

auxigro® WP

**Plant Metabolic Primer
WETTABLE POWDER
FOR INCREASED YIELD AND QUALITY**

Active Ingredients:

GABA: gamma aminobutyric acid -----	29.2 %
L-Glutamic acid -----	29.2 %
Other Ingredients -----	41.6 %
TOTAL -----	100.0 %

(1 pound contains 0.6 pounds of active ingredient)
(5 pounds contains 3 pounds of active ingredient)

KEEP OUT OF REACH OF CHILDREN

CAUTION

FIRST AID

If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 – 20 minutes. • Call a poison control center or doctor for treatment advice.
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15 – 20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-222-1222 for emergency medical treatment information.	
See (back) (side) panel for additional precautionary statements and directions for use.	

EPA Registration Number: 70810-1
EPA Establishment Number: 33967-NJ-1, 39578-TX-1
Net Contents: _____

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PRECAUTIONARY STATEMENTS

HAZARDS TO HUMAN AND DOMESTIC ANIMALS – CAUTION

Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.

Personal Protective Equipment (PPE). Applicators and other handlers must wear:

- long sleeve shirt and long pants
- shoes plus socks
- protective eyewear
- waterproof gloves

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

User Safety Recommendations:

User should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if product gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Environmental Hazards:

For terrestrial uses: Do not apply directly to water, or areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

DO NOT apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation. Please see package insert on bottom of bag for complete Directions For Use.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses and handlers of agricultural pesticides. It contains requirements for training, decontamination, notifications and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on the label about personal protective equipment and the restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Re-Entry Statement:

Do not enter or allow worker entry into treated areas without protective clothing during the restricted-entry interval (REI) of 4 hours.

For Early Entry

For early entry into treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated (plants, soil) wear:

- ◆ Long sleeve shirt and long pants
- ◆ Shoes plus socks
- ◆ Protective eyewear
- ◆ Coveralls

Observe all cautions and limitations on this label and on the labels of products used in combination with Auxigro. Do not use Auxigro other than in accordance with the instructions set forth on this label. The use of Auxigro not consistent with this label can result in injury to crops.

GENERAL INFORMATION

Apply Auxigro on all labeled crops per label instructions (Directions for Use). When used as directed, Auxigro has been shown to increase yields of crops. Auxigro applications have also resulted in increased size and/or quality of treated commodities, early ripening in certain vegetables, increased root growth, early flowering and fruit set, faster seed germination and rooting, and induction of plant resistance to control or suppress certain plant pathogens.

MIXING INSTRUCTIONS

Mixing of Auxigro: Fill the spray tank one-half to three-quarters full with clean water. Use a calibrated device to weigh the required amount of Auxigro. Add Auxigro to the spray tank while agitating. Add other products, adjuvants or surfactants and then fill the remainder of the tank with water.

When water temperatures are below 50 F, make a slurry of one pound of Auxigro into one gallon of water (or comparable ratio) prior to mixing. Pour slurry mixture into the spray tank when it is ½ to ¾ full of water. This will minimize mixing difficulties that can occur with this type of formulation.

Tank mix combinations with Auxigro: When Auxigro is used in combination with other products refer to the respective product labels for rates and methods of application; proper timing; disease, weeds or insects controlled; restrictions and precautions. Always use in accordance with the most restrictive label restrictions and precautions. Do not exceed any label dosage.

Spray solution pH: For best results, ensure that the final spray solution is near neutral or slightly acidic (pH 6.0 to 7.5).

Compatibility Testing: Auxigro is compatible with most commonly used agricultural fungicides, insecticides, micronutrients and spray adjuvants. If compatibility with another product is unknown, conduct a jar test for physical compatibility before field mixtures are made. Read and recognize all cautions and limitations on labeling of all products used in mixtures.

Adjuvants and Surfactants: Optimal results are obtained when a silicone-based surfactant is used with Auxigro. Use the surfactant at the lowest label rate for use with Plant Growth Regulators (PGRs) or foliar sprays (typically 4 to 6 ounces surfactant per 100 gallons). If Auxigro is tank mixed with other products that prohibit surfactant use, follow the tank mix product label and do not use a surfactant.

Clean or triple rinse mixing containers, hoses and spraying equipment prior to mixing Auxigro for application.

APPLICATION INSTRUCTIONS

Applications of Auxigro effectively enhance plant development, growth of numerous plant species and induce plant resistance to control or suppress selected plant pathogens. Begin applications of Auxigro at seeding (or transplanting) and continue until harvest unless otherwise stated. For optimal yield/disease response, apply Auxigro postemergence according to the application timings and rates provided in the table below. Make multiple applications (with fungicides or nutrients) at a rate of 1 - 4 ounces (per application). Do not exceed a total season application of 24 ounces per acre per crop unless otherwise stated.

