

Biofeed[®] *Turf*

*Bio-Fertilizers & Soil Management
Products for Professional Turf*

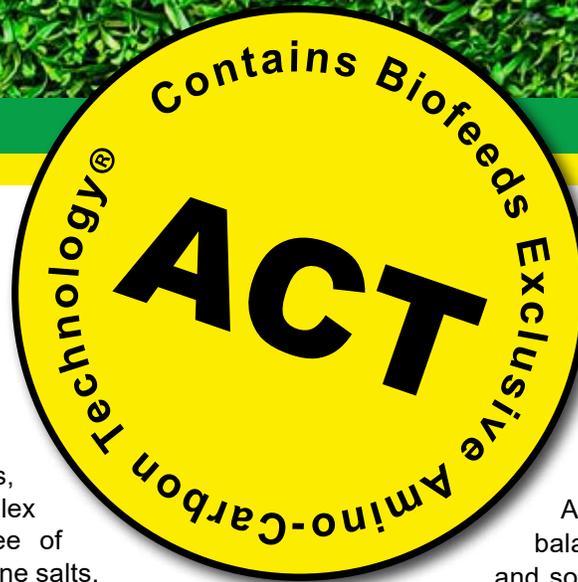




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Biofeed® products come to life through our Amino-Carbon Technology® (ACT). Creation of ACT® starts with our proprietary process of enzymatic transformation of sustainable plant extracts, intracellular components, organic acids and complex carbohydrates, thus ACT® is free of dangerous heavy metals and alkaline salts.

ACT® chelates and releases insoluble soil nutrients allowing for improved uptake by plant roots and more efficient, leaf-friendly foliar applications. ACT® remains active long after application and improves the soil's Cation Exchange Capacity (CEC).

ACT® releases oxygen through the action of specialized enzymes that cleave water molecules, thus releasing

elemental oxygen into water and the soil below ground. Increased oxygen improves oxidation-reduction reactions and stimulates beneficial aerobic microbes.

ACT® helps to reduce sodium toxicity, balance water biology, improve plant and soil interactions, and has been proven effective over a period of nearly three decades through agricultural, environmental, and turf-grass university studies.

ACT® has been produced at our manufacturing facility located in Glendale, Arizona-USA since 1986 and serves as the foundation formula for all of Biofeed's environmental products, fertilizers and soil management product lines.

Biofeed® builds better soil!

Key Benefits - In the Soil:

- Releases oxygen into the soil.
- Promotes aerobic biological activity.
- Eliminates or reduces anaerobic Black-Layer conditions caused by a lack of elemental soil oxygen.
- Chelates soil minerals for improved uptake by the plant.
- Improves water penetration and retention by enhancing polysaccharide production resulting in improved soil crumb structure.
- Buffers harmful salts.
- Gently buffers soil pH.
- Aids seed germination.
- Aids thatch digestion and soil humus formation.
- Easily sprayed on or applied through most fertilizer injection systems.
- Mix or blend with most fertilizers or turf management products.

Key Benefits - In the Plant:

- Optimizes root growth producing higher rates of nutrient uptake resulting in healthier top growth and higher overall photosynthetic metabolites that support dynamic plant growth.
- Improves drought tolerance and disease resistance by increasing antioxidant production in the plant.
- Improves plant-cell division aiding in improved repair of greens and tees due to wear.
- Improves biochemical nutrient translocation via cellular transfer within the plant.
- Optimizes cellular activity to produce higher levels of plant sugars, proteins, amino acids, and starch reserves to improve Select Acquired Resistance (SAR).



SUPER-C™

SOIL & PLANT MANAGEMENT SYSTEM 6-0-0

Description:

SUPER-C™ is a bio-chemical plant and soil additive that contains a super-concentrate of Biofeed® ACT® including molecular and intracellular components plus nitrogen in a bio-available form.

This rich combination provides cellular nutrition on a molecular level that feeds both plant cells and soil organisms to stimulate the growth of beneficial aerobic soil microbes. These work to promote polysaccharide production which builds better soil structure and reduces compaction. **SUPER-C™** improves the oxygen content of the soil and root-zone. **SUPER-C™** also contains complex organic compounds which chelate and dissolve insoluble soil minerals to enhance plant up-take and buffer free sodium to reduce toxicity and help leach it out of the root zone.

Guaranteed Analysis:

Total Nitrogen (N)	6.0%
4.0% Urea Nitrogen	
2.0% Water Soluble Organic Nitrogen	
Derived From: Urea and Soy Protein Hydrolysate.	

Application Instructions:

SHAKE WELL OR STIR BEFORE USE.

SUPER-C™ is highly concentrated and should be mixed with water to ensure adequate coverage. Jar test for compatibility prior to final tank mixing with other products.

Utilize **SUPER-C™** on all soil types year-round to support biodynamic soil fertility.

GREENS, TURF GRASS & SOIL: Apply 4-8 ounces in 5-20 gallons of water per 1000 square feet, or 1-2 gallons in 50-100 gallons of water per acre. Water thoroughly. Apply every 2-4 weeks or as required.

FAIRWAYS: Apply 1-2 quarts in 50-100 gallons of water per acre once every 30 days with sprayer, or apply through a fertilizer injection system. Water thoroughly.

TREES & SHRUBS: Spray 0.5 ounce in 1 gallon of water with power sprayer, hose-end sprayer, or dilute in a watering can. Apply onto foliage to point of runoff and drench soil.

COMPOSTS: Apply 8 ounces per cubic yard with watering can or hose-end sprayer every 2 weeks. Turn pile following application.

Condition of Sale:

The information herein is believed to be accurate and reliable. Buyer and user assume all liability from use of this material. Follow directions carefully. Timing, method of application, weather, plant, crop or turf conditions and other factors are beyond the control of the seller.

Storage and Disposal:

Store at 50°-95°F / 10°-35°C. Do not store in direct sunlight.

Keep products in original container. Do not transfer into food or drink containers. Triple rinse when empty for recycling. Always dispose of container in accordance with local, state and federal regulations.

Physical Characteristics:

8.9 lbs./gal. (0.534 lbs. N/gal.)
pH Range: 8.5-9.5
Enzymatic activity may affect pH during storage.

Availability:

2.5 gallon jugs (2 per case), 55 gallon drums, and 275 gallon bulk containers.

Caution:

Keep out of reach of children. May be harmful if swallowed.

SDS available upon request.



CHETROL™

CHELATION MANAGEMENT

8-0-0

Description:

CHETROL™ (key-trol) is a concentrated formulation of ACT® plus added nitrogen that is formulated to control a variety of minerals, salts and heavy metals. This dynamic blend also aids in enhancing bio-degradation of a wide range of organics and complex hydrocarbons.

CHETROL™ is an effective blending additive for most granular fertilizers to increase nutrient efficiency.

CHETROL™ dissolves mineral scale and buffers sodium salts in soils and irrigation water that often tie up essential plant nutrients. Removes mineral scale build-up from irrigation lines and emitters, restoring water-flow and sprinkler efficiency.

CHETROL™ enhances herbicide uptake by buffering minerals present in tank water. This process improves herbicide efficiency, reduces usage rates and chemical tie-up of herbicides.

CHETROL™ catalyzes microbial proliferation and breakdown of chemical and petroleum compounds. The result is bio-degradation into environmentally harmless carbon dioxide, water and minerals.

Guaranteed Analysis:

Total Nitrogen (N)8.0%
6.0% Urea Nitrogen
2.0% Water Soluble Organic Nitrogen
Derived From: Urea and Soy Protein Hydrolysate.

Application Instructions:

SHAKE WELL OR STIR BEFORE USE.

CHETROL™ is highly concentrated and should be mixed with water to ensure adequate coverage. Jar test for compatibility prior to final tank mixing with other products.

GREENS, TURF GRASS & SOIL Apply 1-2 quarts per acre every 2-4 weeks by ground sprayer, water-run or through a fertilizer injector system.

SALT REDUCTION AND NUTRIENT MANAGEMENT:
Sports Fields and Agricultural Soils: Apply 1-2.5 gallons per acre every 30 days by ground sprayer or through a fertilizer injector system.

HERBICIDE ENHANCEMENT: Mix 1 ounce per each gallon of water, prior to adding herbicide. Herbicide rates may be reduced 20-50%.

HEAVY METALS/PETROLEUM TOXICITY: Apply 2-5 gallons in at least 100 gallons of water per acre by grounds sprayer. Water thoroughly or incorporate by tillage, follow by thorough watering. Treat every 2-4 weeks until desired control is achieved.

Condition of Sale:

The information herein is believed to be accurate and reliable. Buyer and user assume all liability from use of this material. Follow directions carefully. Timing, method of application, weather, plant, crop or turf conditions, and other factors are beyond the control of the seller.

Storage and Disposal:

Store at 50°-95°F / 10°-35°C. Do not store in direct sunlight.

Keep products in original container. Do not transfer into food or drink containers. Triple rinse when empty for recycling. Always dispose of container in accordance with local, state and federal regulations.

Physical Characteristics:

9.5 lbs./gal. (0.76 b. N/gal.)
pH Range: 8.5-9.5
Enzymatic activity may affect pH during storage.

Availability:

2.5 gallon jugs (2 per case), 5 gallon pail, 55 gallon drums, and 275 gallon bulk containers.

Caution:

Keep out of reach of children.
May be harmful if swallowed.
SDS available upon request.



CARBOMAX™

FOLIAR & SOIL PHOSPHATE

6-20-0

Description:

CARBOMAX™ provides a dynamic blend of nitrogen and phosphorus in a complex with Biofeed® ACT® for easier absorption and translocation in all plants, turf and crops resulting in enhanced sugar (BRIX) production and plant vigor. These combine to promote strong stem and leaf growth, deeper root growth and earlier maturity of agricultural crops.

CARBOMAX™ improves turf density and quality of cut and play performance on golf greens, tees and fairways, while it supplies primary nutrients commonly lost due to regular mowing and leaching.

Guaranteed Analysis:

Total Nitrogen (N)6.0%
5.0% Ammoniacal Nitrogen
1.0% Other Water Soluble Nitrogen
Available Phosphoric Acid (P₂O₅).....20.0%
Derived From: Soy Protein Hydrolysate and Ammonium Phosphate.
ALSO CONTAINS NON-PLANT FOOD INGREDIENT:
1.0% Molasses (Microbe Food)

Application Instructions:

SHAKE WELL OR STIR BEFORE USE.

CARBOMAX™ is highly concentrated and should be mixed with water to ensure adequate coverage. Do not mix with calcium fertilizers. Jar test for compatibility prior to final tank mixing with other products.

FOLIAR APPLICATION RATES:

Professional Sports Turf: Foliar apply 0.5-2 gallons per acre in 20-100 gallons of water.

SOIL RATES:

Apply 1-4 gallons per acre via fertigation or sprayer. Irrigate after application to maximize distribution into root zone.

FERTIGATION AND DRIP IRRIGATION RATES:

Turf and Crops: Use 1-4 gallons per acre per irrigation. Continue irrigation after application to maximize fertilizer distribution.

Condition of Sale:

The information herein is believed to be accurate and reliable. Buyer and user assume all liability from use of this material. Follow directions carefully. Timing, method of application, weather, plant, crop or turf conditions, and other factors are beyond the control of the seller.

Storage and Disposal:

Store at 50°-95°F / 10°-35°C. Do not store in direct sunlight.

Keep products in original container. Do not transfer into food or drink containers. Triple rinse when empty for recycling. Always dispose of container in accordance with local, state and federal regulations.

Physical Characteristics:

10.4 lbs./gal. (0.624 lb. N/gal.)
pH Range: 5.5-6.5
Enzymatic activity may affect pH during storage.

Availability:

2.5 gallon jugs (2 per case), 30/55 gallon drums, and 275 gallon bulk containers.

Caution:

Keep out of reach of children. May be harmful if swallowed. **SDS** available upon request.

Information regarding the contents and levels of metals in this product is available on the internet at:
<http://www.aapfco.org/metals.html>



EXPO™

FOLIAR PHOSPHATE BLEND 8-16-4

Description:

EXPO™ is a high phosphate liquid in a complex with Biofeed® ACT®. These combine to promote stronger metabolic activity, cellular growth and stronger horizontal stem and leaf growth that is essential to maintaining high-quality greens, tees and turf.

EXPO™ Promotes more vigorous turf recovery by supplying primary nutrients commonly lost due to soil mineral tie-up as well as regular mowing and leaching.

Regular use of **EXPO™** goes further than standard fertilization as it stimulates and supports sugar (BRIX) production and plant vitality which helps reduce disease occurrence by enhancing Select Acquired Resistance (SAR).

Guaranteed Analysis:

Total Nitrogen (N)	8.0%
7.0% Urea Nitrogen	
1.0% Other Water Soluble Nitrogen	
Available Phosphoric Acid (P ₂ O ₅).....	16.0%
Soluble Potash (K ₂ O)	4.0%
Derived From: Urea, Soy Protein Hydrolysate, Phosphoric Acid, and Potassium Hydroxide.	

Application Instructions:

SHAKE WELL OR STIR BEFORE USE.

EXPO™ is highly concentrated and should be mixed with water to ensure adequate coverage. Jar test for compatibility prior to final tank mixing with other products.

GREENS, TEES AND TURF: Foliar apply 1-2.5 gallons in 50-100 gallons of water per acre, or for smaller areas apply 4-16 ounces in 5-10 gallons of water per 1000 square feet. Apply every 7-14 days or as needed with sprayer. Water normally following application.

Condition of Sale:

The information herein is believed to be accurate and reliable. Buyer and user assume all liability from use of this material. Follow directions carefully. Timing, method of application, weather, plant, crop or turf conditions, and other factors are beyond the control of the seller.

Storage and Disposal:

Store at 50°-95°F / 10°-35°C. Do not store in direct sunlight.

Keep products in original container. Do not transfer into food or drink containers. Triple rinse when empty for recycling. Always dispose of container in accordance with local, state and federal regulations.

Physical Characteristics:

10.5 lbs./gal. (0.84 b. N/gal.)

pH Range: 7.0-8.0

Enzymatic activity may affect pH during storage.

Availability:

2.5 gallon jugs (2 per case), 30/55 gallon drums, and 275 gallon bulk containers.

Caution:

Keep out of reach of children. May be harmful if swallowed.

SDS available upon request.

Information regarding the contents and levels of metals in this product is available on the internet at: <http://www.aapfco.org/metals.html>



GT PRO™

GREENS & TEES FOLIAR

9-4-12

Description:

GT PRO™ provides a dynamic blend of primary nutrients plus Biofeed® ACT®. These combine to promote efficient cellular function and promotes root growth and strong vertical growth that is essential to managing high quality professional turf.

