



NITRO[®] +K 22-0-16

WITH 82% SMART NITROGEN PLUS POTASSIUM CARBONATE

- **No Nitrates or Chlorides - Environmental Stewardship**
- **Low Salt Index - Non-Burning**
- **Potassium Carbonate for Added K**

Guaranteed Analysis:

Total Nitrogen (N) 22%
 3.3% Urea Nitrogen
 18.7% Slowly Available Nitrogen*

Soluble Potash (K₂O) 16%

Derived From: Low Biuret Urea, Methylene Urea, Potassium Carbonate

*18.7% Slowly Available Nitrogen from Methylene Urea.

TECHNICAL DATA:

Weight per gallon 12.1 lbs.
 Weight per liter 1.45 kg.
 pH 10.5
 1 gallon contains..... 2.66 lbs. N
 1 gallon contains 1.9 lbs. K
 1 Ton (2,000 lbs.) = 166 gallons

PRODUCT DESCRIPTION:

Nitro+K (22-0-16) is a highly effective, crystal clear liquid nitrogen / potassium solution that can be applied by ground or by air. Because of the sticker benefit of the slow release nitrogen, there is improved K uptake. Nitro+K does not contain any chlorides or nitrates. The low salt formulation was developed to supplement standard soil fertility practices as a foliar feed on crops. Used as a foliar applied nitrogen / potassium source the amount of soil applied nitrogen can be reduced, thus decreasing losses from leaching and volatilization. Each gallon of Nitro+K contains 2.66 lbs. nitrogen and 1.9 lbs. potassium. Nitro+K can also be used as a sticker to enhance pesticide uptake.

CAUTION:

The following conditions must be observed in order to apply product successfully. Failure to follow these instructions may result in damage to the plant.

- Use sufficient water to provide thorough coverage.
- A jar test is recommended prior to mixing chemicals in your tank.
- The following mixing procedures should be used after Nitro-30 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.
- Agitate during each addition.
- Consult your local representative for rate and application questions.

- **N & K for Immediate Absorption**
- **Increases Potassium Uptake**
- **Provides Extended Feeding**

CROP TREATMENT RECOMMENDATIONS:

All recommendations are based on broadcast spray application. When band or directed sprays are used, calculate the rate for the "sprayed acre" only. For most field and horticultural crops the early season applications are directed sprays.

For treatment of individual trees and vines, divide rate per acre by number of trees or vines per acre.

STORAGE & DISPOSAL:

Do not contaminate water, food or feed by storage or disposal. Triple rinse container; empty rinsate into spray tank. Dispose of the empty container according to approved local practices; contact county agricultural commissioner for disposal information.

NITRO+ K 22-0-16 PPM Rates							
Fluid Ounces of Nitro+ K 22-0-16 per Gallon of Stock Tank Water							
PPM Nitrogen	25	50	75	100	150	200	300
PPM Potassium	18	36	54	72	108	144	216
1:500	5	10	15	20	30	41	61
1:300	3	6	9	12	18	24	37
1:200	2	4	6	8	12	16	25
1:100	1	2	3	4	6	8	12
1:50	0.5	1	1.5	2	3	4	6
1:15 Ratio for Hozon Proportioner							
1:15	0.15	0.30	0.46	0.61	0.91	1.22	1.83

Transplant Solutions		
Application	Rate	Frequency / Notes
Fruit, Nut and Citrus Trees, Berries, Vines	2 - 3 quarts in 100 gallons of water (2 Liters in 100 Liters of water)	Drench roots at time of transplant with 1 - 2 gallons of mix. (4 - 8 Liters)
Plugs	Foliar Spray: 1 - 2 quarts in 100 gallons of water (1 Liter in 100 Liters of water)	Drench plug and plant immediately. Do not allow plants to dry or wilt.
	Injector Ratio: 4 fl oz per gallon of stock water. Set injector to 1:100 (31 ml per liter stock tank solution)	Set injector at 100 PPM of nitrogen.

Crop Application Recommendations

Crop	Rate	Application Timing / Intervals
Bananas	1 - 3 gallons per acre (9 - 28 liters per hectare)	Apply at 2 - 3 week intervals. 20 - 30 applications per year.
Berries , such as (but not limited to): Blueberry, Blackberry, Raspberry, Strawberry	½ - 2 gallons per acre (5 - 18 liters per hectare)	Apply prior to bloom. Repeat at fruit set to early fruit color. Repeat every 14 - 21 days until harvest.
Bulb Vegetables , such as (but not limited to): Onions, Garlic, Shallots	½ - 1½ gallons per acre (5 - 14 liters per hectare)	Apply 3 times each season starting when first early-set is 3 inches, then at midseason, and then 2 - 3 weeks prior to harvest.
Citrus , such as (but not limited to): Grapefruit, Lemons, Limes, Oranges, Pomelo, Tangelo, Tangerines	½ - 3 gallons per acre (5 - 28 liters per hectare)	Apply early spring and on flush growth. Apply at pre-bloom to increase fruit set. Apply post bloom to 3 rd petal fall to increase fruit size and cell elongation. Repeat in 30 days and when nitrogen needs are evident. Can be applied with crop protection sprays.
Cole Crops , such as (but not limited to): Broccoli, Cauliflower, Cabbage, Brussels Sprouts, Collards	½ - 2 gallons per acre (5 - 18 liters per hectare)	Apply at early head formation and repeat 14 - 21 days later.
Cotton	¾ - 1 gallons per acre	Apply during seedling stage. Apply when first true leaves appear
	½ - 1 gallon per acre	Apply after seedling stage
	1 - 3 gallons per acre	Apply at this rate during boll development
Cucurbits , such as (but not limited to): Cucumber, Cantaloupe, Squash, Pumpkin, Melons	½ - 3 gallons per acre (5 - 28 liters per hectare)	Apply at early bloom and repeat approximately 4 weeks later.
Field Crops , such as (but not limited to): Barley, Corn, Oats, Peanut, Rice, Soybean, Sugar Beet and Wheat.	½ - 3 gallons per acre (5 - 28 liters per hectare)	Apply at flag leaf emergence or before flowering and repeat 14 - 21 days after pollination.
Fruiting Vegetables , such as (but not limited to): Peppers, Tomato, Eggplant, Okra, Tomatillo	½ - 2½ gallons per acre (5 - 23 liters per hectare)	First application at early bloom. Repeat at fruit set and again 15 to 30 days later. Apply 3 to 4 weeks prior to harvest to strengthen canopy and reduce sunburn.
Grapes , such as (but not limited to): Wine and Table Grapes	¼ - 2 gallon per acre (2 - 19 liters per hectare)	Apply at shoot growth to promote full canopy. Reapply at bloom to set fruit, and then again after bloom when nitrogen is needed.
Grasses Grown for Seed, Sod Production, Pasture, Forage and Alfalfa	¼ - 2 gallons per acre (2 - 19 liters per hectare)	Apply in early spring for good growth, then apply monthly and again after harvesting.
Herbs and Spices , such as (but not limited to): Coriander, Basil, Chives, Dill, Rosemary, Sage & Mint	¼ - 1 gallon per acre (2 - 9 liters per hectare)	Apply after planting and reapply after harvesting.
Leafy Vegetables , such as (but not limited to): Lettuce, Celery, Spinach, Parsley, Radicchio	½ - 2 gallons per acre (5 - 18 liters per hectare)	Apply after transplanting, thinning, or at 2 nd true leaf stage. Apply subsequent application at 7 - 14 day intervals. Use as needed to supplement nutritional requirements.
Legumes and Pulses , such as (but not limited to): Beans, Green Beans, Snap Beans, Lentils, Peas	½ - 2 gallon per acre (5 - 19 liters per hectare)	Apply shortly after first flower appears. Repeat 10 - 14 days later.
Root, Tuber and Corm Vegetables , such as (but not limited to): Carrot, Potato, Sweet Potato, Beets, Ginger, Radish, Ginseng, Turnip	½ - 3 gallons per acre (5 - 28 liters per hectare)	Apply after transplanting, thinning, or at 2 nd true leaf stage. Apply subsequent application at 10 - 15 day intervals. Use as needed to supplement nutritional requirements.
Tree Fruits and Nuts , such as (but not limited to): Almond, Apple, Apricot, Cacao, Cherry, Coffee, Filbert, Nectarine, Olive, Peach, Pear, Pecan, Pistachio, Plum, Prune, Quince and Walnut	½ - 3 gallons per acre (5 - 28 liters per hectare)	Apply first application at green tip, pink bud, bud swell or early bloom. Apply at 30 day intervals up to harvest for improved sizing. Apply post harvest in 1 or 2 applications. Apply as needed to supplement nutritional requirements.
Tropical / Sub Tropical Fruits , such as (but not limited to): Avocados, Coffee, Dragon Fruit, Durian, Mangos, Papaya, Pineapples, Rubber Trees	½ - 2½ gallons per acre (5 - 23 liters per hectare)	Apply on new major growth and on successive flushes. Spray monthly until harvest. Do not apply during bloom.

