

AE II

Biostimulant



**PLANT
FOOD
COMPANY, INC.**

The Liquid Fertilizer Experts

38 Hightstown-Cranbury Station Road
Cranbury, New Jersey 08512
Phone: (609) 448-0935
(800) 562-1291
Fax: (609) 443-8038
www.plantfoodco.com
E-Mail: pfc@plantfoodco.com

22.00 lbs.

Net Wt.

2.5

Net Gallons

AE II is an organic blend of fulvic and amino acids, North Atlantic kelp extract, natural sugars, vitamins and other organic compounds. The organic nutrients in AE II™ will aid in the improvement of soil structure, rooting, and the uptake of N-P-K and minor elements.

AE II contains several different sources of organic matter which will break down at varying times during the growing cycle, providing a longer period to aid in microbial feeding.

AE II is a unique combination of fulvic acid, biostimulants, and micro-nutrients. The fulvic acid will assist in chelating nutrients tied up in the soil. North American kelp improves rooting caused by auxin, cytokinin, and gibberellen hormones. The micronutrients will aid in the correction of soil deficiencies that may be caused by imbalances due to low or high pH.

Some of the Benefits from AE II includes:

- Improved rooting mass with top growth.
- Chelating nutrients tied up in soils, such as phosphates and iron.
- Increase in microbial activity.
- Increase in plant vigor and chlorophyll production.
- Improve heat and cold tolerance.

Use AE II when one or more of the following occurs:

- Pre Stress Conditions
- High Stress
- High Salts
- Traffic and Wear
- High Disease Pressure
- Poor Rooting
- Insect Damage
- Drought Conditions
- Compaction and Poor Drainage
- Poor Soil Structure

Application Information:	
Turf Applications	
Greens & Tees	2 -6 ounces per 1,000 square feet every 2 to 4 weeks.
Fairways & Greens/Turf.....	3 ounces per 1,000 square feet, or 1 gallon per acre through out the growing season
Hydroseeding.....	1 to 2 gallons per acre
Over Seeding.....	1 gallon per acre before seeding, 1/2 gallon per acre at seeding with a starter fertilizer
Sodding.....	1 gallon per acre before sodding, 1 gallon per acre after sodding
Trees & Shrubs	
Deep Root Injection	32 ounces to 64 ounces per 100 gallon tank mix
Diameter at Breast Height.....	2 ounces per caliper inch
Farm Application Rates	
Open Fields	1-2 gallons per acre.
Bedding Plants.....	3-6 ounces per 1,000 square feet
Transplanting.....	24 ounces per 100 gallons of solution

Guaranteed Analysis:	
Boron (B) Chelated.....	.020%
Cobalt (Co) Chelated.....	.005%
Iron (Fe) Chelated.....	.100%
Manganese (Mn) Chelated.....	.050%
Molybdate (Mo)005%
Zinc (Zn) Chelated.....	.050%
Non-Plant Food Ingredients Biostimulants	
Total Fulvic Acid.....	6.0%
6.0% Fulvic Acid	
L-Amino Acid Substrates*	44.5%
Soluble Kelp Extract.....	2.5%
Contains Auxin, Cytokini and Gibberellen Hormone	
Plant Metabolites (Intermediate)**	16.5%
Carbohydrates.....	3.0%
Sarsaponins (Natural Wetting Agent)	1.0%
Derived from the following: Leonardite, Fulvic Acid(s), North Atlantic Kelp Extract, Simple and Complex Carbohydrates, Hydrolyzed Fish Emulsions, Sarsaponins (Natural Wetting Agent), Colloidal Mineral Extracts, Organic Chelated Micronutrients of Boron-Cobalt-Copper-Iron-Manganese-Zinc, and Polycofermented Extracts of Yeast, Fungii and Soil Bacteria.	

Storage and Handling:

Store in a cool, dry place; keep container tightly closed; do not add water or other material to the container. Do not contaminate water, food, or feed by storage or disposal. Do not store near acids or other acidic materials.

Store above 40° F. Do not allow to freeze.

Caution:

Keep away from children. Avoid contact with eyes, open cuts, or sores. Harmful if swallowed. External: Flood with water. Internal: Induce vomiting. Contact a physician immediately.

L-Amino Acid Substrates*	
L-Alanine.....	538 Mg/Lb
L-Arginine.....	546 Mg/Lb
L-Glycine.....	345 Mg/Lb
L-Hydroxyproline.....	285 Mg/Lb
L-Isoleucine.....	354 Mg/Lb
L-Leucine.....	558 Mg/Lb
L-Lysine.....	575 Mg/Lb
L-Methionine.....	103 Mg/Lb
L-Phenylalanine.....	300 Mg/Lb
L-Serine.....	338 Mg/Lb
L-Threonine.....	351 Mg/Lb
L-Tryptophan.....	73 Mg/Lb
L-Tyrosine.....	316 Mg/Lb
L-Valine.....	452 Mg/Lb
Plant Metabolites (Intermediate)**	
Vitamins	
B-1.....	16 Mg/Lb
B-2.....	16 Mg/Lb
B-6.....	16 Mg/Lb
B-12.....	25 Mg/Lb
Biotin.....	100 Mg/Lb
Choline.....	160 Mg/Lb
Minerals	
Calcium.....	500 Mg/Lb
Phosphorus.....	216 Mg/Lb
Iodine.....	120 Mg/Lb
Magnesium.....	250 Mg/Lb
Potassium.....	350 Mg/Lb
Selenium.....	25 Mg/Lb

Notice and Limitation of Warranty:

The manufacturer and seller warrants that the material conforms to the product description on the label and is reasonably fit for the purpose stated, when used in accordance with the directions. Further, because of critical unforeseeable factors beyond the manufacturer's and seller's control which prevent them from eliminating all risks in connection with the use of fertilizers, the buyer and user acknowledge and assume all risks and liabilities resulting from handling, storage and use of this material. The terms of this notice may not be varied by any verbal or written statement.



**PLANT
FOOD
COMPANY, INC.**

The Liquid Fertilizer Experts

38 Hightstown-Cranbury Station Road
Cranbury, New Jersey 08512
Phone: (609) 448-0935
(800) 562-1291
Fax: (609) 443-8038
www.plantfoodco.com
E-Mail: pfc@plantfoodco.com

- Weight per gallon: 10.14 lbs. (4.6 kg)
- pH: 6.5 - 7

Net Contents:

- 2.5 gallon (9.46 L) Jug
2 x 2.5 gal. (2 x 9.46 L) Case
Net Wt.: 25 lbs. (11.5 kg) Jug
Net Wt.: 51 lbs. (23 kg) Case
- 30 gallon (113.56 L) Drum
Net Wt.: 304 lbs. (138 kg) Drum
- 55 gallon (208.20 L) Drum
Net Wt.: 558 lbs. (253 kg) Drum
- 275 gallon (1040.99 L) Tote
Net Wt.: 2789 lbs. (1265 kg) Tote

Ammonium Sulfate

7-0-0 with 8% Sulfur Liquid Fertilizer

GUARANTEED ANALYSIS	
Total Nitrogen (N).....	7.00%
7% Ammoniacal Nitrogen	
Sulfur (S).....	8.00%

Derived from Ammonium Sulfate CAS #7783-20-2

- One gallon of 7-0-0 with 8% Sulfur contains:
.70 lb. Nitrogen
.80 lb. Sulfur

Each gallon equals 3.33 lbs. of Ammonium Sulfate (21-0-0 24%S).

Ammonium Advantage. The nitrogen in **Ammonium Sulfate** is 100% ammonium. When the turfgrass roots take up the ammonium form of nitrogen, they release hydrogen ions creating an acid zone around the root area. This acidic rhizosphere can suppress certain soil-borne diseases while enhancing micronutrient availability.

Disease Suppression. **Ammonium Sulfate** helps reduce turf diseases, including summer patch, take-all patch, and spring dead spot. **Ammonium Sulfate** is NOT a fungicide, nor does it claim to be one. However, the application of **Ammonium Sulfate** can provide an environment that is more conducive to reducing certain plant diseases.

Increased Micronutrient Availability. **Ammonium Sulfate** increases the solubility of key micronutrients like iron and manganese, making them more available for plant uptake.

Nitrogen is the single most important nutrient that contributes to turf color. The ammonium form of nitrogen in **Ammonium Sulfate** is less prone to environmental losses to leaching, volatilization and denitrification. As a result, more N is often retained in the root zone and available for plant uptake. The ammonium form of nitrogen also improves uptake of phosphorus, manganese and iron – three nutrients that are also associated with desirable turf color. Finally, **Ammonium Sulfate** contains readily available sulfur, which also contributes to development of turf color.

Directions for Use:

Greens, Tees & Fine Turf: Apply 8 - 20 oz. per 1,000 sq. ft. (2 ¼- 6¼ gallons per acre) every 14 days in a minimum of 2 gallons of water per 1,000 sq. ft.

Fairways, Roughs, Sports Turf & Lawns: Apply 4 - 6 gallons per acre (12 - 20 oz. per 1,000 sq. ft.) every 14 days during active growth period. Apply in a minimum of 87 gallons of water per acre (minimum of 2 gallons of water per 1,000 sq. ft.).

Application Precautions:

Do not apply **Ammonium Sulfate** directly on or below germinating seeds such as in a "pop up" fertilizer. Dry soil condition and/or combination with other starter fertilizers may damage germination. Always irrigate with sufficient

water to reduce the possibility of fertilizer injury. Avoid application during mid day when temperatures are high.

Pounds of Nutrients per Liquid Ounce

Oz.	Nitrogen	Sulfur
8	.04	.05
16	.08	.10
20	.11	.12
32	.17	.20

Apply per 1,000 sq. ft. at desired rate.

Prior to any fertilizer or pesticide application, all spray mixing and application equipment must be cleaned. A quality tank cleaner is recommended. Carefully observe all cleaning directions on the pesticide and fertilizer label. Fill the spray or mix tank at least one half full of water and begin agitation. Add pesticides and/or fertilizers as directed by labeling or in the following sequence:

1. Dry flowables or water dispersible granules
2. Wettable powders
3. Flowables
4. Emulsifiable concentrates
5. Water based solutions
6. Compatibility agents
7. Micronutrients and Fertilizers
8. Spray adjuvants

Before mixing multiple chemicals and/or fertilizers in the tank, confirm product compatibility by performing a jar test. Be sure to mix with plenty of water.

Storage and Handling:

Store in a cool, dry place; keep container tightly closed; do not add water or other material to the container. Do not contaminate water, food, or feed by storage or disposal. Do not store near acids or other acidic materials.

Store above 32° F. Do not allow to freeze.

Caution:

Keep away from children. Avoid contact with eyes, open cuts, or sores. Harmful if swallowed. External: Flood with water. Internal: Induce vomiting. Contact a physician immediately.

Notice and Limitation of Warranty:

The manufacturer and seller warrants that the material conforms to the product description on the label and is reasonably fit for the purpose stated, when used in accordance with the directions. Further, because of critical unforeseeable factors beyond the manufacturer's and seller's control which prevent them from eliminating all risks in connection with the use of fertilizers, the buyer and user acknowledge and assume all risks and liabilities resulting from handling, storage and use of this material. The terms of this notice may not be varied by any verbal or written statement.

Phosphite 30

0-0-27

FOLIAR PHOSPHITE Liquid Fertilizer



**PLANT
FOOD
COMPANY, INC.**

The Liquid Fertilizer Experts

38 Hightstown-Cranbury Station Road
Cranbury, New Jersey 08512
Phone: (609) 448-0935
(800) 562-1291
Fax: (609) 443-8038
www.plantfoodco.com
E-Mail: pfc@plantfoodco.com

GUARANTEED ANALYSIS

Soluble Potash (K₂O)..... 27.00%

Derived from Virgin Phosphorous Acid and Potassium Hydroxide

- **Weight per Gallon 12.31 lbs.**
- **Each gallon contains 3.70 lbs. of Phosphite and 3.32 lbs. of Potassium**
- **Equivalent to 4.41 lbs. Phosphorous Acid/gallon.**
- **Contains 7.03 lbs per gallon or 56% Mono- and dipotassium salts of Phosphorous Acid**

Plant Food Phosphite 30 is a pure Potassium Phosphite fertilizer solution that is manufactured in a one step process by reacting Phosphorous Acid and Potassium Hydroxide in a patented high temperature, rapid cooling process, that preserves the maximum amount of Phosphorus in the desirable H₃PO₃ (Phosphorous Acid) form. This unique Phosphite 30 manufacturing process neither contains nor requires any H₃PO₃ preserving or solubility additives that are necessary in competitive products. As a result, Phosphite 30 economically feeds and protects plants through superior Phosphorous Acid nutrition. **Plant Food Phosphite 30** is rapidly absorbed by turfgrass blades for maximum nutritional benefit in order to prevent and correct nutrient deficiencies and to promote disease resistance. Note: With foliar applications, phosphite ions are taken up directly by the plant foliage and may undergo a degree of conversion to phosphate ions, or be utilized directly by the plant as phosphite ions.

Do not apply to emerging seeds, especially if soil pH is less than 6.0. Do not mix with fixed copper or copper based fungicides if the pH of the spray solution is below 6 pH. Use sufficient water to ensure thorough coverage.

Do not exceed a maximum product spray concentration of 2%. For every 5 oz. of Phosphite 30, apply with at least 2 gallons of water. For every 2.5 oz of Phosphite 30, apply with at least 1 gallon of water.

Directions for Use:

Greens, Tees & Fine Turf: Apply 2 – 6 oz. per 1,000 sq. ft. (2/3 – 2 gallons per Acre) every 10 - 21 days in a minimum of 2 gallons of water per 1,000 sq. ft.

Do not mow or irrigate treated areas until spray has completely dried. Apply at 2 week intervals and repeat as needed. Rate and frequency of application may vary due to active growth periods and grass cultivars.

Fairways, Roughs, Sports Turf & Lawns:
Apply 1 – 1.5 gallons per Acre (3 – 4.4 oz. per 1,000 sq. ft.) every 14 days during active growth period.

Mixing Instructions:

A small jar compatibility test is recommended when adding other products to the tank mix. Prior to any fertilizer or pesticide application, all spray mixing and application equipment must be cleaned. A quality tank cleaner is recommended. Carefully observe all cleaning directions on the pesticide and fertilizer label. Fill the spray or mix tank one half full of water and begin agitation. Add pesticides and/or fertilizers as directed by labeling or in the following sequence:

1. Dry flowables or water dispersible granules
2. Wettable powders
3. Flowables
4. Emulsifiable concentrates
5. Water based solutions
6. Compatibility agents
7. Micronutrients and Fertilizers
8. Spray adjuvants

Pounds of Nutrients per Liquid Ounce:

Oz.	Phosphite	Potassium
2 oz	0.06	0.05
3 oz	0.09	0.08
4 oz	0.12	0.10
6 oz	0.17	0.16

Apply per 1,000 sq. ft. at desired rate.

Storage and Handling:

Store in a cool dry place, keep container tightly closed, do not add water or other material to the **Phosphite 30** container.

Store above 32° F. Do not allow to freeze.

Caution:

Keep away from Children and Domestic Animals.

Avoid contact with eyes, open cuts, or sores. Harmful if swallowed.

External: Flood with water. Internal: Induce vomiting. Contact a physician immediately.

Notice and Limitation of Warranty:

The manufacturer and seller warrants that the material conforms to the product description on the label and is reasonably fit for the purpose stated, when used in accordance with the directions.

Further, because of critical unforeseeable factors beyond the manufacturer's and seller's control which prevent them from eliminating all risks in connection with the use of fertilizers, the buyer and user acknowledge and assume all risks and liabilities resulting from handling, storage and use of this material. The terms of this notice may not be varied by any verbal or written statement.

- **Weight per gallon: 12.31 lbs.**

- **pH: 6.8-7.0**

■ Available Container Sizes:

- 2x2.5 gallon case
- 30 gallon drum
- 55 gallon drum
- 275 gallon tote tank

DKP XTRA™

3-18-20 Potassium PolyPhosphate- Phosphite Combination



**PLANT
FOOD
COMPANY, INC.**

The Liquid Fertilizer Experts

38 Hightstown-Cranbury Station Road
Cranbury, New Jersey 08512

Phone: (609) 448-0935

(800) 562-1291

Fax: (609) 443-8038

www.plantfoodco.com

E-Mail: pfc@plantfoodco.com

■ **Weight per gallon: 11.8 lbs.**

■ **Available Container Sizes:**

2x2.5 gallon case

30 gallon drum

55 gallon drum

275 gallon tote tank

GUARANTEED ANALYSIS

Total Nitrogen (N)..... 3.00%
3.0% Other Water Soluble

Available Phosphate (P₂O₅) 18.00%

Soluble Potash (K₂O) 20.00%

Chlorine Not More Than0.00%

Derived From: Potassium Hydroxide, Mono and Di-Potassium Polymeric Phosphates and Phosphites

SPECIFICATIONS:

Weight Per Gallon	11.80
P ₂ O ₅ Per Gallon	2.12
K ₂ O Per Gallon	2.36
pH	7.00-7.50
Salting Out Temperature F	<32

CAUTION: Do not apply with less than 20 gallons of water for each gallon of **DKP XTRA** to be applied. Store safely in a cool, dry place, do not add other materials to **DKP XTRA** during storage.

DKP XTRA 3-18-20 is a unique balanced polymeric combination of potassium polyphosphates and phosphites. **DKP XTRA** is a systemic product for use as a bloom and fruit sizer and finisher, liquid nutrient supplement for a wide variety of blooming crops, including fruit, tobacco, vegetable, ornamental, turf and field crops, for both leaf foliar and soil application. **DKP XTRA** can also be used as a starter fertilizer at planting, placed 2 inches below and to the side of the seed.

APPLICATION RECOMMENDATIONS:

DKP XTRA 3-18-20 can be applied as a foliar spray, with ground sprayers or applicators, or with aerial application equipment.

DKP XTRA may possibly be combined with other agricultural chemicals, including other liquid plant nutrients, and pesticides, for application efficiency; but a small jar compatibility test should be first be made before making commercial applications to the crop. A small portion of the crop should then be treated first, in order to determine phototoxic effect, if any.

RECOMMENDED APPLICATION RATES:

FRUIT CROPS – Citrus, Avocados, Strawberries, and all other deciduous and non- deciduous fruits, apply 2-5 gallons per acre of **DKP XTRA**, during the early bloom stage, and every 3-6 weeks, 30 days prior to harvest, for fruit sizing, acid ratio control and total brix increase.

VEGETABLE CROPS- Sizing, yield increase for Tomatoes, Peppers, Lettuce, Spinach, Leaf, Cole Crops, Cucurbits, Beans, Peas, Potatoes, Root, Bulb, or Tuber Crops, apply 2-5 gallons of **DKP XTRA**, per acre, 30 days after planting, and pre-bloom, thru fruit set, every 5-7 days, or as required, with the last application, 3-4 weeks prior to harvest. To extend harvest, continue application after first picking.

ORNAMENTAL CROPS- For blooming ornamentals, apply 1-2 pints of **DKP XTRA**, per 1,000 square feet of

growing area, 30 days after planting, and pre-bloom, through flower maturity, every 5-7 days, or as required, with the last application, 3-4 weeks prior to harvest.

TURF- Apply 2-4 gallons per acre of turf, every 30 days, or as required, in order to shorten intermodal length, grow roots, thicken cover, increase root mass and lifting ability in sod.

TOBACO- Apply 1-2 gallons in 75-100 gallons per acre every 3-5 weeks determined by crop need. This can also be applied as a Sucker Spray Application.

Prior to any fertilizer or pesticide application, all spray mixing and application equipment must be cleaned. A quality tank cleaner is recommended. Carefully observe all cleaning directions on the pesticide and fertilizer label. Fill the spray or mix tank at least one half full of water and begin agitation. Add pesticides and/or fertilizers as directed by labeling or in the following sequence:

1. Dry flowables or water dispersible granules
2. Wettable powders
3. Flowables
4. Emulsifiable concentrates
5. Water based solutions
6. Compatibility agents
7. Micronutrients and Fertilizers
8. Spray adjuvants

Before mixing multiple chemicals and/or fertilizers in the tank, confirm product compatibility by performing a jar test. Be sure to mix with plenty of water.

Storage and Handling:

Store in a cool, dry place; keep container tightly closed; do not add water or other material to the container. Do not contaminate water, food, or feed by storage or disposal. Do not store near acids or other acidic material.

Store above 32° F. Do not allow to freeze.

Caution:

Keep away from children. Avoid contact with eyes, open cuts, or sores. Harmful if swallowed. External: Flood with water. Internal: Induce vomiting. Contact a physician immediately.

Notice and Limitation of Warranty:

The manufacturer and seller warrants that the material conforms to the product description on the label and is reasonably fit for the purpose stated, when used in accordance with the directions. Further, because of critical unforeseeable factors beyond the manufacturer's and seller's control which prevent them from eliminating all risks in connection with the use of fertilizers, the buyer and user acknowledge and assume all risks and liabilities resulting from handling, storage and use of this material. The terms of this notice may not be varied by any verbal or written statement.

8-4-12, 50% SRN

with Micronutrients Liquid Fertilizer



**PLANT
FOOD
COMPANY, INC.**

The Liquid Fertilizer Experts

38 Hightstown-Cranbury Station Road
Cranbury, New Jersey 08512
Phone: (609) 448-0935
(800) 562-1291
Fax: (609) 443-8038
www.plantfoodco.com
E-Mail: pfc@plantfoodco.com

■ **Weight per gallon: 10.75 lbs.**

■ **Available Container Sizes:**

2x2.5 gallon case
30 gallon drum
55 gallon drum
275 gallon tote tank

GUARANTEED ANALYSIS

Total Nitrogen (N).....	8.00 %
1.1% Ammoniacal Nitrogen	
2.9% Urea Nitrogen	
4.0% Slowly Available Water Soluble Nitrogen*	
Available Phosphate (P ₂ O ₅)	4.00 %
Soluble Potash (K ₂ O)	12.00 %
Magnesium (Mg)100%
Sulfur (S)200%
Boron (B)010%
Copper (Cu).....	.005%
Iron (Fe)100%
Manganese (Mn).....	.002%
Zinc (Zn).....	.012%

Derived from Urea CAS # 57-13-6, Urea Triazone Solution CAS # 7098-14-8, Ammonium Polyphosphate CAS #68333-79-9, Potassium Carbonate CAS #584-08-7, Magnesium EDTA Chelate, Solubor, Copper EDTA Chelate, Iron HEDTA Chelate, Manganese EDTA Chelate, Zinc EDTA Chelate.

* Slowly Available Nitrogen from Urea-Triazone Solution

■ **One gallon of 8- 4-12, 50% SRN contains:**
 .86 lb. Nitrogen
 .43 lb. Phosphorous
 1.29 lb. Potassium

Directions for Use:

Greens, Tees & Fine Turf: Apply 12 - 24 oz. of **8-4-12, 50% SRN** per 1,000 sq. ft. (4 - 8 gallons per Acre) with sufficient water for good coverage. Most common rate is 18 oz. per 1,000 sq. ft which equals .12 lbs of Nitrogen.

Palm Trees:

For deep root feeding of Palm Trees, mix 4 gallons of **8-4-12, 50% SRN** per 100 gallons of water. Tank mix with 1 gallon of Green-T[®] Magnesium 4% and 1/2 gallon of AdamsEarth[™] Biostimulant. Inject 2.5 gallons of the diluted fertilizer solution per each inch of tree trunk diameter at breast height. Apply 2-4 times per year.

Trees & Shrubs:

For deep root feeding, mix 4 gallons of **8-4-12, 50% SRN** per 100 gallons of water. Inject 2.5 gallons of the diluted fertilizer solution per each inch of tree trunk diameter at breast height. The **8-4-12, 50% SRN** will provide a continuous source of nutrients through the growing season.

For best results, tank mix with AdamsEarth[™] per label directions.

Pounds of Nutrients per Ounce

Oz	Gallons	Nitrogen	Phosphate	Potassium
6	2.0	.04	.02	.06
12	4.0	.08	.04	.12
18	6.1	.12	.06	.18
24	8.1	.16	.08	.24
64	22	.43	.21	.64
128	44	.86	.43	1.29

Apply per 1,000 sq. ft. at desired rate

Prior to any fertilizer or pesticide application, all spray mixing and application equipment must be cleaned. A quality tank cleaner is recommended. Carefully observe all cleaning directions on the pesticide and fertilizer label. Fill the spray or mix tank at least one half full of water and begin agitation. Add pesticides and/or fertilizers as directed by labeling or in the following sequence:

1. Dry flowables or water dispersible granules
2. Wetttable powders
3. Flowables
4. Emmulsifiable concentrates
5. Water based solutions
6. Compatibility agents
7. Micronutrients and Fertilizers
8. Spray adjuvants

Before mixing multiple chemicals and/or fertilizers in the tank, confirm product compatibility by performing a jar test. Be sure to mix with plenty of water.

Storage and Handling:

Store in a cool, dry place; keep container tightly closed; do not add water or other material to the container. Do not contaminate water, food, or feed by storage or disposal. Do not store near acids or other acidic material.

Store above 32° F. Do not allow to freeze.

Caution:

Keep away from children. Avoid contact with eyes, open cuts, or sores. Harmful if swallowed. External: Flood with water. Internal: Induce vomiting. Contact a physician immediately.

Notice and Limitation of Warranty:

The manufacturer and seller warrants that the material conforms to the product description on the label and is reasonably fit for the purpose stated, when used in accordance with the directions. Further, because of critical unforeseeable factors beyond the manufacturer's and seller's control which prevent them from eliminating all risks in connection with the use of fertilizers, the buyer and user acknowledge and assume all risks and liabilities resulting from handling, storage and use of this material. The terms of this notice may not be varied by any verbal or written statement.



PLANT FOOD COMPANY, INC.

The Liquid Fertilizer Experts

38 Hightstown-Cranbury Station Road
Cranbury, New Jersey 08512
Phone: (609) 448-0935
(800) 562-1291
Fax: (609) 443-8038
www.plantfoodco.com
E-Mail: pfc@plantfoodco.com

- Weight per gallon: 11.88 lbs
- pH: 6.1-6.9
- Contains 1.35 lbs per gallon or 11.3% Mono and di-potassium salts of Phosphorous Acid
- Each Gallon contains:
 - .95 lbs of Nitrogen
 - 2.85 lbs of Phosphate
 - .58 lbs of Potassium
 - 1.35 lbs of Potassium Phosphite
- Available Container Sizes:
 - 2x2.5 gallon case
 - 30 gallon drum
 - 55 gallon drum
 - 275 gallon tote tank

Ideal for:

- Improving Poa health
- Aerification-promotes healing
- New seedlings
- Flowers & Ornamentals

8-27-5 Healthy Start Ammonium Polyphosphate & Phosphite Solution

GUARANTEED ANALYSIS

Total Nitrogen (N)..... 8.00%
 8.00% Ammoniacal Nitrogen
 Available Phosphate (P₂O₅)..... 27.00%
 Soluble Potash (K₂O)..... 5.00%

Derived from Ammonium Polyphosphate Solution CAS #68333-79-9, Virgin Phosphorous Acid and Virgin Potassium Hydroxide CAS #1310-58-3.

8-27-5 Healthy Start is a unique high polyphosphate & potassium formula with phosphite. The ammonium polyphosphate & potassium stimulates rooting, increases cell wall structure, thickness and turgidity, while the phosphite stimulates the plant's natural defense mechanism that encourages healthier plants. Every gallon of 8-27-5 Healthy Start contains 24 oz. of Plant Food Phosphite 30. Polyphosphates have natural chelating capabilities which makes soil bound micronutrients more available to plants.

Poa Health: 8-27-5 Healthy Start's available potassium and polyphosphate strengthens Poa roots and stimulates uniform turf color with bentgrass.

Directions for Use:

Poa Stress Recovery: Apply 15 oz. per 1,000 sq. ft. (5.1 gallons per Acre) and irrigate to move to crown and roots.

Greens, Tees & Fine Turf:

Apply 4-8 oz. per 1,000 sq. ft. (1.36 – 2.72 gallons per Acre) every 10-14 days. Apply throughout the season anytime additional phosphate and potassium are required, and when Poa is showing signs of stress.

Fairways & Sports Turf:

Apply 4-8 oz. per 1,000 sq. ft. (1.36 – 2.72 gallons per Acre) once or twice per month throughout the growing season.

Flowers and Ornamentals:

8-27-5 Healthy Start is an excellent complete fertilizer and phosphite combination for all types of flowers and blooming ornamentals. Apply 8-16 oz. of 8-27-5 Healthy Start per 1,000 sq. ft of growing area with 1-2 gallons of water. Use at time of transplant and every 30 days throughout the season. 8-27-5 Healthy Start will promote more and larger blooms.

Plus, will aid plants in combating various types of stress.

Mixing Instructions:

8-27-5 Healthy Start should be added last in the tank mix sequence. A small jar compatibility test is recommended when adding other products to the tank mix, especially if tank mix has an acidic pH or more than four products. Prior to any fertilizer or pesticide application, all spray mixing and application equipment must be cleaned. A quality tank cleaner is recommended. Carefully observe all cleaning directions on the pesticide and fertilizer label. Fill the spray or mix tank one half full of water and begin agitation. Add pesticides and/or fertilizers as directed by labeling or in the following sequence:

1. Dry flowables or water dispersible granules
2. Wettable powders
3. Flowables
4. Emmulsifiable concentrates
5. Water based solutions
6. Compatibility agents
7. Micronutrients and Fertilizers
8. Spray adjuvants

Apply per 1,000 sq. ft. at desired rate.

Pounds of Nutrients per Liquid Ounce:			
Oz.	Nitrogen	Phosphate	Potassium
4	.030	.100	.019
8	.059	.200	.037
10	.074	.251	.046
15	.111	.376	.070

Storage and Handling

Store above 40° F. Do not allow to freeze.

Be sure to mix with plenty of water.

Caution:

Keep away from children and domestic animals. Avoid contact with eyes, open cuts, or sores. Harmful if swallowed. External: Flood with water. Internal: Induce vomiting. Contact a physician immediately.

Notice and Limitation of Warranty:

The manufacturer and seller warrants that the material conforms to the product description on the label and is reasonably fit for the purpose stated, when used in accordance with the directions. Further, because of critical unforeseeable factors beyond the manufacturer's and seller's control which prevent them from eliminating all risks in connection with the use of fertilizers, the buyer and user acknowledge and assume all risks and liabilities resulting from handling, storage and use of this material. The terms of this notice may not be varied by any verbal or written statement.



12-0-12 50%SRN Liquid Fertilizer



**PLANT
FOOD
COMPANY, INC.**

The Liquid Fertilizer Experts

38 Hightstown-Cranbury Station Road
Cranbury, New Jersey 08512

Phone: (609) 448-0935

(800) 562-1291

Fax: (609) 443-8038

www.plantfoodco.com

E-Mail: pfc@plantfoodco.com

GUARANTEED ANALYSIS

Total Nitrogen (N) ----- 12.00%
6% Urea Nitrogen
6% Slowly Available Water Soluble Nitrogen*

Soluble Potash (K₂O) ----- 12.00%

Derived from Urea-CAS#57-13-6, Urea
Triazone Solution-CAS#7098-14-8,
Potassium Carbonate-CAS#584-08-7

*Slowly Available from Urea-Triazone
Solution

■ Weight per gallon equals 10.7 pounds.

Green-T® 12-0-12 50% SRN is an
excellent high Nitrogen and Potassium
liquid fertilizer. Ideal for both foliar and root
uptake.

Directions for Use:

Greens, Tees and Find Turf:

Apply 11-26 oz. per 1,000 square feet (4-9
gallons per Acre) every 14 days. **Green-T®
12-0-12 50% SRN** can be used in place of
granular and soluble materials, providing a
steady, even supply of nutrients.

Fairways, Sports Turf and Lawn Areas:

Apply 4 -17 gallons per Acre) (12 – 50 oz.
per 1,000 sq. ft.) of **Green-T® 12-0-12 50%
SRN** liquid fertilizer throughout the growing
season on warm, transitional and cool
season grasses. Application can begin in
early Spring and continue through late Fall
at a rate of 16 -50 oz (1/6 lb. Nitrogen to 1/2
lb. Nitrogen) per 1,000 square feet every 10
days to 4 week intervals, or as needed.
Dilute with water according to desired
Nitrogen rate per 1,000 square feet.

Nitrogen Amount per Liquid Ounce:

11 oz = 0.10 lb. of Nitrogen & Potassium
16 oz = 0.16 lb. of Nitrogen & Potassium
21 oz = 0.20 lb. of Nitrogen & Potassium
25 oz = 0.25 lb. of Nitrogen & Potassium
50 oz = 0.50 lb. of Nitrogen & Potassium
100 oz = 1.00 lb. of Nitrogen & Potassium
128 oz = 1.28 lb. of Nitrogen & Potassium

Apply per 1,000 sq. ft. at desired rate.

Before mixing multiple chemicals and/or
fertilizers in the tank, confirm product
compatibility by performing a jar test.
Be sure to mix with plenty of water

Storage and Handling

Store in a cool dry place, keep container
tightly closed, do not add water or other
material to the container. Do not
contaminate water, food, or feed by storage
or disposal. Do not store near acids or other
acidic material

Store above 32° F. Do not allow to freeze.

Caution:

Keep away from children and domestic
animals. Avoid contact with eyes, open cuts,
or sores. Harmful if swallowed. External:
Flood with water. Internal: Induce vomiting.
Contact a physician immediately.

Notice and Limitation of Warranty:

The manufacturer and seller warrants that
the material conforms to the product
description on the label and is reasonably fit
for the purpose stated, when used in
accordance with the directions. Further,
because of critical unforeseeable factors
beyond the manufacturer's and seller's
control which prevent them from
eliminating all risks in connection with the
use of fertilizers, the buyer and user
acknowledge and assume all risks and
liabilities resulting from handling, storage
and use of this material. The terms of this
notice may not be varied by any verbal or
written statement.

26.75 lbs.

Net Wt.

2.5

Net Gallons



16-0-8 50% SRN with Sulfur & Micronutrients Liquid Fertilizer



PLANT FOOD COMPANY, INC.

The Liquid Fertilizer Experts

38 Hightstown-Cranbury Station Road
Cranbury, New Jersey 08512
Phone: (609) 448-0935
(800) 562-1291
Fax: (609) 443-8038
www.plantfoodco.com
E-Mail: pfc@plantfoodco.com

■ **Weight per gallon: 10.3 lbs.**

■ **Available Container Sizes:**

- 2x2.5 gallon case
- 30 gallon drum
- 55 gallon drum
- 275 gallon tote tank

GUARANTEED ANALYSIS

Total Nitrogen (N) -----	16.00%
8.0% Urea Nitrogen	
8.0% Slowly Available Water Soluble Nitrogen*	
Soluble Potash (K ₂ O) -----	8.00%
Sulfur (S) -----	.450%
Boron (B) -----	.045%
Copper (Cu) -----	.045%
Iron (Fe) -----	.090%
Manganese (Mn) -----	.045%
Zinc (Zn) -----	.045%

Derived from Urea- CAS #57-13-6,
Urea Triazone Solution CAS #7098-14-8,
Potassium Hydroxide CAS #1310-58-3,
Potassium Carbonate CAS #584-08-7,
Potassium Thio-Sulfate CAS #10294-66-3,
Iron HEDTA Chelate, Boric Acid,
Copper EDTA Chelate, Manganese
EDTA Chelate, Zinc EDTA Chelate.

*Slowly Available Nitrogen from Urea-
Triazone Solution

- Weight per gallon equals 10.3 pounds.
- pH: 9.5 - 10
- One gallon of 16-0-8 50% SRN
contains:

1.64 lbs Nitrogen
.06 lb Phosphorous
.82 lb Potassium

Directions for Use:

Tees, Greens & Fine Turf:

Apply 8 - 16 oz. per 1,000 sq. ft. (2.7 - 5.5
gallons per Acre) every 7-14 days. This
supplies .10 - .20 lb of Nitrogen per 1,000
sq. ft. The most common rate is 8 oz per
1,000 sq. ft. For additional performance,
tank mix with AdamsEarth™ biostimulant
and Phosphite 30.

Fairways, Roughs, Sports Turf & Lawns:

Apply 5.5 - 23 gallons per Acre (16 - 68 oz
per 1,000 sq. ft.). This application rate shall
provide .20 lb. to 1.00 lb. of Nitrogen per
1,000 sq. ft. Avoid applying during periods
of extremely hot or dry weather. If applying
rates higher than 12 gallons per Acre (.50 lb.
of Nitrogen per 1,000 sq. ft.), it is
recommended that the area be watered
completely after application. Do not apply
over the 1 lb. of Nitrogen per 1,000 sq. ft. at
any one time. Green-T® 16-0-8 50% SRN
may be applied through irrigation injection
or hose end proportioners at the calculated
rates per 1,000 sq. ft.

Nitrogen per Liquid Ounce

8 oz. =	.10 lb. Nitrogen
16 oz. =	.20 lb. Nitrogen
39 oz. =	.50 lb. Nitrogen
58 oz. =	.75 lb. Nitrogen
68 oz. =	1.00 lb. Nitrogen
128 oz. =	1.60 lbs. Nitrogen

Apply per 1,000 sq. ft. at desired rate.

Before mixing multiple chemicals and/or
fertilizers in the tank, confirm product
compatibility by performing a jar test.
Be sure to mix with plenty of water.

Storage and Handling:

Store in a cool dry place, keep container tightly
closed, do not add water or other material to the
container. Do not contaminate water, food, or
feed by storage or disposal. Do not store near
acids or other acidic material

Store above 32° F. Do not allow to freeze.

Caution:

Keep away from children and domestic animals.
Avoid contact with eyes, open cuts, or sores.
Harmful if swallowed. External: Flood with
water. Internal: Induce vomiting. Contact a
physician immediately.

Notice and Limitation of Warranty:

The manufacturer and seller warrants that the
material conforms to the product description on
the label and is reasonably fit for the purpose
stated, when used in accordance with the
directions. Further, because of critical
unforeseeable factors beyond the manufacturer's
and seller's control which prevent them from
eliminating all risks in connection with the use of
fertilizers, the buyer and user acknowledge and
assume all risks and liabilities resulting from
handling, storage and use of this material. The
terms of this notice may not be varied by any
verbal or written statement.



16-2-8, 50% SRN with Sulfur & Micronutrients Liquid Fertilizer



**PLANT
FOOD
COMPANY, INC.**

The Liquid Fertilizer Experts

38 Hightstown-Cranbury Station Road
Cranbury, New Jersey 08512
Phone: (609) 448-0935
(800) 562-1291
Fax: (609) 443-8038
www.plantfoodco.com
E-Mail: pfc@plantfoodco.com

- **Weight per gallon: 10.3 lbs.**
- **pH: 9.5 – 10**
- **Available Container Sizes:**
2x2.5 gallon case
30 gallon drum
55 gallon drum
275 gallon tote tank

GUARANTEED ANALYSIS

Total Nitrogen (N) -----	16.00%
8.0% Urea Nitrogen	
8.0% Slowly Available Water Soluble Nitrogen*	
Available Phosphate (P ₂ O ₅) -----	2.00%
Soluble Potash (K ₂ O) -----	8.00%
Sulfur (S) -----	.450%
Boron (B) -----	.045%
Copper (Cu) -----	.045%
Iron (Fe) -----	.090%
Manganese (Mn) -----	.045%
Zinc (Zn) -----	.045%

Derived from Urea- CAS #57-13-6,
Urea Triazone Solution CAS #7098-14-8,
Phosphoric Acid CAS #7764-38-2, and
Potassium Hydroxide CAS #1310-58-3,
Potassium Thio-Sulfate, Iron HEDTA Chelate,
Boric Acid, Copper EDTA Chelate,
Manganese EDTA Chelate, Zinc EDTA
Chelate.

*Slowly Available Nitrogen from Urea-Triazone Solution

- **One gallon of 16-2-8 50% SRN contains:**
1.64 lbs Nitrogen
.06 lb Phosphorous
.82 lb Potassium

Directions for Use:

Tees, Greens & Fine Turf:

Apply 8 – 16 oz. per 1,000 sq. ft. (2.7 – 5.5 gallons per Acre) every 7-14 days. This supplies .10 - .20 lb of Nitrogen per 1,000 sq. ft. The most common rate is 8 oz per 1,000 sq. ft. For additional performance, tank mix with **AdamsEarth™** biostimulant.

Fairways, Roughs, Sports Turf & Lawns:

Apply 5.5 - 23 gallons per Acre (16 – 68 oz per 1,000 sq. ft.). This application rate shall provide .20 lb. to 1.00 lb. of Nitrogen per 1,000 sq. ft. Avoid applying during periods of extremely hot or dry weather. If applying rates higher than 12 gallons per Acre (.50 lb. of Nitrogen per 1,000 sq. ft.), it is recommended that the area be watered completely after application. Do not apply over the 1 lb. of Nitrogen per 1,000 sq. ft. at any one time. **Green-T® 16-2-8 50% SRN** may be applied through irrigation injection or hose end proportioners at the calculated rates per 1,000 sq. ft.

Nitrogen per Liquid Ounce

8 oz. =	.10 lb. Nitrogen
16 oz. =	.20 lb. Nitrogen
39 oz. =	.50 lb. Nitrogen
58 oz. =	.75 lb. Nitrogen
68 oz. =	1.00 lb. Nitrogen
128 oz. =	1.64 lbs. Nitrogen

Apply per 1,000 sq. ft. at desired rate.

Prior to any fertilizer or pesticide application, all spray mixing and application equipment must be cleaned. A quality tank cleaner is recommended. Carefully observe all cleaning directions on the pesticide and fertilizer label. Fill the spray or mix tank at least one half full of water and begin agitation. Add pesticides and/or fertilizers as directed by labeling or in the following sequence:

1. Dry flowables or water dispersible granules
2. Wettable powders
3. Flowables
4. Emulsifiable concentrates
5. Water based solutions
6. Compatibility agents
7. Micronutrients and Fertilizers
8. Spray adjuvants

Before mixing multiple chemicals and/or fertilizers in the tank, confirm product compatibility by performing a jar test.

Be sure to mix with plenty of water.

Storage and Handling:

Store in a cool dry place, keep container tightly closed, do not add water or other material to the container. Do not contaminate water, food, or feed by storage or disposal. Do not store near acids or other acidic material

Store above 32° F. Do not allow to freeze.

Caution:

Keep away from children. Avoid contact with eyes, open cuts, or sores. Harmful if swallowed. External: Flood with water. Internal: Induce vomiting. Contact a physician immediately.

Notice and Limitation of Warranty:

The manufacturer and seller warrants that the material conforms to the product description on the label and is reasonably fit for the purpose stated, when used in accordance with the directions. Further, because of critical unforeseeable factors beyond the manufacturer's and seller's control which prevent them from eliminating all risks in connection with the use of fertilizers, the buyer and user acknowledge and assume all risks and liabilities resulting from handling, storage and use of this material. The terms of this notice may not be varied by any verbal or written statement.

MSN

Methylene
Stabilized
Nitrogen

26-1-4, 75% MSN Fairway & Rough



PLANT FOOD COMPANY, INC.

The Liquid Fertilizer Experts

38 Hightstown-Cranbury Station Road
Cranbury, New Jersey 08512

Phone: (609) 448-0935

(800) 562-1291

Fax: (609) 443-8038

www.plantfoodco.com

E-Mail: pfc@plantfoodco.com

■ **Weight per gallon: 10.58 lbs.**

■ **Available Container Sizes:**

2x2.5 gallon case

30 gallon drum

55 gallon drum

275 gallon tote tank

GUARANTEED ANALYSIS

Total Nitrogen (N) ----- 26.00%
0.30% Ammoniacal Nitrogen
15.60% Slowly Available Water Soluble Nitrogen*
10.10% Urea Nitrogen**
Available Phosphate (P₂O₅) ----- 1.00%
Soluble Potash (K₂O) ----- 4.00%

Derived from Triazone-Methylene Urea Complex,
Ammonium Polyphosphate CAS #68333-79-9, Urea
CAS #57-13-6, Potassium Carbonate CAS# 584-08-7

*Slowly Available Nitrogen from
Triazone and Methylene Urea
** 4.1% Stabilized Nitrogen from
Excelis Plus

■ **One gallon of 26-1-4, 75% MSN
contains:**
2.75lbs Nitrogen
.10 lb. Phosphorous
.42 lb. Potassium

26-1-4, 75% MSN contains a Methylene
Stabilized Nitrogen that releases nitrogen
over an extended period of time within the
growing season. It is a combination of
triazone-methylene urea complex and
stabilized nitrogen. The stabilized nitrogen
minimizes volatilization of the quick release
nitrogen and prevents nitrate movement
within the soil by keeping the nitrogen in the
ammonium form.

Directions for Use:

Fairways, Roughs and Sports Turf: Apply
2 - 4 gallons per Acre (6-12 oz per 1,000
sq. ft.) with adequate water volume, every
14 - 28 days. This supplies .13 - .25 pounds

of actual Nitrogen per 1,000 sq. ft. For a deeper
green turf, tank mix with Plant Food 12 Iron.

Mixing Information:

26-1-4, 75% MSN is compatible with most
technical materials when tank mixed with
adequate water volume. Always make sure that
you perform a jar test before mixing chemicals in
your tank.

Storage and Handling:

Store in a cool dry place, keep container tightly
closed, do not add water or other material to the
container. Do not contaminate water, food, or
feed by storage or disposal. Do not store near
acids or other acidic material

Store above 32° F. Do not allow to freeze.

Caution:

Keep away from children. Avoid contact with
eyes, open cuts, or sores. Harmful if swallowed.
External: Flood with water. Internal: Induce
vomiting. Contact a physician immediately.