Due to its high potassium to silicate content in relation to nitrogen, phosphorus, **GT PRO™** improves ball roll or stimp rating. Turf color improves along with quality of cut and play performance on golf greens and tees while it supplies essential nutrients commonly lost due to regular mowing and leaching.

Regular use of **GT PRO™** goes further than standard fertilization as it stimulates and supports dynamic cellular function and growth while it improves Select Acquired Resistance (SAR).

Guaranteed Analysis:

Total Nitrogen (N)	9.0%
6.0% Urea Nitrogen	
2.0% Ammoniacal Nitrogen	
1.0% Other Water Soluble Nitrogen	
Available Phosphoric Acid (P ₂ O ₅)	4.0%
Soluble Potash (K ₂ O)	12.0%
Derived From: Urea, Soy Protein Hydrolysate, Ammonium Phosphate, Potassium Hydroxide, and Potassium Silicate.	

ALSO CONTAINS NON-PLANT FOOD INGREDIENT:
0.1% SILICA (SiO₂) derived from Potassium Silicate.

Application Instructions:

SHAKE WELL OR STIR BEFORE USE.

GT PRO™ is highly concentrated and should be mixed with water to ensure adequate coverage. Jar test for compatibility prior to final tank mixing with other products.

GREENS, TEES AND TURF: Foliar apply 1-5 gallons in 50-100 gallons of water per acre, or for smaller areas apply 8-16 ounces in 5-10 gallons of water per 1000 square feet.

Apply every 7-14 days or as needed with sprayer. Water normally following application.

Contact your Biofeed® representative for a complete greens and tees foliar feeding program.

Condition of Sale:

The information herein is believed to be accurate and reliable. Buyer and user assume all liability from use of this material. Follow directions carefully. Timing, method of application, weather, plant, crop or turf conditions, and other factors are beyond the control of the seller.

Storage and Disposal:

Store at 50°-95°F / 10°-35°C. Do not store in direct sunlight.

Keep products in original container. Do not transfer into food or drink containers. Triple rinse when empty for recycling. Always dispose of container in accordance with local, state and federal regulations.

Physical Characteristics:

10.5 lbs./gal. (0.945 lb. N/gal.)

pH Range: 9.3-10.3

Enzymatic activity may affect pH during storage.

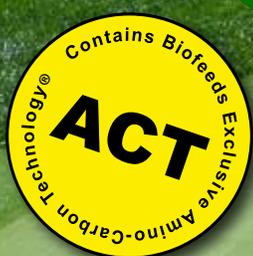
Availability:

2.5 gallon jugs (2 per case), 30/55 gallon drums, and 275 gallon bulk containers.

Caution:

Keep out of reach of children. May be harmful if swallowed. SDS available upon request.

Information regarding the contents and levels of metals in this product is available on the internet at: <http://www.aapfco.org/metals.html>



K-PRO™

FOLIAR POTASSIUM FERTILIZER 0-0-20

Description:

K-PRO™ potassium is complexed with Biofeed® ACT® for enhanced uptake and translocation throughout the entire plant and is beneficial during extremes in temperature and water stress.

K-PRO™ potassium facilitates nitrogen metabolism and stimulates root growth, while providing dynamic plant response due to its plant-friendly formulation. Use it to balance your turf, plant or crop nutritional program.

Guaranteed Analysis:	
Soluble Potash (K ₂ O)	20.0 %
Derived From: Potassium Hydroxide.	

Application Instructions:

SHAKE WELL OR STIR BEFORE USE.

K-PRO™ is highly concentrated and should be mixed with water to ensure adequate coverage. Jar test for compatibility prior to final tank mixing with other products.

GREENS, TEES AND TURF: As a foliar, apply 1-2.5 gallons in 50-100 gallons of water per acre, or for smaller areas apply 4-16 ounces in 10-20 gallons of water per 1000 square feet, or apply through a fertilizer injection system. Frequency and rate of applications may vary.

Condition of Sale:

The information herein is believed to be accurate and reliable. Buyer and user assume all liability from use of this material. Follow directions carefully. Timing, method of application, weather, plant, crop or turf conditions, and other factors are beyond the control of the seller.

Storage and Disposal:

Store at 50°-95°F / 10°-35°C. Do not store in direct sunlight.

Keep products in original container. Do not transfer into food or drink containers. Triple rinse when empty for recycling. Always dispose of container in accordance with local, state and federal regulations.

Physical Characteristics:

10.9 lbs./gal.
pH Range: 11.5-12.5
Enzymatic activity may affect pH during storage.

Availability:

2.5 gallon jugs (2 per case), 30/55 gallon drums, and 275 gallon bulk containers.

Caution:

Keep out of reach of children. May be harmful if swallowed.

SDS available upon request.