Greenhouse Foliar Spray Recommendations		
Application	Rate	Frequency / Notes
For All Types of Greenhouse Crops	Transplanting: Mix 1 - 2 oz per gallon of water (8 - 16 ml per liter water)	Soak plug tray or foliar spray after transplanting
	Propagation: ½ - 1 oz per gallon water (4 - 8 ml per liter water)	Apply at 2 nd leaf stage and then every 10 - 14 day intervals.
	Maintenance: ½ - 2 oz per gallon water (4 - 16 ml per liter water)	Apply at 10 - 14 day intervals to supplement nutrient requirements.

Fertigation / Drip Irrigation Rates		
Application	Rate per acre (Hectare)	Frequency / Notes
Sprinkler Irrigation	1 - 3 gallons (18 - 28 liters)	Apply 3 - 6 times per growing season or as needed to supplement nitrogen requirements
Drip Irrigation	Tomatoes & Peppers: 1-3 gallons (18-28 liters)	Apply 2 times per month for 3 to 4 months.
	Strawberries: 1-3 gallons (18-28 liters)	Apply twice monthly throughout growing season.
	Grapes, Trees & Vines: 1 - 3 gallons (28 liters)	Apply 3 times per year or every 30 days in sandy soils.
	Lettuce, Celery, and leafy Vegetables: 1-3 gallons (18-28 liters)	Apply at first irrigation and repeat as needed.

Ferns	
Plant Type	Application Rate
Ferns	Foliar Spray: ½ - 1 gallon per acre in a minimum of 100 gallons of water. Apply every other week (½ - 1 liter per 100 liters water) *Do not mix with any other technical materials

Nursery Applications		
Application	Rate	Notes
Containerized and Field Grown Crops, (including but not limited to): Deciduous and Evergreen Trees, Foliage, Ornamental Grasses, Perennials, Tropicals, Woody Ornamentals	Foliar Spray: 1 gallon per 100 gal of water (1 L in 100 L water)	Thoroughly spray to point of run-off. Apply every 2 - 4 weeks.
	Injector Ratio: 6 - 8 fl oz per gallon of stock tank water at a 1:100 ratio (47 - 63 ml per 1 liter water at 1:100 ratio)	Set injector at 150 - 200 PPM of nitrogen. Apply monthly.

Foliar Turf Applications	
Application	Rate
Fairways, Roughs, Sports Turf, Sod and Lawns	Apply 3 - 5 gallons per acre (9 - 15 oz. per 1,000 sq. ft.) every 14 to 28 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).
Pastures	Apply 3 - 5 gallons per acre (9 - 15 oz. per 1,000 sq. ft.) every 14 to 28 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).

The following precautionary statements and pictograms are based on The Globally harmonized System of Classifications and Labeling of Chemicals (GHS) and are mandated by the Occupational Safety and Health Administration (OSHA)



WARNING

- H302 Harmful if Swallowed
- H315 Causes Skin Irritation
- H319 Causes Serious Eye Irritation
- H335 May Cause Respiratory Irritation

FIRST AID	
IF SWALLOWED:	Call a poison center or doctor if you feel unwell: Rinse mouth.
IF IN EYES:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor.
IF ON SKIN:	Remove contaminated clothing and wash skin with plenty of soap and water. If skin irritation occurs, get medical advice/attention.
IF INHALED:	Call a poison center or doctor if you feel unwell.
You may also contact 1-800-992-5994 day or night for emergency treatment information. If medical advice is needed, have product container or label at hand (P101), Keep out of reach of children (P102), Read label before use (P103).	
STORAGE: Keep container tightly closed. May be stored in unheated area, but keep from freezing. Store in areas inaccessible to children and pets.	
DISPOSAL: Dispose of contents/container in accordance with local/regional/national/international regulations. Do not reuse container.	

Condition of Sale and Warranty: Growth Products, Ltd. warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label only when used in accordance with label directions under normal conditions of use. Handling, storage and use of the product by Buyer or User are beyond the control of Growth Products, Ltd. and Seller. Risks such as crop injury or other unintended consequences resulting from, but not limited to, weather or soil conditions, presence of other materials, disease, pests, drift to other crops or property, or failure to follow label directions will be assumed by Buyer or User. IN NO CASE WILL GROWTH PRODUCTS, LTD. OR SELLER BE HELD LIABLE FOR CONSEQUENTIAL, SPECIAL, OR INDIRECT DAMAGES RESULTING FROM THE HANDLING, STORAGE OR USE OF THIS PRODUCT.

Manufactured By:

