

US ENVIRONMENTAL PROTECTION AGENCY OFFICE OF PESTICIDES PROGRAMS REGISTRATION DIVISION (75-767) WASHINGTON, DC 20460	EPA REGISTRATION NO. 11688-6	DATE OF ISSUANCE AUG 27 1992
	TERM OF ISSUANCE CONDITIONAL REGISTRATION	
	NAME OF PESTICIDE PRODUCT MEEM	

NOTICE OF PESTICIDE: REGISTRATION
 REREГИSTRATION
 (Under the Federal Insecticide, Fungicide,
 and Rodenticide Act, as amended)

NAME AND ADDRESS OF REGISTRANT (Include ZIP code)

W.R. Graze and Company--Conn.
 7379 Route 32
 Columbia, MD 21044

171/5423522
 101

NOTE: Changes in labeling formula differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above U.S. 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.

A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith.

Registration is in no way to be construed as an indorsement or approval of this product by this 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 conditionally registered in accordance with 40 CFR sec. 156.10(c)(2), provided that you:

1. Submit to the Agency all data required for registration, reregistration of your product under 40 CFR sec. 156.10(c)(2) and the Agency requires all registrants of similar products to submit such data.

2. Add the following changes listed below to the label of the product for which you are:

- a. Fill-in items 4, 7, 8 and 9 on your Confidential Statement of Formula and resubmit it.
- b. Add the phrase "EPA Registration No. 11688-6" to the label of the above referenced product.

(REGISTRATION CONTINUED)

BEST AVAILABLE COPY

ATTACHMENT IS APPLICABLE

SIGNATURE OF APPROVING OFFICIAL

[Signature] Sep. 2

DATE

8/6/92

3. With reference to the one basic formulation and the two alternate formulations submitted with your application, it is preferable that you submit only one formulation initially, and then apply for alternate formulations once the initially formulated product has been registered. Otherwise, your submission is predisposed to confusion which could delay the review of your application.

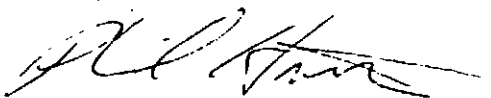
4. If the alternate solvents significantly change formulation, e.g. percentage of ingredient in the formulation; then, you must submit Confidential Statements of Formula representing each of these changes.

5. Submit five (5) copies of your final printed labeling before you release the product for shipment. Refer to the A-79 Enclosure for a further description of final printed labeling.

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

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

Phil Hutton, PM-18



Insecticide Rodenticide Branch
Registration Division (i7505-C)

BEST AVAILABLE COPY

MEEN
BOTANICAL INSECTICIDE CONCENTRATE
INSECT GROWTH REGULATOR
INSECT GROWTH INHIBITOR
INSECT REPELLENT
INSECT FEEDING INHIBITOR
ADULT INSECT REPRODUCTIVE
INHIBITOR/DISRUPTOR

For effective management of various insect pests on ornamentals, trees, lawns and shrubs, in and around homes. To repel insect pests from in and around the home. **MEEN** disrupts the molting ability of immature insects of many types, inhibits feeding, and acts to disrupt the reproductive capacity of many insect adults.

Do not use on food-crops.

Active Ingredients:

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

EPA Registration No: 11688-

EPA Establishment No:

Keep Out of Reach of Children

CAUTION

See Back Panel for Additional Precautionary Statements

Net Contents:

W.R. Grace & Co.-Conn
 7379 Route 32
 Columbia, MD 21044

ACCEPTED
with COMMENTS
in EPA Letter Dated

AUG 07 1992

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 11688-6

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

Caution: Harmful if swallowed. Avoid contact with skin, eyes, or clothing. Avoid contamination of feed and foodstuffs. Avoid breathing spray mist. In case of eye contact, flush eyes with plenty of water. If on skin, wash with soap and water. Wash contaminated clothes before reuse. If irritation persists, get medical attention.

Environmental Hazards:

This product may be hazardous to fish and aquatic invertebrates. Do not apply directly to or allow run-off into ponds, lakes, streams, or wetlands. Do not contaminate water by cleaning of equipment or disposal of water.

Physical and Chemical Hazards: Flammable. Do not use or store near heat or open flame.

Storage and Disposal

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 (55°C).

Disposal: Rinse water and unused diluted pesticide may be disposed of on site or in an approved waste disposal facility. Do not reuse empty container. Triple rinse empty containers and offer for recycling 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.

Directions for Use

It is a violation of federal law to use this product in a manner inconsistent with its labeling.

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.

While **MEEN** is effective against a broad assortment of insect pests, it doesn't harm 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 extensively tested and used as effective insecticides in commercial greenhouses. For over sixteen years the Neem seed has been the subject of extensive testing throughout the world. Neem has been tested in the U.S. for ten years at major universities.

The active ingredient in **MEEN** is an organic. It comes from a natural source: the seeds of a tree. Parts of this tree have been used over the centuries for highly effective insecticidal and medicinal purposes. In India the tree is called Neem. 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.

Spray solutions should be used within 8 hours of mixing for maximum effectiveness. Do not store diluted spray solution for later use.

Appropriate protective clothing, gloves, and respiratory devices are suggested.

Not for use in food handling areas.
Do not use on food crops.

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. Do not apply when ambient temperatures exceed 90°F.

Known Sensitive Plants

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

Hibiscus flowers

Known Tolerant Plant Species

MEEN has been demonstrated to be safe for use on the following:

Potted Flowering Plants
 A. Violet
 Azalea
 Begonia
 Cineraria
 Coreopsis
 Crossandra
 Cyclamen
 Easter Lily
 Exacum
 Gerbera
 Geranium
 Gioxinia
 Hibiscus
 Hydrangea
 Impatiens

Lantana
 Mums
Poinsettia Foliage Plants
 Aglaonema
 Anthurium
 Aphelandra
 Diffenbachia
 Dracaena
 Ficus
 Benjamina
 Ficus Pumula
 Palm-NB
Bedding Plants
 Ageratum
 Alyssum

Begonia
 Brachycome
 Celosia
 Coleus
 Dahlia
 Delphinium
 Dianthus
 Dusty Miller
 Gazania
 Impatiens
 Lobella
 Marigold
 Nemesia
 Pansy
 Periwinkle
 Petunia
 Portulaca
 Salvia

Snapdragon
 Torenia
 Verbena
 Vinca
 Zinnia
Trees/Shrubs
 Maple
 Oak
 Dogwood
 Crabapple
 Ornamental
 Pear
 Ornamental
 Cherry
 Elm
 White Pine
 White Birch
 Azalea

Holly
 Roses

The Following Section Contains Directions for Concentrate Products Use

1)

2)

3)

4)

(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:

Leafhoppers	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. Excessive application is unnecessary and should be avoided.
Leafminers	
Whiteflies	
Thrips	
Mealybugs	
Loopers	
Caterpillars	
Aphids	
Fruitflies	
Beetarmyworms	
Mexican Bean Beetles	

(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:

Leafhoppers	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. Excessive application is unnecessary and should be avoided.
Leafminers	
Gypsy moths	
Weevils	
Psyllids	
Webworms	
Hornworms	
Spruce budworms	
Pine sawflies	
Elm leaf beetle	
Bagworms	
Tent Caterpillars	
Grasshoppers	

(3) Lawn Application

For home lawns to control the following insect pests:

Mole crickets	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 at least 3 times on a 7-10 day interval to insure effective control of surface and sub-surface feeding pests. MEEN should not be applied 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
White grubs	
Sod webworms	
Fall armyworm	
Chinch bugs	
Hyperodes weevil	
Billbugs	

Crain flies

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

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) to control the following insects:

- Aphids
 - Caterpillars
 - Gypsy moth larvae
 - Immature tent beetles
 - Webworms
 - Bagworms
 - Lace bugs
 - Box elder bugs
 - Leafhoppers
 - Psyllids
 - Sawfly larvae
 - Woolly aphids
- Repeat applications 2-3 times on a 7-day interval. Heavy infestations may require more frequent applications on a 3-4 day interval until populations are reduced.

(5) House Plant Application

Dilute **MEEN** to a concentration of 0.42 fl oz. (2½ 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. Excessive application is unnecessary and should be avoided.

10/0/13

**The Following Section Contains Directions For Use
Of The Product In A Hose-end Applicator**

(6) Foliar Application (Bedding & 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:

Leafhoppers	The 16 oz. hose end applicator for bedding & 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. Excessive application is unnecessary and should be avoided. Do not apply to known sensitive plants without a prior small scale test application.
Leafminers	
Whiteflies	
Thrips	
Mealybugs	
Loopers	
Caterpillars	
Beetarmyworms	
Aphids	

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 (Trees & Shrubs)

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

Leafminers	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. Excessive application is unnecessary and should be avoided.
Leafhoppers	
Gypsy moths	
Weevils	
Psyllids	
Webworms	
Hornworms	
Spruce budworms	
Pine sawflies	
Elm leaf beetle	
Grasshoppers	

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.

(8) Lawn Application

Mole crickets	The 16 oz. hose-end applicator for lawns will treat approximately 2,600 square feet. Apply MEEN at least 3 times on a 7-10 day interval to insure effective control of surface and sub-surface feeding pests.
White grubs	
Sod webworms	
Fall armyworm	
Chinch bugs	
Hyperodes weevil	

Billbugs

- 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) 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.

Warranty

W.R. Grace & Co.-Conn. warrants that the material contained herein shall substantially conform to the chemical composition stated herein. The foregoing warranty is in lieu of all other warranties expressed and implied, including the implied warranties of merchantability and fitness for a particular purpose which are expressly disclaimed. Buyer's sole remedy shall be replacement of defective material or refund of the purchase price. In no event shall Grace be liable for any injury, loss, or damage, direct, indirect, incidental, or consequential arising out of the use of this material.