

228-458

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

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

JUL 28 2010

Nathan P. Ehresman Product Registration Manager Nufarm Americas, Inc. 150 Harvester Drive, Suite 200 Burr Ridge, IL 60527

SUBJECT:

Application for Pesticide Notification per PR Notice 98-10: Addition of New York State

Only Use Restriction on Golf Courses for Suffolk and Nassau Counties

Menace® Flowable EPA Reg. No. 228-458

Application Dated November 30, 2009

Dear Mr. Ehresman:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of this PRN. The label that was submitted with the above application is acceptable, date-stamped "Notification", and will be placed in our records.

If you have any questions, please contact me directly at 703-305-5335 or Terri Stowe of my staff at 703-305-6117.

Sincerely,

Paul Mastradone, Acting

Notifications & Minor Formulations Team Leader

Registration Division (7505P) Office of Pesticide Programs Please read instructions on reverse before completing form.

ease read instructions on reverse befo	ore completing form.		Form Approved	MB No. 2070 من,	0-0060, Approval expires 05-31-98
	United States	S	☐ Registr	ation	OPP Identifier Number
EPA Env	rironmental Protec	tion Agency			
	Washington, DC 2				
					
	Applica	tion for Pes	sticide – Section	11	
Company/Product Number		2. EPA	Product Manager		Proposed Classification
228-458			Richard Geb	ken	
4. Company/Product (Name)		PM#	Monard Cebi	Kell	None Restricted
Nufarm USA, Inc./					Z None T Restricted
Menace™ Flowable			13	<u> </u>	
5. Name and Address of Applicant Nufarm Americas, Inc	t (Include ZIP Code)				with FIFRA Section
150 Harvester Drive, Suite	200		(b)(1), my product i beling to:	is similar or ic	lentical in composition
Burr Ridge, IL 60527			eg. No.		
		Produc	ct Name:		
Check if this is a new	address .				
		Sectio	n – II	,	
Amendment – Explain below	1.		Final printed label	s in response to	Agency letter dated
Resubmission in response to	Agency letter dated		Me Too" Application	on .	
Notification - Explain below.			Other - Explain be	low	JUL 2 8 2010
Explanation: Use addition	nal page(s) if necess	ary. (For Sec	ction I and Section	II.)	
! !					
SEE ATTACHED					
		Castia			
d. Adelarial This Descript MANU De-	Death and In	Sectio	n – III		
Material This Product Will Be Child-Resistant Packaging	Unit Packaging		Water Soluble Pack	caging T	Type of Container
☐ Yes*	☐ Yes		Yes		Metal
⊠ No	⊠ No		⊠ No		⊠ Plastic
,	If "Yes"	No. per	If "Yes"	No. per	Glass
*Certification must	Unit Packaging wgt.	container	Package wgt.	container	Paper
be submitted					Other (Specifiy)
3. Location of Net Contents Infor	1	s) Retail Contair	ner		of Label Directions
Label C	Container 1	2.5, 5, 10, 29	5 30 55 Gal	On Lab	
6. Manner in Which Label is Affin	<u></u>	ithograph	Other	On labe	ling accompanying product
S		Paper glued			
		Stenciled			
:		Section	n – IV		
Contact Point (Complete items	directly below for identifi	cation of individ	ual to be contacted, if n		
Name Nathan P. Ehresman	1	Title Product Reg	jistration Managei	1 .	919-655-0018
I certify that the statements I have I acknowledge that any knowingly both under applicable law.		all attachments			6. Date Application Received (Staniped)
2. Signature		3. Title	-1-441		
4. Typed Name		Product Reg 4. Date	gistration Manage	<u> </u>	
7. Typeu Raine	1	4. Date			

EPA Form 8570-1 (Rev. 8-94) Previous editions are obsolete

White- EPA File Copy (original) Yellow- Applicant Copy



NUFARM AMERICAS, INC.

150 Harvester Drive, Suite 200 Burr Ridge, IL 60527

Phone: 630-455-2000 ■ Fax: 630-455-2001

November 30, 2009

Richard Gebken (PM-13)
Document Processing Desk (AMEND)
Office of Pesticide Programs (7504P)
U. S. Environmental Protection Agency
Room S-4900, One Potomac Yard
2777 S. Crystal Drive
Arlington, VA 22202-4501

Subject:

Nufarm Americas, Inc.; Menace Flowable (EPA Reg. No. 228-458)

Labeling Notification

Addition of New York only use restriction on Golf Courses for Suffolk and Nassau Counties

Dear Mr. Gebken:

Nufarm Americas, Inc. is submitting the enclosed label amendment to add an additional use restriction under the New York specific use restrictions section. NY DEC has requested that the use of Menace Flowable (228-458) be restricted on Golf Courses and Sod Farms in the counties of Suffolk and Nassau. In order to comply with this request, we are notifying you of the addition of this restriction to the Menace Flowable (228-458) product label.

In support of this action, please find enclosed:

- Application for Pesticide Registration (8570-1)
- Tiwo (2) copies of the revised Menace Flowable (228-458) label (1 copy with changes highlighted).
- An electronic copy of the revised Menace Flowable (228-458) label on CD.

Please contact me at 919-655-0018 (or nathan.ehresman@us.nufarm.com) if you have any questions regarding this submission.

Kind regards,

Nathan P. Ehresman

Product Registration Manager

Nufarm Americas, Inc.

ATTACHMENT TO LABEL NOTIFICATION DATED November 30, 2009

ACTION

#1--- Nufarm Americas, Inc. is adding an additional restriction to the Menace Flowable (228-458) label as requested by NY DEC to include a restriction on golf course and sod farm applications in the counties of Suffolk & Nassau

These changes have been incorporated into the label for 228-458 dated Nov 30, 2009.

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

Nathan P. Ehresman

Product Registration Manager

RESTRICTED USE PESTICIDE

Toxic to fish and aquatic organisms.

For retail sale to and use only by certified applicators, or persons under their direct supervision and only for those uses covered by the certified applicator's certification.

NOTIFICATION

MENACE® FLOWABLE 28 2010

For use to control insect and mite pests in greenhouses and nurseries, as well as on golf courses and on ornamental and turf in landscaped areas around residential, institutional, public, commercial and industrial buildings, parks, recreational areas, golf courses, sod farms and athletic fields.

ACTIVE INGREDIENT:

OTHER INGREDIENTS:		<u>92.1%</u>
	TOTAL	100.0%
*Cis isomers 97% minimum, trans isomers 3% product contains 2/3 pound active ingredients		
KEE	P OUT OF REACH OF CHILDREN	
CA	UTION - PRECAUCION	
(If you do not under	ueta, busque a alguien para que se la explique a uste stand the label, find someone to explain it to you in de TIONAL PRECAUTIONARY STATEMENTS AND DI	etail.)
	Leak, Fire, or Exposure, Call CHEMTREC (800) 424 dical Emergencies Only, Call (877) 325-1840	1-9300
EPA REG. NO. 228-458 EPA EST. NO	MANUFACTURED FOR NUFARM AMERICAS INC. 150 HARVESTER DRIVE BURR RIDGE, IL 60527 800-455-2000	
NET CONTENTS	LBS. (KG)	
000228-00458.20091130.Additional_NY_Rest	riction	

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION - PRECAUCION

Harmful if swallowed, inhaled, or absorbed through skin. Avoid contact with skin, eyes or clothing. Avoid breathing dust (vapor or spray mist). Wash thoroughly with soap and water after handling, and before eating, drinking, chewing gum or using tobacco. Remove contaminated clothing and wash clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

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 (other than mixers and loaders) must wear:

- Long-sleeved shirt and long pants.
- Chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride or viton.
- Shoes plus socks.

Mixers and loaders must wear:

- Long-sleeved shirt and long pants.
- Chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride or viton.
- Shoes plus socks.
- Protective eyewear.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

After the product is diluted in accordance with label directions for use, shirt, pants, socks, shoes and waterproof gloves are sufficient.

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

i	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 the poison control center or doctor. Do not give anything by mouth to an unconscious person.
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 further treatment advice.
IF ON SKIN OR CLOTHING	 Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.

