



U.S. ENVIRONMENTAL PROTECTION AGENCY
 Office of Pesticide Programs
 Biopesticides and Pollution Prevention Division
 (7511C)
 1200 Pennsylvania Avenue NW
 Washington, DC 20460

EPA Reg. Number:

70688-2

Date of Issuance:

SEP 28 2001

Term of Issuance:

Conditional

Name of Pesticide Product:

AtEze™

NOTICE OF PESTICIDE:

Registration
 Reregistration

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

Eco Soil Systems, Inc., 10740 Thornmint Rd., San Diego, CA 92127

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Biopesticides and Pollution Prevention Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

The registration application referred to above, submitted in connection with registration under § 3(c)(7)(C) of the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable provided that you do the following terms and conditions.

1. Submit/cite all data required for registration of your product under FIFRA § 3(c)(5) when the Agency requires all registrants of similar products to submit such data.
2. Submit production information for this product to Mr. Owen Beeder of the Registration Division (7505C) for the fiscal year in which this product is conditionally registered, in accordance with FIFRA § 29. The fiscal year begins October 1 and ends September 30. Production information will be submitted to the Agency no later than November 15, following the end of the preceding fiscal year.

Signature of Approving Official:

(See second page for signature)

Date:

SEP 28 2001

- 3. Within eighteen (18) months after the date of this registration:
 - (1) Growth and survival data for the bacterium *Pseudomonas shlororaphis* strain 63-28, for the temperature range of 10 to 25 degrees C.
 - (2) A study demonstrating the production of siderophores by this strain.
- 4. Amend the proposed label by specifically indicating the sites of application. General terms such as "vegetable crops" are not acceptable unless qualified by specific examples.
- 5. Submit five (5) copies of the revised final printed labeling before you release the product for shipment. Refer to the A-79 enclosure for a further description of final printed labeling.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

Sincerely,



Janet L. Andersen, Director
 Biopesticides and Pollution
 Prevention Division

AtEze™

A BACTERIAL INOCULANT FOR THE SUPPRESSION OF ROOT/STEM ROT PATHOGENS OF GREENHOUSE CROPS.

ACTIVE INGREDIENT

Pseudomonas chlororaphis strain 63-28..... 0.16%*

INERT INGREDIENTS..... 99.84%

TOTAL..... 100.00%

*Contains 1.9 x 10⁹ colony forming units per ml

KEEP OUT OF REACH OF CHILDREN

CAUTION

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Personal Protective Equipment:

Applicators and other handlers must wear long sleeved-shirt and long pants, and shoes plus socks and use a dust/mist filtering respirator (MSHA/NIOSH approval number prefix N-95, R-95, or P-95).

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

ENVIRONMENTAL HAZARDS

Do not contaminate water supplies when cleaning equipment or disposing of equipment washwaters. This product may be toxic or pathogenic to fish and aquatic invertebrates. The potential effects of this product on non-target beneficial insects that may be used in greenhouse Integrated Pest Management Programs are not known.

STORAGE AND DISPOSAL

STORAGE

Store at 41°F (5°C) until use. The product is stable until the expiration date stamped on the package. Avoid exposing container to sun, excess heat, drying and freeze-thaw cycles. Do not store with food or feed.

Discard the product if the package is damaged and is leaking.

Once opened, the product should be used within 24 hours.

DISPOSAL

Treat unused or expired product with bleach (10% v/v) or alternative bactericides prior to disposal in the sewer system.

Empty containers should be rinsed with water and discarded in a sanitary landfill, or by incineration, if allowed by State and Local authorities.

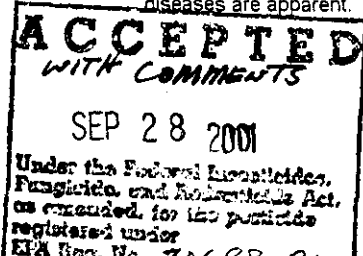
DIRECTIONS FOR USE

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 and Tribe, consult the agency or tribe in your state responsible for pesticide regulation.

GENERAL INFORMATION

This product contains a strain of the non-pathogenic, non-toxic soil bacterium *Pseudomonas chlororaphis*, which is ubiquitous in nature. It is used for the suppression of stem and root rots caused by *Rhizoctonia solani* and *Pythium* spp., and wilt caused by *Fusarium oxysporum* on greenhouse ornamental and vegetable crops.

This product is a preventative measure and should be applied before the diseases are apparent.



AGRICULTURE USE REQUIREMENTS

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Use this product in accordance with its labeling and 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, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), notifications to workers, and restricted-entry interval. The requirements in this box apply to uses of this product that are within covered by the Worker Protection Standard.

The minimum restricted-entry interval is zero.

PRODUCT APPLICATION

This product must be used prior to the expiration date shown below.

Shake package for 30 seconds by inversion before opening.

Dilute the contents of this package with 100 gallons of water (about 1:500 dilution rate) immediately prior to use.

This product is limited for use as a direct application or soil drench of contained plants for greenhouse ornamental and vegetable crops.

For greenhouse-grown ornamentals and vegetable crops, the diluted product can be applied immediately after seeding and transplanting of rooted cuttings. As a further preventative measure, this product may be applied repeatedly at two-month intervals for long-season crops such as cut flowers and greenhouse vegetables.

For bedding plant flats, apply 100 gallons of dilute product to a 1,000 square foot area. Apply 4-8 fluid ounces of dilute product into a 6-inch pot or until the root zone is completely saturated. For other sized containers, apply dilute product at amounts proportionate to the volume of the container. The diluted product can be applied as a soil drench or through a drip irrigation system.

Use all dilute product within 24 hours.

Allow one hour before adding further liquid to treated pots

APPLICATION THROUGH CHEMIGATION: Refer to supplemental labeling entitled "SUPPLEMENTAL LABELING: CHEMIGATION" for use directions for chemigation. Do not apply this product through any irrigation system unless the supplemental labeling on chemigation is followed.

WARRANTY

This material conforms to the description on the label and is reasonably fit for the purposes stated on the label when used and stored in accordance with the directions. The timing of the application, the nature of the soil, the disease problem, the condition of the crop and incompatibility with other soil-treatment products are beyond the control of the seller.

EPA Registration No.: 70688-#
EPA Establishment No.: 70571-MN-1

Net Contents: 26 fl. oz. (770 ml)

Lot No.:

Product expiration date:

This product is manufactured for:
Eco Soil Systems, Inc.
10740 Thornmint Rd.
San Diego, CA 92127
(858) 675-1600

Application of AtEze Through Irrigation Systems

CHEMIGATION USER PRECAUTIONS:

Apply this product only through drip (trickle), flood (basin) or sprinkler (overhead boom) irrigation systems. Do not apply this product through any other type of irrigation system. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts. 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. 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.

FOR CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS:

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.

Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone (RPZ), backflow preventer or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the PRZ, 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.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. 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. 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.

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.

Do not apply when wind speed favors drift beyond the area intended for treatment.

Agitation of the reservoir containing AtEze may be appropriate if the introduction of the product through the drip irrigation system takes greater than an hour. Application can be continuous but should not be followed by any further irrigation until at least one hour following chemigation. AtEze should be mixed with the drip irrigation system so that the product is diluted approximately 1:500 when being applied.

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 control 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.

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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. Agitation of the reservoir containing AtEze may be appropriate if the introduction of the product through the drip irrigation system takes greater than an hour.
 8. Application can be continuous but should not be followed by any further irrigation until at least one hour following chemigation.
 9. AtEze should be mixed with the drip irrigation system so that the product is diluted approximately 1:500 when being applied.

FOR FLOOD (BASIN), FURROW AND BORDER CHEMIGATION:

1. Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as a drop structure or weir box to decrease potential for water source contamination from backflow if water flow stops.
2. Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:
 - a. 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.
 - b. The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of fluid back toward the injection pump.
 - c. 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.
 - d. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
 - e. 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.
 - f. System 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 of being fitted with a system interlock.
3. Constant agitation in a pesticide supply tank is recommended to maintain product in suspension. Fill tank with 1/2 to 3/4 the desired amount of water. Start mechanical or hydraulic agitation. Add required amount of AtEze and then the remaining volume of water.
4. Inject diluted AtEze during the entire irrigation cycle. If a pesticide supply tank is unavailable, inject undiluted AtEze at the rate of 26 oz. per 1000 square foot area.
5. Apply at AtEze drench at 26 oz. per 100 gallons of water.

FOR OVERHEAD BOOM- AND MIST-TYPE SYSTEMS, SPRINKLERS SUCH AS IMPACT OR MICROSPRINKLER 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 contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
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 fitted with a system interlock.
7. Do not apply when wind speed favors drift beyond the area intended for treatment.

8. Constant agitation in a pesticide supply tank is recommended to maintain product in suspension. Fill tank with 1/2 to 3/4 the desired amount of water. Start mechanical or hydraulic agitation. Add required amount of AtEze and then the remaining volume of water.
9. Inject diluted AtEze during the entire irrigation cycle. If a pesticide supply tank is unavailable, inject undiluted AtEze at the rate of 26 oz. per 1000 square foot area.
10. Apply at AtEze drench at 26 oz. per 100 gallons of water.