27	Phosphorous Acid and Potassium Hydroxide	Potassium Phosphite VS Potassium Hydroxide. Desert Plant Extracts VS Nothing
Hydra-Cal 4-0-0 8% Calcium	Calcium acetate, Calcium glucoheptonate, Magnesium acetate, Calcium nitrate, boric acid, desert plant extracts + 1% Plant Available Silica + SAR Elicitors	Sugar Cal 10% Calcium	Calcium Acetate Mannitol Chelate	Very Similar Calcium loads. Desert Plant Extracts + 1% Plant Available Silica + SAR Elicitors VS Nothing. This product is not being truthful in their labels; you cannot have a 10% calcium derived from acetate; this is likely a blend of acetate and nitrate or acetate and chloride.
Hydra-Kace 0-0-29	Potassium Acetate	Green-T Infiltrate-K 0-0-29	Potassium Acetate	Exact Same
Hydra-Minors 1% Mg, .02% B, .01% Cu, 3% Fe, 1% Mn, .02% Mo, 0.5% Zn)	Magnesium Glucoheptonate, boric acid, copper citrate Iron Glucoheptonate, Manganese Glucoheptonate, Sodium Molybdate, Zinc Glucoheptonate + Amino Acids	Micro-Mix 1.5% Mg, 4% S, .04% B, 2.5% Fe, 0.1% Mn, 0.1% Zn	Urea, Magnesium, Sulfur, Sodium Borate, Iron, Manganese, and Zinc Glucoheptonate.	Both glucoheptonate. Hydra-Minors = more trace elements and higher load. Amino Acids VS nothing.
Hydra-Gro 30-0-0	Urea-Triazone	Green-T 30-0-0	Urea and Triazone	Exact Same.
Hydra-Fe Combo 6% Fe, 0.25% Mg, 2% Mn	urea, magnesium citrate ferrous citrate manganese citrate	Green-T 12 Iron	Urea, Mg Glucoheptonate Sulfur, Fe Glucoheptonate, Mn Glucoheptonate	Far Less trace element load, yet they do use glucoheptonate.
		Green-T 6 Iron	Urea, Ferrous Sulfate Heptahydrate, Manganese Sulfate	Far Less Trace element load.



## Redox

HydraSmart/GI Product	Derived From	Redox Product	Derived From	HydraSmart/GI Advantage
Backbone 0-0-6	Potassium Citrate, Magnesium Oxide & Organic Acid	C-85	Phosphorous acid, Potassium Hydroxide, Humic Acid from Lenoardite	RLS, Magnesium, Organic Acids, Carbon based K
Component CaB	Calcium Carbonate, Boric Acid & Corn Steep Liquor	Turf Rx Ca	20% Calcium Carbonate	Boron added, organic acids added/chelated,
Hydra-Si	12% Silicon Dioxide	Turf Rx Si	10% Calcium Silicate, 22% Silicon Dioxide	Redox claims 10% more Silicon Dioxide. Why is the Ca Silicate needed for a Si product? Where is the Si really coming from?
Rukus 0-6-12	MKP, Potassium Citrate, Magnesium Oxide, Disodium Octaborate Tetrahydrate, Ferrous Sulfate, Manganese Sulfate & Organic Acid	Turf Rx Green 1-5-5	Urea, Phosphoric Acid, Potassium Hydroxide, Boric Acid, Copper Sulfate, Ferrous Sulfate, Manganese Sulfate, Zinc Sulfate	Higher analysis, RLS, Mg, higher Micros, B
Hydra-Mn Combo	Ferrous citrate magnesium citrate manganese citrate complexed with citric acid	Turf Rx Mg	Magnesium Hydroxide	Mg hydroxide contains salt. Has very low solubility in water, 'reduced foliar uptake.' Mn Combo contains complexed citric acids for foliar absorption
Hydra-Minors	Magnesium Glucoheptonate, boric acid, copper citrate Iron Glucoheptonate, Manganese Glucoheptonate, Sodium Molybdate, Zinc Glucoheptonate + Amino Acids	Turf Rx Micro	Boric Acid, Copper Sulfate, Ferrous Sulfate, Manganese Sulfate, Zinc Sulfate	Sulfates VS glucoheptonates. Hydra-Minors contain SAR Elicitors + highest quality biostimulants. Plant health. Plant safety.
CalciPath	Calcium Carbonate & Non-Ionic Surfactants	Turf Rx Penecal	Calcium Carbonate + Alcohols (Surfactant)	Similar product, lower cost, different penetrant, organic acids
NutriPath	Humic Acid, Carboxylic Acid & Non-Ionic Surfactants	Turf Rx SaltEx	Alcohols (6% Penetrant Surfactant)	RLS, Carboxylic Acids, improved surfactant
Core 1-5-4	Soy Protein Hydrosalate, MKP, Potassium Citrate, Magnesium Oxide, Disodium Octaborate Tetrahydrate, Ferrous Citrate, Manganese Citrate & Organic Acid	Turf Rx Supreme 0-5-4	Phosphoric acid, Potassium Hydroxide, Boric Acid, Copper Sulfate, Ferrous Sulfate, Manganese Sulfate, Sodium Molybdate, Zinc Sulfate	Improved micro package, Mg, Boron, RLS, organic acids, protein
Ruckus 0-6-12	MKP, Potassium Citrate, Magnesium Oxide, Disodium Octaborate Tetrahydrate, Ferrous Sulfate, Manganese Sulfate & Organic Acid	Turf Rx Fairway 1-7-12	Ammonium Nitrate, Urea, Phosphorous Acid, Potassium Hydroxide	RLS, improved micro, Mag, GenTec suspension tech, Boron,



HydraSmart/ GI Product	Derived From	Turf Fuel Product	Derived From	HydraSmart/GI Advantage
Hydra-Fuse 18-0-6 50% Triazone Urea	Urea, Urea-triazone, potassium phosphite, potassium acetate, High concentration of Desert Plant Extracts biostimulants + SAR Elicitors	Base N18: 18-3-6	Urea, dipotassium phosphate (P), potassium acetate, Yucca Surfactant	3% Phosphite: Drives roots; SAR Elicitors: stress management; Improved Desert Plant Extracts
Hydra-Green 25-0-0 + Kelp	Urea; Urea-triazone; NBPT, iron glucoheptonate, Kelp Extracts	Base N25: 25-0-0	Urea; Urea Triazone 3% Yucca Surfactant	Glucoheptonate minors + Kelp Extracts
Hydra-Kace 0-0-29	Potassium Acetate	Base K26: 0-0-26	Potassium Acetate	Simply 3% more Potassium
Hydra-Boost 3-10-15	Urea, Ammonium Polyphosphate; potassium phosphite (16% Phosphoric Acid)	14-20-0 Quik Green	Urea, phosphoric acid, ammonium polyphosphate.	15% Potassium: Cell-wall strength; Necessary formulation of PO <sub>4</sub> and PO <sub>3</sub> .
Hydra-Cal 4-0-0 8% Calcium	Calcium acetate, Calcium glucoheptonate, Magnesium acetate, Calcium nitrate, boric acid, 10% Kelp Extracts + 1% Plant Available Silica + SAR Elicitors	Respo-Fuel	Calcium Gluconate + 5% Kelp Extracts	Multiple sources of calcium for root and foliar uptake. 2X Kelp Extracts. Plant available Silica. SAR Elicitors for stress defense.
Hydra-Fuse 18-0-6 50% Triazone Urea	Urea, Urea-triazone, potassium phosphite, potassium acetate, High concentration of Desert Plant Extracts biostimulants + SAR Elicitors	Element 6: 13-0-3	Urea; Ammonium Nitrate; Molasses	Nitrates put stress on plant. Plant has to use more energy. "Nitrate bursts." Fuse contains: Phosphite; DPE; SAR Elicitors; K-acetate.
Hydra-Base 18-0-6	Urea; potassium acetate	Element 6: 13-0-3	Urea; Ammonium Nitrate; Molasses	No Nitrates. More N. Yet; no Molasses. Can get molasses from many other HydraSmart solutions.
Hydra-Fe Combo 6% Fe, 0.25% Mg, 2% Mn	urea, magnesium citrate; ferrous citrate manganese citrate	Photo Fuel 12-0-0	urea, ferrous sulfate, manganese sulfate, copper sulfate, chelated with citric acid. Urea; Ammonium Nitrate; Molasses	No Nitrates in Hydra-Fe. Nitrates cause huge flushes. Plant must use more energy; puts plant under stress. Same Chelation process (no advantage either way). They use nitrate to get quick color response. Hydra-Fe has 2% more iron + Magnesium for best color response.
Hydra-Phite 40 2-0-16	urea, potassium phosphite + Nutri-Charge Nutrient Efficiency Polymer	Greens Phite 2-0-16	urea, potassium phosphite	Same Product, except Hydra-Phite 40 contains Nutri-Charge Nutrient Efficiency Polymer. Hydra- Nutrient Availability Polymer (Nutri-Charge) is a negatively charged polymer that sequesters cations such as calcium and others; allowing readily availability + far better mixing capabilities.
Hydra-Minors	Magnesium Gluconate, boric acid, copper citrate Iron Gluconate, Manganese Gluconate, Sodium Molybdate, Zinc Gluconate + Amino Acids	Minors Fuel Kelp	ferrous sulfate, magnesium sulfate, manganese sulfate, zinc sulfate, boric acid, sodium molybdate + Kelp Extracts	Gluconates VS Sulfates = No Salts VS Salts. Both contain quality biostimulant. Hydra-Minors contains plant available Silica, Minors Fuel does not.
Hydra-Mineral-Miner 21-0-0	urea, blackstrap molasses, polyamino- carboxylate + Nutri-Charge Nutrient Efficiency Polymer (100% Slow Release)	Carbon 21: 0-0-3	molasses + 3% Yucca	3 different solutions that are far more complex than straight molasses and Yucca Extracts. In short, goal is to drive carbon into soil. Biostimulants, Fulvic acids, amino acids, and molasses all drive carbon into plant and soil.
Hydra-Kelp 4-0-0	Urea, Magnesium Acetate; Iron Citrate; Manganese Citrate, Fulvic Acids			