All rates of application for Auxigro are given as broadcast rates and expressed as ounces of formulated product per acre per application. If crop growth will permit a banded treatment, use proportionally less product than the broadcast rate. Apply **Auxigro with silicone-based surfactants unless tank mix combinations prohibit their use or crop injury is likely to occur.** If air temperatures are expected to be above 80 F at the time of application, increase the application volume to 10 gallons per acre (GPA). Additionally, use surfactants that lower the rate of evaporation such as silicone and mentholated seed oil (MSO) blends.

Test the final spray solution pH and adjust it to near neutral or slightly acidic (pH 6.0 to 7.5).

Allow heavy dew to evaporate prior to Auxigro applications. Do not apply Auxigro if windy conditions exist or a strong threat of rain exists within 4 hours of application.

Ground Application: Apply uniformly with properly calibrated ground equipment in 20 to 100 gallons of water per acre, except as noted in the Directions for Use. Increase application volume and pressure as needed depending on the size of plants being treated. Use hollow cone nozzles or other types of nozzles that achieve uniform wetting of the entire plant canopy.

Aerial Application: Thorough spray coverage is required for maximum benefit. To achieve good coverage, use proper droplet size, spray uniformly, and ensure swath width and spray volume are correct. Do not use less than 7 gallons total spray volume per acre.

Chemigation Application: For Potatoes Only. See CHEMIGATION section of this label.

Crops & Application(s)	Rate / Acre / Application & Timing*
Almond	To increase total yield. First application: Apply 4 oz. of Auxigro when trees are in pink bud. Second application: Apply 4 oz. of Auxigro at full bloom. Third application: Apply 4 oz. of Auxigro at petal fall. <u>For optimal performance: Apply Auxigro in combination with a calcium based foliar fertilizer.</u>
Apples	To increase the total yield and/or quality. Bloom time applications: Apply 2-8 oz/100 gal. of Auxigro at each of the following growth stages - Pink bud, full bloom & petal fall. Nutrient Combinations: Apply 2-8 oz Auxigro per 100 gal. as a tankmix partner with foliar micro-nutrients during fruit development.
Broccoli and Cauliflower	To increase total yield and/or uniformity. First application: Apply 4 oz. at 4-6 leaf stage or one week after transplanting. Later applications: Apply 4 oz. of Auxigro every 2 weeks following the initial application up until at button (head) formation.
Celery	To increase the size and/or total yield. First application: Apply 4 oz. of Auxigro when plants are 6 – 8 inches tall or one week after transplanting. Later applications: Apply 4 oz. of Auxigro 14 days after the initial application, until within 2 weeks of harvest.
Corn (maize)	To increase total yield and/or feed quality of the corn. To promote plant health and reduce the occurrence of common corn smut, <i>Ustilago zeae</i> and related species. Applications: Apply 4 oz of Auxigro during the period just prior to tassel appearance until complete tassel emergence.
Cucumbers	To increase the grade and/or marketable yield. First application: Apply 4 oz. of Auxigro at early bloom, just prior to running. Second application: Apply 4 oz. of Auxigro at 10-14 days after the initial application. Other applications: Apply 4 oz. of Auxigro at 14-16 day intervals when multiple harvests are taken. Do not exceed a total seasonal application of 24 oz. per season.

Edible Dry Beans	To increase yields.
One application:	Apply 4 oz. of Auxigro to the crop at flower bud initiation (less than 5% bloom) or at pinning stage of growth (approximately 21 days after first bud formation).

