16-4-5, 50% SRN
Magnesium, Sulfur & Micronutrients

Premium Liquid Fertilizer for Trees, Shrubs & Turf

Guaranteed Analysis

Total Nitrogen (N)	**16.0000%**
0.3% Ammoniacal Nitrogen	
7.7% Urea Nitrogen	
8.0% Slowly Available Water Soluble Nitrogen*	
Available Phosphate (P_2O_5)	**4.0000%**
Soluble Potash (K_2O)	**5.0000%**
Chelated Magnesium (Mg)	**.0250%**
Sulfur (S)	**.2000%**
Boron (B)	**.0125%**
Copper (Cu)	**.0050%**
.0050% Chelated Copper (Cu)	
Iron (Fe)	**.2000%**
.2000% Chelated Iron (Fe)	
Manganese (Mn)	**.0025%**
.0025% Chelated Manganese (Mn)	
Zinc (Zn)	**.0125%**
.0125% Chelated Zinc (Zn)	

Derived from
Ammonium Nitrate CAS #6484-52-2,
Urea CAS #57-13-6,
Urea Triazone Solution CAS #7098-14-8, Tech Grade Phosphoric Acid CAS #7664-38-2,
Potassium Hydroxide CAS #1310-58-3,
Magnesium EDTA Chelate, Solubor,
Ammonium Thiosulfate CAS #7783-18-8,
Copper EDTA Chelate, Iron EDTA Chelate,
Manganese EDTA Chelate,
Zinc EDTA Chelate.

***Slowly Available from Urea-Triazone Solution**

- **Weight per gallon: 10.0 lbs. (4.54 kg)**
- **Potential Acidity 720 lbs. $CaCO_3$ Equivalent Per Ton**
- **pH 9.2 - 9.7**

Directions for Use:
Hydraulic Tree Feeding: P.F.C.'s 16-4-5 has been formulated for deep root feeding of trees and shrubs. It supplies the primary nutrients of Nitrogen, Phosphorus and Potassium plus Magnesium, Sulfur, Boron, Copper, Iron, Manganese and Zinc all in one ready to use package. Being a liquid, **16-4-5** mixes instantly with water that makes it a natural to use with hydraulic equipment. A substantial percent of the Nitrogen in **16-4-5** is unique as it is derived from Triazone. With Triazone, there is little chance of burn because it makes its Nitrogen available through a slow regulated breakdown of complex molecules. Triazone lasts substantially longer than Urea or Ammonium Nitrate in the soil and provides a steady source of Nitrogen to trees and shrubs.

Hydraulic Feeding: To feed with your hydraulic system at the 1 pound per caliper inch rate, obtain a hydraulic needle probe unit with an on/off lever. To determine the output of your equipment, place the probe in a bucket and time how long it takes to pump one gallon of water. The time it takes to fill one gallon is the amount of time you will require for each one-gallon injection. Apply five such one-gallon injections per caliper inch of tree, totaling five gallons of diluted solution. The rate of 1 pound per caliper inch of tree is obtained by mixing 100 pounds (10 gallons) of **16-4-5, 50%** into 500 gallons of water and injecting five gallons of diluted solution per caliper inch of tree. To determine the caliper inches of a tree, measure the diameter of the tree at breast height. The fertilizer injections should be made 2-1/2 feet apart beginning two feet from the trunk of the tree going in a circular pattern around the tree extending two feet beyond the drip line. Make sure the injection probe penetrates into the soil to your desired feeding depth, which should be 8 to 12 inches deep. Care should be taken to prevent hollowing out of the root area with excessive water.

Gallons H_2O	Gallons 16-4-5	Pounds 16-4-5	Caliper inches of trees
5	1/10	1	1
500	10	100	100
1000	20	200	200

The Most Commonly Used Rate: One pound of **16-4-5** per each caliper inch of tree provides:
.16 pound of Nitrogen
.04 pound of Phosphorus
.05 pound of Potassium

Simplified Tree Feeding: Tree and Shrub: For deep root feeding mix 1 to 5 gallons of **16-4-5, 50% SRN** per 100 gallons of water. Inject 1 to 5 gallons of the diluted fertilizer solution per each inch of tree trunk diameter at breast height. **16-4-5** will provide a continuous feeding throughout the growing season.

Foliar Feed: Mix 2 to 3 quarts of **16-4-5, 50% SRN** per 100 gallons of water, spray until light run-off. Foliar feeding with **16-4-5** will help correct deficiencies that occur through the growing season. Do not foliar feed when temperatures exceed 80°F, or in drought conditions.

Feeding Turf with P.F.C.'s 16-4-5: Know the capabilities and limitations of the applicator you plan to use. Study the area to be treated and calculate the square footage accurately. A rate of 1/2 pound Nitrogen per 1,000 square feet is accomplished by applying:
2-1/2 pints per 1,000 square feet
1 gallon per 3,200 square feet
5 gallons per 16,000 square feet

Add the proper amount of water to obtain this coverage. (Two to five gallons of H_2O per 1,000 square feet). The 1/2 pound rate should be used during warmer weather or when watering is not practical. Avoid application during periods of extremely hot or dry weather. The 1 pound rate should be used in spring and fall during colder weather, or where complete irrigation or watering may be accomplished after application.

Application Rates for 16-4-5, 50% SRN

Fluid Oz/ 1,000 sq. ft.	Gallons/ One Acre	ML/ 1,000 sq. ft.	Nitrogen/ 1,000 sq. ft.	Phosphate/ 1,000 sq. ft.	Potassium/ 1,000 sq. ft.	Magnesium/ 1,000 sq. ft.	Sulfur/ 1,000 sq. ft.	Boron/ 1,000 sq. ft.	Copper/ 1,000 sq. ft.	Iron/ 1,000 sq. ft.	Manganese/ 1,000 sq. ft.	Zinc/ 1,000 sq. ft.
8 oz	2.7 Gal	237 ML	0.10	0.03	0.03	0.0002	0.0013	0.0001	0.0000	0.0013	0.0002	0.0001
16 oz	5.4 Gal	473 ML	0.20	0.05	0.06	0.0003	0.0025	0.0002	0.0001	0.0025	0.0003	0.0002
20 oz	6.8 Gal	591 ML	0.25	0.06	0.08	0.0004	0.0031	0.0002	0.0001	0.0031	0.0004	0.0002
32 oz	10.9 Gal	946 ML	0.40	0.10	0.13	0.0006	0.0050	0.0003	0.0001	0.0050	0.0006	0.0003
80 oz	27.2 Gal	2366 ML	1.00	0.25	0.31	0.0016	0.0125	0.0008	0.0003	0.0125	0.0016	0.0008

Tank Mixing Information:
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 3/4 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.

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.

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.

Available Container Sizes:

2 x 2.5 gal	(2 x 9.46 L)	Case
30 gal	(113.56 L)	Drum
55 gal	(208.20 L)	Drum
275 gal	(1040.99 L)	Tote

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PLANT FOOD COMPANY, INC.
The Liquid Fertilizer Experts

38 Hightstown-Cranbury Station Road ■ Cranbury, NJ 08512 ■ 800.562.1291 ■ pfc@plantfoodco.com ■ www.plantfoodco.com