MICRO-Fe™

LIQUID IRON

0-0-0

Description:

MICRO-Fe™ contains iron in a liquid solution of Biofeed® ACT® to increase leaf absorption of this important element. This dynamic blend promotes strong plant development, improved antioxidant production, plant enzyme activity and chlorophyll production for deeper green leaf color.

Guaranteed Analysis:

Sulfur (S).....	3.0%
Iron (Fe).....	6.0%
Derived From: Ferrous Sulfate.	

Application Instructions:

SHAKE WELL OR STIR BEFORE USE.

MICRO-Fe™ is highly concentrated and should be mixed with water to ensure adequate coverage. Jar test for compatibility prior to final tank mixing with other products. Not recommended for use in fertigation systems.

GREENS, TEES AND TURF: Foliar apply 1-2 gallons in 50-100 gallons of water per acre or for smaller areas apply 4-8 ounces in 3-5 gallons of water per 1000 square feet. Apply every 7-10 days or as needed with sprayer. **DO NOT IRRIGATE** for 30-60 minutes following application to allow for maximum foliar uptake.

Physical Characteristics:

10.6 lbs./gal.
pH range: 2.5-3.5 Enzymatic activity may affect pH during storage.

MICRO-H™

FOLIAR MICRO-NUTRIENT BLEND

0-0-0

Description:

MICRO-H™ contains a powerful combination of ACT® and micro-nutrients to maximize leaf absorption. These nutrients are required for stronger plant development, improved antioxidant and enzyme activity and chlorophyll production which aids in producing deeper green leaf color.

Guaranteed Analysis:

Sulfur (S).....	3.00%
Copper (Cu).....	0.05%
Iron (Fe).....	2.00%
Manganese (Mn).....	2.00%
Molybdenum (Mo).....	0.08%
Zinc (Zn).....	2.00%
Derived From: Copper, Iron, Manganese and Zinc Sulfates, Sodium Molybdate.	

Application Instructions:

SHAKE WELL OR STIR BEFORE USE.

MICRO-H™ is highly concentrated and should be mixed with water to ensure adequate coverage. Jar test for compatibility prior to final tank mixing with other products. Not recommended for use in fertigation systems.

GREENS, TEES AND TURF: Foliar apply 1-2 gallons in 50-100 gallons of water per acre, or for smaller areas apply 4-8 ounces in 3-5 gallons of water per 1000 square feet. Apply every 7-10 days or as needed with sprayer. **DO NOT IRRIGATE** for 15-30 minutes following application to allow maximum foliar uptake.

FOLIAR FEEDING OF TREES AND SHRUBS: Dilute 8-16 ounces in 100 gallons of water and spray on foliage to point of runoff. Repeat as needed.

Physical Characteristics:

10.5 lbs./gal.
pH Range: 7.2-8.2 Enzymatic activity may affect pH during storage.

MICRO-Fe™ and **MICRO-H™** are available in 2.5 gallon jugs (2 per case), 30/55 gallon drums, and 275 gallon bulk containers.

CAUTION: Keep out of reach of children. May be harmful if swallowed.
Information regarding the contents and levels of metals in these products is available on the internet at:
<http://www.aapfco.org/metals.html>

MICRO-H™ Only: Use of fertilizers containing 0.001% or more of Molybdenum (Mo) may result in forage crops containing levels of Molybdenum (Mo) which are toxic to ruminant animals.

Refer to other products for Condition of Sale, Storage and Disposal statements.

SDS available upon request.



QUICK-6™

FOLIAR SILICATE SOLUTION 1-0-5

Description:

QUICK-6™ provides a rich source of potassium and silica with Biofeed® ACT® for efficient leaf absorption and translocation throughout the plant. These combine to promote strong vertical leaf and stem development that is essential to managing high quality turf. **QUICK-6™** improves turf stand and green speed or stimp rating by increasing stem and leaf rigidity.

Studies have shown that foliar application of potassium and silica assist plant development following deposition of silica in the epidermal cell walls, thus enhancing the plant's ability to point its leaves towards the light source.

Guaranteed Analysis:

Total Nitrogen 1.0%
1.0% Other Water Soluble Nitrogen
Soluble Potash (K₂O) 5.0%
Derived From: Soy Protein Hydrolysate and Potassium Silicate.

ALSO CONTAINS NON-PLANT FOOD INGREDIENT:
6.0% SILICA (SiO₂) derived from Potassium Silicate.

Application Instructions:

SHAKE WELL OR STIR BEFORE USE.

QUICK-6™ is highly concentrated and should be mixed with water to ensure adequate coverage. Jar test for compatibility prior to final tank mixing with other products.

GREENS, TEES AND TURF: Foliar apply 22-66 ounces in 50-100 gallons of water per acre, or for smaller areas apply 1-3 ounces in 5-10 gallons of water per 1000 square feet. Apply every 7-14 days or as needed with sprayer. Water normally following application.

Physical Characteristics:

9.4 lbs./gal. (0.094 lbs. N/gal.)
pH Range: 7.2-8.2
Enzymatic activity may affect pH during storage.