NOTE TO PHYSICIAN

This product is a pyrethroid. If large amounts have been ingested, the stomach and intestine should be evacuated. Treatment is symptomatic and supportive. Digestible fats, oils or alcohol may increase absorption and so should be avoided.

ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops if bees are visiting the treatment area.

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.

Do not apply this product through any kind of irrigation system.

Do not apply this product by air.

Apply with ground equipment only.

Do not apply when wind direction favors downwind drift towards nearby water bodies.

Do not apply when wind velocity exceeds 10 mph.

Avoid application when wind gusts approach 10 mph.

Do not apply when a temperature inversion exists.

Apply using the largest nozzle size compatible with adequate coverage.

Do not apply if rain is expected within 12 hours (or whatever time is necessary for the spray to dry).

Do not apply by ground equipment within 25 feet of lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries and commercial fish farm ponds. When treating tall trees (>15 feet) from the ground with high pressure sprays or during any application with air assisted equipment (mist blower) do not apply within 150 feet of aquatic areas.

AGRICULTURE 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 intervals. 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.

PPE required for early entry to 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 is:

- 1. Coveralls.
- 2. Chemical-resistant gloves, such as barrier laminate or butyl rubber or nitrile rubber or neoprene rubber or polyvinyl chloride or viton.
- 3. Shoes plus socks.

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 and greenhouses.

Do not allow people or pets on treated surfaces until the spray has dried.

APPLICATION RECOMMENDATIONS

Landscape Ornamentals, Greenhouses, Nurseries, Sod Farms, Golf Courses and Home Lawn Uses (Including Interiorscapes, Plantscapes, and Ornamental Plantings Grown for Aesthetic Purpose).

GENERAL APPLICATION INSTRUCTIONS

This product formulation mixes readily with water and other aqueous carriers, and controls a wide spectrum of insects and mites on ornamentals, trees, shrubs, foliage plants, non-bearing fruit and nut trees, and flowers in greenhouses and interiorscapes including hotels, shopping malls, office buildings, etc., and, outdoor plantscapes, such as around residential dwellings, parks, institutional, public, commercial and industrial buildings, recreational, athletic fields, home lawns, golf courses and sod farms. Non-bearing crops are perennial crops that will not produce a harvestable raw agricultural commodity during the season of application.

This product may be tank-mixed with other products, including insect growth regulators. When tank mixing this product with other products, observe all precautions and limitations on each separate product label. The physical compatibility of this product may vary with different sources of pesticide products and local cultural practices. Any tank mixture which has not been previously tested should be prepared on a small scale (pint or quart jar), using the proper proportions of chemicals and water to ensure the physical compatibility of the mixture.

The following procedure is recommended for preparation of a new tank mix, unless specified otherwise in label directions: (1) Add wettable powders to tank water, (2) Agitate, (3) Add liquids and flowables, (4) Agitate, (5) Add emulsifiable concentrates, and (6) Agitate. If a mixture is found to be incompatible following this order of addition, try reversing the order of addition, or increase the volume of water.

Note: If the tank mixture is found to be compatible after increasing the amount of water, then the sprayer will need to be recalibrated for a higher volume application. Do not allow tank mix to stand overnight.

Maximum Rates: Do not apply more than 0.2 pound a liacre (40 fluid ounces of this product) in a single application or per year for outdoor applications.

Resistance: Some insects are known to develop resistance to products used repeatedly for control Because the development of resistance cannot be predicted, the use of this product should conform to resistance management strategies established for the use area. Consult your local or state pest management authorities for details.

If resistance to this product develops in your area, this product, or other products with a similar mode of action, may not provide adequate control. If poor performance cannot be attributed to improper application or extreme weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and suspect that resistance is a reasonable cause, immediately consult your local company representative or pest management advisor for the best alternative method of control for your area.

	TURF DILUTION CHART (Lawns, Golf Course And Sod Farms)					
Application Volume: Gallons per 1,000 sq. ft.	Application Fluid Ounces* of This Product Diluted to these Volumes of Finis					
	Rate: Pounds A.I./Acre	1 gallon	10 gallons	25 gallons	50 gallons	100 gallons
0.5	0.05	0.5	5.0	12.5	25.0	50.0
0.5	0.1	1.0	10.0	25.0	50.0	100.0
0.5	0.2	2.0	20.0	50.0	100.0	200.0
0.75	0.05	0.33	3.33	8.33	16.67	33.33
0.75	0.1	0.67	6.67	16.67	33.33	66.67
0.75	0.2	1.33	13.33	33.33	66.67	133.33
1.0	0.05	0.25	2.5	6.25	12.5	25.0
1.0	0.1	0.5	5.0	12.5	25.0	50.0
1.0	0.2	1.0	10.0	25.0	50.0	100.0
1.5	0.05	0.17	1.67	4.17	8.33	16.67
1.5	0.1	0.33	3.33	8.33	16.67	33.33
1.5	0.2	0.67	6.67	16.67	33.33	66.67
2.0	0.05	0.13	1.25	3.13	6.25	12.5
2.0	0.1	0.25	2.5	6.25	12.5	25.0
2.0	0.2	0.5	5.0	12.5	25.0	50.0
2.3	0.05	0.11	1.09	2.72	5.43	10.87
2.3ª	0.1	0.22	2.17	5.43	10.87	21.74
2.3ª	0.2	0.43	4.35	10.87	21.74	43.48
3.0	0.05		0.83	2.09	4.1.7	8.33
3.0	0.1	0.17	1.66	4.17	8.3ა	16.67
3.0	0.2	0.33	3.33	8.33	16.67	აა.ა3
4.0	0.05	***	0.63	1.56	3.13	6.25
4.0	0.1	0.13	1.25	3.13	6.25	12.5
, 4.0	0.2	0.25	2.5	6.25	12.5	25.0

^{*} To convert to milliliters, multiply by 29.57.

^a 100 gallons per acre.

1 fluid ounce = 29.57 ml = 2 tablespoons = 6 teaspoons Do not use household utensils to measure this product.

APPLICATION RECOMMENDATIONS

Grass Areas (including golf courses, sod farms, home lawns, lawn areas around parks, institutional, public, commercial and industrial buildings, recreational and athletic fields).

Do not apply to pastures or rangeland.

Apply this product as a surface or sub-surface treatment. Use application volumes of up to 10 gallons per 1,000 square feet to get uniform coverage when treating dense and or long grass foliage.

For low volume applications, less than 2 gallons/1,000 square feet, immediate irrigation of treated area with at least 0.25 inches of water following application to ensure efficacy of sub-surface pests such as, but not limited to, mole crickets, is recommended.

New York State Restrictions:

In New York State, this product may not be applied to turf within 100 feet of a coastal marsh (or of a water body [lake, pond river, stream, wetland, or drainage ditch].)

In New York State, do make a single repeat application of this product if there are signs of renewed insect activity, but not sooner than two weeks after the first application.

NOT FOR USE ON SOD FARMS IN THE STATE OF NEW YORK.

DO NOT USE THIS PRODUCT ON GOLF COURSES AND SOD FARMS IN NASSAU AND SUFFOLK COUNT NEW YORK

Impregnation and Application on Dry Bulk Turf Fertilizers

This product may be impregnated on dry bulk fertilizers. When applied as directed, Menace/dry bulk fertilizer mixture provides insect control equal to that provided by the same rates of Menace in water.

Impregnation: Apply using a minimum of 100 pounds of dry bulk fertilizer per acre with the recommended amount of Menace per acre. Use a closed rotary-drum mixer or a similar type of closed blender equipped with suitable spray equipment. The spray nozzle(s) should be positioned to provide a uniform, fine spray pattern over the tumbling fertilizer for thorough coverage. The physical properties of fertilizers vary, particularly in liquid absorptive capacity. When absorptivity is sufficient, simple spray impregnation of the fertilizer with Menace provides a satisfactory, dry mixture. If the absorptive capacity is inadequate, use of a highly absorptive powder is required to provide a dry, flowable mixture. Microcel E (Johns-Manville Products Corporation) is a recommended powder. Generally less than 2% by weight of Microcel E is required. DO NOT impregnate Menace onto straight coated ammonium nitrate or limestone because these materials will not absorb the insecticide. Dry fertilizer blends containing mixtures of ammonium nitrate or limestone may be impregnated with Menace.