Notice and Limitation of Warranty:

The manufacturer and seller warrants that the
material conforms to the product description on
the label and is reasonably fit for the purpose
stated, when used in accordance with the
directions. Further, because of critical
unforeseeable factors beyond the manufacturer's
and seller's control which prevent them from
eliminating all risks in connection with the use of
fertilizers, the buyer and user acknowledge and
assume all risks and liabilities resulting from
handling, storage and use of this material. The
terms of this notice may not be varied by any
verbal or written statement.

26-1-4, 75% MSN Application Schedule					
26-1-4, 75% MSN	2 Weeks Schedule	2 gal/A	or	6 oz / 1,000 sq.ft.	= .127 lb Nitrogen/M
26-1-4, 75% MSN	3 weeks Schedule	3 gal/A	or	9 oz / 1,000 sq.ft.	= .190 lb. Nitrogen/M
26-1-4, 75% MSN	4 weeks Schedule	4 gal/A	or	12 oz / 1,000 sq.ft.	= .256 lb. Nitrogen /M
Tank Mix with Plant Food 12 Iron to obtain secondary and micronutrients, such as sulfur, magnesium, iron and manganese					
26-1-4, 75% MSN & 12 Iron	2 Weeks Schedule	2 gal/A 1 gal/A	or	6 oz / 1,000 sq.ft. & 3 oz / 1,000 sq.ft.	= .161 lb. Nitrogen/M
26-1-4, 75% MSN & 12 Iron	3 weeks Schedule	3 gal/A 1 gal/A	or	9 oz / 1,000 sq.ft. & 3 oz / 1,000 sq.ft.	= .224 lb. Nitrogen/M
26-1-4, 75% MSN & 12 Iron	4 weeks Schedule	4 gal/A 1 gal/A	or	12 oz / 1,000 sq.ft. & 3 oz / 1,000 sq.ft.	= .287 lb. Nitrogen/M

30-0-0

60% SRN

Slow-Release Liquid Nitrogen Fertilizer

GUARANTEED ANALYSIS

Total Nitrogen (N)..... 30.0%
12.00% Urea Nitrogen
18.00 Slowly Available Water Soluble Nitrogen*

Derived from:
Urea Triazone Solution CAS# 7098-14-8

*Slowly Available Nitrogen from Urea-Triazone Solution.

Weight per gallon equals 10.3 pounds

One Gallon contains 3.09 lbs of Nitrogen

Do not allow to freeze

Plant Food 30-0-0 60% SRN is a water-soluble slow release liquid nitrogen fertilizer. A total of 60% of the nitrogen is composed of slowly available urea polymers in the form of methylene ureas and triazone. The remaining 40% is composed of urea. The intoner in Plant Food 30-0-0 60% SRN is released in the soil over 60 to 90 days depending on soil type and climatic conditions. Microbial breakdown is required to release nitrogen from the urea polymers and this may be affected by soil temperature, moisture and oxygen concentration. Plant Food 30-0-0 60% SRN was developed to have high stability when blended with certain formulations of phosphorus, potassium and micro-nutrients. The product can have a shelf life of several years when stored alone in a closed container. Plant Food 30-0-0 60% SRN has a low freezing point and has been shown to lower the freezing point of liquid blends.

Nitrogen Per Liquid Ounce:

2.0 oz. = .05 lb. Nitrogen

3.9 oz. = .10 lb. Nitrogen

5.8 oz. = .15 lb. Nitrogen

7.8 oz. = .20 lb. Nitrogen

Apply per 1,000 sq. ft. at desired rate.

Caution:

Keep away from children. Avoid contact with eyes, open cuts, or sores. Caution:

Keep away from children. Avoid contact with eyes, open cuts, or sores. Harmful if swallowed.

External: Flood with water. Internal: Induce vomiting. Contact a physician immediately.

Notice and Limitation of Warranty:

The manufacturer and seller warrants that the material conforms to the product description on the label and is reasonably fit for the purpose stated, when used in accordance with the directions.

Further, because of critical unforeseeable factors beyond the manufacturer's and seller's control which prevent them from eliminating all risks in connection with the use of fertilizers, the buyer and user acknowledge and assume all risks and liabilities resulting from handling, storage and use of this material. The terms of this notice may not be varied by any verbal or written statement.



**PLANT
FOOD**
COMPANY, INC.

The Liquid Fertilizer Experts

38 Hightstown-Cranbury Station Road
Cranbury, New Jersey 08512

Phone: (609) 448-0935

(800) 562-1291

Fax: (609) 443-8038

www.plantfoodco.com

E-Mail: pfc@plantfoodco.com

2832.50 lbs.

Net Wt.

275 Gallons

Net Gallons

Directions for Use:

Determine the rate of Nitrogen you would like to apply per 1,000 sq. ft. and mix with adequate water to obtain the proper rate of diluted solution.

MSN

Methylene
Stabilized
Nitrogen

30-0-0

90% MSN



PLANT FOOD COMPANY, INC.

The Liquid Fertilizer Experts

38 Hightstown-Cranbury Station Road
Cranbury, New Jersey 08512
Phone: (609) 448-0935
(800) 562-1291
Fax: (609) 443-8038
www.plantfoodco.com
E-Mail: pfc@plantfoodco.com

■ **Weight per gallon: 10.3 lbs.**

■ **Available Container Sizes:**

2x2.5 gallon case
30 gallon drum
55 gallon drum
275 gallon tote tank

GUARANTEED ANALYSIS

Total Nitrogen (N) ----- 30.00%

18.00% Slowly Available Water Soluble Nitrogen*
12.00% Urea Nitrogen**

Derived from Triazone-Methylene Urea Complex

* **Slowly Available Nitrogen from
Triazone and Methylene Urea**

** **9.0% Stabilized Nitrogen from
Excelis Plus**

■ **One gallon of 30-0-0, 90% MSN contains:
3.09 lbs Nitrogen**

30-0-0, 90% MSN contains a Methylene Stabilized Nitrogen that releases nitrogen over an extended period of time within the growing season. It is a combination of triazone-methylene urea complex and stabilized nitrogen. The stabilized nitrogen minimizes volatilization of the quick release nitrogen and prevents nitrate movement within the soil by keeping the nitrogen in the ammonium form.

Directions for Use:

Fairways, Roughs and Sports Turf: Apply 2 - 4 gallons per Acre (6-12 oz per 1,000 sq. ft.) with adequate water volume, every 14 - 28 days. This supplies .14 - .28 pounds of actual Nitrogen per 1,000 sq. ft. For a deeper green turf, tank mix with Plant Food 12 Iron.

30-0-0, 90% MSN with 3 gallons of Blu-Gro 10-10-10. Apply monthly throughout the growing season.

Mixing Information:

30-0-0, 90% MSN is compatible with most technical materials when tank mixed with adequate water volume. Always make sure that you perform a jar test before mixing chemicals in your tank.

Storage and Handling:

Store in a cool dry place, keep container tightly closed, do not add water or other material to the container. Do not contaminate water, food, or feed by storage or disposal. Do not store near acids or other acidic material

Store above 32° F. Do not allow to freeze.

Caution:

Keep away from children. Avoid contact with eyes, open cuts, or sores. Harmful if swallowed. External: Flood with water. Internal: Induce vomiting. Contact a physician immediately.

Notice and Limitation of Warranty:

The manufacturer and seller warrants that the material conforms to the product description on the label and is reasonably fit for the purpose stated, when used in accordance with the directions. Further, because of critical unforeseeable factors beyond the manufacturer's and seller's control which prevent them from eliminating all risks in connection with the use of fertilizers, the buyer and user acknowledge and assume all risks and liabilities resulting from handling, storage and use of this material. The terms of this notice may not be varied by any verbal or written statement.

30-0-0, 90% MSN Application Schedule

30-0-0, 90% MSN	2 Weeks Schedule	2 gal/A	or	6 oz / 1,000 sq.ft.	=	.145 lb Nitrogen/M
30-0-0, 90% MSN	3 weeks Schedule	3 gal/A	or	9 oz / 1,000 sq.ft.	=	.217 lb. Nitrogen/M
30-0-0, 90% MSN	4 weeks Schedule	4 gal/A	or	12 oz / 1,000 sq.ft.	=	.289 lb. Nitrogen/M
Tank Mix with Plant Food 12 Iron to obtain secondary and micronutrients, such as sulfur, magnesium, iron and manganese						
30-0-0, 90% MSN & 12 Iron	2 Weeks Schedule	2 gal/A 1 gal/A	or	6 oz / 1,000 sq.ft. & 3 oz / 1,000 sq.ft.	=	.179 lb. Nitrogen/M
30-0-0, 90% MSN & 12 Iron	3 weeks Schedule	3 gal/A 1 gal/A	or	9 oz / 1,000 sq.ft. & 3 oz / 1,000 sq.ft.	=	.251 lb. Nitrogen/M
30-0-0, 90% MSN & 12 Iron	4 weeks Schedule	4 gal/A 1 gal/A	or	12 oz / 1,000 sq.ft. 3 oz / 1,000 sq.ft.	=	.323 lb. Nitrogen/M

pHusion Gypsum

Pelletized reacted Calcium Sulfate (Gypsum) that rapidly releases Calcium without changing pH



**PLANT
FOOD
COMPANY, INC.**

The Liquid Fertilizer Experts

38 Hightstown-Cranbury Station Road
Cranbury, New Jersey 08512
Phone: (609) 448-0935
(800) 562-1291
Fax: (609) 443-8038
www.plantfoodco.com
E-Mail: pfc@plantfoodco.com

MINI

150 SGN

Net Weight:

50 lb bag

22.68 KGS

GUARANTEED ANALYSIS

Calcium (Ca)	21.00%
Sulfur (S) Combined.....	16.00%
Calcium Sulfate Dihydrate (CaSO ₄ · 2H ₂ O)*	88.00%
Water Soluble Binder	2.00%
Moisture (Max)	1.00%

Derived from Calcium Sulfate

Non-Plant Food Ingredients

Calcium Lignosulfonate and Lignosulfonic Acid acts as a complexing agent

TYPICAL SIEVE ANALYSIS PRIOR TO GRANULATION

% Passing (Before Pelletizing)	
40% passing	200 Mesh Sieve
50% passing	100 Mesh Sieve
67% passing	50 Mesh Sieve
98% passing	8 Mesh Sieve
100% passing	4 Mesh Sieve

pHusion Gypsum is a pelletized calcium sulfate that is reacted with an organic acid. This unique organic acid is a combination of Calcium Lignosulfonate and Lignosulfonic Acid. **pHusion Gypsum** releases calcium dramatically faster than non-reacted gypsum, which means that it works faster.

When **pHusion Gypsum** is dissolved by water, the organic acid accelerates the reaction of releasing available Calcium and Sulfur in the soil. The Calcium Lignosulfonate and Lignosulfonic Acid convert the calcium in **pHusion Gypsum** into a more soluble form, readily available for plant uptake. **pHusion Gypsum** addresses both the calcium and sulfur needs of the plant. Use when calcium is required and you don't want to increase the soil pH. **pHusion Gypsum** will help achieve a uniform calcium profile throughout the soil. This product is non-burning when used according to directions.

Directions for Use:

Tees, Fairways, Sports Turf & Lawns:

Apply 5 lbs per 1,000 sq. ft. or 200 lbs. per acre of **pHusion Gypsum** at least twice per growing season. Based on soil tests, additional

product may be needed due to low calcium or sulfur levels. On established turf, apply no more than 15 lbs per 1,000 sq. ft. per application. Follow soil test recommendations.

Reducing High Sodium Levels

After initial application, frequent applications of 5-12 lbs per 1,000 sq. ft. throughout the growing season may be required to maintain optimum growing conditions. Rates should be determined on the basis of a soil test and water test. If Sodium (Na+) Base Saturation levels are higher than 2%, **pHusion Gypsum** applications should be considered.

Application at Aerification

To work **pHusion Gypsum** into the soil, application immediately after Aerification is ideal. After Aerification when holes are present, apply **pHusion Gypsum** at the rate of 5-15 lbs per 1,000 sq. ft. Using a brush, lightly drag the granules into the holes to move it into the soil. Irrigate after application to release the calcium sulfate.

pHusion Gypsum is ideal for turf and horticultural application. Always use complete soil tests from a reputable laboratory to determine liming needs.

Caution:

Keep away from children. Avoid contact with eyes, open cuts, or sores. Harmful if swallowed. External: Flood with water. Internal: Induce vomiting. Contact a physician immediately.

Notice and Limitation of Warranty:

The manufacturer and seller warrants that the material conforms to the product description on the label and is reasonably fit for the purpose stated, when used in accordance with the directions. Further, because of critical unforeseeable factors beyond the manufacturer's and seller's control which prevent them from eliminating all risks in connection with the use of fertilizers, the buyer and user acknowledge and assume all risks and liabilities resulting from handling, storage and use of this material. The terms of this notice may not be varied by any verbal or written statement.

Spreader Setting Rates	CYCLONE		SCOTTS		LESCO		LELY		VICON		Bags/Acre
	Setting	Width	Setting	Width	Setting	Setting	Setting	Width	Setting	Width	
5 lbs/1,000 sq. ft. or 200 lbs./acre	4.5	14.5	O-P	12	G-H	#16	7	33	20	25	4 bags
12 lbs./1,000 sq. ft. or 500 lbs./acre	5.5	14	U	12	L	#22	9	33	28	25	10 bags

Spreader Settings are an initial guideline for calibrating the spreader

pHusion KMS

0-0-21, 10% Magnesium, 21% Sulfur



**PLANT
FOOD
COMPANY, INC.**

The Liquid Fertilizer Experts

38 Hightstown-Cranbury Station Road
Cranbury, New Jersey 08512
Phone: (609) 448-0935
(800) 562-1291
Fax: (609) 443-8038
www.plantfoodco.com
E-Mail: pfc@plantfoodco.com

110 SGN

**Net Weight:
50 lb bag
22.68 KGS**

GUARANTEED ANALYSIS

Potassium (K₂O) 21.00%
Magnesium (Mg) 10.00%
Sulfur (S) Combined 21.00%

Derived from Sulfate of Potash-Magnesia

Non-Plant Food Ingredients

Calcium Lignosulfonate and Lignosulfonic Acid acts as a complexing agent

pHusion KMS supplies three vital nutrients critical for proper soil chemistry-potassium, magnesium and sulfur. When soils are deficient in these nutrients, other primary and secondary nutrients can become unavailable which prevents the plant from efficiently utilizing the nutrients within in the soil.

pHusion KMS contains pHusion Organic Acid which aids in releasing tied up nutrient complexes. In turn, these nutrients become available to the plant.

Directions for Use:

Greens, Tees, Fairways, Sports Turf & Lawns:

Apply 5 lbs. per 1,000 sq. ft. or 200 lbs. per acre of **pHusion KMS**. Based on soil tests, additional product may be needed due to low potassium, magnesium or sulfur levels. Irrigation after application is recommended to move nutrients into the soil. Repeat applications approximately every 3-4 weeks until desired quantity is achieved. On established turf, apply no more than 5 lbs. per 1,000 sq. ft. per application and irrigate after applications.

Reducing High Sodium Levels

After initial application, frequent applications of 5 lbs. per 1,000 sq. ft. throughout the growing season may be required to maintain optimum growing conditions. Rates should be determined on the basis of a soil test and water test.

Application at Aerification

To work **pHusion KMS** into the soil, application immediately after Aerification is ideal. After Aerification when holes are present, **apply pHusion KMS** at the rate of 5 lbs. per 1,000 sq. ft. Using a brush, lightly drag the granules into the holes to move it into the soil. Irrigate after application to release the calcium sulfate.

Storage and Handling:

Caution:

Keep away from children and domestic animals. Avoid contact with eyes, open cuts, or sores. Harmful if swallowed. External: Flood with water. Internal: Induce vomiting. Contact a physician immediately.

Notice and Limitation of Warranty:

The manufacturer and seller warrants that the material conforms to the product description on the label and is reasonably fit for the purpose stated, when used in accordance with the directions. Further, because of critical unforeseeable factors beyond the manufacturer's and seller's control which prevent them from eliminating all risks in connection with the use of fertilizers, the buyer and user acknowledge and assume all risks and liabilities resulting from handling, storage and use of this material. The terms of this notice may not be varied by any verbal or written statement.

Spreader Setting Rates	CYCLONE		SCOTTS		LESCO		LELY		VICON		Bags/Acre
	Setting	Width	Setting	Width	Setting	Setting	Setting	Width	Setting	Width	
5 lbs./1,000 sq. ft. or 200 lbs./Acre	4.5	14.5	O-P	12	G-H	#16	7	33	20	25	4 bags

Spreader Settings are an initial guideline for calibrating the spreader

Now with
SA

Salicylic
Acid



The Liquid Fertilizer Experts

38 Hightstown-Cranbury Station Road
Cranbury, New Jersey 08512
Phone: (609) 448-0935
(800) 562-1291
Fax: (609) 443-8038
www.plantfoodco.com
E-Mail: pfc@plantfoodco.com

■ **Weight per gallon: 8.6 lbs.**

■ **pH: 3.6**

■ **Available Container Sizes:**
2x2.5 gallon case
30 gallon drum
55 gallon drum
275 gallon tote tank

**Derived from: Proprietary blend
of advanced surfactants**

**NOT A D.O.T. HAZARDOUS
MATERIAL HMIS 1-1-0-B**

Regulate™ PLUS is a trademark
of JADA Corp. and formulated
by them

REGULATE™ PLUS

Super Wetting Agent & Penetrant

Regulates even water penetration while reducing

Regulate™ PLUS is a dual action wetting agent and penetrant. The results are even water movement throughout the soil, reduction of localized dry spots and consistent water dispersion within the root zone.

Regulate™ PLUS contains **Salicylic Acid (SA)**. **Salicylic Acid (SA)** enables the turf tissue to retain more water and enhances the plant's immune system to react faster to stress recovery. The results are an improvement in the plant's ability to recover from heat and drought stress.

Regulate™ PLUS provides the following benefits:

- Prevents and cures Localized Dry Spots (LDS)
- Eliminates water channeling in soil profile
- Increases water and nutrient availability
- Helps reduce high soil temperatures
- Reduces run off and evaporative water loss
- Reduces dew and frost incidence
- Improves turf quality in bunker banks
- Increases seed germination
- Reduces water costs
- Reduces energy consumption
- Can be combined with most chemicals to work as a penetrant
- Provides erosion control during construction

GENERAL INFORMATION

Regulate™ PLUS is formulated to reduce the effects of Localized Dry Spot caused by hydrophobic soils by increasing both the rate and depth of water infiltration into the root zone for extended periods of time. Because **Regulate™ PLUS** provides proven performance over hydrophobic soil conditions and localized dry spots -- better drainage and deeper, more even root growth is achieved.

