

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

February 26, 2015

Christine Dively
Director of Regulatory Affairs
Certis U.S.A. L.L.C.
9145 Guilford Rd, Suite 175
Columbia, MD 21046

Subject: Non-PRIA (Pesticide Registration Improvement Act) Labeling Amendment – include

residential use label

Product Name: Neemazad 1% EC EPA Registration Number: 70051-104

Application Date: 10/27/2014 OPP Decision Number: 497121

Dear Ms. Dively:

The amended labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable.

This approval does not affect any terms or conditions that were previously imposed on this registration. You continue to be subject to existing terms or conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one (1) copy of the final printed labeling before you release this product for shipment with the new labeling. In accordance with 40 CFR § 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR § 152.3.

Should you wish to add/retain a reference to your company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the U.S. Environmental Protection Agency (EPA). If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the EPA find or if it is brought to our attention that a website contains false

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or misleading statements or claims substantially differing from the EPA-approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

Your release for shipment of this product constitutes acceptance of these terms. If these terms are not complied with, this registration will be subject to cancellation in accordance with FIFRA section 6.

If you have any questions, please contact Shenell Bolden of my team by phone at (703) 347-0120 or via email at bolden.shenell@epa.gov.

Sincerely,

Andrew Bryceland, Team Leader Biochemical Pesticides Branch Biopesticides and Pollution Prevention Division (7511P) Office of Pesticide Programs

andrew . Buycelow

Enclosure

NEEMAZAD 1% EC

Insect Growth Regulator

(EPA Registration Number: 70051-104)

For Use on Crops, in Commercial Greenhouses and Nurseries and Use in Home Gardens, Interiorscapes

MASTER LABEL

Master Label	Page 2
Sub-label A(Agricultural)	
Sub-label B(Residential)	Page 8

Ingredient Statement

Active Ingredient

Azadirachtin	1.0%
OTHER INGREDIENTS	99.0%
ΤΟΤΔΙ	100.0%

ACCEPTED

02/26/2015

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 70051-104

Master Label

Neemazad®1%EC

INSECT GROWTH REGULATOR

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



FOR ORGANIC PRODUCTION

ACTIVE INGREDIENT:

Azadirachtin......1.0% OTHER INGREDIENTS: _______99.0%

This product contains 0.082 lb. of azadirachtin per U.S. 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).

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

Net Contents: 2.5 Gallons

EPA Reg. No. 70051-104 EPA Est. No. 44616-MO-01

Lot Number:



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



Sublabel A: Agricultural Use Neemazad® 1% EC

INSECT GROWTH REGULATOR

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

V FOR ORGANIC PRODUCTION

ACTIVE INGREDIENT:

Azadirachtin	1.0%
OTHER INGREDIENTS:	<u>99.0%</u>
TOTAL:	100.0%

This product contains 0.082 lb. of azadirachtin per U.S. gallon.

KEEP OUT OF REACH OF CHILDREN CAUTION

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

Net Contents: 2.5 Gallons EPA Reg. No. 70051-104 EPA Est. No. 44616-MO-01 Lot Number:

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



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 4 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

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 stages and pupae. It also reduces damage by repelling and deterring feeding of all stages of insect.

Pest	Rate Neemazad® 1.0% EC Per Acre*(fluid ounces)	Frequency	Remarks
Sweetpotato Whitefly Low Pressure High pressure	18.0 – 31.5 fluid oz. 36.0 – 72.0 fluid oz.	4 – 10 days 3 – 7 days	Foliar application to larvae and nymphs
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 sufficien	t water to obtain adequ	uate plant coverage.			
CITRUS, POME AND STONE FRUITS		SMALL FRUITS AND BERRIES			
Crops	(including, but not lim	ited to)	Cro	ps (including, but not	limited to)
Apples Apricots Avocado Cherries Crabapples Grapefruits	Jujubes Kumquats Lemons Limes Nectarines Oranges	Peaches Pears Plums Prunes Quinces	Blackberries Blueberries Boysenberries Cranberries Currants	Dewberries Elderberries Gooseberries Grapes Huckleberries	Loganberries Raspberries Strawberries Youngberries
				HERBS AND SPIC	ES
	CUCURBITS		Cro	ps (including, but not	limited to)
Balsam pears Cantaloupes Chinese waxgourds Cucumbers	Gherkins Gourds Honeydew melons Mangoes	Pumpkins Squashes Watermelons	Anise Balm Basil Borage Camomile Caraway	Cumin Curry leaf Dandelion Dill Fennel Marigold	Rosemary Rue Sage Savory Spearmint Sweet bay
•	OLE AND LEAFY VEG		Catnip Celery Chives	Majoram Mint Pennyroyal	Tarragon Thyme Wintergreen
Asparagus Arugula Broccoli	Collards Cress Endive	Mustard greens Onions Parsley	Coriander ————————————————————————————————————	Peppermint NUTS	
Bok choy	Fennel	Rhubarb	Crops (including, but not limited to)		limited to)
Brussels sprouts Cabbage Cauliflower	Garlic Kale Kohlrabi	Shallots Spinach Swiss chard	Almonds Beech nuts	Cashews Chestnuts	Macadamias Pecans
Celery	Leek	Turnip tops	Brazil nuts	Filberts	Pistachios
Chinese spinach	Lettuce	Watercress	Butternuts	Hickory nuts	Walnuts
LEGUME	AND FRUITING VEG	ETABLES		MISCELLANEOL	IS
	(including, but not lim		Cro	ps (including, but not	limited to)
Beans Chick peas Eggplants Ground cherries	Lentils Peanuts Peas Peppers	Soybeans Tomatoes	Cotton Sweet Corn Alfalfa	Corn Other	crops grown for seed
POOT	AND TUBER VEGET	ARIES			
	(including, but not lim				
Artichokes Beets Carrots Cassava Ginger Ginseng	Horseradish Parsnips Potatoes Radishes Rutabaga Sweet potatoes	Turmeric Turnips Yam beans Yams			

INSECT PESTS CONTROLLED BY NEEMAZAD® 1.0% EC

Aphids:

Cotton Aphid Green Peach Aphid Black Margined Aphid Filbert Aphid

Leafhoppers:

Grape Leafhopper Potato Leafhopper Variegated Leafhopper Aster Leafhopper

Leafminers:

Holly Leafminer Serpentine Leafminer Vegetable Leafminer

Thrips: Thrips Palmi Whiteflies:

Greenhouse Whitefly Silverleaf Whitefly Sweetpotato Whitefly **Psyllids**

Spittle Bugs

Mealybugs

Beetles, Grubs and Weevils:

Colorado Potato Beetle Black Vine Weevil (soil 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

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 Handling: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (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.

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:

- 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.
- 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.
- 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:

- 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.
- 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.
- 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.

- 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:

- 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.
- 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.

Sublabel B: Residential Use

Neemazad®1% EC

INSECT GROWTH REGULATOR

FOR ORGANIC GARDENING

Controls insect pests on ornamental plants, houseplants, trees, lawns, shrubs, bedding plants, flowers, and vegetables in the yard and garden, and in and around interiorscapes and homes. NEEMAZAD kills immature (stages of insects by disrupting their life cycle. It disrupts, repels, and inhibits feeding by adult insects and disrupts their reproduction.

Active Ingredient:

Azadirachtin	1.0%
Other Ingredients	99.0%
Total	100.0%



EPA Registration No: 70051-104 EPA Establishment No: 44616-MO-01

Keep Out of Reach of Children CAUTION

See Side/Back Panel for Additional Precautionary Statements and First Aid

Net Contents:

MANUFACTURED BY: CERTIS USA, L.L.C. 9145 Guilford Road, Suite 175 Columbia, MD 21046

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

Caution: Harmful if swallowed. Harmful if absorbed through skin. Avoid contact with skin, eyes, or clothing. Causes moderate eye irritation. Harmful if inhaled. Avoid breathing spray mist. 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 swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

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 in eyes: 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.

If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. 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. Hot Line Number: 1-800-255-3924.

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.

General:

- Botanical Insecticide Concentrate
- Insecticide, Repellent, Insect Growth Regulator
- All-Purpose Insect Control
- All-Purpose Insecticide
- Broad Spectrum Insecticide
- Broad Spectrum Insect Control

- Insect Anti-Feedant
- Multi-Purpose Insecticide
- Kills and/or repels insects
- Kills immature stages of insects.
- For Indoor and Outdoor Use
- Formulated for Interiorscape use.

General Information

NEEMAZAD's effectiveness is based on multiple modes of action. It disrupts insect horomones that in control life cycle development. immature insects. NEEMAZAD also repels insects and deters them from feeding on treated plants. These different modes of action result in broad spectrum control of the majority of insects that harm gardens, fruit trees, lawns, and shrubs...

NEEMAZAD is effective against a broad assortment of insect pests, has minimal impact on beneficial insects such as honey bees, or natural enemies of insect pests such as lady beetles.

Shake well before using. Use spray solutions within 8 hours of mixing for maximum effectiveness. Do not store diluted spray solution for later use.

Not for use in food handling areas.

NEEMAZAD is not intended as a "knock-down" insecticide. It interferes with insect growth and may require several days to kill immature insects. . It is most effective when applied 2-3 times at 7-10 day intervals. When infestations are heavy, apply on a 3-4 day interval until populations are reduced.

NEEMAZAD has both contact and ingestion activity. Application directly onto the target pest will therefore increase efficacy. Time applications for early to mid-morning or in the late afternoon for maximum effect.

Do not add other chemicals to NEEMAZAD solutions. Use soft water whenever possible.

Do not apply to wilted, stressed, or newly transplanted materials prior to root development. Do not apply to known sensitive plant species (such as Hibiscus flowers) without prior testing for potential plant damage due to phytotoxicity. Use with caution on new, tender foliage.

DIRECTIONS FOR USE (Concentrate products):

Foliar application to bedding plants, potted plants, trees, shrubs, other ornamental plants

For use on bedding plants, potted and foliage plants, trees, shrubs, and other ornamental plants in and around homes to kill immature forms or repel adults of the following insect pests:

PESTS:

Aphids

Beetles, including (but not limited to):
Mexican bean beetle, Elm leaf beetle,
Colorado potato beetle, Weevils (repel
adults), Japanese beetles (repel adults)

Box elder bugs

Caterpillars (Lepidoptera larvae), including but not limited to:

Armyworms (including Beet armyworm), Bagworms, Gypsy moth, Hornworms, Leafrollers, Loopers, Spruce budworm and other budworms, Tent caterpillars, Webworms

Fruitflies, Grasshoppers, Lacebugs, Leafhoppers, Leafminers, Mealybugs, Psyllids, Sawfly larvae, Scale insects (crawler stage), Spittlebugs, Thrips, Whiteflies, Wooly aphids (Wooly adelgids)

USE DIRECTIONS:

Begin applications at first sign of pest infestation.

- 1. Dilute to a concentration of 1 tablespoon (½ fl. oz.) of NEEMAZAD per gallon of water (equal to 1 part NEEMAZAD to 256 parts water).
- 2. Stir or shake to mix thoroughly.
- 3. Apply the solution as a fine spray to leaf surfaces using a hand sprayer or garden pump sprayer.
- 4. Apply sufficient spray to wet upper and lower leaf surfaces with minimal dripping or runoff.

Lawn Application. Apply to home lawns to control the following insect pests:

PESTS:

Billbugs

Chinch bugs

Crane flies

Fall armyworms

Fleas (immature stages)

Hyperodes weevils

Mole crickets

Sod webworms

White grubs* (larval stages of Chafers, May

beetles, June beetles, and Japanese beetles) –

see note at right

USE DIRECTIONS

- 1. Dilute 1 tablespoon (½ fl. oz.) of NEEMAZAD in 1 gallon of water.
- 2. Apply at the rate of 5 gallons spray solution per 2,000 square feet.
- 3. Apply NEEMAZAD 2-3 times on a 7-10 day interval to insure effective control of surface and sub-surface feeding pests.

Do not apply NEEMAZAD to newly seeded lawns.

*Best timing for initial white grub application will vary by region but is generally early to mid-summer and again in the fall. If in doubt, contact your local Cooperative Extension office for information about when white grubs are feeding in your area. **House Plant Application:** For use on house plants to kill or repel the following insect pests:

<u>PESTS</u> <u>USE DIRECTIONS</u>

Aphids Apply at first visible signs of infestation.

Caterpillars

Mix 1/3 teaspoon (0.06 fl. oz.) of NEEMAZAD per pint of water.

Fungus gnats**

Lace bugs

Leafhoppers

Leafminers

Adjust spray bottle nozzle to "spray" setting and apply

NEEMAZAD to leaf surfaces until completely wet but not

dripping. Coat undersides of leaves especially those at the soil

surface where many insects hide. Repeat every 1-2 weeks until

Mealybugs signs of infestation are no longer visible.

Psyllids **To kill fungus gnat larvae in the soil, pour NEEMAZAD
Scale insects (diluted as instructed above) directly onto the soil surface in each
Spittle bugs pot. Apply sufficient volume to drench the soil in the entire pot
without excessive dripping. Do not water the plant for at least 24

hours after application.

Application to Vegetables, Fruits, Nuts, Herbs, Spices, and other food crops (see next table for list of crops)

For use on vegetable and fruit crops to kill immature stages or repel adults of the following insect pests:

PESTS

Whiteflies

Aphids, Leafminers, Squash bugs, Thrips, Whiteflies

Beetles, including but not limited to:
Asparagus beetles, Bean leaf
beetle, Borers, Black vine weevil
(larvae)[†], Colorado potato beetle,
Cucumber beetles, Japanese
beetle (repel adults), Mexican
bean beetle, Twig girdlers

Caterpillars (Lepidoptera larvae), including but not limited to:

Armyworms, Bollworms, Borers, Budworms, Corn earworm, Codling moth, Cutworms, Diamondback moth, European corn borer, Grapeleaf skeletonizer, Hornworms, Imported cabbageworm, Leafrollers, Loopers, Melonworm, Pickleworm, Pinworm, Tomato fruitworm, Tent caterpillars, Vine borers

USE DIRECTIONS

Begin applications at first sign of pest infestation.

- 1. Dilute to a concentration of 1 tablespoon (½ fl. oz.) of NEEMAZAD per gallon of water (equal to 1 part NEEMAZAD to 256 parts water).
- 2. Stir or shake to mix thoroughly.
- 3. Apply the solution as a fine spray to leaf and other exposed plant surfaces using a hand sprayer or garden pump sprayer.
- 4. Apply sufficient spray to wet upper and lower leaf surfaces with minimal dripping or runoff.
- 5. Make 2 or more applications at 7-10 intervals as needed to maintain control.

[†]To control black vine weevil larvae, mix NEEMAZAD with water as described above and use to drench the soil at the base of the plant. Apply sufficient volume (at least 4 fl. oz. per plant) to saturate the root zone without puddling. Do not water for at least 24 hours after application. Repeat after 1-2 weeks if necessary.

CROPS (Including, but not limited to):

Almond Ouince Chives Kohlrabi Anise Collard greens Radish **Kumquats**

Apple Collards Leek Raspberries (all **Apricot** Coriander Lemon types)

Artichoke Rhubarb Corn Lentil Arugula Corn salad (Mâche) Lettuce (all types)

Rosemary Lime Asparagus Crabapple Rue Avocado Cranberry Loganberry Rutabaga Balm Cress Macadamias Sage **Basil** Cucumber Savory Mandarins Beans (all types) Cumin **Shallots** Mangoes Beech nut Marigold Soybeans Currant

Beet Marjoram **Spearmint** Curry leaf Melon (all types) Blackberries (all Dandelion Spinach

Mint (all types) Squash (all types) types) Dewberry Blueberry Dill Muskmelon Strawberry Bok choy **Eggplant** Mustard Sweet bay Borage Elderberry Mustard greens Sweet potato Swiss chard Boysenberry Endive Nectarine

Brazil nut Fennel Onion (all types) **Tangerine** Tangelo Broccoli Fig Orange (all types) Brussels sprouts Filbert Parsley Tarragon Garlic Thyme Butternut **Parsnips** Peach **Tomato** Cabbage Ginger Camomile Ginseng Peanut Tomatillo

Cantaloupe Gooseberry Pears (all types) Turmeric Caraway Gourds (all types) Pea Turnip greens Carrot Pecan Turnip Grape Cashew Grapefruit Pennyroyal Walnut Cassava Ground cherry **Peppermint** Watercress Catnip Hawthorn Peppers (all types) Watermelon

Cauliflower Pistachio Hazelnut Wintergreen Celery Yam beans Herbs (all types) Plum

Cherry Hickory nuts Pluot Yam Honeydew Youngberry Chestnuts Pomegranate Zucchini Chick pea Horseradish Pomelo

(Garbanzo) Huckleberry Potato Chinese cabbage Jujubes Prune Chinese spinach Kale Pumpkin

DIRECTIONS FOR USE (Hose End Applicator Instructions)

- 1. Remove plastic wrap from carton and detach hose-end attachment.
- 2. Screw the longer end of the hose-end attachment onto hose.
- 3. Set valve switch to off position (at right angle to line of water flow).
- 4. Remove child resistant cap from product bottle and screw bottle top onto hose-end attachment until tight.
- 5. Turn faucet on. Begin spraying by turning the valve switch located on top of the attachment clockwise until fully in line with water flow.
- 6. When spraying is complete, turn valve switch counter clockwise to stop product flow.
- 7. Turn off faucet.
- 8. Unscrew product bottle from hose-end attachment, recap bottle and if empty dispose of according to label directions. Unscrew hose-end attachment from hose.
- 9. Store out of reach of children.

Alternate Hose End Applicator Instructions:

- 1. Make sure knob is twisted full clockwise (OFF position). Shake well, then attach to hose.
- 2. Turn Product Control Button clockwise until the flat portion is flush with the lock tab, then push button all the way in. Avoid squeezing the bottle.
- 3. Turn water on at faucet, aim nozzle toward surface to be sprayed and turn knob counter-clockwise to begin spraying.
- 4. When finished, push Product Control Button to OFF position from opposite side. Return knob and faucet to OFF position. Discharge water pressure by turning knob ON and OFF again. Turn Product Control Button counter-clockwise away from lock tab to prevent accidental discharge.
- 5. Store out of reach of children.

Foliar Application to Trees and Shrubs (Hose End Applicator)

For use on trees and shrubs on home landscapes to kill the immature (larva) stages or repel adults of the following insect pests:

<u>PESTS</u>		<u>USE DIRECTIONS</u>
Aphids Bagworms Box elder bug Elm leaf beetle	Leafrollers Mealybugs Psyllids Sawfly larvae	The oz. hose end applicator for trees and shrubs will treat up to ten foot trees.
Grasshoppers Gypsy moth	Scale insects (crawlers) Spruce budworm	Repeat application 2 to 3 times at an interval of 7-10 days.
Hornworms Lacebugs Leafhoppers Leafminers	Tent caterpillars Webworms Weevils (repel adults) Whiteflies Wooly aphids (adelgids)	Spray leaf surfaces to run-off. Be sure to coat undersides of leaves as this is where many insects hide. Avoid excessive application.

Foliar Application to Bedding and Potted Plants (Hose End Applicator)

For use on bedding plants, potted and foliage plants, ornamentals in residential settings to control the immature or larval forms of the following insect pests:

PESTS

Aphids

Beetles, including (but not limited to):

Mexican bean beetle, Elm leaf beetle,
Colorado potato beetle, Weevils
(adults), Japanese beetles (adults)

Box elder bugs

Caterpillars (Lepidoptera larvae), including but not limited to:

Armyworms (including Beet armyworm), Gypsy moth, Hornworms, Leafrollers, Loopers, Spruce budworm and other budworms, Tent caterpillars, Webworms

Fruitflies, Grasshoppers, Lacebugs, Leafhoppers, Leafminers, Mealybugs, Psyllids, Sawfly larvae, Scale insects (crawler stage), Spittlebugs, Thrips, Whiteflies, Wooly aphids (Wooly adelgids)

USE DIRECTIONS

The ____ oz. hose end applicator for bedding and potted plants will treat approximately ____ square feet of plant material times.

Repeat application 2 to 3 times at an interval of 7-10 days.

Apply to leaf surfaces to run-off. Be sure to coat undersides of leaves as this is where many insects hide. Avoid excessive application.

Do not apply to known sensitive plants without a prior small scale test application.

Lawn Application (Hose End Applicator)

For use on home lawns to control the immature larval stages of the following insect pests:

PESTS

Billbugs Chinch bugs Crane flies Fall armyworms

Fleas (immature stages)
Hyperodes weevils
Mole crickets
Sod webworms

White grubs* (larval stages of Chafers, May beetles, June beetles, and Japanese beetles) – see note at right

USE DIRECTIONS

The __ oz. hose-end applicator for lawns will treat approximately ____square feet.

Apply NEEMAZAD 2-3 times on a 7-10 day interval to insure effective control of surface and sub-surface feeding pests

Do not apply NEEMAZAD to newly seeded lawns.

*Best timing for initial white grub application will vary by region but is generally early to mid-summer and again in the fall. If in doubt, contact your local Cooperative Extension office for information about when white grubs are feeding in your area.

Hose-end Sprayer Refill (a)

- 1. Remove child resistant cap from product bottle and screw bottle top onto hose-end attachment until tight.
- 2. Turn faucet on. Begin spraying by turning the valve switch located on top of the attachment clockwise until fully in line with water flow.
- 3. When spraying is complete, turn valve switch counter clockwise to stop product flow.
- 4. Turn off faucet.
- 5. Unscrew product bottle from hose-end attachment, recap bottle and if empty dispose of according to label directions. Unscrew hose-end attachment from hose.

(a) Will also contain appropriate application directions as per the foregoing.

DIRECTIONS FOR USE AS A REPELLENT

Repellency Against Japanese Beetles and Other Pests:

NEEMAZAD repels a variety of pests including armyworms, aphids, and Japanese Beetles.

Dilute to a concentration of 1 tablespoon (½ fl. oz.) of NEEMAZAD per gallon of water (Mix thoroughly and apply to plants with a hand sprayer, being sure to completely cover foliage and flowers. Apply just before pests emerge or at first sign of infestation.

Repeat applications every 3-7 days, or immediately after significant rainfall.

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 and Container Disposal:

If empty: Do not reuse this container. Place in trash or offer for recycling if available.

If partly filled: Call your local solid waste agency or 1-800-CLEANUP for disposal instructions. Never place unused product down any indoor or outdoor drain.

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.