The amount of Menace actually required in the preparation of individual fertilizer mixtures should be determined carefully for each production operation. This is necessary to ensure that the amount of pesticide actually contained in the mixture applied to the soil represents the correct rate of use. Bulk fertilizer impregnated with Menace should be applied immediately, not stored.

All individual Federal and state regulations relating to bulk dry fertilizer blending, registration, labeling, and application of the mixtures are the responsibility of the individual and/or company selling the fertilizer and Menace mixture.

Fertilizer for this use should be turf fertilizers recommended for specific regions.

	NURSERY DILUTION CHART						
Application Volume: Gallons	Application Rate:	Fluid Ounces* of This Product Diluted to these Volumes of Finished Spray					
Per Acre	Pounds A.I./Acre	1 gallon	25 gallons	50 gallons	100 gallons		
50	0.025	0.1	2.5	5.0	10.0		
. 50	0.05	0.2	5.0	10.0	20.0		
50	0.1	0.4	10.0	20.0	40.0		
50	0.2	0.8	20.0	40.0	80.0		
100	0.025	0.05	1.25	2.5	5.0		
100	0.05	0.1	2.5	5.0	10.0		
100	0.1	0.2	5.0	10.0	20.0		
100	0.2	0.4	10.0	20.0	40.0		
150	0.025	0.03	0.83	1.67	3.3		
150	0.05	0.07	1.67	3.33	6.7		
150	0.1	0.133	3.33	6.67	13.3		
150	0.2	0.266	6.67	13.33	26.7		
200	0.025	0.025	0.63	1.25	2.5		
200	0.05	0.05	1.25	2.5	5.0		
200	0.1	0.1	2.5	5.0	10.0		
200	0.2	0.2	5.0	10.0	20.0		
250	0.025		0.5	1.0	2.0		
250	0.05		1.0	2.0	4.0		
250	0.1		2.0	4.0	8.0		
250	0.2		4.0	8.0	16.0		
300	0.025		0.42	0.83	1.7		
. 300	0.05		0.83	1.67	3.3		
300	0.1		1.67	3.33	6.7		
300	0.2		3.33	6.67	13.3		

^{*} To convert to milliliters, multiply by 29.57.

Formula for Determining the Active Ingredient Content of the Finished Spray Mixture: The following formula may be used to determine the percent active ingredient that is in the spray tank after mixing this product.

(7.9) (fluid ounces of this product added to tank)

= Percent active ingredient of spray

(Gallons of finished spray mix)(128)

¹ fluid ounce = 29.57 ml =2 tablespoons = 6 teaspoons

Do not use household utensils to measure this product.

	RATES		
PEST	POUNDS A.I. PER 10 GALLONS	FLUID OUNCES PER 10 GALLONS	COMMENTS
Adelgids Ants Aphids Bagworms Blackvine Weevil Brown Soft Scales Broad Mites Budworms California Red Scale (Crawlers) Centipedes Clover Mites Crickets Cutworms Earwigs Elm Leaf Beetles Fall Webworms Flea Beetles Fungus Gnats Grasshoppers Lacebugs Leafhoppers Leaf Feeding Catepillars Mealybugs Millipedes Orchid Weevil Pillbugs Pine Needle Scales (Crawlers) Plant Bugs (incl. Lygus spp.) San Jose Scales (Crawlers) Sowbugs Spiders Tent Caterpillars Tip Moths Weevils Whiteflies	0.004 to 0.02	0.80 to 4.0	Apply the specified rate of this product as a full coverage foliar spray. Repeat as necessary to achieve control using higher rates as pest pressure and foliage area increases. To control Bagworm: Apply when larvae begin to hatch. Spray larvae directly. Applications made when larvae are young will be most effective. To control scale crawlers and twig borers: Treat trunks, stems, and twigs in addition to plant foliage. Certain cultivars may be sensitive to the final spray solution. A small number of plants should be treated prior to application of the entire planting. Use of an alternate class of chemistry in a treatment program is recommended to prevent or delay pest resistance.
Citrus Thrips Beet Armyworm European Crane Flies European Red Mite Leaf rollers Spider Mites Thrips Twig Borers	0.006 to 0.02	1.2 to 4.0	
Japanese Beetles (adult) Leafminers Pecan Leaf Scorch Mite	0.01 to 0.02	2.0 to 4.0	