TRACE™ and **QUICK-6™** are available in 2.5 gallon jugs (2 per case), 30/55 gallon drums, and 275 gallon bulk containers.

CAUTION: Keep out of reach of children. May be harmful if swallowed.

TRACE™ Only: Use of fertilizers containing 0.001% or more of Molybdenum (Mo) may result in forage crops containing levels of Molybdenum (Mo) which are toxic to ruminant animals.

Information regarding the contents and levels of metals in these products is available on the internet at: <http://www.aapfco.org/metals.html>

Refer to other products for Condition of Sale, Storage and Disposal statements.

SDS available upon request.

TRACE™

ESSENTIAL MICRO-ELEMENT 0-0-0

Description:

TRACE™ contains elemental molybdenum and Biofeed® ACT® that combine to support vital biochemical reactions. Once applied to the leaf, **TRACE™** rapidly moves throughout the xylem and phloem conductive tissue of the turf plant.

Molybdenum is the central element required by enzymes involved with nitrogen conversion and reduction as well as symbiotic nitrogen fixation. When present at proper levels, molybdenum enhances nitrogen efficiency and minimizes stress by catalyzing the enzymatic reduction of nitrites and nitrates that may accumulate in plant tissues. In the soil and root system of various plants, molybdenum acts as a co-enzyme for nitrogen fixation by beneficial microbes.

Guaranteed Analysis:

Molybdenum (Mo) 6.0%
Derived From: Sodium Molybdate.

Application Instructions:

SHAKE WELL OR STIR BEFORE USE.

TRACE™ is highly concentrated and should be mixed with water to ensure adequate coverage. Jar test for compatibility prior to final tank mixing with other products.

GREENS, TEES AND TURF: Apply 2-4 ounces in 25-50 gallons of water per acre, or for smaller areas apply 0.1 ounce in 5-10 gallons of water per 1000 square feet. Apply every 30 days or as needed with sprayer or through fertigation. Water normally following application.

Physical Characteristics:

9.1 lbs./gal.
pH Range: 7.2-8.2
Enzymatic activity may affect pH during storage.





SURFACT™

Multi-Purpose Wetting Agent and Surfactant

Description:

SURFACT™ is a multi-purpose wetting agent and surfactant formula made with powerful surface active agents and organic acids that work synergistically to enhance irrigation efficiency and soil moisture levels as it buffers salts for maximum performance.

SURFACT™ also enhances fertilizer, herbicide and insecticide efficiency by enhancing penetration and absorption and by neutralizing mineral salts in the tank water.

Guaranteed Analysis:

CONTAINS NON-PLANT FOOD INGREDIENTS:

Active Ingredients:

Modified Ammonium Lauryl Polyethylene Glycol 95.0%
Carboxylic Acids 5.0%

NOT RECOMMENDED FOR USE AS A FERTILIZER SUBSTITUTE

All ingredients are exempt from the requirements of a tolerance as specified in 40 CFR 180. Formulation may vary by region or country.

Application Instructions:

GENERAL WATER PENETRATION: Apply 2-4 quarts per acre, or for standing water apply 1-2 gallons per acre via fertigation, water-run, or diluted in a sprayer followed by irrigation cycle or rainfall. Repeat as needed.

FERTILIZERS, HERBICIDES AND INSECTICIDES: Add 1-2 quarts per 100 gallons of water while filling tank and before addition of chemicals. Use higher rate for mineralized or hard water sources.

IMPROVED SEEDLING EMERGENCE: Apply 1-2 quarts per acre to improve seedling germination and emergence. Apply by fertigation, water-run or spray directly over seed row separately, or tank mixed with fertilizers.

TRANSPLANTING: Dilute 1 quart per 250 gallons of transplant water. Deep water at planting.

FALLOW/PLANTING BED TREATMENT: Apply 1-4 quarts per acre to fallow beds followed by irrigation or rainfall to improve water infiltration and reduce water run-off. Use higher rate in compacted or high sodium soils.

Condition of Sale: *

The information herein is believed to be accurate and reliable. Buyer and user assume all liability from use of this material. Follow directions carefully. Timing, method of application, weather, plant, crop or turf conditions, and other factors are beyond the control of the seller.

Storage and Disposal: *

Store at 50°-95°F / 10°-35°C. Do not store in direct sunlight.

Keep products in original container. Do not transfer into food or drink containers. Triple rinse when empty for recycling. Always dispose of container in accordance with local, state and federal regulations.

Physical Characteristics:

9.1 lbs./gal.
pH Range: 8.0-9.0
Enzymatic activity may affect pH during storage.

Availability:

2.5 gallon jugs (2 per case), 5-gallon pails, 30/55 gallon drums, and 275 gallon bulk containers.

Caution: *

KEEP OUT OF REACH OF CHILDREN. May be harmful if swallowed. May cause irritation. Do not get in eyes. Avoid breathing vapors or mists. Avoid using product in a manner as to directly, or through drift, expose workers or other persons. Always consult the material safety data sheet for specific instructions.