DIRECTIONS FOR USE

Regulate™ PLUS should be applied early in the growing season as a preventative measure against LDS or as a curative treatment later in the growing season.

APPLICATION TECHNIQUES

The objective of irrigating after application is to move the **Regulate™ PLUS** down into the soil profile where it can perform. Pre-wetting the turfgrass, under hot or dry conditions, with at least two turns of the irrigation heads or approximately .10 inches (26 mm) of water, will reduce the concentration of **Regulate™ PLUS** on the leaf surface during application and improve overall product performance. Following application, irrigate immediately for 15-20 minutes or with approximately .25 inches (64 mm) of water to move **Regulate™ PLUS** into the root zone to enhance product performance. To determine that sufficient irrigation has been applied, use a soil probe in the treated area to ensure that the soil is moist to the desired soil depth from the irrigation cycle. Continue to cycle the

irrigation, without puddling the surface, until the desired depth is achieved. The amount of water you apply immediately after application regulates the depth of the soil that **Regulate™** will perform. **Regulate™ PLUS** is compatible with most chemicals and liquid fertilizers. Before using, test the tank mix for compatibility and effect on turf quality.

INITIAL APPLICATION RATES:

Regulate™ should be applied as a split application of 8 ounces (237 ml) followed by an additional 8 ounces (237 ml) within 7 to 10 days of the initial application. Two applications of 8 ounces (237 ml) each in 1-2 gallons (3.79-7.57 L) of water per 1000 square feet (92.9 m²) at a 7 to 10-day interval will generally relieve the symptoms of LDS. Under extreme conditions, such as heat or drought, or in geographies with extended growing seasons, it may be necessary to make sequential applications of 8 ounces (237 ml) each applied at appropriate intervals. Mix with water (minimum 100 gallons per acre). Immediately irrigate after application to rinse the leaf blades and activate the wetting process.

Push-up Greens & Fine Turf:

Apply 2-3 ounces per 1,000 sq. ft. every 2 weeks
4-6 ounces per 1,000 sq. ft. every 4 weeks. Irrigate after application.

Sand-Based Greens:

Apply 4 ounces per 1,000 sq. ft. every 2 weeks
or 8 ounces per 1,000 sq. ft. every 4 weeks.

Fairways, Tees and Sports Turf:

- Apply 5.4 gallons per acre (16 ounces per 1,000 sq. ft.) every 90 days
- Apply 2.7 gallons per acre (8 ounces per 1,000 sq. ft.) every 45 days.
- Apply 1-2 gallons per acre (3 to 6 ounces per 1,000 sq. ft.) once a month as needed

Injection:

Apply 16-32 ounces per acre (1/8 – 1/4 gallon) throughout the season.

Storage and Handling:

Store above 32° F. Do not allow to freeze

Caution:

Keep away from children. Avoid contact with eyes, open cuts, or sores. Harmful if swallowed. External: Flood with water. Internal: Induce vomiting. Contact a physician immediately. This product can be phytotoxic if not watered in immediately after application in order to rinse the leaf blades.

Warranty:

This product is made under rigid quality control but the user must determine its suitability for its intended uses. The seller and/or the manufacturer shall not be liable for any loss, injury or damage direct, indirect or consequential due to the use or inability to use this product and will only replace it with a like quantity if it is defective. No other warranty, express or implied, is made about its suitability. This can be waived only by an officer of JADA Corp. in writing

- even water penetration
- reduces LDS



Plant Food Company's

REGULATE™ PLUS

Super Wetting Agent
& Penetrant

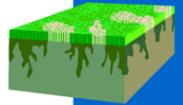
**P
R
O
D
U
C
T**

Penetrant

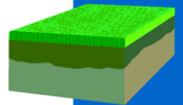
- Breaks Surface Tension
- Promotes even water movement throughout the soil

The Problem:

Channeling



The Solution:
Penetrant for even penetration

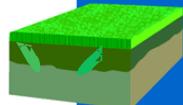


Wetting Agent

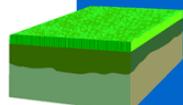
- Eliminates Localized Dry Spots
- Corrects water repelling soil
- Promotes **EVEN** drying

The Problem:

Uneven water Retention & Uneven drying (LDS)



The Solution:
Even Drying



Keys for Success

- Determine the depth you want the Regulate to work
- Make sure that REGULATE is irrigated immediately to the **DESIRED SOIL DEPTH**. Simple test is to use a soil test probe
- Initial rate is two x 8 oz per 1,000 sq. ft. applied 10 days apart
- Maintenance Rate is 2-3 oz per 1,000 sq. ft. every 14 days or 4- 6 oz monthly

The Liquid Fertilizer Experts
www.plantfoodco.com

REGUL+1108

pHirst Water Treatment

Urea-sulfuric acid product that acidifies Water, Destroys Bicarbonates and Frees soil-bonded Calcium & Magnesium



**PLANT
FOOD
COMPANY, INC.**

The Liquid Fertilizer Experts

38 Hightstown-Cranbury Station Road
Cranbury, New Jersey 08512
Phone: (609) 448-0935
(800) 562-1291
Fax: (609) 443-8038
www.plantfoodco.com
E-Mail: pfc@plantfoodco.com

- **Weight per gallon:**
12.70 lbs. (5.8 kg)
- **pH:** <1
- **Available Container Sizes:**
55 gallon drum
275 gallon tote tank
- **Common Name: MCDS (monocarbamide Dihydrogen sulfate)** MCDS (monocarbamide dihydrogen sulfate) is an outstanding water treatment product with soil amendment qualities and also works as an anticrustant.

pHirst (pronounce first) **Water Treatment Additive** is a turf management tool that improves irrigation water quality by neutralizing the bicarbonates, thus improving the soil structure and turf quality.

Benefits

- Improve water penetration
- Increase effectiveness of alkaline sensitive fungicides
- Eliminate mineral deposits in irrigation lines, fences and pavement
- Solubilize nutrients bound at high pH ranges
- Oxygenate soil profile to help reduce black layer
- Save money
- Amend sodic soils
- Increase the water's ability to leach salts
- Keep the harmful salts in effluent water more soluble
- Decrease surface sealing or crusting
- Decrease hand watering
- Minimizes the need to apply wetting agents

pHirst is a urea-sulfuric acid product that is produced under a unique process. The end product is a high quality clear liquid material with a ratio of 15% urea and 49% sulfuric acid. A corrosion inhibitor for metal is added during the manufacturing process. MCDS is the "generic" name for this product ratio of nitrogen to sulfuric acid equivalent.

pHirst is produced with only the "highest quality" raw materials. The sulfuric acid used in the production of pHirst is a "virgin" acid. This simply means that it has not been used in any industrial process that contributes to the addition of "heavy metals". Not only is the acid virgin it also meets U.S. standards for "heavy metals" content. A corrosion inhibitor is also added to pHirst. This helps where the product comes in contact with metal such as bulk delivery tankers and in other areas such as stainless steel storage tanks or irrigation delivery systems.

Production Method: The production of pHirst is unique; it is not simply a process of mixing urea and sulfuric acid. This exothermic process requires an expertise in chemistry, using a temperature over time "strip chart". The strip chart provides an exact method of timing the heat of reaction and the entire process, which is essential in producing a quality material.

The ratios of nitrogen to sulfuric acid equivalents play an important role. The ratio of 15/49 is designed for use on turf and ornamental. Every gallon contains 15% urea and 49% sulfuric acid.

Typical Properties:

Crystallization temperature, degrees	F 42° +/-3
Crystallization temperature, degrees C	5.5° +/-1.5
Viscosity, cps	49
Specific Gravity	1.52
Pounds per gallon	12.70
Gallons per ton	158
pH (10% solution)	<1

Only "virgin" acid is used in the product of pHirst. pHirst contains a corrosion inhibitor.

Transportation

Proper Shipping Name	Corrosive Liquid, N.O.S. (contains monocarbamide dihydrogen sulfate)
Hazard Class:	8
ID#	UN1760
Packing Group	III
Placard Requirement	None
Not regulated if transported by motor vehicle or rail car {see STCC: 28-714-31}	

Exposure Prevention – Protective Equipment

The use of suitable protective equipment to prevent physical contact with the product or its mist will reduce the risk of exposure. Each employee or individual should be provided with appropriate safety equipment and should be trained to use the equipment properly along with safe handling practices. Chemical splash-shielded goggles and a full-face shield must be worn. Wear suitable protective equipment to protect skin, such as synthetic rubber or non-nylon plastic apron, gloves, pants and boots. pHirst will damage clothing made of nylon, cotton, leather or natural rubber. READ AND REVIEW MSDS before use.

SAFETY EQUIPMENT

A quick-drench shower and eyewash should be available near the transfer site and employees should wear a full-face shield, as well as impervious clothing. Shoes and contaminated clothing should be washed prior to reuse.

Notice and Limitation of Warranty:

The manufacturer and seller warrants that the material conforms to the product description on the label and is reasonably fit for the purpose stated, when used in accordance with the directions. Further, because of critical unforeseeable factors beyond the manufacturer's and seller's control which prevent them from eliminating all risks in connection with the use of fertilizers, the buyer and user acknowledge and assume all risks and liabilities resulting from handling, storage and use of this material. The terms of this notice may not be varied by any verbal or written statement.