

FOOD GRADE RAW MATERIALS
| L-AMINO ACIDS | NITROGEN
POTASSIUM | PHOSPHORUS
CALCIUM | MAGNESIUM
| MANGANESE | HUMIC ACID |
POLYSACHARRIDES | FULVIC
ACID | MYCORRHIZAE | CITRIC
ACID | MOLASSES | SEAWEED
POLYAMINO ACIDS | IRON
BENEFICIAL MICROBES



Foliar•Pak[®]

MORE THAN NUTRIENTS
**WE PROVIDE
SOLUTIONS.**

2017 Product Catalog

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Foundation Forty

4-0-8 Amino Acid Concentrate



NEW FORMULA - LOWER RATES

FOUNDATION FORTY

Foliar-Pak Foundation Forty is a highly concentrated, engineered blend of specific amino acids for increased nitrogen fixation, chlorophyll production, energy production, and the production of anti-stress compounds.

Better Stress Tolerance

Foliar-Pak Foundation Forty provides the amino acid inputs necessary to increase production of key anti-stress osmolytes such as gamma-aminobutyric acid and proline, which are loaded into the vacuole of the plant. With an increase in nitrogen fixation and chlorophyll production, the plant can utilize nitrogen more efficiently.

Improved Uptake and Utilization

Foliar-Pak Foundation Forty facilitates greater uptake of nutrients and chemicals through two ways: by directly complexing and moving them through the vacuole and by loading up metabolites in the stomatal guard cells, keeping the stomatal pores open and increasing the uptake efficiency of foliar applied products. This increases the efficiency of many tank-mix chemistries.

GUARANTEED ANALYSIS

Total Nitrogen (N).....	4.0%
4.0% Water Soluble Organic Nitrogen	
Soluble Potash (K ₂ O)	8.0%

Derived from: soy protein hydrolysate, potassium acetate

NON PLANT FOOD INGREDIENTS

Free Amino Acids.....	40.0%
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PRODUCT INFORMATION:

Weight per Gallon: 11.2 lbs
pH: 9.2

GENERAL USE GUIDE

For foliar applications delay irrigation or mowing for 12 to 24 hours.

<p>Golf Course Greens and Tees</p>	<p>Maintenance Applications: Apply 0.5 to 1.5 fl oz per 1000 sq ft every 7 to 14 days.</p> <p>Turf Recovery or Intense Stress: Apply 1.5 to 3.0 fl oz per 1000 sq ft every 7 to 14 days until turf sufficiently recovers.</p>
<p>Fairways Sports Turf</p>	<p>Apply 0.5 to 1.5 fl oz per 1000 sq ft. Tank mix with other fertilizers and pesticides for increased absorption and better turf health. Repeat applications every 14 to 28 days.</p>
<p>Professional Lawn Care</p>	<p>Apply 0.5 to 1.5 fl oz per 1000 sq ft. Tank mix with other fertilizers and pesticides for increased absorption and better turf health. Repeat applications every 30 to 45 days.</p>



L-18 Activator[®]

3-0-0 Amino Acid Supplement

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GUARANTEED ANALYSIS

Total Nitrogen (N).....	3.0%
2.89% Soluble Organic Nitrogen	
0.11% Nitrate Nitrogen	
Magnesium (Mg).....	0.5%
0.5% Water Soluble Magnesium (Mg)	
Manganese (Mn).....	0.1%
0.1% Chelated Manganese	

Derived from: protein hydrolysate, magnesium nitrate, manganese EDTA

NON PLANT FOOD INGREDIENTS

Free Amino Acids.....	15.5%
Natural Amino Acids	20.0%

L-AMINO ACIDS:

L-Alanine.....	4.3%	L-Lysine	6.3%
L-Arginine	7.6%	L-Methionine	1.3%
L-Aspartic Acid	11.6%	L-Phenylalanine	4.8%
L-Cysteine	1.3%	L-Proline.....	5.1%
L-Glutamic Acid.....	19.1%	L-Serine	5.2%
L-Glycine	4.2%	L-Threonine.....	3.7%
L-Histidine	2.6%	L-Tryptophan.....	1.4%
L-Isoleucine	4.9%	L-Tyrosine	3.8%
L-Leucine	8.2%	L-Valine	4.6%

PRODUCT INFORMATION:

Weight per Gallon: 9.1 lbs
pH: 5.3



L-18 ACTIVATOR[®]

Foliar-Pak L-18 Activator is a source of concentrated, plant-derived amino acids that yields a unique plant response, resulting in healthier turfgrass regardless of weather.

- Enhances the plant's ability to defend itself from stress. It helps improve carbohydrate storage, resulting in healthier, more vibrant turfgrass.
- Increases absorption of tank mix nutrients and improves the uptake and efficiency of pesticides and growth regulators.

Activate plant metabolic activity for more vibrant turf.

Foliar-Pak L-18 Activator is a naturally absorbed amino acid supplement. The addition of amino acids improves the metabolic efficiency of the plant. Plants are able to store more carbohydrates, reduce root decline, and increase photosynthesis, which leads to better health, especially during periods of extreme stress.

Activate fertilizers for improved uptake and response.

Foliar-Pak L-18 Activator facilitates greater uptake of nutrients. Foliar uptake of most plant nutrients is inhibited by the natural charge carried by most nutrients. L-amino acids chelate nutrients, eliminating their charge, thereby increasing the likelihood of foliar uptake.

Activate pesticides and PGR's for better efficiency.

Foliar-Pak L-18 Activator improves uptake of many pesticides and growth regulators, leading to better efficiency of many tank mix chemistries.

GENERAL USE GUIDE

Golf Course Greens Tees and Fairways

Cool Season Turf: Apply 1.0 to 2.0 fl oz per 1,000 sq ft every 7 to 14 days throughout the growing season.

Warm Season Turf: Apply 1.0 to 2.0 fl oz per 1,000 sq ft every 7 to 14 days throughout the growing season.

Turf Rescue or Malnourished Turf: Apply 3.0 fl oz per 1,000 sq ft every 7 to 14 days until turf recovers to health.

Athletic Fields and Professional Lawn Care

Apply 1.0 to 3.0 fl oz per 1,000 sq ft tank mixed with fertilizers and pesticides for increased absorption and turf health.

Repeat application every 14 to 28 days during the growing season.

14-2-4

with L-Amino Acids

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NEW FORMULA
14-2-4

Safe, reliable nutrients enhanced with a new plant-derived L-amino acid package for increased nitrogen fixation, chlorophyll production, energy production, and the production of anti-stress compounds.

- Foliar-Pak 14-2-4 gives the plant instant and continued feeding with 35% of the nitrogen being controlled release. 14-2-4 continues to impress days after the initial application.
- Foliar-Pak 14-2-4 will improve uptake and enhance overall performance of other nutrients, plant growth regulators, and fungicides in the tank mix.
- Micronutrients enhance plant color and help build proper enzymes.

GUARANTEED ANALYSIS

Total Nitrogen (N)	14.0%
0.5% Water Soluble Organic Nitrogen	
7.0% Urea Nitrogen	
0.5% Nitrate Nitrogen	
6.0% Slowly Available Water Soluble Nitrogen (N)*	
Available Phosphate (P ₂ O ₅)	2.0%
Soluble Potash (K ₂ O)	4.0%
Iron (Fe)	0.25%
0.25% Chelated Iron	
Manganese (Mn)	0.25%
0.25% Chelated Manganese	

Derived from: soy protein hydrolysate, urea-triazone solution, low biuret urea, potassium phosphate, potassium nitrate, iron EDTA, manganese EDTA

*Slowly available nitrogen from urea-triazone nitrogen

NON PLANT FOOD INGREDIENTS

L-Amino Acids	5.0%
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NITROGEN RATES:

- 3 fl oz = 0.04 lbs N per 1000 sq ft
- 4 fl oz = 0.05 lbs N per 1000 sq ft
- 5 fl oz = 0.06 lbs N per 1000 sq ft
- 6 fl oz = 0.07 lbs N per 1000 sq ft
- 9 fl oz = 0.10 lbs N per 1000 sq ft
- 12 fl oz = 0.14 lbs N per 1000 sq ft

PRODUCT INFORMATION:

1.46 lbs Nitrogen/Gallon
Weight per Gallon: 10.4 lbs
pH: 8.7

GENERAL USE GUIDE

For foliar applications delay irrigation or mowing for 12 to 24 hours.

Golf Course Greens	Apply 3.0 to 12.0 fl oz per 1,000 sq ft in enough water to provide sufficient foliar coverage. Repeat application every 7 to 14 days. Transition and warm season turf may require more frequent applications.
Golf Course Tees, Fairways, and Sports Turf	Apply 3.0 to 9.0 fl oz per 1,000 sq ft in a minimum of 1 gal per 1,000 sq ft of spray solution. Repeat application every 2 to 4 weeks.
Professional Lawn Care	Apply at 2 to 5 gal per acre in enough water for sufficient foliar coverage. Use the lower rates if daytime temperatures exceed 85 degrees or if turf is exhibiting symptoms of drought stress.



11-0-11

with L-Amino Acids

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GUARANTEED ANALYSIS

Total Nitrogen (N).....	11.0%
0.5% Water Soluble Organic Nitrogen	
7.5% Urea Nitrogen	
3.0% Slowly Available Water Soluble Nitrogen*	
Soluble Potash (K ₂ O)	11.0%
Derived from: soy protein hydrolysate, low biuret urea, potassium thiosulfate	
*Slowly available nitrogen from urea-triazone nitrogen	

NON PLANT FOOD INGREDIENTS

L-Amino Acids	5.0%
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PRODUCT INFORMATION:

1.15 lbs Nitrogen/Gallon
 Weight per Gallon: 10.45 lbs
 pH: 8.8



NEW FORMULA 11-0-11

Safe, reliable nutrients enhanced with a new plant-derived L-amino acid package for increased nitrogen fixation, chlorophyll production, energy production, and the production of anti-stress compounds.

- Foliar-Pak 11-0-11 gives the plant instant and continued feeding with 25% of the nitrogen being controlled release. 11-0-11 continues to impress days after the initial application.
- The proprietary amino acid package in Foliar-Pak 11-0-11 will improve uptake and enhance overall performance of other nutrients, plant growth regulators, and fungicides in the tank mix.