SDS available upon request.

* See product label or technical bulletin for more information.





AQUA PRO™

PREBIOLOGICAL WATER CONDITIONER

Description:

AQUA-PRO™ is a biodynamic formulation of naturally derived enzymes, organic acids and growth promoting nutrients that stimulate healthier aerobic bio-activity in lakes and ponds. Sludge and odors usually exist due to a lack of oxygen and proper bio-nutrition to support microbes that break down sludge and organic matter. The solution is to release oxygen within the pond bottom to support these microbes.

AQUA-PRO™ formula is an extensively tested and proven product used to enzymatically release elemental oxygen which helps to correct a variety of problems associated with pond and lake water management.

Ingredients:

Contains: Enzymes, biocomplexed nutrients and natural buffers.

Application Instructions:

SHAKE WELL OR STIR BEFORE USE.

AQUA PRO™ may be diluted to ensure even distribution. Ideal method of application is to dilute product in a sprayer filled with water and evenly spray the solution over the top of the water.

LAKES AND PONDS: Apply 2.5-5 parts per million (PPM) once every 2-4 weeks until desired conditions are attained, then maintain at 2.5 PPM every 2-4 weeks.

Condition of Sale:

The information herein is believed to be accurate and reliable. Buyer and user assume all liability from use of this material. Follow directions carefully. Timing, method of application, weather, plant, crop or turf conditions, and other factors are beyond the control of the seller.

Storage and Disposal:

Store at 50°-95°F / 10°-35°C. Do not store in direct sunlight.

Keep products in original container. Do not transfer into food or drink containers. Triple rinse when empty for recycling. Always dispose of container in accordance with local, state and federal regulations.

Physical Characteristics:

8.6 lbs./gal.

pH Range: 7.6-9.0

Enzymatic activity may affect pH during storage.

Availability:

5 gallon pails, 55 gallon drums, and 275 gallon bulk containers.

Caution:

Keep out of reach of children. May be harmful if swallowed.

SDS available upon request.



VECTROL™

Broad Spectrum Natural Fungicide & Nematicide

Description:

VECTROL™ is a next generation contact and systemic liquid fungicide and insecticide that controls or kills invasive fungi such as Black Spot, Botrytis, Late Blight, Phytophthora and Powdery Mildew, and it controls or kills insects such as Aphids, Pinion Scale (Crawler Stage), Coddling Moth, Spider Mites, Gnats, White Flies, Leaf Hoppers, Thrips and Nematodes.

It is a 100% biodegradable broad spectrum contact and systemic formula for use on all crops, turf, ornamentals and soil.

Ingredients:

Active Ingredients:

Thyme Oil.....	8.0%
Clove Oil.....	2.0%

Inert Ingredients* 90.0%

Total Ingredients 100.0%

*Contains water, wintergreen oil and glycerin.

Application Instructions:

SHAKE WELL OR STIR BEFORE USE.

Always jar test before mixing with plant growth regulators, pesticides, liquid fertilizers or other products.

VECTROL™ should be applied when plant tissue, root or soil analysis identifies the need for application of this product. Best results will be obtained when sprayed on the leaf or applied directly to the active root zone and watered in.

FOLIAR APPLICATION: Dilute in water at a rate of 0.25% to 0.5% (1-2 quarts/100 gallons). Increased rate may be desired. Do not foliar apply this product in concentrations greater than 1.28% or 1 gallon per 100 gallons of water. Do not exceed 0.5% (2 quarts/100 gallons) on newly planted crops, or crops with a thin leaf wax layer such as tomatoes and cucurbits. Spray entire foliage to point of runoff.

FIELD CROPS / TREE OR VINE CROPS: Foliar band spray at 50% coverage. Foliar broadcast via sprinklers: solid, set, linear and pivot (100% speed). Soil banded or injected, through drip tape or micro sprinklers up to 2-4 quarts per acre. Repeat as needed.

SOIL NEMATODE INFESTATIONS: Apply 1-2 gallons per acre to the active root zone. Repeat 3 times every 7-14 days via fertigation, broadcast spray or flood irrigation. For best results, include foliar treatment.

Condition of Sale:

The information herein is believed to be accurate and reliable. Buyer and user assume all liability from use of this material. Follow directions carefully. Timing, method of application, weather, plant, crop or turf conditions, and other factors are beyond the control of the seller.

Storage and Disposal:

Keep container sealed when not in use. Keep product in a cool location away from direct sunlight. Store in temperatures between 5°C (41°F) and 25°C (77°F). Keep products in original container. Do not transfer into food or drink containers. Triple rinse when empty for recycling. Always dispose of container in accordance with local, state, and/or federal regulations.

Physical Characteristics:

9.3 lbs./gal.
pH Range: 12.0-13.0
Enzymatic activity may affect pH during storage.

Availability:

2.5 gallon jugs (2 per case), 55 gallon drums, and 275 gallon bulk containers.

Caution: *

Keep out of reach of children. May be harmful if swallowed.

SDS available upon request.

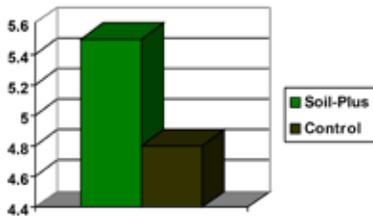
* See product label or technical bulletin for more information.

Virginia Tech Turf Trials

Determine the Efficacy of Biofeed® SOIL-PLUS™ on Mature Penncross Creeping Bentgrass

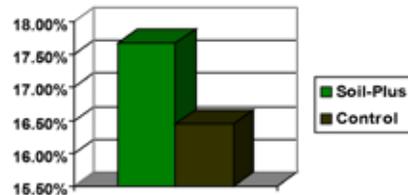
Sodium Toxicity

2-10 cm plugs were removed from each treated plot and these were transplanted in plastic containers and were irrigated 3 times per week for 6 weeks with a 2% saline (salt) solution. The grass irrigated with 2% saline water and treated with **SOIL-PLUS™** produced 15% more roots than the control.



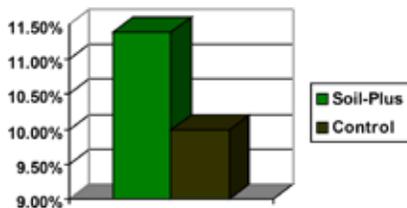
Chlorophyll Capacity

During photosynthesis, tiny plant cells combine sunlight, water, and minerals and convert it into chlorophyll. Throughout the tests, the **SOIL-PLUS™** treated Bentgrass had 7.0% higher chlorophyll content compared to the side by side control areas. Even minute increases in chlorophyll content result in improved stress tolerance.



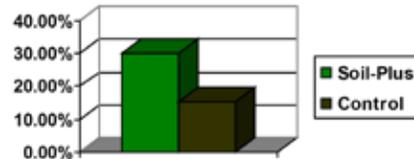
Photosynthetic Capacity

Turf treated with **SOIL-PLUS™** showed an average increase of 14% greater photosynthetic capacity than the control plots. This measurement accurately determines the rate of conversion of light into usable energy.



Superoxide Dismutase (S.O.D.)

S.O.D. has been shown to control free radicals within green leafy plants, reducing environmental stress. Its production is relevant to chlorophyll production. However the **SOIL-PLUS™** treated Bentgrass in this study measured over 49% higher S.O.D. content as compared to the control plots.

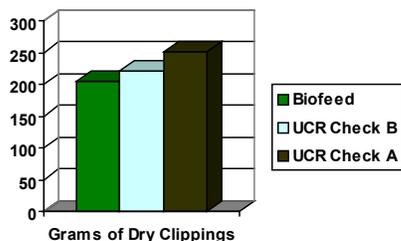


University of California Riverside Evaluation

One Year Evaluation of Biofeed® Products Applied on Tall Fescue

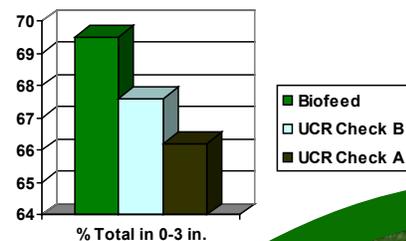
Clipping Yields Analysis

Clipping Yields Analysis showed that the Biofeed® treated turf produced 12.5% LESS clippings on an annual basis than the chemically fertilized turf during the 12 month study.



Root Mass Density

In September 1996, Biofeed® fertilized turf averaged 5% greater Root Mass Density than the conventionally fertilized turf areas.





About the Company

Biofeed Solutions, Inc. produces an advanced line of liquid biotech products that solve a variety of issues associated with turf, landscape, agriculture, aquaculture, municipal waste and environmental pollution. Biofeed® products are based on nearly 30 years of field research and development beginning in 1986.

Biofeed® provides the professional turf and landscape manager with dynamic bio-products to solve both plant nutritional and soil management problems. These non-toxic solutions are formulated to condition and build healthier soil, while they supply nutrients in a plant available form. This means that fewer nutrients are wasted and no harmful impact on our environment.

Biofeed® products focus on the long range needs of turf grasses, soils and aquatic environments. The result is a vibrant, balanced, natural environment where beneficial bacteria can flourish. Our extensive research and manufacturing capabilities ensure that our customers receive a consistent line of products for managing quality greens, tees, fairways, sports turf and water systems. We strive in every way to provide products and technologies that work in harmony with that which was brought about by our Designer and Creator.

Packaging...



Biofeed® products are available in 2.5 Gallon Jugs (2 per case), 5 Gallon Pails, 30/55 Gallon Drums and 275 Gallon Bulk Totes.

Contact your Biofeed® distributor today, or visit our web site at www.biofeed.com.

Biofeed®

Biofeed Solutions, Inc.

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www.biofeed.com

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