



**New!**

# 18-6-12 NURSERY STAR

## LIQUID FERTILIZER SOLUTION

*With 60% SRN FROM NITRO-30*

- **No Nitrates**
- **Tank Mix Compatible**

**GUARANTEED ANALYSIS:**

Total Nitrogen (N) . . . . . 18%  
 6.2% Urea Nitrogen  
 1.0% Ammoniacal Nitrogen  
 10.8% Slowly Available Water Soluble Nitrogen\*  
 Available Phosphate (P<sub>2</sub>O<sub>5</sub>) . . . . . 6%  
 Soluble Potash (K<sub>2</sub>O) . . . . . 12%  
**Derived From:** Urea, Methylene Urea, Potassium Carbonate, Monoammonium Phosphate, Phosphoric Acid,  
 \*60% slowly available Nitrogen from Methylene Urea  
 Weight per gallon . . . . . 10.8 lbs.  
 Weight per litre . . . . . 1.29 kg  
 1 gallon contains . . . . . 1.9 lbs nitrogen  
 1 litre contains . . . . . 0.22 kg nitrogen  
 Potential acidity equivalent to 573 lbs. Calcium Carbonate per ton.

**PRODUCT DESCRIPTION:**

Growth Products 18-6-12 with 60% Slow Release Nitrogen is a professional liquid fertilizer solution made from only the highest quality N-P-K raw materials to assure a safe, reliable and efficient product. 18-6-12 provides a balance of quick release nitrogen for initial green up and 60% slow release nitrogen for a continuous steady feeding. 18-6-12 contains methylene urea from Nitro-30 (MDU), which resists leaching and provides a release over 8-12 weeks. The phosphorus and potassium are readily available for both foliar and root uptake. The K is a non chloride source. 18-6-12 provides fast green up without producing flush growth. Since all Growth Products are TRUE CLEAR SOLUTIONS, they are ideal for spray applications for turf, foliar feed and root injection of trees and ornamentals. Growth Products solutions are non-clogging and non-abrasive to equipment. No special agitation is needed. 18-6-12 does not contain any nitrates, and avoids nitrate leaching. 18-6-12 is compatible with fungicides, herbicides and insecticides and can be mixed and sprayed in one application.

**SUGGESTED USES:**

Growth Products 18-6-12 liquid fertilizer is recommended for all turf grass applications, including Bentgrass, Rye, Fescue and warm season grass. 18-6-12 can be safely used on Rye overseeded areas. 18-6-12 is ideal for both foliar spray and soil injection of trees and shrubs. 18-6-12 is compatible with herbicides, fungicides and insecticides. No special agitation is needed.

**APPLICATION RECOMMENDATIONS:**

**Turf Applications:** Growth Products 18-6-12 liquid fertilizer can be applied throughout the growing season on warm, transitional and cool season grasses. Application can begin in early spring and continue through fall at rates of 1/4 lb. to 3/4 lb. N (121 ml to 1.4 L) per 1,000 sq. ft. (100 m<sup>2</sup>), every 4-10 week intervals, (or as needed). Dilute with water according to desired nitrogen rate per 1,000 sq. ft. (100 m<sup>2</sup>). (See dilution chart for application rates.)

- **Non Leaching**
- **Low Salt Index / Reduce Salt Build-Up**

Foliar Turf Applications		
Application	Rate / 1,000 FT <sup>2</sup> (100 m <sup>2</sup> )	Frequency
Tees & Greens	8 - 16 oz. (266 - 500 ml)	Every 14 days
Fairways, Roughs, Sports Turf & Sod	16 - 20 oz. (500 - 650 ml)	Apply Monthly
Lawn Care	32 oz. (1 L)	Apply every 6-8 weeks

Turf Applications: 18-6-12 Nitrogen Per Liquid Ounce (ml)		
18-6-12	Nitrogen Rate	Application Timing
9 oz 219 ml	1/8 lb. N 50 g N	2 weeks release rate
10 oz 439 ml	1/4 lb. N 100 g N	4 weeks release rate
14 oz 659 ml	1/3 lb. N 150 g N	6 weeks release rate
21 oz 879 ml	1/2 lb. N 200 g N	8 weeks release rate
31 oz 1.3 L	3/4 lb. N 300 g N	10 weeks release rate

Apply at desired Nitrogen Rate per 1,000 FT<sup>2</sup> (100 m<sup>2</sup>)

**Tees & Greens:** Apply on greens and tees 9 to 12 oz. (1/8 to 1/3 lb. N) per 1,000 sq. ft. with a spray unit applying no less than 2 gal. tank mix per 1,000 sq. ft. This is the recommended rate for Bentgrass greens and tees. 18-6-12 is compatible with most technical turf products. Always use a jar test before mixing pesticides in your tank. In Southern areas where Rye overseeding is practiced, use 18-6-12 at a rate of 1/8 to 1/3 lb. nitrogen every 10 to 17 days to assure a steady and continuous source of nutrients.

If You Apply	Turf Applications 18-6-12 in 100 Gallons (400 L) of Tank Mix Nitrogen Rate per 1,000 FT <sup>2</sup> (100 m <sup>2</sup> )			
	1/8 lb N (50 g N)	1/4 lb. N (100 g N)	1/3 lb. N (150 g N)	1/2 lb. N (200 g N)
5 gal per 1,000 FT <sup>2</sup>	1.3 gal	2.6 gal	3.4 gal	5.3 gal
20 L per 100 m <sup>2</sup>	4.3 L	8.7 L	13 L	17.5 L
4 gal per 1,000 FT <sup>2</sup>	1.6 gal	3.3 gal	4.3 gal	6.6 gal
15 L per 100 m <sup>2</sup>	5.7 L	11.4 L	17 L	23 L
3 gal per 1,000 FT <sup>2</sup>	2.2 gal	4.4 gal	5.6 gal	8.8 gal
10 L per 100 m <sup>2</sup>	8.7 L	17.5 L	26.3 L	35 L
2 gal per 1,000 FT <sup>2</sup>	3.3 gal	6.6 gal	8.5 gal	13.1 gal
7.5 L per 100 m <sup>2</sup>	11.6 L	23 L	35 L	46 L

**TREE CARE RECOMMENDATIONS:**

**Root Application Rates:** For determining tree fertilization rates, measure the trunk diameter of the tree (DBH) 4 1/2 feet above ground. Growth Products liquid fertilizers should be injected into the top 4 to 8 inches of soil where feeder roots extend. Start application of fertilizer approximately 2 - 3 feet from tree trunk and extend the same distance from the drip line. A grid pattern should be laid out, and spacing should be every 2 1/2 ft. A minimum of 5 gallons of tank mix should be applied per inch of tree diameter. Inject approximately 1/2 gal. of fertilizer solution at each point.

**Trees & Ornamentals:** Growth Products liquid fertilizers contain methylene urea, which has an extremely low salt index and resists leaching. 18-6-12 is a true solution and is ideal for root injection and for use through IPM units. Inject no lower than 8" below ground with correctly calibrated fertilizer injector equipment. See Injection Application Rate Chart.

Tree Care DBH Method	
Lb. Nitrogen per Inch DBH	18-6-12 per 100 Gal of Water
1/18	73 ounces
1/12	110 ounces
1/6	1.75 gallon

Apply 5 gallons of tank mix per inch diameter. Always measure diameter at 4 1/2 feet above ground level

Application Rate at 75 Gallons per 1,000 FT <sup>2</sup>			
Tank Size in Gallons	Quantity 18-6-12		
	1/2 lb N	1 lb N	2 lb N
75	.25 gal	.5 gal	1 gal
100	.3 gal	.6 gal	1.3 gal
150	.5 gal	1 gal	2 gal
200	.6 gal	1.3 gal	2.6 gal
300	1 gal	2 gal	4 gal
600	2 gal	4 gal	8 gal
1000	3.5 gal	7 gal	14 gal

For ground area method, measure below drip line of tree. Rates of 1/2-2 lbs of nitrogen are recommended. Evergreens usually require slightly higher nitrogen than deciduous trees

**NURSERY APPLICATIONS:**

Nitro+K (22-0-16) is a high quality, concentrated slow release nitrogen/ potassium solution. It is ideal for both supplement feeding and constant feed of nursery stock for both foliar and root uptake. This clear liquid can be injected through fertigation, drip irrigation or overhead sprinkler systems.

**For Supplemental Feeding:** Use between applications of granular coated fertilizer to level off nutrients that are often not available or depleted because of adverse weather conditions. This will extend nutrient availability at the end of feeding cycle to avoid costly hand topdressing. Apply at the end of growing cycle prior to shipment, as a final feed to avoid labor, waste and spillage.

**For Constant Feed:** Use on all nursery stock, potted and containerized plants as both foliar or root feeding.

**STORAGE & HANDLING:**

**Storage:** All Growth Products professional liquid fertilizers can be

**CAUTION:** Keep out of reach of children. In case of contact with eyes, flush immediately with copious amounts of water. Contact a physician. Do not take internally.

Daily Drip Rate		
1:100	50 PPM N	100 PPM N
Ounces 18-6-12 per gal (4 L) of water	1.6 oz (50 ml)	3.2 oz (100ml)

Monthly Drench Rates Ounces 18-6-12 per 100 Containers		
Container Size	Low Feeding & Sensitive Crops	Medium Feeding Crops
5" Standard	2.5 oz	4 oz
6" Standard	5 oz	8 oz
1 gallon	7.5 oz	12 oz
2 gallon	16 oz	24 oz
3 gallon	28 oz	42 oz
5 gallon	42 oz	63 oz
7 gallon	63 oz	97 oz

Nursery Foliar Spray Applications		
Application	Rate	Notes
Containerized Crops, Woody Ornamentals, Foliage Plants, Field-Grown Trees	1-2 gallon per 100 gal of water (3.7-7.6 L in 400 L water)	Thoroughly spray to point of run-off. Apply every 2-4 weeks.

stored in normal warehouse areas and are not affected by heat or freezing temperatures. 18-6-12 has a neutral pH and is neither corrosive or abrasive.

**Dilution:** 18-6-12 can be diluted by either adding the concentrate to water or the water to concentrate without any detrimental effects on the final product. Appropriate quantities of water should be added to the tank prior to adding pesticides, fungicides or herbicides. Never mix concentrated materials together without first diluting with water.

**Mixing:** High quality buffers allow 18-6-12 to be blended with acidic or alkaline materials. The following mixing procedures should be used after 18-6-12 has been diluted with water. Add products to mix in this order: 1. wettable powders, 2. flowables, 3. water solubles, 4. surfactants, 5. emulsifiable concentrates. Be sure to agitate during each addition before adding next. When mixing technical materials, check each product's mixing instructions. Apply all of mixture the same day.

Manufactured By:

