

70051-6

02/26/2007

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# Meen

## INSECT GROWTH REGULATOR

### FOR ORGANIC GARDENING

Kills or repels various insect pests on ornamentals, trees, lawns, shrubs, flowers, and vegetables in the yard and garden, and in and around interiorscapes and homes.

MEEN disrupts the molting ability of immature insects of many types, inhibits feeding, and acts to disrupt the reproductive capacity of many insect adults.

Active Ingredient:

Azadirachtin.....	0.09%
Other Ingredients.....	99.91%
Total.....	100.0%

EPA Registration No: 70051-6

EPA Establishment No: 44616-MO-01

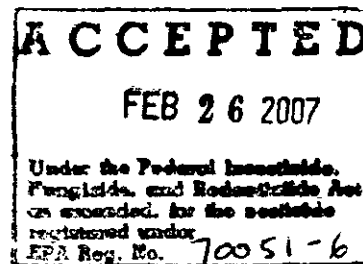
**Keep Out of Reach of Children**

**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.

**Physical or Chemical Hazards:**

Flammable. Keep away from heat and open flame.

## 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/Japanese beetles.
- Kills larval stages of insects.
- For Indoor and Outdoor Use
- Formulated for Interiorscape use.

### General Information

MEEN's effectiveness is based on several modes of action. It disrupts insects' delicate hormonal balance so they die before they molt to the next life stage. MEEN suppresses some insects' desire to feed and also repels many insects in areas that have been sprayed. These different modes of action result in broad spectrum control of the majority of insects that harm your yard and garden.

*[MEEN's effectiveness is based on three modes of action:*

- 1. Anti-feedant: MEEN suppresses the insect's desire to feed and, therefore, no damage is caused.*
- 2. Repellent: Insects simply stay away from areas sprayed with MEEN and, therefore, no damage is caused.*
- 3. Insect Growth Regulator: MEEN disrupts the insect's delicate hormonal balance so it dies before it molts to the next life stage.]*

MEEN kills or repels a broad spectrum of insect pests. MEEN spares many beneficial insects such as honey bees and lady bugs that prey on undesirable insects. Without beneficial insects to control pest populations, plants are even more vulnerable to new infestations.

Neem-based products have been tested and used as effective insecticides in commercial greenhouses. The Neem seed has been the subject of extensive testing throughout the

world [since after WWII]. Neem has been tested at major universities throughout the U.S. since 1982.

The active ingredient in MEEN is an extract from the seeds of the neem tree, a renewable resource. Parts of the neem tree have been used over the centuries for highly effective insecticidal and medicinal purposes. The neem tree is native to India, Africa, and several other tropical countries. Over the years, people have stored their food grains, in the home, free from pest infestation by adding whole or chopped neem seeds. The trees are also planted in backyards and common areas in order to repel insects.

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.

Since MEEN interferes with insect growth function, it is most effective when applied 2-3 times at 7-10 day intervals.

Application directly onto the target pest will increase efficacy. Time applications for early to mid-morning or in the late afternoon.

Do not add other chemicals to MEEN solutions.

Do not apply to wilted, stressed, or newly transplanted materials prior to root development. Do not apply to known sensitive plant species without prior testing.

### **Known Sensitive Plants**

Do not apply MEEN to the following plant species due to potential plant damage:

Hibiscus flowers

**The Following Section Contains Directions For Concentrate Products Use**

**(1) Foliar Application (Bedding & Potted Plants)**

For use on bedding plants, potted and foliage plants, ornamentals, trees and shrubs, in and around homes to control the immature or larval forms of the following insect pests:

PESTS

- Leafhoppers
- Leafminers
- Whiteflies
- Thrips
- Mealybugs
- Loopers
- Caterpillars
- Aphids
- Fruitflies
- Beet armyworms
- Mexican Bean Beetles

USE DIRECTIONS

Dilute MEEN to a concentration of 3 fl. Oz. (6 tablespoons) of MEEN per gallon of water (1 part MEEN to 40 parts water). Mix thoroughly. Apply with a hand sprayer as a fine spray to leaf surfaces to run-off. Be sure to coat undersides of leaves as this is where many insects hide. Avoid excessive application

**(2) Foliar Application (Trees & Shrubs)**

For use on trees and shrubs on residential landscapes to control the immature larval stages of the following insect pests:

PESTS

- Leafhoppers
- Leafminers
- Gypsy moths
- Weevils
- Psyllids
- Webworms
- Hornworms
- Spruce budworms
- Pine sawflies
- Elm leaf beetle
- Bagworms
- Tent Caterpillars
- Grasshoppers

USE DIRECTIONS

Dilute MEEN to a concentration of 3 fl. Oz. (6 tablespoons) of MEEN per gallon of water (1 part MEEN to 40 parts water). Mix thoroughly. Apply with a hand sprayer as a fine spray to leaf surfaces to run-off. Be sure to coat undersides of leaves as this is where many insects hide. Avoid excessive application.

**(3) Lawn Application**

For home lawns to control the following insect pests:

PESTS

- Mole crickets
- White grubs
- Sod webworms
- Fall armyworms
- Chinch bugs
- Hyperodes weevils
- Billbugs
- Crane flies

USE DIRECTIONS

Dilute 2 fl. Oz. (4 tablespoons) of MEEN in 1 gallon of water. Apply at the rate of 5 gallons spray solution per 2000 square feet. Apply MEEN 2-3 times on a 7-10 day interval to insure effective control of surface and sub-surface feeding pests. Do not apply MEEN 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 university research or extension specialist for the periods when white grubs are feeding in your area.

**(4) Yard and Landscape MEEN Concentrate**

For use around the home to control the following insects:

PESTS

- Aphids
- Caterpillars
- Gypsy moth larvae
- Immature tent beetles
- Webworms
- Bagworms
- Lace bugs
- Box elder bugs
- Leafhoppers
- Psyllids
- Sawfly larvae
- Woolly aphids

USE DIRECTIONS

Always use freshly mixed spray solution. Use soft water whenever possible. Use with caution on new tender foliage, and do not apply to plants in direct sunlight. When insects are first noticed, apply a mixture of 3 fl. Oz. (6 tablespoons) of MEEN per gallon of water (1 part

MEEN to 40 parts water).  
Repeat applications 2-3 times on  
a 7-day interval. When

infestations are heavy, apply on a  
3-4 day interval until populations  
are reduced.

**(5) House Plant Application**

For use on house plants to kill or repel the following insect pests:

PESTS

- Leafhoppers
- Leafminers
- Whiteflies
- Thrips
- Mealybugs
- Loopers
- Caterpillars
- Aphids
- Fruitflies
- Beet armyworms
- Mexican bean beetles
- Fungus gnats

USE DIRECTIONS

Dilute MEEN to a concentration  
of 0.42 fl. Oz. (2 1/2 teaspoons)  
of MEEN per pint of water. Mix  
thoroughly. Adjust spray bottle  
nozzle to spray setting and apply  
MEEN to leaf surfaces until  
completely wet. Be sure to coat  
undersides of leaves especially  
those at the soil surface as this is  
where many insects hide.  
Avoid excessive application.

**(6) Vegetable and Fruit Crop Application**

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

PESTS

- Armyworms
- Diamondback moths
- Hornworms
- Imported cabbageworms
- Loopers
- Melonworms
- Pickleworms
- Tomato fruitworms
- Corn earworms
- Bollworms
- Budworms
- Whiteflies
- Thrips
- Borers
- Aphids
- Squash bugs
- Tent caterpillars

USE DIRECTIONS

Always use freshly mixed spray  
solution. Use soft water whenever  
possible. Use with caution on new  
tender foliage. When insects are first  
noticed, apply a mixture of 3 fl. Oz. (6  
tablespoons) of MEEN per gallon of  
water (1 part MEEN to 40 parts water).  
Repeat applications 2-3 times on a 7-day  
interval. When infestations are heavy,  
apply on a 3-4 day interval until  
populations are reduced.

Mexican bean beetles  
 Pinworms  
 Colorado potato beetles  
 European corn borers  
 Cucumber beetles  
 Leafminers  
 Vine borers

Cutworms  
 Weevils  
 Bean leaf beetles  
 Leafrollers  
 Grape leaf skeletonizers  
 Twig girdlers  
 Codling moths

### CROPS

Broccoli  
 Turnips  
 Cabbage  
 Tomatoes  
 Melons  
 Kale  
 Mustard  
 Peppers  
 Lentils  
 Squash  
 Lettuce  
 Beans  
 Corn  
 Potatoes  
 Peanuts  
 Asparagus  
 Garlic  
 Parsley  
 Radishes  
 Rutabaga  
 Anise  
 Mint  
 Dill  
 Rosemary  
 Sweet bay  
 Thyme  
 Almonds  
 Pecans  
 Pistachios  
 Apples  
 Pumpkins  
 Peaches  
 Plums  
 Figs

Lemons  
 Cauliflower  
 Celery  
 Kohlrabi  
 Carrots  
 Spinach  
 Turnip greens  
 Brussels sprouts  
 Sweet potatoes  
 Cucumbers  
 Collards  
 Beets  
 Peas  
 Eggplants  
 Ginger  
 Artichokes  
 Onions  
 Turnips  
 Bok choy  
 Collard greens  
 Mustard greens  
 Basil  
 Chives  
 Marjoram  
 Sage  
 Tarragon  
 Wintergreen  
 Cashews  
 Macadamia nuts  
 Walnuts  
 Cherries  
 Cantaloupes  
 Pears  
 Apricots  
 Oranges  
 Limes



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**The Following Section Contains Directions for Use of the product in a Hose-End Applicator**

**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.

(7) **Foliar Application (Bedding and Potted Plants):** For use on bedding plants, potted and foliage plants, ornamentals in and around homes to control the immature or larval forms of the following insect pests:

PESTS

- Leafhoppers
- Leafminers
- Whiteflies
- Thrips
- Mealybugs
- Loopers
- Caterpillars
- Beet armyworms
- Aphids

USE DIRECTIONS

The 16 oz. hose end applicator for bedding and potted plants will treat approximately 650 square feet of plant material 3 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.

**(8) Foliar Application (Trees and Shrubs)**

For use on trees and shrubs on home landscapes to control the immature larval stages of the following insect pests:

PESTS

- Leafminers
- Leafhoppers
- Gypsy moths
- Weevils
- Psyllids
- Webworms
- Hornworms
- Spruce budworms
- Pine sawflies
- Elm leaf beetle

Grasshoppers

USE DIRECTIONS

The 16 oz. hose end applicator for trees and shrubs will treat up to 5 ten foot trees. 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.

**(9) Lawn Application:** For use on home lawns to control the immature larval stages of the following insect pests:

PESTS

- Mole crickets
- White grubs
- Sod webworms
- Fall armyworms
- Chinch bugs
- Hyperodes weevil
- Billbugs

USE DIRECTIONS

The 16 oz. hose-end applicator for lawns will treat approximately 1,000-2,000 square feet. *[The 32 oz. hose-end applicator for lawns will treat approximately 2,000-4,000 square feet.]* Apply MEEN 2-3 times on a 7-10 day interval to insure effective control of surface and sub-surface feeding pests.

**10) Hose-end Sprayer Refill <sup>(a)</sup>**

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.

**The Following Section Contains Directions For Use Of The Product As A Repellent**

**Repellency Against Japanese Beetles and Other Pests:**

MEEN repels a variety of pests including armyworms, aphids, and Japanese Beetles. Dilute MEEN to a concentration of 3 fl. Oz. (6 tablespoons) of MEEN per gallon of water (1 part MEEN to 40 parts water). Mix thoroughly. 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.

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