GENERAL USE GUIDE

For foliar applications delay irrigation or mowing for 12 to 24 hours.

Golf Course Greens	Apply 3.0 to 12.0 fl oz per 1,000 sq ft in enough water to provide sufficient foliar coverage. Repeat application every 7 to 14 days. Transition and warm season turf may require more frequent applications.
Golf Course Tees, Fairways, and Sports Turf	Apply 3.0 to 9.0 fl oz per 1,000 sq ft in enough water for sufficient foliar coverage. Repeat application every 2 to 4 weeks.
Lawn	Apply at 2 to 5 gal per acre in enough water for sufficient foliar coverage. Use the lower rates if daytime temperatures exceed 85 degrees or if turf is exhibiting symptoms of drought stress.

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1-0-15

with L-Amino Acids



NEW FORMULA
1-0-15

Formulated with a new, focused amino acid package for increased nitrogen fixation, chlorophyll production, and energy production.

Safe, reliable nutrients enhanced with a new plant-derived L-amino acid package. Foliar-Pak 1-0-15 works to increase nutrient absorption and maximize plant nutrition through the use of low dose applications. These L-amino acids work in various pathways to increase nutrient uptake, nutrient transport, and improve plant tolerance of environmental stress.

Foliar-Pak 1-0-15 is a high performance foliar fertilizer that promotes turf health by offering the following advantages:

- Foliar-Pak 1-0-15 is a high performance foliar fertilizer that promotes turf health by offering the following advantages:
- L-amino acids are easily absorbed by plants, enhancing uptake of nutrients and tank mix products.
- Improves the plant's ability to create necessary proteins and protein structures.
- Utilization of L-amino acids allows the plant to conserve energy and strengthen root systems.
- Provides organic molecules that increase chlorophyll and photosynthesis.
- Potassium helps build leaf strength and helps the plant maintain proper osmotic relations.
- Micronutrients enhance plant color and help build proper enzymes.

GUARANTEED ANALYSIS

Total Nitrogen (N).....	1.0%
0.5% Water Soluble Organic Nitrogen	
0.5% Urea Nitrogen	
Soluble Potash (K ₂ O)	15.0%
Iron (Fe).....	0.10%
0.10% Chelated Iron	
Manganese (Mn).....	0.05%
0.05% Chelated Manganese	

Derived from: soy protein hydrolysate, urea, potassium thiosulfate, iron EDTA, manganese EDTA

NON PLANT FOOD INGREDIENTS

L-Amino Acids	5.0%
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PRODUCT INFORMATION:

1.56 lbs Potassium/Gallon
Weight per Gallon: 10.4 lbs
pH: 7.3

GENERAL USE GUIDE

For foliar applications delay irrigation or mowing for 12 to 24 hours.

Golf Course Greens	Apply 1.0 to 9.0 fl oz per 1,000 sq ft in enough water to provide sufficient foliar coverage. Repeat application every 7 to 14 days. Transition and warm season turf may require more frequent applications.
Golf Course Tees and Fairways Sports Turf	Apply 1.5 to 9.0 fl oz per 1,000 sq ft in 0.5 to 2.0 gal per 1,000 sq ft of spray solution. Repeat application every 2 to 3 weeks.
Residential and Commercial Lawn	Apply 1.0 to 5.0 gal per acre in 25 to 88 gal per acre of spray solution. Use the lower rates if daytime temperatures exceed 85 degrees or if turf is exhibiting symptoms of drought stress.



Minors

with L-Amino Acids

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GUARANTEED ANALYSIS

Total Nitrogen (N).....	1.0%
1.0% Water Soluble Organic Nitrogen	
Magnesium (Mg)	0.5%
0.50% Water Soluble Magnesium (Mg)	
Sulfur (S).....	2.5%
2.5% Combined Sulfur (S)	
Boron (B)	0.5%
Copper (Cu).....	0.1%
0.1% Water Soluble Copper (Cu)	
Iron (Fe)	1.5%
1.5% Water Soluble Iron (Fe)	
Manganese (Mn).....	1.0%
1.0% Water Soluble Manganese (Mn)	
Molybdenum (Mo)	0.001%
Zinc (Zn)	0.4%
0.4% Water Soluble Zinc (Zn)	

Derived from: soy protein hydrolysate, magnesium sulfate, sodium borate, copper sulfate, ferrous sulfate, manganese sulfate, sodium molybdate, zinc sulfate

NON PLANT FOOD INGREDIENTS

Seaweed Extract.....	1.5%
L-Amino Acids	5.0%

PRODUCT INFORMATION:

Weight per Gallon: 9.7 lbs
pH: 3.7



NEW FORMULA - LOWER RATES

MINORS

Foliar-Pak Minors is a newly formulated fertilizer that increases turf health by offering the following advantages:

- Foliar-Pak Minors can be effectively used to correct micronutrient deficiencies and is especially useful on turf grown in sand-based soil mediums.
- Foliar-Pak Minors provides nutrients that promote better photosynthesis.
- A calculated dose of seaweed extract is included to delay plant senescence and fortify the plant's stress defense system.
- Focused amino acid package increases photosynthetic efficiency, prolongs life of chloroplasts, and produces anti-stress compounds.

Multi-Protected Micronutrients

Foliar-Pak Minors is a brand new formulation using natural and modified plant metabolites specific for protecting each element.

Each plant metabolite performs well in its own niche. The low-molecular-weight plant metabolites allow for movement through the stomatal pores and trans-cuticular pores; the high-molecular weight modified plant metabolite chelates the micronutrients for secondary uptake via the soil. This engineered redundancy ensures rapid uptake for the turf in all growing conditions.

GENERAL USE GUIDE

Golf Course Greens, Tees, and Fairways	Apply 1.0 to 3.0 fl oz per 1,000 sq ft. Repeat application every 7 to 21 days depending on growth and color. For new establishment, apply more often. For recovery, increase rate to 3.0 to 5.0 fl oz per 1,000 sq ft.
Sports Turf, Residential and Commercial Lawns	Apply 1.0 to 3.0 fl oz per 1,000 sq ft. Repeat application every 4 to 6 weeks.
Trees, Ornamentals, and Flowers	Foliar Spray: Mix 24 to 36 fl oz in 100 gal of water. Spray to the point of runoff. Soil Applications: Trees and Shrubs- Add 2.0 to 3.0 fl oz per caliper inch into 2 gal of water and drench into root zone. FLOWERS AND SMALL PLANTS- Add 0.5 to 1.0 fl oz per gal of water. Thoroughly drench soil around area.

Manganese

with L-Amino Acids

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soil



NEW FORMULA - LOWER RATES
MANGANESE

Foliar-Pak Manganese is a newly formulated fertilizer that increases turf health by offering the following advantages:

- Protected manganese and magnesium provide long-lasting color through being direct and indirect components of chlorophyll.
- Focused amino acid package increases photosynthetic efficiency, prolongs life of chloroplasts, and produces anti-stress compounds.
- Manganese works to activate multiple plant enzymes.
- Available manganese can decrease susceptibility to soil patch disease organisms.

Triple Protected Manganese and Magnesium

Foliar-Pak Manganese is a brand new formulation using three natural and modified plant metabolites specific for protecting manganese and magnesium.

Each plant metabolite performs well in its own niche. The low-molecular-weight plant metabolites allow for movement through the stomatal pores and trans-cuticular pores; the high-molecular weight modified plant metabolite chelates the manganese and magnesium for secondary uptake via the soil. This engineered redundancy ensures rapid uptake for the turf in all growing conditions.

GUARANTEED ANALYSIS

Total Nitrogen (N).....	2.0%
1.0% Nitrate Nitrogen	
1.0% Water Soluble Organic Nitrogen	
Magnesium (Mg)	1.0%
1.0% Water Soluble Magnesium (Mg)	
Manganese (Mn).....	3.0%
3.0% Water Soluble Manganese (Mn)	
Derived from: soy protein hydrolysate, magnesium nitrate, manganese sulfate	

NON PLANT FOOD INGREDIENTS

L-Amino Acids	5.0%
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PRODUCT INFORMATION:

Weight per Gallon: 10.5 lbs
pH: 4.7

GENERAL USE GUIDE

For foliar applications delay irrigation or mowing for 12 to 24 hours.

Golf Course Greens and Tees	<p>Apply 0.5 to 2.0 fl oz per 1,000 sq ft in enough water to provide sufficient foliar coverage.</p> <p>Repeat application every 7 to 14 days during the growing season.</p> <p>Warm season turf may require more frequent applications to achieve desired results.</p>
Fairways Sports Turf and Professional Lawn Care	<p>Apply 1.0 to 3.0 fl oz per 1,000 sq ft in enough water to provide sufficient foliar coverage.</p> <p>Repeat application every 14 to 28 days during the growing season.</p>



A.S. Fusion

7-0-0 Liquid AMS with L-Amino Acids

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GUARANTEED ANALYSIS

Total Nitrogen (N).....	7.0%
6.4% Ammoniacal Nitrogen	
0.6% Water Soluble Organic Nitrogen	
Sulfur (S).....	7.0%
7.0% Combined Sulfur (S)	
Manganese (Mn).....	0.5%
0.5% Water Soluble Manganese (Mn)	
Derived from: soy protein hydrolysate, ammonium sulfate, manganese sulfate	

NON PLANT FOOD INGREDIENTS

L-Amino Acids	5.0%
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PRODUCT INFORMATION:

Weight per Gallon: 10.01 lbs
pH: 6.1



NEW FORMULA
A.S. FUSION

Liquid ammonium sulfate with a new, focused amino acid package for increased nitrogen fixation, chlorophyll production, and energy production.

L-amino acids increase nutrient absorption and maximize plant nutrition through the use of low dose applications. L-amino acids work in various pathways to increase nutrient uptake, nutrient transport, and improve plant tolerance of environmental stress.