RECOMMENDED GREENHOUSE MIXING TABLE

Rate This Product in Ounces (pounds a.i.) 10 gallons	This Product Per Gallons of Finished Spray					
	1 gallon	3 gallons	5 gallons	25 gallons	100 gallons	
0.80						
(0.004)	-	1/4	1/2	2	8	
1.20						
(0.006)	1/8	1/3	2/3	3	12	
2.0						
(0.010)	1/4	2/3	1	5	20	
4.0						
(0.020)	1/2	1-1/3	2	10	40	

	RECOMMENDED GRASS APPLICATION RATES				
PEST	THIS PRODUCT	COMMENTS			
Ants Annual Bluegrass Weevil (hyperodes) adults Armyworms Bluegrass Billbugs Centipedes Chinchbugs Crane Flies Crickets (Mole)* Cutworms Earwigs Fall Webworms Fleas Grasshoppers Mealybugs Millipedes Mites Pillbugs Sod Webworms Sowbugs Ticks	0.23 to 0.46 ounces per 1,000 square feet - or - 10 to 20 ounces per Acre - or - 0.05 to 0.1 pounds a.i. per Acre	*For control of over-wintered Mole Crickets apply this product at the lower rate in early spring. For the control of adult Mole Crickets in late-summer or early fall, apply higher rate. To enhance control, a non-ionic surfactant or a silicon based surfactant (0.25% w/v) may be applied as a tank-mix for the control of late summer or fall Adult Mole Crickets. For best results irrigate immediately after application with a minimum of 0.25 inches of water.			
Imported Fire Ants Japanese Beetles (Adult)	0.46 to 0.92 ounces per 1,000 square feet - or - 20 to 40 ounces per Acre				

IMPORTED FIRE ANT QUARANTINE TREATMENT

Against Imported Fire ants (IFA) in potting media (including balled and containerized nursery grown ornamental trees, shrubs, plants, flowers, conifers, bushes, Christmas trees, and non-bearing fruit and nut-trees). This product is approved and can be used in accordance with the USDA Imported Fire Ant Quarantine Program. This product may be applied either soil incorporated, as a topical application, or as a high volume drench treatment.

Soil Incorporation: Incorporate the appropriate volume of this product (see table below) per cubic yard of potting media by diluting it in water (typically 1 quart to 1 gallon per cubic yard of media) and sprinkling or spraying it onto the media. The applications are based on the dry bulk density of the potting media. When used in accordance with USDA quidelines, this application will provide a 6-month certification period.

RECOMMENDED SOIL INCORPORATION RATE OF THIS PRODUCT FOR CONTROL OF IFA IN POTTING MEDIA

POTTING MEDIA BULK DENSITY (POUNDS CUBIC YARD)	FLUID OUNCES OF THIS PRODUCT IN ONE CUBIC YARD
200	1.9
400	3.8
600	5.7
800	7.6
1,000	9.5
1,200	11.4
1,400	13.3

Use proportional amounts of this product for potting media with bulk densities not listed.

Topical Application: Mix this product in 1,000 ounces of water based on container size and bulk density of the potting media (see table below). Apply one (1) ounce of the mix to each container evenly distributed over the surface of the potting media. Irrigate all treated containers with 1.5 inches of water following application. When used in accordance with USDA guidelines, this application will provide a 6-month certification period.

RECOMMENDED TOPICAL DRENCH APPLICATION RATE OF THIS PRODUCT FOR CONTROL OF IFA IN POTTING MEDIA

POTTING MEDIA BULK DENSITY	FLUID OUNCES OF THIS PRODUCT PER 1,000 OUNCES OF WATER				
(POUNDS CUBIC YARD)	3 QUART CONTAINER	4 QUART CONTAINER			
200	3.6	5.2			
400	7.2	10.4			
600	10.6	15.6			
i 800 l	14.4	20.8			
1,000	18.0	26.0			
1,200	21.6	31.2			
1,400	25.2	36.4			

Use proportional amounts of this product for potting media with bulk densities not listed.

