



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:  
70051-104

Date of Issuance:

11/2/07

NOTICE OF PESTICIDE:

☒ Registration ☐ Re-registration  
(under FIFRA, as amended)

Term of  
Issuance:

Unconditional

Name of Pesticide Product:

Neemazad 1% EC

Name and Address of Registrant (include ZIP Code):

Certis USA, LLC.  
9145 Guilford Road, Suite 175  
Columbia, MD 21046

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.

This product is unconditionally registered in accordance with FIFRA Sec. 3(c)(5) provided you:

1. Submit and/or cite all data required for registration/ reregistration of your product under FIFRA section 3(c)(5) and section 4 when the Agency requires all registrants of similar products to submit such data.
2. Make the following label change before you release the product for shipment: Revise the EPA Registration Number to read, "EPA Reg. No. 70051-104.
3. Submit three (3) copies of your final printed labeling before you release the product for shipment. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA se.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.

Signature of Approving Official:

*James L. Anderson*

Date:

11/2/07

CONCURRENCES

SYMBOL ☒ Michael McDavit, Associate Director  
SURNAME ☒ Biopesticides and Pollution Prevention Division  
DATE ☒

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**NEEMAZAD 1% EC**  
**INSECT GROWTH REGULATOR**

**Kills/repels a variety of insect pests including whiteflies, caterpillars, leafminers, aphids, and diamondback moths.**

**ACTIVE INGREDIENT:**

Azadirachtin ..... 1.0%

**OTHER INGREDIENTS** ..... 99.0%

**TOTAL** ..... 100.0%

This product contains 0.082 lb. of azadirachtin per US gallon.

**KEEP OUT OF REACH OF CHILDREN**  
**CAUTION**

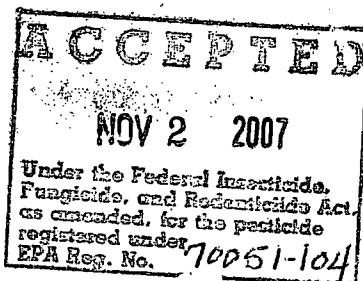
Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail).

EPA Reg. No. 70051-XX  
EPA Est. No. 44616-MO-01

NET CONTENTS: 1 gallon  
LOT NO:

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

**CERTIS**



**SEE SIDE/BACK PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS AND FIRST AID**

**PRECAUTIONARY STATEMENTS**  
**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**  
**CAUTION**

Harmful if absorbed through the skin. 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.

**FIRST AID**

**If in eyes:** Hold eyes 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.

**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 immediately for treatment advice. 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.

**Personal Protective Equipment:**

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category C on an EPA chemical-resistance category selection chart.

**Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants.
- Chemical-resistant gloves, such as barrier laminate or butyl rubber or nitrile rubber or neoprene rubber or polyvinylchloride (PVC) or Viton.
- Shoes plus socks.
- Protective Eyewear

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not re-use them.

**USER SAFETY RECOMMENDATIONS**

Users 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. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**ENVIRONMENTAL HAZARDS**

This product is hazardous to fish and aquatic invertebrates. For terrestrial uses: 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.

**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.

#### 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, 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.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours. For early entry into treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, wear:

- Coveralls.
- Chemical-resistant gloves, such as barrier laminate or butyl rubber or nitrile rubber or neoprene rubber or polyvinylchloride (PVC) or Viton.
- Shoes plus socks.
- Protective Eyewear

#### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. Keep unprotected persons out of treated areas until sprays have dried.

#### GENERAL

- Botanical Insecticide Concentrate.
- Kills larval stages of insects only.
- Not for use in food-handling establishments.
- Shake well before using.
- Spraying directly onto the pest and a longer duration of leaf wetting increases effectiveness. Apply in early to mid-morning or late afternoon.
- The pH of spray solution containing NEEMAZAD® 1.0% EC must be kept between 3 and 8. Use spray solutions within several hours of preparation for maximum effectiveness. Do not store diluted solution for later use.
- Do not apply to wilted or otherwise stressed plants, or to newly transplanted material prior to root establishment. Do not apply to known spray sensitive plants without testing.
- NEEMAZAD® 1.0% EC has been found to be compatible when used in conjunction with most beneficial insects. Conduct a small trial to assure compatibility before using on a large scale.
- For indoor and outdoor use.

#### TANK MIXING

NEEMAZAD® 1.0% EC Botanical Agricultural Insecticide has been found to be compatible with most commonly used fungicides, insecticides, and fertilizers. Check physical compatibility first by using the correct proportion of products in a small jar test. Then, test tank-mix combinations for phytotoxicity on a sample of plants prior to use. This must be done with combinations used before as environmental conditions can alter the interaction between compounds. *Due to the wide variation in climatic conditions, cultural practices, and other factors, the user assumes full responsibility for any crop damage or other liability resulting from the use of NEEMAZAD® 1.0% EC in a tank mix combination.* Do not mix NEEMAZAD® 1.0% EC with oxidizing agents such as bleach, or strong acids and bases as they will destabilize the product.

## DIRECTIONS FOR FOOD CROP APPLICATION

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### General Directions

- Use care when applying near streams, ponds, lakes or other bodies of water.
- Do not apply NEEMAZAD® 1.0% EC when weather conditions favor drift or when the likelihood of runoff is high.

### GREENHOUSE

- For use to control whiteflies, thrips, mealybugs, leafminers, and aphids in and around greenhouses and commercial nurseries.
- NEEMAZAD® 1.0% EC may be used on all fruits, vegetables, vegetable transplants, and herbs both inside and outside of the greenhouse.
- Dilute NEEMAZAD® 1.0% EC at 1 to 2.25 pints (16 - 36 fluid oz.) per 100 gallons of water (1 1/8 to 2 1/4 teaspoon of NEEMAZAD® 1.0% EC per gallon of water). Mix thoroughly. Apply at 25-40 psi with hand sprayer or 100-200 psi with power sprayer as a fine spray to both leaf surfaces to runoff. Use 1-2 gallons of spray solution/1,000 sq. feet. Avoid excessive application.
- For low volume application, apply 2.25 pint of NEEMAZAD® 1.0% EC per acre in sufficient water to provide adequate coverage.
- Apply sprays on a preventative 7-day schedule or at the first sign of insect presence. This schedule is effective under low insect pressure. Under high insect pressure, apply every 3-4 days.
- For drench applications in greenhouse or nursery plantings, use 10 fluid ounces per 100 gallons and apply at the rate of 4.5 quarts of diluted solution per square foot of growing media surface. Repeat at 14- day intervals during the growing season.

### Specific Crop Directions

Application Rate: Apply 1 1/8 – 4 1/2 pints (18.0-72.0 fluid oz.) of NEEMAZAD® 1.0% EC per acre using suitable ground or aerial application equipment, in a manner to obtain uniform and complete plant coverage. For agronomic crops apply using conventional ground application equipment in a minimum of 30 gallons of water and aerial application equipment in a minimum of 3 gallons of water. Avoid over-spraying to the point of excessive runoff. Refer to table for application rates. Use the low rate as a preventative when pest pressure is low, or if used in conjunction with adulticide products. Otherwise, use the high rate. The maximum application rate is 20 grams active ingredient or less per acre according to the tolerance exemption (40 CFR 180.1119).

### Mode of Action

This product controls targeted insect larvae when ingested or come in contact with it, by interfering with the insects' ability to molt. It is effective on all larval or nymphal stages and pupae. It also reduces damage by repelling and deterring feeding of all stages of insect.

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Application Rate for Whiteflies, Aphids, Leafminers, Armyworms, and Other Pests			
Pest	Rate NEEMAZAD® 1.0% EC Per Acre* (fluid ounces)	Frequency	Remarks
Sweetpotato Whitefly			
Low Pressure	18.0 – 31.5 fluid oz.	4 – 10 days	Foliar application to larvae and nymphs
High pressure	36.0 – 72.0 fluid oz.	3 – 7 days	
Aphids	22.5 – 31.5 fluid oz.	7 – 10 days	Suppression and adult feeding deterrence
Leafminer	18.0 – 31.5 fluid oz.	14 – 21 days	Foliar application to larvae and nymphs
Leafhoppers			
	31.5 – 72.0 fluid oz.	7 – 10 days	Foliar application to nymphs

\*apply in sufficient water to obtain adequate plant coverage.

### CITRUS, POME AND STONE FRUITS

Crops (including, but not limited to)

Apples	Grapefruits	Nectarines	Prunes
Apricots	Jujubes	Oranges	Quinces
Avocado	Kumquats	Peaches	
Cherries	Lemons	Pears	
Crabapples	Limes	Plums	

### CUCURBITS

Crops (including, but not limited to)

Balsam pears	Cucumbers	Honeydew melons	Squashes
Cantaloupes	Gherkins	Mangoes	Watermelons
Chinese waxgourds	Gourds	Pumpkins	

### BULB, COLE AND LEAFY VEGETABLES

Crops (including, but not limited to)

Asparagus	Celery	Kale	Rhubarb
Arugula	Chinese spinach	Kohlrabi	Shallots
Broccoli	Collards	Leek	Spinach
Bok choy	Cress	Lettuce	Swiss chard
Brussels sprouts	Endive	Mustard greens	Turnip tops
Cabbage	Fennel	Onions	Watercress
Cauliflower	Garlic	Parsley	

### LEGUME AND FRUITING VEGETABLES

Crops (including but not limited to)

Beans	Ground cherries	Peas	Tomatoes
Chick peas	Lentils	Peppers	
Eggplants	Peanuts	Soybeans	

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## ROOT AND TUBER VEGETABLES

Crops (including, but not limited to)

Artichokes	Ginger	Potatoes	Turmeric
Beets	Ginseng	Radishes	Turnips
Carrots	Horseradish	Rutabaga	Yam beans
Cassava	Parsnips	Sweet potatoes	Yams

## SMALL FRUITS AND BERRIES

Crops (including but not limited to)

Blackberries	Currants	Grapes	Strawberries
Blueberries	Dewberries	Huckleberries	Youngberries
Boysenberries	Elderberries	Loganberries	
Cranberries	Gooseberries	Raspberries	

## HERBS AND SPICES

Crops (including but not limited to)

Anise	Chives	Majoram	Spearmint
Balm	Coriander	Mint	Sweet bay
Basil	Cumin	Pennyroyal	Tarragon
Borage	Curry leaf	Peppermint	Thyme
Camomile	Dandelion	Rosemary	Wintergreen
Caraway	Dill	Rue	
Catnip	Fennel	Sage	
Celery	Marigold	Savory	

## NUTS

Crops (including but not limited to)

Almonds	Butternuts	Filberts	Pecans
Beech nuts	Cashews	Hickory nuts	Pistachios
Brazil nuts	Chestnuts	Macadamias	Walnuts

## MISCELLANEOUS

Crops (including but not limited to)

Cotton	Sweet Corn	Alfalfa	Corn
Other crops grown for seed			

## INSECT PESTS CONTROLLED BY NEEMAZAD® 1.0% EC

### Aphids:

Cotton Aphid  
Green Peach Aphid  
Black Maringed Aphid  
Filbert Aphid

### Leafminers:

Holly Leafminer  
Sepentine Leafminer  
Vegetable Leafminer

Sweetpotato Whitefly

### Psyllids

### Spittle Bugs

### Mealybugs

### Beetles, Grubs and Weevils:

Colorado Potato Beetle  
Black Vine Weevil (soill drench)  
Strawberry Beetle (soil drench)  
Mexican Bean Beetle

### Miscellaneous:

Fruitfly  
Grasshopper  
Squash Bug  
Cabbage Maggot (soil drench)  
Onion Maggot (soil drench)  
Lygus Bug  
San Jose Scales  
Calico Scales  
Frosted Scales  
Pecan Leaf Phylloxera  
Pecan Stem Phylloxera

### Leafhoppers:

Grape Leafhopper  
Potato Leafhopper  
Variegated Leafhopper  
Aster Leafhopper

### Thrips:

Thrips Palmi

### Whiteflies:

Greenhouse Whitefly  
Silverleaf Whitefly

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## **CHEMIGATION**

Refer to supplemental labeling entitled "Certis's Chemigation Bulletin" for use directions for chemigation. Do not apply this product through any irrigation system unless the supplemental labeling on chemigation is followed.

## **STORAGE AND DISPOSAL**

Do not contaminate water, food, or feed by storage and disposal.

**Pesticide Storage:** Keep in original container. Store in a cool, dry place, away from direct sunlight, feed or foodstuffs. Keep container tightly sealed when not in use. Do not store below 50°F (10°C) or above 95°F (35°C).

**Pesticide Disposal:** Wastes resulting from the use of this product must be disposed of on-site or in an approved waste disposal facility.

**Container Disposal:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by incineration, if allowed by state and local authorities. 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. 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.



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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.

The pesticide injection pipeline must contain a functional, automatic, quick-closing 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:

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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.

## 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 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.

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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.