Foliar-Pak A.S. Fusion is a high performance foliar fertilizer that promotes turf health by offering the following advantages:

- Formulated with ammonium sulfate for better plant response during cooler temperatures.
- Ammonium sulfate and amino nitrogen are more easily digested by the plant, leaving more energy for root growth.
- Foliar-Pak A.S. Fusion provides rapid green color and is compatible with other fertilizers and control products.
- Ammonium sulfate is the preferred N source for turf on high pH soils.

GENERAL USE GUIDE

For foliar applications delay irrigation or mowing for 12 to 24 hours.

A.S. Fusion should not be applied when daytime temperatures are expected to exceed 85°F

Golf Course Greens and Tees

Apply 3.0 to 15.0 fl oz per 1,000 sq ft in enough water to provide sufficient foliar coverage.

Repeat application every 7 to 14 days or as needed throughout the growing season to increase turf density.

Fairways Sports Turf and Lawns

Apply 3.0 to 15.0 fl oz per 1,000 sq ft in enough water to provide sufficient foliar coverage.

Repeat application every 7 to 14 days or as needed throughout the growing season to increase turf density.

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soil

Calcium

7-0-0 with L-Amino Acids



NEW FORMULA - LOWER RATES
CALCIUM

Foliar-Pak Calcium is a newly formulated fertilizer that increases turf health by offering the following advantages:

- Calcium improves plant tolerance to disease and stress while enhancing plant stem strength.
- Focused amino acid package increases photosynthetic efficiency, prolongs life of chloroplasts, and produces anti-stress compounds.
- Multiple complexors and chelators provide a dramatic increase in uptake efficiencies.

Triple Protected Calcium

Foliar-Pak Calcium is a brand new formulation using three natural and modified plant metabolites specific for protecting calcium.

Each plant metabolite performs well in its own niche. The low-molecular-weight plant metabolites allow for movement through the stomatal pores and transcuticular pores; the high-molecular weight modified plant metabolite chelates the calcium for secondary uptake via the soil. This engineered redundancy ensures rapid uptake and longer nutrient availability in all growing conditions.

GUARANTEED ANALYSIS

Total Nitrogen (N).....	7.0%
5.5% Nitrate Nitrogen	
1.5% Water Soluble Organic Nitrogen	
Calcium (Ca)	7.0%
Derived from: soy protein hydrolysate, calcium nitrate	

NON PLANT FOOD INGREDIENTS

L-Amino Acids	5.0%
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CALCIUM RATES:

- 3 fl oz = 0.018 lbs Ca per 1000 sq ft
- 4 fl oz = 0.025 lbs Ca per 1000 sq ft
- 5 fl oz = 0.031 lbs Ca per 1000 sq ft
- 6 fl oz = 0.038 lbs Ca per 1000 sq ft

PRODUCT INFORMATION:

Weight per Gallon: 11.3 lbs
pH: 5.5

GENERAL USE GUIDE

For foliar applications delay irrigation or mowing for 12 to 24 hours.

Golf Course Greens	Apply 1.5 to 6.0 fl oz per 1,000 sq ft in enough water to provide sufficient foliar coverage. Repeat application every 7 to 14 days. Warm season turf may require more frequent applications.
Golf Course Tees and Fairways Athletic Fields	Apply 1.5 to 6.0 fl oz per 1,000 sq ft in 0.5 to 2.0 gal spray solution per 1,000 sq ft. Repeat application every 14 to 28 days.
Commercial and Residential Lawns	Apply 1.5 to 6.0 fl oz per 1,000 sq ft in 0.5 to 2.0 gal spray solution per 1,000 sq ft. Repeat application every 3 to 6 weeks.



Carbosential® Fe Turbo

with L-Amino Acids

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soil

GUARANTEED ANALYSIS

Total Nitrogen (N) 0.30%
 0.30% Water Soluble Organic Nitrogen
 Iron (Fe) 5.0%
 5.0% Water Soluble Iron (Fe)
 Derived from: soy protein hydrolysate, iron polysaccharide

NON PLANT FOOD INGREDIENTS

L-Amino Acids 5.0%

PRODUCT INFORMATION:

Weight per Gallon: 10.1 lbs
 pH: 4.5

CARBOSENTIAL® FE TURBO

- Improved formulation using additional natural plant metabolites that increase foliar and root uptake of iron.
- Foliar-Pak Carbosential Fe Turbo yields outstanding residual color, increased nutrient uptake, and improved overall plant health.
- Foliar-Pak Carbosential Fe Turbo provides timely delivery of iron to the turf through both foliar and root absorption.
- Foliar-Pak Carbosential Fe Turbo contains plant available amino acids that significantly increase nutrient uptake and utilization. Amino acids help the plant maintain proper metabolic functions, giving it a unique health advantage.
- Foliar-Pak Carbosential Fe Turbo feeds and stimulates the microbial populations.
- Application rates for Carbosential Fe Turbo are much lower compared to traditional iron micronutrient products. At 10 to 14 oz. per acre, one 2.5 gallon container will treat the same area as one 30 gallon drum of other products.



GENERAL USE GUIDE

Golf Course Greens	Apply 10 to 14 fl oz per acre in 30 to 90 gal water. Repeat application every 10 to 14 days.
Golf Course Fairways and Tees Athletic Fields	Apply 10 to 14 fl oz per acre in 30 to 90 gal water. Repeat application every 14 to 28 days.
Professional Lawn Care	Apply 16 to 24 fl oz per acre in 30 to 90 gal water. Repeat application every 4 to 6 weeks.

foliar

soil

Bio Sea

0.1-0-0.1



NEW FORMULA
BIO SEA

- Foliar-Pak® Bio Sea is an *Ascophyllum nodosum* liquid seaweed extract harvested from the coast of Norway. The cold process extraction method used in this unique product preserves the integrity of the natural ingredients, amino acids, organic acids, sugars and plant extracts.
- Bio Sea is more effective because the plant derived ingredients are more structurally complete, therefore, they remain more bio-active than other fertilizers.
- Natural betaines and organic acids regulate at the cellular level to ensure the plant is protected from stress.
- This rich source of natural plant extracts works to enhance new root growth, new shoot growth, and photosynthesis while delaying chlorophyll degradation.

GUARANTEED ANALYSIS

Nitrogen (N) 0.1%
0.1% Water Soluble Organic Nitrogen
Soluble Potash (K₂O) 0.1%
Derived from: *Ascophyllum nodosum* seaweed extract

NON PLANT FOOD INGREDIENTS

Cold Process Seaweed 12%

PRODUCT INFORMATION:

Weight per Gallon: 8.99 lbs
pH: 3.0

GENERAL USE GUIDE

Golf Course Greens	Apply 1.5 to 4.0 fl oz per 1,000 sq ft in enough water to provide sufficient foliar coverage. Repeat application every 7 to 14 days. May be combined with liquid fertilizers and surfactants
Fairways, Tees Athletic Fields	Apply 1/2 to 1 gal per acre in enough water to provide sufficient foliar coverage. Repeat every 2 to 4 weeks. Recovery and Grow-In: Apply 1.5 to 3 fl oz per 1,000 sq ft every 7 days or 3.0 to 6.0 fl oz per 1,000 sq ft every 14 days.
Shrubs and Ornamentals	Drench with 1.0 to 2.0 fl oz per gal of water at transplant or throughout the growing season. Repeat drench every 14 to 28 days. Foliar applications can be made with 1.0 to 2.0 fl oz per gal of water every 14 to 28 days.



Promote

4-0-1

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soil

GUARANTEED ANALYSIS

Total Nitrogen (N).....	4.0%
3.25% Urea Nitrogen	
0.75% Nitrate Nitrogen	
Soluble Potash (K ₂ O)	1.0%
Iron (Fe)	0.5%
0.5% Chelated Iron	
Manganese (Mn).....	0.2%
0.2% Chelated Manganese	

Derived from: urea, potassium nitrate, iron EDTA, manganese EDTA

NON PLANT FOOD INGREDIENTS

Humic Acid	4.0%
Alkyl Block Polymer.....	20.0%
Seaweed Extract.....	4.0%

PRODUCT INFORMATION:

Weight per Gallon: 9.2 lbs
pH: 6.5



PROMOTE

- Foliar-Pak Promote is a powerful combination of highly concentrated sea plant extracts, humates, and wetting agents, along with key nutrients to enhance the plant's ability to fight stress and maintain proper metabolic functions.
- Foliar-Pak Promote can be used effectively as a fertilizer for turf, ornamentals, and trees. Uses include foliar applications, soil drenches, and deep root feeding.
- When applied regularly, turf plants will maintain more balanced growth and remarkable stress tolerance under difficult conditions including high temperatures, extreme drought, high salinity, low mowing, high traffic, herbicide applications, and disease pressures.

GENERAL USE GUIDE

Golf Course	<p>Green and Tees: Apply 2.0 to 4.0 fl oz per 1,000 sq ft. Repeat application every 7 to 14 days. Irrigate into root zone within 24 to 48 hours for best result.</p> <p>Fairways: Apply 3.0 to 6.0 fl oz per 1,000 sq ft. Repeat application every 2 to 4 weeks. Irrigate into root zone within 24 to 48 hours for best result.</p> <p>High Stress Areas: Apply 6.0 to 12.0 fl oz per 1,000 sq ft. Irrigate enough to ensure one inch of penetration into root zone. Repeat application every 2 to 4 weeks, or as conditions warrant.</p>
Professional Lawn Care	<p>Newly Seeded Lawns: Apply 6.0 fl oz per 1,000 sq ft. Use sufficient water for uniform coverage. Repeat application after germination to encourage deeper root formation.</p> <p>Established Lawns: Apply 3.0 to 6.0 fl oz per 1,000 sq ft. Repeat application at 3.0 fl oz per 1,000 sq ft monthly during growing season.</p> <p>Hydro Seeding: Apply 6.0 fl oz per 1,000 sq ft or 2.0 gal per acre at seeding. Repeat application after germination to encourage deeper root formation.</p>
Sod Farms	<p>Sod Installation: Apply 1.0 to 2.0 gal per acre. Repeat application monthly throughout the growing season.</p> <p>Sod Farms: Apply 1.0 gal per acre after seeding. Application at 1.0 gal per acre prior to cutting reduces shipping stress.</p>
Trees and Ornamentals	<p>Annuals, Perennials, and Ornamentals: Spray soil and plants with a solution of 1 to 2 tsp per gal of water. Water plants thoroughly after application.</p> <p>Planting Trees and Shrubs: Use 1 or 2 qt per 100 gal of water. Apply as a soil drench 2 to 5 gal per plant. May repeat in 30 days.</p> <p>Feeding Trees and Shrubs (Injection): Use 1 to 2 qt per 100 gal of water. Inject over 3,000 sq ft area.</p> <p>Soil Drench and Transplants: Apply 2.5 to 5.0 fl oz per gal of water. Thoroughly drench area.</p>

foliar

soil

Caliber

Micronized Calcium Powder



NEW FORMULA
CALIBER

Foliar-Pak Caliber calcium carbonate is finely milled, consistently processed to a size of less than one micron. This ultra-small particle is easily solubilized and ensures that the calcium is rapidly available for root uptake or absorption to soil cation exchange sites.

In the Plant:

- Calcium plays an active role in the uptake of water and nutrients.
- Calcium strengthens cell walls and works as a signal messenger, helping activate natural plant defense mechanisms.
- Calcium reduces or prevents infections by increasing cuticular thickness and cell turgor pressure.
- Calcium protects the plant by acting as a buffering agent against stress caused by soil toxicity or extremes of acidity or alkalinity.

In the Soil:

- Calcium has the ability to displace sodium ions on the soil colloid, and also buffer salts that may be present in the root rhizosphere.
- Calcium helps to push the soil platelets apart, creating a more suitable environment for aeration and root growth.
- Calcium is important in maintaining proper base saturation levels.

GUARANTEED ANALYSIS	
Calcium (Ca)	37.5%
Derived from: calcium carbonate	

PRODUCT INFORMATION:
25 lbs pail

GENERAL USE GUIDE	
Lightly water in immediately after application to prevent a light residue from forming on the surface.	
Application	<p>After compatibility has been established, Caliber should be the first thing added to the agitating water in the spray tank. Add slowly at the point of greatest agitation turbulence.</p> <p>DO NOT ADD MORE THAN 0.25 LB PRODUCT PER GALLON OF WATER IN THE SPRAY TANK. DO NOT ALLOW THE MIXTURE TO SIT WITHOUT AGITATION.</p> <p>Apply 10 to 20 lbs per acre (0.25 to 0.50 lbs per 1,000 sq ft)</p>



Micros Plus

2-0-0

foliar

soil

GUARANTEED ANALYSIS

Total Nitrogen (N).....	2.0%
2.0% Nitrate Nitrogen	
Calcium (Ca)	2.5%
Magnesium (Mg)	0.5%
0.50% Water Soluble Magnesium (Mg)	
Boron (B)	0.02%
Copper (Cu).....	0.05%
0.05% Chelated Copper	
Iron (Fe).....	1.0%
1.0% Chelated Iron	
Manganese (Mn).....	0.4%
0.4% Chelated Manganese	
Zinc (Zn).....	0.05%
0.05% Chelated Zinc	

Derived from: calcium nitrate, magnesium nitrate, sodium borate, copper EDTA, iron EDTA, manganese EDTA, zinc EDTA

NON PLANT FOOD INGREDIENTS

Humic Acid	1.0%
Seaweed Extract.....	1.0%

PRODUCT INFORMATION:

Weight per Gallon: 10.05 lbs
pH: 4.4



NEW FORMULA

MICROS PLUS

- Foliar-Pak Micros Plus provides foliar delivery of key nutrients that promote improvement for overall plant health and stress tolerance.
- Foliar-Pak Micros Plus enhances density, rooting, and recovery. Great for use on transitions and turf establishment.
- Foliar-Pak Micros Plus targets cell division, chlorophyll formation, increased nutrient mobility and utilization, while improving metabolism of carbohydrates and nitrogen.
- At low use rates, this bio-based formulation can be used as a valuable source of readily available micronutrients and plant extracts.
- Foliar-Pak Micros Plus can be tank mixed with Foliar-Pak Promote or Foliar-Pak Bio Sea for greater biological enhancement and more balanced turf recovery.

GENERAL USE GUIDE

<p>Recovery Programs</p>	<p>COOL SEASON TURF: Spring green up and summer stress recovery: Apply 0.5 to 1.0 fl oz per 1,000 sq ft every 10 to 14 days as necessary. Aeration recovery/ New seed/ New sod: Apply 1.0 to 2.0 fl oz per 1,000 sq ft every 7 to 10 days as necessary. WARM SEASON TURF: Apply 1.0 to 3.0 fl oz per 1,000 sq ft every 7 to 14 days.</p>
<p>Nutrition Maintenance Programs</p>	<p>COOL SEASON TURF: Apply initial application of 0.5 fl oz per 1,000 sq ft. Increase as necessary in 0.25 fl oz increments. Repeat application every 10 to 14 days. WARM SEASON TURF: Apply 1.5 to 3.0 fl oz per 1,000 sq ft every 10 to 14 days.</p>
<p>Ornamentals</p>	<p>Flowers and Vegetables: 1 tbs per gal of water. Drench plants. Trees and Shrubs: Apply with root feeder in combination with regular fertilizer at a rate of 24 to 40 fl oz per 100 gal of water.</p>

Amperage

10-0-0

foliar

soil

AMPERAGE

- Foliar-Pak Amperage is a liquid blend of iron, manganese and zinc in a nitrogen matrix.
- Foliar-Pak Amperage is formulated with a blend of gluconic sugars that hold the metallic ions in solution, which allows the plant to assimilate the nutrients as they are required.
- Foliar-Pak Amperage is great for maintaining base levels of the primary minerals required for complete photosynthesis, especially during periods of cool temperatures.
- Especially useful when plant metabolism declines due to low sunlight and sub-optimal temperatures.
- Foliar-Pak Amperage will provide excellent plant color response due to superior uptake of micro-nutrients chelated with gluconates.
- Sugars from natural molasses energize plants and microbes with available carbon sources that stimulate biological activity.
- Greatly increases microbial activity and can aid in thatch reduction.

GUARANTEED ANALYSIS

Total Nitrogen (N).....	10.0%
10.0% Urea Nitrogen	
Sulfur (S).....	4.0%
4.0% Combined Sulfur (S)	
Iron (Fe).....	2.5%
2.5% Water Soluble Iron (Fe)	
Manganese (Mn).....	2.5%
2.5% Water Soluble Manganese (Mn)	
Zinc (Zn).....	2.5%
2.5% Water Soluble Zinc (Zn)	

Derived from: urea, iron sulfate, manganese sulfate, zinc sulfate, complexed with natural sugars and gluconic acid

NITROGEN RATES:

- 3 fl oz = 0.025 lbs N per 1000 sq ft
- 4 fl oz = 0.0312 lbs N per 1000 sq ft
- 5 fl oz = 0.039 lbs N per 1000 sq ft
- 6 fl oz = 0.050 lbs N per 1000 sq ft

PRODUCT INFORMATION:

1.1 lbs Nitrogen/Gallon
 Weight per Gallon: 11 lbs
 pH: 6.5

GENERAL USE GUIDE

Golf Course Greens and Tees	Apply 3.0 to 6.0 fl oz per 1,000 sq ft in a minimum 0.5 gal of spray solution per 1,000 sq ft. Repeat application every 7 to 14 days during periods of active turf growth or increased plant stress.
Golf Course Fairways	Apply 3.0 to 6.0 fl oz per 1,000 sq ft in a minimum of 0.5 gal of spray solution per 1,000 sq ft. Repeat application every 14 to 28 days during periods of active turf growth or increased plant stress.
Athletic Fields and Professional Lawn Care	Apply 3.0 to 6.0 fl oz per 1,000 sq ft in a minimum of 0.5 gal of spray solution per 1,000 sq ft. Repeat application every 14 to 35 days during periods of active turf growth or increased plant stress.



Full Throttle

12-0-0

foliar

soil

GUARANTEED ANALYSIS

Total Nitrogen (N).....	12.0%
12.0% Water Soluble Nitrogen	
Sulfur (S).....	1.0%
1.0% Combined Sulfur (S)	
Iron (Fe).....	1.0%
1.0% Water Soluble Iron (Fe)	
Manganese (Mn).....	0.75%
0.75% Water Soluble Manganese (Mn)	
Zinc (Zn).....	0.35%
0.35% Water Soluble Zinc (Zn)	

Derived from: urea, ferrous sulfate, manganese sulfate, zinc sulfate

PRODUCT INFORMATION:

1.32 lbs Nitrogen/Gallon
 Weight per Gallon: 11.0 lbs
 pH: 2.5



FULL THROTTLE

- Foliar-Pak Full Throttle provides quick relief to turf under stress.
- Drives density and lateral growth to enhance spring transition of warm season turf. Improves turf affected by winter damage or any damage from biotic and abiotic factors.
- Foliar-Pak Full Throttle gives new seedlings, sprigs, and sod a quick, non-burning nutrient surge for faster rooting and plant development.
- The natural additives in Foliar-Pak Full Throttle maximize nutrient absorption and translocation throughout the plant.
- Balanced micronutrient ratios drive photosynthesis, resulting in deep lasting color, and improved plant energetics.

GENERAL USE GUIDE

For use on warm season turf.

Golf Course Greens and Tees	Apply 1.0 to 2.0 fl oz per 1,000 sq ft. Repeat application every 10 to 14 days or as needed.
Golf Course Fairways and Athletic Fields	Apply 1.0 to 3.0 fl oz per 1,000 sq ft in sufficient water for proper coverage. Repeat application every 10 to 14 days depending on conditions and desired effects. Establish an application schedule that allows treatments to immediately follow heavy traffic events for quicker recovery.
Aeration Recovery and Grow In	Apply 2.0 to 3.0 fl oz per 1,000 sq ft. Water into root zone after application.