## NUTRIENT CALCULATOR

Product Name	High Quality Bio-stimulant	Plant Defense Elicitors	N	P	PO3	K	Ca	Mg	Fe	Mn	Zn	Cu	B	Si	Mo
Hydra-Base 18-0-6			18.00			6.00									
Hydra-Boost 3-10-15		X	3.00	10.00	16.00	15.00									
Hydra-Cal 4-0-0	X	X	4.00				6.00	1.00					0.02	1.00	
Hydra-Carb	X		1.00			3.00	0.70		0.25	0.10					
Hydra-Enrich 20	X														
Hydra-Fe 12-0-0			12.00					0.25	6.00	2.00					
Hydra-5Fe									5.00						
Hydra-Fuse 18-0-6	X	X	18.00		3.00	6.00									
Hydra-Green 25-0-0	X		25.00						0.04						
Hydra-Gro 30-0-0			30.00												
Hydra-Kace 0-0-29						29.00									
Hydra-Kelp 4-0-0	X		4.00					1.00	2.00	1.00					
Hydra-Kelp Plus	X														
Hydra-Minors	X								3.00	1.00	0.5	0.1	0.2		0.02
Hydra-Mn Combo								1.00	3.00	4.00					
Hydra-Phite 0-0-31		X			30.00	31.00									
Hydra-Phite Plus 0-0-28	X	X			27.00	28.00									
Hydra-Si 12% Si		X												12.00	
Hydra-Thrive	X	X	1.00			1.00			0.25	0.05	0.13		0.02		
Hydra-Trio 30-0-0	X		30.00												
Mineral-Miner 21-0-0			21.00												

# HydraSmart

	Hydra-Base 18-0-6	Hydra-Boost 3-26-15	Hydra-Cal	Hydra-Carb	Hydra-Enrich 20	Hydra-Fe 12-0-0	Hydra-5Fe	Hydra-Fuse 18-3-6	Hydra-Green 25-0-0 Kelp	Hydra-Gro 30-0-0	Hydra-Kace 0-0-29	Hydra-Kelp 4-0-0	Hydra-Kelp Plus	Hydra-Minors	Hydra-Mn Combo	Hydra-Si	Hydra-Thrive	Hydra-Trio	HydraSmart Phosphites (all)	Mineral Miner
Hydra-Base 18-0-6		G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
Hydra-Boost 3-26-15	G		P	G	G	P	G	G	G	G	P	G	P	P	G	G	G	G	G	G
Hydra-Cal	G	P		G	G	C	G	G	G	G	G	G	C	G	G	G	G	P	C	
Hydra-Carb	G	P	G		G	G	G	G	G	G	G	G	G	G	G	G	G	C	G	
Hydra-Enrich 20	G	G	G	G		G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
Hydra-Fe 12-0-0	G	P	C	G	G		G	G	G	C	G	G	G	G	G	G	G	C	G	
Hydra-5Fe	G	P	C	G	G	G		G	G	C	G	G	G	G	G	G	G	C	G	
Hydra-Fuse 18-3-6	G	G	G	G	G	G		G	G	G	G	G	G	G	G	G	G	G	G	G
Hydra-Green 25-0-0 + Kelp	G	P	G	G	G	G	G		G	G	G	G	G	G	G	G	G	C	G	
Hydra-Gro 30-0-0	G	G	G	G	G	G	G	G		G	G	G	G	G	G	G	G	G	G	G
Hydra-Kace 0-0-29	G	G	G	G	G	C	G	G	G		G	G	C	C	G	G	G	G	G	G
Hydra-Kelp 4-0-0	G	P	G	G	G	G	G	G	G	G		G	G	G	G	G	G	C	G	
Hydra-Kelp Plus	G	P	G	G	G	G	G	G	G	G	G		G	G	G	G	G	C	G	
Hydra-Minors	G	P	C	G	G	G	G	G	G	C	G	G		G	G	G	G	C	G	
Hydra-Mn Combo	G	P	G	G	G	G	G	G	G	C	G	G	G		G	G	G	C	G	
Hydra-Si	G	G	G	G	G	G	G	G	G	G	G	G	G	G		G	G	G	G	G
Hydra-Thrive	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G		G	G	G	G
Hydra-Trio	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G		G	G	G
HydraSmart Phosphites (All)	G	G	P	G	G	C	G	G	G	G	C	G	C	C	G	G	G		G	
Mineral Miner	G	G	C	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G		

## COMPATIBILITY CODES:

G: Good compatibility; problems are not expected at normal rates under normal conditions

C: Use caution; incompatibilities may exist at certain concentrations or under certain pH conditions

P: Poor compatibility under some conditions. May be stable in pH buffered tank

Note: product compatibility chart is a general guideline for normal conditions. Always conduct a jar test to confirm compatibility of new mixtures before adding them to a spray tank.