



AMMOS 22-0-0

WITH 40% SMART NITROGEN™ PLUS 4% SULFUR

- **Low Salt Index**
- **Ammonium Sulfate For Quick Growth**
- **pH Neutral for Mixing Compatibility**

GUARANTEED ANALYSIS:

Total Nitrogen (N) 22%
 4.7% Ammoniacal Nitrogen
 8.5 % Urea Nitrogen
 8.8% Slowly Available Water Soluble Nitrogen*
 Sulfur (S) Combined 4%
 Derived From: Urea, Methylene Urea, Ammonium sulfate, Ammonium carbonate. F106
 *8.8% slowly available Nitrogen from Methylene Urea
 Weight per gallon 10 lbs.
 Weight per Liter 1.2 Kg
 1 gallon contains 2.2 lbs.N
 pH 7.5

PRODUCT DESCRIPTION:

AMMOS combines the benefits of SMART slow release nitrogen with the cost-effective economics of ammonium sulfate. Quick absorption by the plant results in faster start up, even at low soil temperatures with the added benefit of SMART Nitrogen. Use when a liquid type of ammoniacal nitrogen source and sulfur is required. Ammos has a neutral to slightly basic (7.5-8) pH and is a clear liquid solution, containing 22% nitrogen and 4% sulfur. It is compatible with most liquid fertilizer materials. Nitrogen and sulfur are important components of proteins. Sulfur deficiency can affect the plant's ability to utilize nitrogen for protein synthesis.

When applied, ammonium sulfate decomposes quickly in the soil to give sulfate sulfur. This sulfur is immediately available for plant uptake, whereas elemental sulfur (S) must undergo oxidation for longer term release. The advantage of Ammos is that the sulfur needed for plant growth becomes available over several weeks. The sulfur in Ammos will help reduce the pH of soils that are too alkaline.

APPLICATION PRECAUTIONS:

Do not apply Ammos directly on or below germinating seeds such as in a "pop up" fertilizer. Dry soil condition and/or combination

- **High Sulfur to Help Lower pH**
- **No Nitrates - Environmentally friendly**
- **For Extended Feeding**

Transplant Solutions		
Application	Rate	Frequency / Notes
Fruit, Nut and Citrus Trees, Berries, Vines	1 gallons in 100 gallons of water (1 Liter in 100 Liters of water)	Drench roots at time of transplant with 1 - 2 gallons (4 - 8 Liters) of mix.
Plugs	Foliar Spray: ½-1 gallon 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: 3.5 fl oz per gallon of stock tank water ratio at a 1:100 ratio (25 ml per L water at 1:100 ratio)	Set injector at 100 PPM of Nitrogen.

Greenhouse Foliar Spray Recommendation		
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 2nd 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	2-3 gallons (9-28 liters)	Apply 3-6 times per growing season or as needed to supplement nitrogen requirements
Drip Irrigation	Tomatoes & Peppers 2-3 gallons (9-28 liters)	Apply 2 times per month for 3 to 4 months.
	Strawberries 2-3 gallons (9-28 liters)	Apply twice monthly throughout growing season.
	Grapes, Trees & Vines 2-3 gallons (9-28 liters)	Apply 3 times per year or every 30 days in sandy soils.
	Lettuce, Celery and leafy Vegetables 2-3 gallons (9-28 liters)	Apply at first irrigation and repeat as needed.

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: 5-7 fl oz per gallon of stock tank water at a 1:100 ratio (35 - 52 ml per 1 liter water at 1:100 ratio)	Set injector at 150-200 PPM of Nitrogen. Apply monthly.

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 3rd 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.
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 in 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 to 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 2nd 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 - 3 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 2nd 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, dud 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.

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. Do not mix Ammos with acids or other acidic materials below a pH of 6. Prior to any fertilizer or pesticide application, all spray mixing and application equipment must be cleaned. Carefully observe all cleaning directions on the pesticide and fertilizer label. Fill the sprayer or mix tank at least half full with 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.

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.

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 in the USA by:

