

70051-19

10/11/2012

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Washington, D C 20460

OCT 11 2012

OFFICE OF
CHEMICAL SAFETY AND
POLLUTION PREVENTION

Ms Christine A Dively
Director of Regulatory Affairs
Certis USA, LLC
9145 Guilford Road, Suite 175
Columbia, MD 21046

Re Product Name – PFR-97™ 20% WDG
EPA Reg No 70051-19
Your application dated October 4, 2012 to add the Organic Materials Review Institute (OMRI) logo consistent with Pesticide Registration (PR) Notice 98-10
Decision No 470416

Dear Ms Dively

The Biopesticides and Pollution Prevention Division is in receipt of your application, as indicated above, for notification under PR Notice 98-10. A preliminary screen of this request has been conducted for its applicability under PR Notice 98-10, and it has been determined that the action requested falls within the scope of this document. Our records have been duly noted, and the label submitted with this application has been stamped "Notification Accepted" and will be placed accordingly in our records.

Questions concerning this action should be directed to Ms Jeannine Kausch by phone (703-347-8920) or email (kausch.jeannine@epa.gov)

Sincerely,

Kimberly Nesci, Acting Chief
Microbial Pesticides Branch
Biopesticides and Pollution
Prevention Division (7511P)

CONCURRENCES

SYMBOL	7511P	7511P						
SURNAME	KAUSCH	Boyer						
DATE	10/11/2012	10/11/12						

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Please read instructions on reverse before completing form

Form Approved OMB No 2070-0080

Print Form



United States
Environmental Protection Agency
Washington DC 20460

Registration
 Amendment
 Other

OPP Identifier Number

Application for Pesticide - Section I

1 Company/Product Number 70051 19	2 EPA Product Manager MPB Nesci	3 Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4 Company/Product (Name) PFR 97 20% WDG	PM#	
5 Name and Address of Applicant (Include ZIP Code) Curtis USA LIC 9145 Guilford Road Suite 175 Columbia Maryland 21046 <input type="checkbox"/> Check if this is a new address	6 Expedited Review In accordance with FIFRA Section 3(c)(3) (b)(i) my product is similar or identical in composition and labeling to EPA Reg No _____ Product Name _____	

Section - II

<input type="checkbox"/> Amendment Explain below	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> Me Too Application
<input checked="" type="checkbox"/> Notification Explain below	<input type="checkbox"/> Other Explain below

Explanation Use additional page(s) if necessary (For section I and Section II)
Addition of OMRI to the label No other revisions have been made to the label

Notification Accepted

Date 10 / 11 / 2012

Reviewer J KAVSCH

Section - III

1 Material This Product Will Be Packaged In			
Child Resistant Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2 Type of Container <input type="checkbox"/> Metal <input type="checkbox"/> Plastic <input checked="" type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____
* Certification must be submitted		If Yes Unit Packaging wgt	No per container
3 Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container		4 Size(s) Retail Container 5 lbs	5 Location of Label Directions <input checked="" type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product
6 Manner in Which Label is Affixed to Product <input checked="" type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled		<input type="checkbox"/> Other _____	

Section - IV

1 Contact Point (Complete items directly below for identification of individual to be contacted if necessary to process this application)		
Name Christine A Dively	Title Director of Reg Affairs	Telephone No (Include Area Code) 301 483 3806
Certification I certify that the statements I have made on this form and all attachments thereto are true accurate and complete I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law		6 Date Application Received (Stamped)
2 Signature <i>Christine A Dively</i>	3 Title Director of Reg Affairs	
4 Typed Name Christine A Dively	5 Date Oct 04 2012	

NOTIFICATION STATEMENT

PFR-97 20% WDG (EPA Registration Number 70051-19) - Notification of addition of Organic Materials Review Institute (OMRI) Seal to the EPA stamped label

“This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C. sec 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.”

PFR-97™

2.9% WDG

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MICROBIAL INSECTICIDE

FOR ORGANIC PRODUCTION



FOR CONTROL OF INSECT AND MITE PESTS ON VEGETABLES, FRUITS, AND OTHER FOOD CROPS

Active Ingredient	
<i>Isaria fumosorosea</i> Apopka Strain 97 (ATCC 20874) (formerly <i>Paecilomyces fumosoroseus</i>)	20%
Other Ingredients	80%
TOTAL	100%

Contains 1 x 10⁹ CFU/g (equivalent to 1.4% technical grade active ingredient)

Net Contents 5 pounds
 EPA Reg No 70051 19
 EPA Est No 70051 CA 001
 Lot No
 Expiration date

KEEP OUT OF REACH OF CHILDREN
CAUTION

FIRST AID
 If on skin or clothing 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 product diluted in accordance with the directions for use
 gets on skin medical attention is not required
 Have the product container or label with you when calling a poison control center or doctor or going for treatment
 Hot Line Number 1 800 255 3924

Manufactured by
 Certis USA L L C
 9145 Guilford Road
 Suite 175
 Columbia MD 21046
CERTIS

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION
 Harmful if swallowed inhaled or absorbed through the skin Avoid breathing
 spray mist Causes moderate eye irritation Avoid contact with skin eyes
 or clothing Wash thoroughly with soap and water after handling and
 before eating drinking chewing gum or using tobacco Remove and wash
 contaminated clothing before reuse
Personal Protective Equipment
 Applicators and other handlers must wear
 Long sleeved shirt and long pants
 Shoes plus socks
 Mixers loaders applicators and other handlers must wear a dust/mist
 filtering respirator (MSHA/NIOSH approval number prefix TC 21C) or a
 NIOSH approved respirator with prefix N 95 R 95 or P 95
 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

ENVIRONMENTAL HAZARDS
 For outdoor non greenhouse use do not apply when bees are actively
 foraging Do not apply directly to water or to 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 Do
 not allow contamination of or discharge into lakes streams ponds or public
 waterways
 Drift and runoff may be hazardous to aquatic organisms in water adjacent to
 treated areas Apply this product only as specified in the label

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 agency responsible for pesticide regulation

User Safety Recommendations
User should
 Wash hands before eating drinking chewing gum using tobacco or
 using the toilet
 Remove clothing immediately if pesticide gets inside Then wash
 thoroughly and put on clean clothing
 Remove PPE immediately after handling this product As soon as
 possible wash thoroughly and change into clean clothing

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 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)
 and restricted entry interval The requirements in this box only apply to uses
 of this product that are covered by the Worker Protection Standard

Notification Accepted

Date 10/11/2012

Reviewer J LAUSCH

(continued)

AGRICULTURAL USE REQUIREMENTS (continued)

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours unless wearing appropriate PPE
 For entry into treated areas that are permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as plants soil or water early entry workers must wear

- Coveralls over long sleeve shirt long pants
- Waterproof gloves
- Shoes plus socks
- A dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC 21C) or a NIOSH approved respirator with prefix N 95 R 95 or P 95

GENERAL

Mode of Action *Isaria fumosorosea* the active component in PFR 97™ is a naturally occurring fungus which infects many insect and mite pests that occur on foliage and other above ground plant as well as many soil dwelling pests Under proper environmental conditions spores of the fungus attach to and penetrate the cuticle of the target pest The fungus grows inside the insect causing its death The fungus then emerges from the dead insect to release more spores to infect other insects

Monitoring of pest pressure is critical to the effective use of PFR 97™ Efficacy results from germination and growth of the beneficial fungus over several days so applications should start before pest numbers have reached crisis levels PFR 97™ is most effective when application is initiated just before or at the first signs that target pests are present

Optimal Environmental Conditions PFR 97™ is most effective when relative humidity is 80% or higher for 8 10 hours Irrigating will increase humidity levels Application at times of low air movement and moderate temperature (70 90 F) will reduce drying conditions and maintain the effectiveness of the fungus

Compatibility PFR 97™ can be used in conjunction with most other pesticides and is compatible with beneficial arthropods It can be mixed with copper based fungicides without impacting performance However do not mix with other fungicides or apply within 5 days of fungicide applications other than copper PFR 97™ can be mixed with most insecticides for which such mixing is permitted by the label in accordance with the most restrictive label limitations and precautions of all products used in the mixture Do not exceed any label dosage rates However physical compatibility should be checked by mixing small quantities of each tank mix partner in correct proportions (jar test) prior to the first time such a mixture is attempted

DIRECTIONS FOR USE

GREENHOUSES (AND OTHER COVER)

For use on vegetables melons strawberries and other food crops raised for transplanting to production fields

Mix PFR 97™ in clean water at a rate of 14 to 28 ounces of product per 100 gallons of water Agitate for 20 30 minutes before application to ensure a well dispersed suspension

Product may be premixed with 5 gallons of water per pound of PFR 97™ and agitated continuously for 20 30 minutes to completely suspend and hydrate the spores Dilute this suspension to the final volume for application This suspension can also be metered (injected) into a chemigation system without further dilution if desired

Maintain agitation during application Apply the suspension using one of the methods below depending on target pest and application site (foliar or soil)

Foliar (spray) application	For control of whiteflies (<i>Bemisia</i> and <i>Trialeurodes</i> spp) aphids thrips spider mites leafminers (<i>Linomyza</i> spp) citrus leafminers mealybugs psyllids and plant bugs (<i>Lycophotia</i> spp)	Apply to plants using pressurized spray equipment (such as backpack sprayer tractor mounted spray boom hand held spray gun or wand) mist blower cold fogger electrostatic or other applicator Spray sufficient volume to achieve thorough coverage of leaves flowers fruit and other above-ground plant parts with minimal run off Repeat applications at 3 10 day intervals over 2 3 weeks or as needed to maintain control Frequent application may be required under dry conditions during periods of increased pest build up or reproduction or rapid host plant growth More frequent application at low rate (e.g. 14 16 oz/100 gal every 3 to 5 days) is more likely to improve results than using higher rates at low frequency (e.g. 28 oz/100 gal every 10 days) Use higher rates (24 28 oz/100 gal) when applying to large or dense plant canopies to ensure complete coverage
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DIRECTIONS FOR USE (continued)

GREENHOUSES (AND OTHER COVER)

(continued)

For use on vegetables melons strawberries and other food crops raised for transplanting to production fields

Soil application	To control black vine weevil and other root weevils crown weevils thrips pupae grape phylloxera rootworms wireworms Coleoptera grubs and larvae Lepidoptera caterpillars and larvae symphylans	<p>Drench application Apply as a drench of 4 fluid ounces per pot for pots up to 6 diameter or 8 fl oz for pots up to 12 diameter For pots larger than 12 in diameter either apply 1 pint of drench per pot</p> <p>Soil surface spray Spray the suspension on the soil surface If targeting root feeding insects follow immediately by sufficient water from a watering can hose or overhead sprinkler irrigation to carry the spores into the root zone</p> <p>Chemigation PFR 97™ may also be applied through drip or trickle chemigation Mix in water as described above and apply using standard injection equipment to introduce into the irrigation lines See the Chemigation Bulletin below for additional information</p> <p>Soil injection against root feeding insects The PFR 97™ suspension may be injected directly into the soil surrounding roots using pressurized shank or other injector Inject in sufficient volume of water to wet the entire root zone</p>
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FOR ALL OUTDOOR GROWN FOOD AND SEED CROPS

including non bearing fruit trees (pome and stone fruits citrus, grapes and tree nuts) strawberries sweet corn leafy vegetables melons and other cucurbits potatoes beans herbs and spices

Apply 1 to 2 pounds of PFR 97™ per acre in sufficient volume of water to attain thorough coverage of foliage flowers and fruit with minimal run off

Mix the required amount of product in clean water and agitate the spray mix for 20 30 minutes before application to ensure a well-dispersed suspension

For low volume application premix with at least 2 gallons of water per pound of PFR 97™ and agitated continuously for 20 30 minutes to completely suspend and hydrate the spores Dilute this suspension to the final volume for application This suspension can also be metered (injected) into a chemigation system without further dilution if desired

Maintain agitation during application Apply the suspension using one of the methods below depending on target pest and application site (foliar or soil)

Foliar (spray) application	For control of whiteflies (<i>Bemisia</i> and <i>Trialeurodes</i> spp) aphids thrips spider mites broad mites rust mites leafminers (<i>Linomyza</i> spp) citrus leafminers mealybugs psyllids and plant bugs (<i>Lycophotia</i> spp)	<p>Apply with pressurized spray equipment (such as backpack sprayer tractor mounted spray boom hand held spray gun or wand) air assisted or chard sprayer mist blower cold fogger electrostatic or other applicator</p> <p>Repeat applications at 3 10 day intervals as needed to maintain control Frequent application may be required under dry conditions during periods of increased pest build up or reproduction or rapid host plant growth</p> <p>More frequent application at low rate (1 lb/acre every 3 to 5 days for example) is more likely to improve results than using higher rates at low frequency (such as 2 lb/acre every 10 days)</p> <p>Use higher rates (2 lb/acre) when applying to large or dense plant canopies to ensure complete coverage</p>
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DIRECTIONS FOR USE (continued)

The pesticide injection pipeline must contain a functional automatic quickclosing check valve to prevent the flow of fluid back toward the injection

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

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 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 (i.e. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock
- 7 Dilute the product in water following the label mixing directions. It may be premixed in a supply tank with water fertilizer or other appropriate tank-mixed agricultural chemicals. Agitation is necessary. Apply to moderately moist soils. Use volumes that thoroughly wet the soil but that do not cause significant runoff or excessive drip from pots. Application should be continuous in sufficient water to apply the application rate evenly to the entire treated area

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 also 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 (i.e. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock
- 7 Dilute the product in water following the label mixing directions. It may be premixed in a supply tank with water fertilizer or other appropriate tank-mixed agricultural chemicals. Agitation is necessary. Apply when soils are moderately moist. Use volumes that thoroughly wet the foliage and/or soil but that do not cause significant runoff or excessive drip from pots. Application should be continuous in sufficient water to apply the application rate evenly to the entire treated area
- 8 Do not apply when wind speed favors drift beyond the area intended for treatment

(continued)

FOR ALL OUTDOOR GROWN FOOD AND SEED CROPS (continued)

including non bearing fruit trees (pome and stone fruits citrus grapes and tree nuts) strawberries sweet corn leafy vegetables melons and other cucurbits potatoes beans herbs and spices

Soil application	To control black vine and other root weevils thrips pupae rootworms wireworms Coleoptera grubs and larvae Japanese beetle Lepidoptera caterpillars and larvae grape phylloxera symphyla	<p>Soil drench Apply the PFR 97™ suspension as a 4 to 8 banded drench or coarse spray onto the soil surface in the seed furrow or as a broadcast spray or drench onto the planting bed or at the base of the tree or vine. To control insects beneath the soil surface incorporate with overhead sprinkler irrigation or light cultivation</p> <p>Chemigation PFR 97™ may also be applied through drip trickle and overhead or microjet sprinkler chemigation. Mix in water as described above and apply using standard injection equipment to introduce into the irrigation lines. See the Chemigation Bulletin below for additional information</p> <p>Soil injection against root feeding insects The PFR 97™ suspension may be injected directly into the soil surrounding roots using pressurized shank or other injector. Inject in sufficient volume of water to wet the entire root zone</p>
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STORAGE AND DISPOSAL

Do not contaminate water food or feed by storage or disposal

Pesticide Storage Keep unopened product refrigerated (40-50 F) and dry. Seal out moisture from unused material by closing the bag tightly after squeezing out excess air. Keep unused product refrigerated in the original package and use within 30 days after opening

Pesticide Disposal Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility

Container Handling Non refillable container. Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration or if allowed by state and local authorities by burning. If burned stay out of smoke

WARRANTY

Certis USA L.L.C. warrants that the material contained herein conforms to the description on the label and is reasonably fit for the purposes referred to in the directions for use. Timing and method of application weather watering practices nature of soil the insect problem condition of the crop incompatibility with other chemicals not specifically recommended and other influencing factors in the use of this product are beyond the control of the seller. To the extent required by law Buyer assumes all risks of use storage or handling of this material not in strict accordance with directions given herein. **NO OTHER EXPRESS OR IMPLIED WARRANTY OF THE FITNESS OR MERCHANTABILITY IS MADE**

**Chemigation Bulletin
GENERAL INFORMATION**

Apply this product only through drip (trickle) sprinkler (solid set lateral move end tow sideroll center pivot, or hand move) flood (basin) furrow or border 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 non uniform distribution of treated water

If you have questions about calibration 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

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 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 discharge the water from the public water system 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

Chemigation Bulletin (continued)

FLOOD 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 of water source contamination from the 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 Systems must use a metering pump such as a positive displacement injection pump (i.e. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock
- 3 Dilute the product in water following the label mixing directions. It may be premixed in a supply tank with water, fertilizer, or other appropriate tank mixed agricultural chemicals. Agitation is necessary. Apply to moderately moist soils. Use volumes that thoroughly wet the soil but that do not cause significant runoff. Application should be continuous in sufficient water to apply the application rate evenly to the entire treated area.