30-0-0

60% Slowly Available Nitrogen

foliar

soil

30-0-0

- Foliar-Pak 30-0-0 60% slowly available nitrogen is a superior nitrogen fertilizer that is safe and easy to handle.
- Foliar-Pak 30-0-0 corrects soil and plant nitrogen deficiencies with steady, even release and no growth surges.
- Foliar-Pak 30-0-0 has a low salt index and utilizes complex nitrogen molecules.
- Foliar-Pak 30-0-0 is a foliar or soil applied slow release fertilizer.
- Foliar-Pak 30-0-0 provides a 60 to 90 day release rate dependent upon microbial activity.
- Foliar-Pak 30-0-0 has a slow drying time resulting in more leaf penetration.
- Foliar-Pak 30-0-0 results in less leaching and volatilization for better budgetary and environmental impacts.

GUARANTEED ANALYSIS

Total Nitrogen (N) 30.0%
 12.0% Urea Nitrogen
 18.0% Slowly Available Water Soluble Nitrogen*

Derived from: urea-triazone, methylene urea, urea

*Slowly available nitrogen from methylene ureas and triazone

NITROGEN PER LIQUID OUNCE:

3 oz/1000 = 0.07 lb Nitrogen
 6 oz/1000 = 0.14 lb Nitrogen
 9 oz/1000 = 0.21 lb Nitrogen
 12 oz/1000 = 0.28 lb Nitrogen
 15 oz/1000 = 0.36 lb Nitrogen
 24 oz/1000 = 0.57 lb Nitrogen

PRODUCT INFORMATION:

3.09 lbs Nitrogen/Gallon
 Weight per Gallon: 10.3 lbs
 pH: 9.2

GENERAL USE GUIDE

<p>Golf Course Greens and Tees</p>	<p>Apply 3.0 to 6.0 fl oz per 1,000 sq ft in a minimum of 0.5 gal of spray solution per 1,000 sq ft. Repeat application every 7 to 21 days.</p>
<p>Golf Course Fairways and Rough Athletic Fields Lawns</p>	<p>Apply 1.0 to 8.0 gal per acre (3.0 to 24.0 oz per 1,000 sq ft) in enough water to provide sufficient foliar coverage. Repeat application every 14 to 28 days or as needed.</p>
<p>Ornamentals, Trees and Shrubs</p>	<p>Deep root feeding applications may be made at 20 to 83 oz (0.5 to 2.0 lb of N) per 1,000 sq ft. Inject fertilizer solution 8 to 12 inches deep on a grid pattern 2 to 3 feet apart in the area beneath the canopy and one third more area outside the canopy.</p>



CSi™

12-0-0 + 25% Si

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soil

GUARANTEED ANALYSIS

Total Nitrogen (N).....12.0%
 12.0% Water Soluble Nitrogen (N)

Derived from: protein hydrolysate

NON PLANT FOOD INGREDIENTS

Silicon (SiO₂) 25.0%

PRODUCT INFORMATION:

Net Weight: 1 lb
 Packaging Sizes: 6 x 1 lb case



CSi™

- Foliar-Pak CSi 12-0-0 + 25% Si offers bio-available plant-derived silicon in opaline form delivered with plant derived carbon carrier.
- Foliar-Pak CSi strengthens turfgrass by providing the key nutrient silicon, delivered with a reliable carrier in a form that plants can immediately recognize and use.
- Silicon is one of the most important fortification nutrients for plants. Until now, it has been inefficient to try to deliver potassium silicate, slag or other forms of silicon. Foliar-Pak CSi contains 25% silicon in opaline form.
- Our plant derived nitrogen is immediately recognized by plants. Plants will respond to Foliar-Pak CSi and assimilate it with less energy expended and utilize it more efficiently.
- Foliar-Pak CSi provides true plant health response to biotic and abiotic stress by producing stronger cell walls, thicker leaf blades, more roots, and less trans-evaporation.
- The Silicon in CSi can increase plant turgidity, resulting in smoother surfaces, better green speed and increased wear tolerance.

GENERAL USE GUIDE

Low rates are weekly maintenance. High rates are corrective requirements. Adjust for biweekly applications.

<p>Golf Course Greens and Tees</p>	<p>WARM SEASON TURF: Apply 1.0 to 2.5 pounds per acre COOL SEASON TURF: Apply 0.5 to 1.5 pounds per acre</p>
<p>Golf Course Fairways</p>	<p>WARM SEASON TURF: Apply 0.5 to 1.5 pounds per acre COOL SEASON TURF: Apply 0.5 to 1.5 pounds per acre</p>

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soil

BioDrive

Humic Acid Supplement



NEW FORMULA
BIODRIVE

Foliar-Pak BioDrive is a highly active humic acid source. Using a proprietary extraction process the integrity of natural humic and fulvic structures are preserved, thus eliciting better plant and soil responses.

- Humic and fulvic acids make soil nutrients more available by naturally complexing and chelating nutrients and making them more available for root uptake.
- Foliar-Pak BioDrive provides energy to microbes which work to mineralize nutrients increasing their availability.
- Foliar-Pak BioDrive aids heavy soils by reducing flocculation of clay particles that tie up sodium, thus improving overall soil structure, root penetration, oxygen availability and water availability.
- Foliar-Pak BioDrive assists sandy soils by increasing CEC, improving environment for microbial activity, and helping with soil water relations.
- Humic acids and enzymes present in BioDrive enhance rooting and root uptake performance.

CONTAINS NON PLANT FOOD INGREDIENTS

Humic Acid 4.0%
Derived from: Leonardite

PRODUCT INFORMATION:

Weight per Gallon: 8.8 lbs
pH: 9.3

GENERAL USE GUIDE

Soil Application for Turfgrass	Apply 3.0 to 9.0 fl oz per 1,000 sq ft every 14 to 28 days. Tank mix with other soil applied nutrients. For most effective results, water into soil profile as soon as possible.
Foliar Applications with Micronutrients	Apply 1 to 2 pints per acre with foliar sprays to improve membrane permeability of plant leaves and improve nutrient uptake.
Tank Mix Combination	Apply 1 to 2 pints per acre with herbicides, fungicides, and fertilizers in tank mix combinations for improved plant uptake and utilization.



22-0-4

with L-Amino Acids

foliar

soil

GUARANTEED ANALYSIS

Total Nitrogen (N)	22.0%
0.25% Water Soluble Organic Nitrogen	
12.75% Urea Nitrogen	
1.5% Nitrate Nitrogen	
1.5% Ammonical Nitrogen	
6.0% Slowly Available Water Soluble Nitrogen (N)*	
Soluble Potash (K ₂ O)	4.0%
Iron (Fe)	0.25%
0.25% Chelated Iron	
Manganese (Mn)	0.10%
0.10% Chelated Manganese	

Derived from: urea triazone, low biuret urea, potassium nitrate, iron EDTA, manganese EDTA, amino acids, protein hydrolysates
 * Slowly available nitrogen from urea-triazone nitrogen

NON PLANT FOOD INGREDIENTS

L-Amino Acids	1.25%
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NITROGEN RATES:

- 3 fl oz = 0.05 lbs N per 1000 sq ft
- 4 fl oz = 0.07 lbs N per 1000 sq ft
- 5 fl oz = 0.09 lbs N per 1000 sq ft
- 6 fl oz = 0.11 lbs N per 1000 sq ft
- 9 fl oz = 0.17 lbs N per 1000 sq ft
- 15 fl oz = 0.28 lbs N per 1000 sq ft

PRODUCT INFORMATION:

2.25 lbs Nitrogen/Gallon
 Weight per Gallon: 10.7 lbs
 pH: 7.8



22-0-4

- Foliar-Pak 22-0-4 is a true foliar fertilizer that is immediately available to the plant. This is especially important when the plant is under stress and the roots have a difficult time meeting the demands of the plant. Foliar-Pak 22-0-4 will provide the plant with necessary nutrients and amino acids to thrive.
- Foliar-Pak 22-0-4 will enhance overall performance when used with plant growth regulators and fungicides.
- Foliar-Pak 22-0-4 contains plant available amino acids that significantly increase nutrient uptake and utilization. Amino acids help the plant maintain proper metabolic functions, giving it a unique health advantage.
- Foliar-Pak 22-0-4 is a specially formulated combination of controlled and readily available nitrogen to provide immediate and lasting results.

GENERAL USE GUIDE

For foliar applications delay irrigation or mowing for 12 to 24 hours.

Golf Course Greens	Apply 3.0 to 12.0 fl oz per 1,000 sq ft in enough water to provide sufficient foliar coverage. Repeat application every 7 to 14 days. Transition and warm season turf may require more frequent applications.
Golf Course Tees and Fairways	Apply 3.0 to 6.0 fl oz per 1,000 sq ft in a minimum of 1 gal per 1,000 sq ft of spray solution. Repeat application every 10 to 14 days.
Athletic Fields and Professional Lawn Care	Apply at 2 to 5 gal per acre in 25 to 88 gal per acre spray solution. Use the lower rates if daytime temperatures exceed 85 degrees or if turf is exhibiting symptoms of drought stress.

Chloroburst®

Iron, Manganese, & Zinc Supplement

foliar

soil

CHLOROBURST®

Plants grown in poor soils and soils of high pH often become discolored and stunted due to micro-nutrient deficiencies. Chloroburst is designed to treat some of the most common micro-nutrient deficiencies in turf and landscape sites. Chloroburst is a premium blend of specially chelated iron, manganese, and zinc for soil application. These nutrients remain plant available even in soil pH levels up to 10.

- Foliar-Pak Chloroburst is a highly concentrated supplement that supplies specially chelated iron, manganese, and zinc in a form that is available to ornamentals and turf even in high soil pH.
- One timely application of Foliar-Pak Chloroburst will reverse iron, manganese and zinc deficiencies.
- Provides long-lasting color for trees, ornamental plants, and turf.
- Micro-nutrients are chelated specifically for root absorption.
- Nutrients remain available for lengthy periods, even in hostile soil conditions.
- Foliar-Pak Chloroburst provides essential nutrients for chlorophyll production.
- Zinc is crucial for apical meristem activity, which allows plants to initiate new root and shoot growth.

GUARANTEED ANALYSIS

Iron (Fe)	3.8%
3.8% Chelated Iron	
Manganese (Mn)	3.1%
3.1% Chelated Manganese	
Zinc (Zn)	1.6%
1.6% Chelated Zinc	

Derived from: iron EDDHA, manganese EDTA, zinc EDTA

PRODUCT INFORMATION:

25 lb pail

4 lb bag

GENERAL USE GUIDE

<p>Trees, Shrubs Perennials, Annuals</p>	<p>For trees and shrubs fed through deep-root injection. Add 3 oz (1/2 dry measurement cup) of Chloroburst per inch diameter and apply in a sufficient amount of water to evenly disperse the solution through the root zone.</p> <p>For annuals, perennials, and other plants treated via soil drench, mix 1.5 oz per gallon of water and apply a quarter gallon per 5 ft² of root zone area.</p> <p>For general applications where an Fe, Mn, Zn supplement is desired but the trees and plants are not showing a deficiency, add 1-2 lbs per 100 gallons.</p>
<p>Golf Courses, Athletic Fields & Professional Lawn Care</p>	<p>Spray 4 to 12 oz per 1,000 sq ft or 33 lbs per acre in sufficient amount of water to apply in an even fashion. Irrigate after spraying to ensure movement into the root zone.</p>



Bio 12-6-6

foliar

soil

GUARANTEED ANALYSIS

Total Nitrogen (N).....	12.0%
9.0% Water Soluble Organic Nitrogen	
3.0% Water Insoluble Nitrogen	
Available Phosphate (P ₂ O ₅)	6.0%
Soluble Potash (K ₂ O)	6.0%
Boron (B)	0.02%
Copper (C)	0.05%
0.05% Water Soluble Copper (C)	
Iron (Fe)	0.10%
0.10% Water Soluble Iron (Fe)	
Manganese (Mn).....	0.05%
0.05% Water Soluble Manganese (Mn)	
Zinc (Zn)	0.05%
0.05% Water Soluble Zinc (Zn)	

Derived from: fish solubles, feathermeal and colloidal phosphates, potassium acetate, borax, complex sugars and glucoheptonate of copper, manganese, zinc

NON PLANT FOOD INGREDIENTS

Sea Plant Extract	4.0%
Fulvic Acid.....	2.0%
L-Amino Acids	1.25%

NITROGEN RATES:

3 fl oz = 0.028 lbs N per 1000 sq ft
4 fl oz = 0.031 lbs N per 1000 sq ft
5 fl oz = 0.039 lbs N per 1000 sq ft
6 fl oz = 0.055 lbs N per 1000 sq ft

PRODUCT INFORMATION:

1.2 lbs Nitrogen/Gallon
Weight per Gallon: 10.0 lbs
pH: 6.8



BIO 12-6-6

- Foliar-Pak Bio 12-6-6 provides bioactive ingredients which improve microbial activity and nutrient availability while reducing fertilizer inputs into the environment.
- Foliar-Pak Bio 12-6-6 promotes rapid root growth and speeds recovery of damaged or stressed turf.
- Plant extracts, humic and fulvic acids influence plant processes to increase uptake of nutrients and improve plant vigor.
- Foliar-Pak Bio 12-6-6 provides long-lasting color and growth. It helps maximize use of foliar and soil nutrients.

GENERAL USE GUIDE

Root Injection

Add 2.5 to 5.0 gal of 12-6-6 per 100 gal of water.
Equipment: Standard hydraulic sprayer with either mechanical agitation of high pressure, jet agitation such as with a venture nozzle. Use a standard root feeder probe or spray gun and soil injection needle with at least 4 lateral ports.

Operating Pressure: 150 to 200 PSI or 1/2 gal per 4 seconds.

TREES: 25 to 50 gal of liquid suspension per 1,000 sq ft of soil to be treated. Apply 1.0 to 2.0 qt of suspension per injection of spacing of 3 ft between injections in a grid under the entire tree canopy. Inject at a depth beginning at 4 in below the surface through a depth of 12 in maximum.

SHRUBS, VINES, AND BERRIES: Apply 1.0 to 2.0 pt of suspension per injection on a spacing of 2 ft between injections. Inject at a depth of 4 to 6 in. (For small shrubbery, drench soil using standard spray gun with disc removed. Apply 1/4 gal per 10 sq ft of root area.)

Soil Drench

PERENNIALS, ANNUALS, AND SHRUBS: Add 1.0 to 2.0 fl oz per 1 gal of water. Apply directly to soil every 2 to 4 weeks. Never over fertilize.

Foliar Application

FLOWERS, PERENNIALS, AND ANNUALS: Add 2.0 to 4.0 fl oz per 1 gal of water. Apply directly to leaves every 3 weeks prior to bloom and then every 2 to 4 weeks

TURFGRASS: Apply 6.0 to 9.0 fl oz per 1,000 sq ft. May be used as a foliar or soil applied product. Apply every 2 to 4 weeks or as needed in order to provide desired color and health.



Armament[®] K

0-0-24 protected by Armament[®]



NEW FORMULA
ARMAMENT[®] K

Foliar-Pak Armament K protects nutrients from adverse interactions in the soil, which render them unavailable, while increasing potassium uptake and use efficiency by as much as 30%.

- Potassium controls the translocation of carbohydrates and plant osmotic relations and is integral to protein synthesis.
- Foliar-Pak Armament K provides a high analysis liquid potassium that can be effectively tank mixed with other nutrients and wetting agents.
- Armament technology ensures predictable nutrient availability.
- Armament technology increases nutrient availability by unlocking existing tied-up soil nutrients and converting them into plant usable nutrients.
- Acting as a buffer, Foliar-Pak Armament K can be used in high pH and hard water.

GUARANTEED ANALYSIS	
Soluble Potash (K ₂ O)	24.0%
Derived from: potassium acetate	

PRODUCT INFORMATION:

Weight per Gallon: 11.02 lbs
pH: 8.3

GENERAL USE GUIDE	
Golf Course Greens, Tees, and Fairways Sports Turf	Apply 3.0 to 9.0 fl oz per 1,000 sq ft in 0.5 to 2.0 gal spray solution per 1,000 sq ft. Repeat application every 3 to 6 weeks during the growing season. May be tank mixed with other soil applied products. Dries safely on the leaf surface, but for best results water into soil profile as soon as possible.
Residential and Professional Lawn Care	Apply 1.0 to 2.0 gal per acre in 25 to 88 gal per acre of spray solution. Repeat application every 6 to 8 weeks.



Armament® P

3-12-2 protected by Armament®

foliar

soil

GUARANTEED ANALYSIS

Total Nitrogen (N).....	3.0%
2.5% Ammoniacal Nitrogen	
0.5% Nitrate Nitrogen	
Available Phosphate (P ₂ O ₅)	12.0%
Soluble Potash (K ₂ O)	2.0%
Derived from: monoammonium phosphate, potassium nitrate	

PRODUCT INFORMATION:

Weight per Gallon: 10.0 lbs
pH: 4.4



NEW FORMULA ARMAMENT® P

Foliar-Pak Armament P protects nutrients from adverse interactions in the soil, which render them unavailable, while increasing phosphorus uptake and use efficiency by as much as 30%.

- Phosphorus is essential for protein synthesis, cell division, and the development of new tissue.
- Foliar-Pak Armament P increases phosphorus availability by loosely complexing and preventing common soil nutrient interactions that tie-up phosphorus.
- Armament technology increases nutrient availability by unlocking existing tied-up soil nutrients and converting them into plant usable nutrients.
- Acting as a buffer, Foliar-Pak Armament P can be used in high pH and hard water.



GENERAL USE GUIDE

<p>Golf Course Greens, Tees, and Fairways Sports Turf</p>	<p>Apply 3.0 to 9.0 fl oz per 1,000 sq ft in 0.5 to 2.0 gal spray solution per 1,000 sq ft. Repeat application every 3 to 6 weeks throughout the growing season. May be tank mixed with other soil applied products. Dries safely on the leaf surface, but for best results water into soil profile as soon as possible.</p>
<p>Residential and Commercial Lawns</p>	<p>Apply 1.0 to 2.0 gal per acre in 25 to 88 gal per acre of spray solution. Repeat application every 6 to 8 weeks.</p>

foliar

soil

Armament[®] MKS

0-0-5 protected by Armament[®]

ARMAMENT[®] MKS

- Foliar-Pak Armament MKS uses a unique combination of organic acids and soil penetrants, protecting potassium, magnesium and sulfur from adverse interactions in the soil and water.
- Foliar-Pak Armament MKS is more efficient than granular products, providing results using fewer nutrients.
- Foliar-Pak Armament MKS offers unique Armament technology, which delivers stable nutrients to plant roots.
- The patented Armament technology protects nutrients from being tied up in tank mixes and in the soil.
- Less physical loss and soil tie-up of nutrients resulting in a greater percentage of applied nutrients used by the plant.
- Foliar-Pak Armament MKS can be applied with soil wetting agents.

GUARANTEED ANALYSIS

Soluble Potash (K ₂ O)	5.0%
Magnesium (Mg)	2.5%
2.5% Water Soluble Magnesium (Mg)	
Sulfur (S)	4.5%
4.5% Combined Sulfur (S)	

Derived from: potassium magnesium sulfate

IMPORTANT NUTRIENT FUNCTIONS:

Magnesium

- Photosynthesis: Mg is the central element of the chlorophyll molecule
- Mg is an enzyme activator and a component of many enzymes

Potassium

- Controls translocation of carbohydrates
- Integral to protein synthesis
- Controls plant osmotic relations
- Regulates plant stomata and water use

Sulfur

- Used to build the amino acids cysteine and methionine
- Involved in synthesis of certain vitamins and anti-oxidants

PRODUCT INFORMATION:

Weight per Gallon: 9.45 lbs
pH: 3.0

GENERAL USE GUIDE

For use on any turfgrass species or surface.

General Application Instructions: Apply 5 to 10 gallons per acre in sufficient water for uniform distribution. Apply with sprayer or through irrigation. Armament MKS is absorbed primarily by the roots, so irrigate immediately after application with sufficient water to wash product off the leaf and into the upper soil profile. Additional irrigation water (or rain) should be applied within 24 hours to move the product deeper into the soil root zone.

For Normal Nutrient Requirement: Apply 5 to 7 gallons per acre monthly or more based on plant demand and soil conditions.

For Moderate To High Demand: Apply 7 to 10 gallons per acre monthly or more often based on plant demand.

Monitor nutrient levels through paste extract soil tests or tissue tests and apply as needed.



Armament[®] ZnB

Granular Fertilizer Coating

foliar

soil

GUARANTEED ANALYSIS

Boron (B) 0.50%
 Zinc (Zn) 4.0%

Derived from: sodium borate, EDTA zinc

IMPORTANT NUTRIENT FUNCTIONS:

Zinc

Integral for tryptophan synthesis and auxin production—two elements that help initiate better rooting in turf

Boron

Crucial for cell-wall development by providing structural linkages in cell walls



NEW FORMULA

ARMAMENT[®] ZnB

Spray-on technology that improves granular fertilizer efficiency by complexing nutrients and protecting them from adverse interactions in the soil.

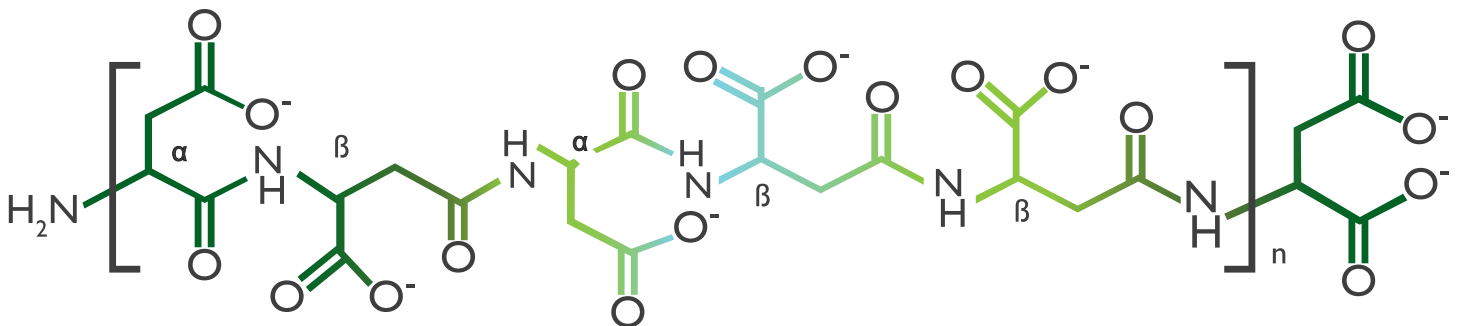
- Foliar-Pak Armament ZnB improves efficiencies and increases nutrient uptake, encouraging a quick and long lasting green up.
- Unlocks the tied up nutrients that already exist in the soil, turning them into plant usable nutrition.
- Supplies stable, plant-available nutrients essential for root growth, cell wall development, and overall plant health.

Foliar-Pak Armament ZnB is designed to be sprayed onto a variety of granular formulations. Using spray-on technology, each fertilizer granule is completely coated with boron, zinc, and the Armament technology—creating an opportunity for better nutrient uptake in the turf through better rooting and increased nutrient availability.

Armament technology works to prevent classic nutrient interactions in the soil between positively charged nutrients, such as calcium, magnesium, and iron, and negative nutrients, such as phosphorus and sulfur.

Armament also guards against nutrient precipitation in high pH soils where positively charged nutrients might interact with negatively charged hydroxide ions and become insoluble precipitates—making them unavailable for plant uptake by the turf. Armament protects essential nutrients, increasing nutrient uptake by 20 to 30 percent.

The Armament structure is a biodegradable, high molecular weight structure that has an extremely high density of negative charges. These negative charges gently complex positively charged metals, keeping them in solution and delivering them to the roots for uptake in the turf.





Holganix[®] PB1

2-0-0 protected by Armament[®]



NEW FORMULA
HOLGANIX[®] PB1

PB1 is a synergistic blend of Holganix-infused components, including a high concentration of 8 species of beneficial bacteria and mycorrhizae, enhanced with Armament technology to improve nutrient utilization.

- Contains nitrogen-fixing bacteria to convert air and soil-locked nitrogen into plant usable nutrients.
- Provides predictable plant and soil responses.
- Grows healthier, stronger, more resilient plants that are better able to defend against insects, disease, environmental stresses, and tournament wear.
- Helps turfgrass grow deeper, stronger, web-like roots for better playability and quicker recovery due to improved nutrient uptake.
- Armament technology and a proprietary stabilization process keeps Holganix components in solution and in suspension, preventing interactions in the spray tank and allowing compatibility with most fungicides and pesticides.
- No refrigeration required.

GUARANTEED ANALYSIS	
Total Nitrogen (N)	2.0%
2.0% Water Soluble Organic Nitrogen	
Derived from: soy protein hydrolysate	

NON PLANT FOOD INGREDIENTS	
Black Strap Molasses	10.0%
Seaweed Extract	2.5%
Humic Acid	1.5%
Vitamin B-1	0.2%

BIOLOGICAL ACTIVE INGREDIENTS:

- (1) **BACTERIA:** Bacillus licheniformis: 1,000,000 cfu/ml; Bacillus pasteurii: 1,000,000 cfu/ml; Bacillus subtilis: 1,000,000 cfu/ml; Bacillus thuringiensis: 1,000,000 cfu/ml; Nitrosomonas europaea: 1,000,000 cfu/ml; Nitrobacter winogradskyi: 1,000,000 cfu/ml; Paenibacillus azotofixans: 1,000,000 cfu/ml
- (2) **ENDO MYCORRHIZAE:** Glomus intraradices: 1 prop/ml; Glomus mosseae: 1 prop/ml; Glomus aggregatum: 1 prop/ml; Glomus monosporum: 0.05 prop/ml; Gigaspora margarita: 0.05 prop/ml
- (3) **ECTO MYCORRHIZAE:** Rhizopogon luteolus: 52,182 prop/ml; Pisolithus tinctorius: 312,500 prop/ml; Laccaria bicolor: 20,875 prop/ml; Laccaria laccata: 20,875 prop/ml

PRODUCT INFORMATION:

2 x 2.5 gal case
55 gal drum

GENERAL USE GUIDE	
Golf Course Greens and Tees	INOCULATION: Apply 6.0 fl oz per 1,000 sq ft when soil reaches 55 degrees. MAINTENANCE: Apply 3.0 fl oz per 1,000 sq ft monthly throughout the growing season.
Golf Course Fairways	Apply 3.0 fl oz per 1,000 sq ft monthly throughout the growing season.



Command

Organic Acid Penetrant

foliar

soil

PRIMARY FUNCTIONING AGENTS

Proprietary Blend of Polymeric Surfactants.....	55.0%
Carboxylic Acids	15.0%
Inert Ingredients.....	30.0%

PRODUCT INFORMATION:

Packaging: 2 x 2.5 Gallon Case
 Weight per gallon: 8.5 lbs
 pH: 7.1



HYDROPAK COMMAND

- Hydro-Pak Command reduces soil surface tension, allowing water and nutrients to reach the root zone.
- Hydro-Pak Command contains an organic acid that helps deal with bicarbonate issues that can create poor water infiltration.
- Hydro-Pak Command allows water to move through heavy organic layers, alleviating oxygen deprived soils.
- Hydro-Pak Command promotes conservation of water usage.
- Hydro-Pak Command is ideal for irrigation injection and is cost effective.

GENERAL USE GUIDE

Turf Maintenance	Apply 16 to 32 fluid ounces of Command per acre. Rates may need to be adjusted up or down until desired performance is achieved. Irrigation soon after application may be advised to move product into the root zone.
Flushing of Salts and Bicarbonate Formations	Apply 2.0 to 4.0 quarts of Command per acre in 20 to 80 gallons of water. Follow with heavy irrigation cycle to move water through the soil profile past root zone.

INJECTION RATES

Inject 22 fluid ounces of Command per acre every 2 to 3 weeks. On very challenging soils, rates up to 40 oz per acre can be used.

Command Rate oz per acre	Irrigation Rate acre inches	PPM
22	0.1	64
22	0.125	52
22	0.2	32
22	0.25	26
22	0.3	21

foliar

soil

Matador

Matrix Active Soil Surfactant

HYDROPAK MATADOR

- Hydro-Pak Matador is a safe, non-ionic wetting agent, based on innovative block polymer technology designed to establish and maintain a consistent moisture level in the root zone.
- Hydro-Pak Matador works by breaking down the hydrophobic coatings found in certain soil profiles, reducing water repellency.
- Hydro-Pak Matador balances the root zone moisture conditions which:
 - Improves oxygen levels
 - Increases microbial activity
 - Improves plant stress tolerance
 - Increases plant metabolism
 - Increases overall plant health
- Hydro-Pak Matador is safe to use on all types of turf throughout the growing season.

PRIMARY FUNCTIONING AGENTS

Blend of Alkyl Block Co-Polymers 100%

PRODUCT INFORMATION:

Packaging: 2 x 2.5 Gallon Case
 Weight per Gallon: 8.5 lbs
 pH: 7.5

GENERAL USE GUIDE

Curative Rates: Golf Course Greens Tees and Fairways	Apply 6.0 fl oz in 1 to 2 gallon of water per 1,000 sq ft. Water in with sufficient irrigation to move product well into the root zone. Follow up application should be made on 4 week intervals (see <i>Turf Maintenance Rates</i> below).
Maintenance Rates: Golf Course Greens Tees and Fairways	Apply 2.0 fl oz per 1,000 sq ft every 2 weeks or apply 4.0 fl oz per 1,000 sq ft every 4 weeks. Rates or intervals may have to be adjusted depending on soil and environmental conditions.
Lawn Care Athletic Fields Sod Installation	Apply 2.0 to 4.0 quarts per acre. Repeat every 4 to 8 weeks during the growing season. Rates and spray intervals will vary according to soil and environmental conditions.
Sod Pre Cutting	Apply 1 to 2 gallon per acre using 50 to 100 gallons of water per acre 2 to 3 weeks before cutting. Water in application with at least 1 inch of water.
Spreader/Activator	Apply 2.0 to 4.0 fl oz per 100 gallons of spray mixture. In difficult wetting situations such as hard water, the addition of a pH reducing agent is recommended.



Stress Reliever Tabs

Soil Wetting Agent

foliar

soil

PRIMARY FUNCTIONING AGENTS

Blend of Polymeric Surfactants	50.0%
Binders and De-Foamers	40.0%

NON PLANT FOOD INGREDIENTS

Humic Acid	4.0%
Amino Acid.....	2.0%
Endo and Ecto Mycorrhizae	4.0%

HYDROPAK STRESS RELIEVER TABS

- Hydro-Pak Stress Reliever Tabs (SRT) contain a proprietary blend of polymeric surfactants to improve infiltration and rewetting of localized dry spots.
- Mycorrhizae improve rooting capability of stressed turf, improving long-term health, water uptake, and nutrient uptake benefits.
- Hydro-Pak SRT will fit in all major commercial hose end applicators.

PRODUCT INFORMATION:

Packaging: 160 grams per tablet
12 tablets per case



GENERAL USE GUIDE

Use one tablet in hose end applicator for direct surface application. May be used as part of a comprehensive water management program. Apply to correct localized dry spots, or use to syringe greens and tees during extreme weather conditions.

SRT will not burn turfgrass and does not need to be watered in. One treatment will last 3 to 4 weeks depending on local soil and weather conditions. Applications made on a more frequent schedule will not adversely effect soil conditions and turfgrass.

Store in original container. Exposure to high heat and humidity for prolonged period of time may cause tablets to melt. Wear appropriate personal protective gear when applying product. For people with sensitive skin, prolonged contact may cause skin irritation. Dispose of containers and unused product in accordance with local, state, and federal regulations.

Product	pH	lbs/gal	Pounds of Nutrient per Gallon Applied													Biological Activators	
			N	P ₂ O ₅	K ₂ O	Ca	B	Cu	S	Fe	Mg	Mn	Mo	Si	Zn		
Foundation Forty	9.2	11.2	0.45		0.9												L
L-18 Activator®	5.3	9.1	0.27								0.05	0.009					L
14-2-4	8.7	10.44	1.46	0.21	0.42					0.026		0.026					L
11-0-11	8.7	10.45	1.23		1.23												L
1-0-15	7.3	10.4	0.10		1.56					0.01		0.005					L
Minors	3.7	9.7	0.1				0.05	0.01	0.24	0.15	0.05	0.1	0.00005			0.04	L, S
Manganese	4.7	10.5	0.21								0.11	0.32					L
A.S. Fusion	6.1	10.0	0.70									0.05					L
Calcium	5.5	11.3	0.78			0.78											L
Carbosential® Fe	4.5	10.1								0.51							L, P
22-0-4	7.8	10.77	2.37		0.43					0.27		0.01					L
Promote	6.5	9.2	0.37		0.092					0.046		0.018					H, S, BP
Micros Plus	4.4	10.05	0.2			0.25	0.002	0.005		0.1	0.05	0.04				0.005	S, H
Bio 12-6-6	6.8	10.0	1.26	0.63	0.63		0.002	0.005		0.01		0.005				0.005	S
Amperage	2.5	11.0	1.1							0.28		0.28				0.28	P
Full Throttle	3.0	9.6	1.15						0.1	0.1		0.07				0.034	S
30-0-0	9.2	10.3	3.09														
Armament K	8.3	11.02			2.65												A
Armament P	4.4	10.0	0.30	1.2	0.20												A
Armament MKS	5.0	10.3			0.52				0.46		0.26						A
Holganix PB1	7.3	9.6	0.19														L,A,H,S,P

Biological Activators

L = L-Amino Acids

There are numerous products on the market that claim to contain “amino acids” but it can be difficult to determine whether they are plant available and in sufficient amounts to make a positive impact on plant health and nutrient uptake. Only L-amino acids are plant available. The Foliar-Pak amino package has been reformulated for increased nitrogen fixation, chlorophyll production, energy production, and the production of anti-stress compounds.

A = Armament Technology

Armament protects nutrients from adverse interactions in the soil, which render them unavailable, while increasing nutrient uptake and use efficiency by as much as 30%.

H = Humate Substances

S = Sea Plant Extract

Humic acids and seaweed extract supply various carbon structures, which take on a multitude of roles in the plant and soil.

Humic acids, as well as the organic acids and sugar alcohols from seaweed, directly impact plant nutrition by complexing with various nutrients, thus improving foliar and root availability of those nutrients. In an indirect manner, humics and seaweed work to improve plant functions such as chlorophyll development, water utilization and plant defense mechanisms. These improvements result in a healthier plant with better root structure that is able to absorb foliar and soil nutrients more efficiently. In the soil seaweed escalates biological activity, which results in nutrient mineralization and an environment more suitable for root functioning.

P = Polysaccharides

Built from a malt extract that is loaded with vitamins, minerals, and a complex series of different molecular-weight sugars, Foliar-Pak’s polysaccharides create terrific complexes with positively charged minerals such as iron, manganese, and zinc. Being

comprised of a variety of different classes of sugar compounds, the polysaccharides provide a range of protection to minerals—with the low-molecular weight sugars breaking down quickly and the high-molecular weight, complex sugars providing long-term protection to minerals and sustenance for microbial life.

BP = Block Polymer

Block polymers work as a spreading surfactant to increase foliar coverage. This increases opportunity for uptake through stomates and transcuticular pores. In the soil the block polymer improves water distribution and aeration, creating a positive environment for root functioning and microbial life.

Foliar-Pak[®] PROGRAMS

SPRING PERFORMANCE

<i>Product</i>	<i>Rate / 1000 sq. ft.</i>
A.S. Fusion	3 - 6 oz
Amperage	3 - 6 oz
L-18 Activator [®]	1 - 1.5 oz
Promote	3 - 6 oz

AERATION RECOVERY

<i>Product</i>	<i>Rate / 1000 sq. ft.</i>
14-2-4	3 - 6 oz
Promote	3 oz
Micros Plus	1.5 oz
Foundation Forty	1 oz

RECOVERY & RELIEF *Warm Season Turf*

<i>Product</i>	<i>Rate / 1000 sq. ft.</i>
Foundation Forty	1 - 1.5 oz
Bio Sea	1.5 - 3 oz
Micros Plus	1 - 3 oz
Promote	3 - 6 oz
Full Throttle	1 - 3 oz

RECOVERY & RELIEF

<i>Product</i>	<i>Rate / 1000 sq. ft.</i>
Foundation Forty	1 - 1.5 oz
Bio Sea	3 - 4 oz
Micros Plus	2 - 3 oz
Promote	3 - 6 oz

BERMUDA RECOVERY

<i>Product</i>	<i>Rate / 1000 sq. ft.</i>
22-0-4	3 - 6 oz
Full Throttle	1.5 - 2 oz
Amperage	3 oz
L-18 Activator [®]	1 - 1.5 oz

THE "OH \$H*T" SPRAY

When the condition of your turf has you shouting four letter words, use this spray:

<i>Product</i>	<i>Rate / 1000 sq. ft.</i>
Bio Sea	5 oz
Foundation Forty	1 oz
Micros Plus	1.5 oz

SEED/SOD *Establishment*

<i>Product</i>	<i>Rate / 1000 sq. ft.</i>
Promote	4 - 6 oz
11-0-11	3 oz
Armament [®] P	3 - 6 oz
Amperage	3 oz
Micros Plus	1 - 2 oz

TRANSITION ZONE

<i>Product</i>	<i>Rate / 1000 sq. ft.</i>
14-2-4	6 - 12 oz
Promote	3 - 6 oz
Minors	1 - 2 oz
1-0-15	3 - 6 oz
Foundation Forty	0.5 - 1 oz

Optional Program Product:

Add Holganix PB1 with Foliar-Pak Armament at 3 oz / 1000 sq. ft. to any program for enhanced turf performance.

Foliar·Pak[®] PROGRAMS

ULTRADWARF GREENS

<i>Product</i>	<i>Rate / 1000 sq. ft.</i>
14-2-4	3 - 6 oz
Micros Plus	1 - 3 oz
1-0-15	3 - 6 oz
Calcium	2 oz
<i>Optional Products:</i>	
Bio Sea	1 - 3 oz
Minors	1 - 2 oz

ATHLETIC FIELDS

<i>Product</i>	<i>Rate / 1000 sq. ft.</i>
22-0-4	3 - 6 oz
Micros Plus	1 - 3 oz
1-0-15	3 - 6 oz
Bio Sea	1.5 - 3 oz
<i>Optional Products:</i>	
Carbosential [®] Fe	10 - 14 oz / acre
Promote	3 oz

Southern BENTGRASS GREENS

<i>Product</i>	<i>Rate / 1000 sq. ft.</i>
14-2-4	3 - 6 oz
Minors	1 - 2 oz
1-0-15	3 - 6 oz
Calcium	2 oz
<i>Optional Products:</i>	
Promote	3 oz
Amperage	3 oz

WINTERIZATION *Foliar*

<i>Product</i>	<i>Rate / 1000 sq. ft.</i>
1-0-15	3 - 6 oz
Amperage	3 - 6 oz
A.S. Fusion	6 - 9 oz
L-18 Activator [®]	1 - 2 oz

Northern BENTGRASS/POA

<i>Product</i>	<i>Rate / 1000 sq. ft.</i>
14-2-4	3 - 6 oz
Promote	3 - 6 oz
Minors	1 - 3 oz
1-0-15	3 - 6 oz

Soil

<i>Product</i>	<i>Rate / 1000 sq. ft.</i>
Armament [®] MKS	5 - 10 gal / acre
Amperage	3 - 6 oz
Promote	3 - 6 oz
HydroPak [®] Command	16 - 32 oz / acre

LATE SEASON *Enhancement*

<i>Product</i>	<i>Rate / 1000 sq. ft.</i>
Foundation Forty	1 - 1.5 oz
1-0-15	3 - 6 oz
Amperage	3 oz



Foliar-Pak[®]

web: foliarpak.com | twitter: [@foliarpak](https://twitter.com/foliarpak)