Grapes (Disease Control).	For the prevention of Powdery Mildew, Auxigro must be used prior to the onset of powdery mildew infections as a preventative disease control product. This product is not intended to be a curative or eradicator fungicide. Use Auxigro as part of Resistance Management and/or Integrated Pest Management programs. Apply this product either (1) alone, (2) in alternating applications with other fungicide products that are labeled for the control of powdery mildew, or (3) in tank mix combinations with these other fungicide products. Auxigro will provide suppression of Bunch Rot. To do so it must be used as part of a disease management program.		
	RATE OF AUXIGRO WP		
	Ounces Per Acre		
Disease	Alone	Alternating*	Tank mix*
Bunch Rot (Botrytis cinerea).	4	4	2 to 4
Powdery Mildew (<i>Ucinula necator</i>)	4	4	2 to 4
* When high disease pressure is present Application Timing: Use shorter application intervals for Auxigro on susceptible varieties or under heavy disease pressures. Begin applications at prebloom (6 - 12 inch shoots). Do not extend applications beyond a 16 day interval following the previous application made for the prevention of powdery mildew. Follow the most restrictive label for application timing when Auxigro is alternated with other disease control products. Thorough coverage is essential for good disease control. Uniformly apply Auxigro to the crop canopy. For ground applications use a minimum of 50 gallons per acre for conventional spray equipment, and a minimum of 36 gallons per acre for electrostatic sprayers.			
Grapes	To increase Soluble Sugars as measured by degrees Brix. First Application: Apply 4 oz. of Auxigro at full bloom (beginning of berry development). Second Application: Apply 4 oz. of Auxigro at veraison (berry softening) prior to grapes achieving 18 degrees Brix and within 60 days of anticipated harvest.		
Grass grown for Seed (annual rye, perennial rye, Kentucky bluegrass, tall fescue)	To increase total yield. Apply 4 oz. of Auxigro at early seed head fill (post anthesis).		
Lettuce	To increase the marketable yield and/or provide earlier maturity. First application: Apply 4 oz. of Auxigro at the time of rapid head development – mid season. Later applications: Apply 2 to 4 oz. of Auxigro every 7 to 14 days after the initial application. <u>For optimal results: Apply Auxigro in combination with a calcium based foliar fertilizer.</u>		
Melons.	To increase the number and/or yield of marketable melons. First application: Apply 4 oz. of Auxigro at early female bloom (less than 10%), just prior to runner formation. Second application: Apply 4 oz. of Auxigro at first fruit set, approximately 10 – 21 days following the initial application. <u>For optimal results: Apply Auxigro in combination with a calcium based foliar fertilizer.</u>		

Melons Multiple applications:	For suppression of gummy stem blight (<i>Didymella bryoniae</i>) on watermelons. Apply Auxigro in combination with commercial fungicides at 2 oz. of Auxigro from emergence until harvest on a regular basis (7-14 day intervals) for suppression of gummy stem blight. Do not exceed a total seasonal application of 24 oz. per season.
Onions First Application Second Application:	To increase the marketable grade and/or yield. Apply 4 oz. of Auxigro at bulb swell (typically 1 ¼ to 1 ½ inch diameter). Apply 4 to 8oz. of Auxigro at approximately 4 weeks prior to harvest (lifting), a minimum of 14 days after the initial application.
Peanuts. First application: Second application:	To increase the total yield. Apply 4 oz. of Auxigro at early bloom, 18 – 20 trifoliates (prior to running). Apply 4 oz. of Auxigro at full bloom, approximately 25 –30 days after initial application.
Peppers First application: Second application: For optimal results:	To increase the marketable grade and/or total yield. Apply 4 oz. of Auxigro at full-bloom of main canopy. Apply 4 oz. of Auxigro at 14 days after initial application. Apply Auxigro in combination with a calcium based foliar fertilizer.
Pineapple First application: Later applications:	To increase the yield and/or quality of pineapple: Apply 2-8 oz Auxigro 1 or 2 days prior to flower induction. Apply 2-8 oz Auxigro every 14-30 days after first application.
Potatoes. First application: Second application:	To increase the marketable yield and/or improve tuber grades. Apply 5 oz. of Auxigro when the first tubers are approximately the size of a small pea (plants 6 – 10 inches in height, typically 2 -3 weeks after emergence). Apply 5 oz. of Auxigro at 30 to 40 days prior to harvest.
Snap Beans One application:	To increase the total yield. Apply 8 oz. of Auxigro at pre-bloom (bud formation) or at pinning stage of growth.
Stone Fruit (including almonds, apricots, cherries, plums, nectarines, peaches and prunes) First application: Second application: Third application: Later season:	For the control of brown rot (<i>Monilinia spp</i>) and suppression of shot hole (<i>Stigmia carpophila</i>). Apply 4 ounces of Auxigro when trees are in pink bud (<20% bloom). Apply 4 ounces of Auxigro at full bloom. Apply 4 ounces of Auxigro at petal fall. Apply 4 ounces of Auxigro at 14-21 days post petal fall and/or 21 to 30 days prior to harvest.
For the prevention of brown rot, Auxigro must be used prior to the onset of disease infections as a preventative disease control product. This product is not intended to be a curative or eradicant fungicide. Use Auxigro as part of Resistance Management and/or Integrated Pest Management programs. Apply this product either alone, in alternating applications with other fungicide products that are labeled for the control of brown rot and shot hole, or in tank mix combinations with these other fungicide products. Auxigro will provide suppression of shot hole. To do so it must be used as part of a disease management program.	

Strawberries.	To increase the total yield and/or quality.
Ever Bearing Varieties. First application: Later applications:	(harvest continues several months) Apply 4 oz. of Auxigro at any time after first harvest. Make additional 4 oz. applications of Auxigro at 1-month intervals following the first application. Do not exceed a total seasonal application of 24 oz. per season.
June Bearing Varieties. First Application: Second Application:	(harvest duration is typically less than 3 months) Apply 4 oz. of Auxigro 5 - 7 days prior to first harvest. Apply 4 oz. of Auxigro 14 – 21 days after initial application.
Multiple applications:	Apply 1 to 2 oz of Auxigro weekly with each drip fertilizer application.
Sugarbeets One application:	To increase total sugar production. Apply 4 oz Auxigro to the crop 30 to 45 days before harvest.
Tomatoes (processing). First application: Second application:	To increase the marketable yield and to maintain or improve the soluble solids levels. Apply 4 oz. of Auxigro at full bloom in the canopy (50-70% bloom). Apply 4 oz. of Auxigro at first fruit set 10 –21 days after first application.
Tomatoes (fresh). First application: Second application: Multiple applications:	To increase the marketable yield and/or improve grades. Apply 4 oz. of Auxigro at pre-bloom (bud formation for initial production set). Apply 4 oz. of Auxigro at first fruit set, at least 21 days after first application. Make additional 4 oz. applications after the second application at intervals of at least 21 days, if multiple harvests over an extended period are taken. Do not exceed a total seasonal application of 24 oz. per season.

ROTATIONAL CROPS

All crops can be safely planted at any time following an Auxigro application.

CHEMIGATION

General Requirements -

- 1) Apply this product only through a drip system or sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, hand move, or drip (trickle) irrigation systems. Do not apply this product through any other type of irrigation system.
- 2) Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- 3) If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.
- 4) Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
- 5) A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Specific Requirements for Chemigation Systems Connected to Public Water Systems -

- 1) Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- 2) Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete

physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

- 3) The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 4) The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 5) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6) Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 7) Do not apply when wind speed favors drift beyond the area intended for treatment.

Specific Requirements for Sprinkler Chemigation -

- 1) The system must contain a functional check valve, vacuum relief valve and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- 2) The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 3) The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 4) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5) The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6) Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being filled with a system interlock.
- 7) Do not apply when wind speed favors drift beyond the area intended for treatment.

Specific Requirements for Drip (Trickle) Chemigation -

- 1) The system must contain a functional check valve, vacuum relief valve and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- 2) The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 3) The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 4) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5) The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6) Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being filled with a system interlock.

Application Instructions -

- 1) Remove scale, pesticide residues, and other foreign matter from the chemical supply tank and entire injector system. Flush with clean water. Failure to provide a clean tank, void of scale or residues may cause product to lose effectiveness or strength.
- 2) Determine the treatment rates as indicated in the directions for use and make proper dilutions.
- 3) Prepare a solution in the chemical tank by filling the tank with the required water and then adding product as required.
- 4) Utilize typical surfactants or additives that are used for overhead irrigation. Do not use a silicone-based surfactant when applying Auxigro by overhead irrigation.

STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage or disposal.

PRODUCT STORAGE: Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of reach of children, preferably in a locked storage area.

PRODUCT DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: DO NOT reuse any part of the packaging. Dispose of all containers and packaging in a sanitary landfill, by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of the smoke.

CONDITIONS OF SALE AND WARRANTY

The label instructions for the use of this product are based on research and field use. The instructions are believed to be reliable and must be followed carefully. However, it is not possible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the use of, or application of the product contrary to label instructions, all of which are beyond the control of Emerald Bio Corporation.

TO THE EXTENT ALLOWABLE BY STATE LAW: All such risks shall be assumed by the user. Emerald BioAgriculture Corporation (Emerald Bio) shall not be responsible for losses or damages resulting from use of this product in any manner not set forth on this label. User assumes all risks associated with the use of this product in any manner not specifically set forth on this label. Emerald Bio Corporation warrants only that the material contained herein conforms to the chemical description on the label and is reasonably fit for the use therein described when used in accordance with the directions for use, subject to the risks referred to above. EMERALD BIO CORPORATION DOES NOT MAKE OR AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE ANY OTHER WARRANTIES, EXPRESS OR IMPLIED AND EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. BUYER'S EXCLUSIVE REMEDY AND EMERALD BIO CORPORATIONS' EXCLUSIVE LIABILITY, WHETHER IN CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL BE LIMITED TO REPAYMENT OF THE PURCHASE PRICE OF AUXIGRO. In no case shall Emerald Bio Corporation or the seller be liable for consequential, special or indirect damages resulting from the use or handling of this product. Buyers and all users are deemed to have accepted the terms of this LIMIT OF WARRANTY AND LIABILITY which may not be varied by any verbal or written agreement.

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