High Volume Drench: Apply this product as a high volume drench by mixing the appropriate amount of product based on the bulk density in 100 gallons of water (see table below). Apply mix to individual containers to the point of saturation. The amount of mix used for each plant is generally 1/5 volume of the container. When used in accordance with USDA guidelines, this application will provide a 6-month certification period.

RECOMMENDED HIGH DRENCH APPLICATION RATE OF THIS PRODUCT FOR CONTROL OF IFA IN POTTING MEDIA

POTTING MEDIA BULK DENSITY (POUNDS CUBIC YARD)	FLUID OUNCES OF THIS PRODUCT IN 100 GALLONS
200	2.4
400	4.8
600	7.2
800	9.6
1.000	12.0
1,200	14.4
1,400	16.8

Use proportional amounts of this product for potting media with bulk densities not listed.

LARVAL CONTROL IN POTTING MEDIA OF CONTAINERIZED PLANTS

Black Vine Weevil Larval Control - Preventative Treatment Topical Drench: For preventative control of Black Vine Weevil larvae in containerized plants, dilute this product at the rate of 10 to 40 fluid ounces (0.05 to 0.2 pound a.i.) per 100 gallons and apply as a drench at the rate of 4 to 8 fluid ounces of finished spray per 6 inch (diameter) container. Use a proportional volume of finished spray for containers less than or greater than 6 inches in diameter. Ideally, the media should be treated to the point of saturation, which generally requires 1/5 the volume of the container. Diluting 10 fluid ounces of the product per 100 gallons and applying 8 fluid ounces of finished spray per 6 inch (diameter) container will provide Black Vine Weevil Larval control for one growing season when the application is made in the spring. Diluting 20 to 40 fluid ounces of this product per 100 gallons and applying 8 fluid ounces of finished spray per 6 inch (diameter) container will provide Black Vine Weevil larval control for two growing seasons when the application is made in the spring.

White Grub Control - Preventative Treatment - Topical Drench: For preventative control of White Grubs (including, but not limited to, Japanese Beetle, Oriental Beetle and European Chafer) in containerized plants, dilute this product at the rate of 40 to 80 fluid ounces (0.2 to 0.4 pound a.i.) per 100 gallons and apply as a drench at the rate of 4 to 8 fluid ounces of finished spray per 6 inch (diameter) container. Use a proportional volume of finished spray for containers less than or greater than 6 inches in diameter. Ideally, the media should be treated to the point of saturation, which generally requires 1/5 the volume of the container. Use the higher application rate for a longer period of control.

Black Vine Weevil and White Grub Larval Control - Preventative Treatment - Media Incorporation: For preventative control of Black Vine Weevil and White Grub Larvae in containerized plants, incorporate the appropriate volume of this product (see table below) per cubic yard of potting media by diluting it in water (typically 1 quart to 1 gallon per cubic yard of media) and sprinkling or spraying it onto the media. Use the higher application rates for longer periods of control.

POTTING MEDIA	FLUID OUNCES OF THIS PRODUCT				
BULK DENSITY	IN ONE CUBIC YARD				
(POUNDS PER CUBIC YARD)	10PPM	15PP M	20PPM	25PPM	
200	0.4	0.6	0.8	1.0	
300 400 500	0.6 0.8	0.9 1.2	1.2 1.6	1.5 2.0 2.5	
600	1.2	1.8	2.4	3.0	
700	1.4	2.1	2.8	3.5	
800	1.6	2.4	3.2	4.0	
900	1.8	2.7	3.6	4.5	
1,000	2.0	3.0	4.0	5.0	

The application rates listed above are based on the dry bulk density of the potting media. Use proportional volumes of this product for potting media with dry bulk densities that are not listed above.

Black Vine Weevil Larval Control - Curative Treatment - Topical Drench: To control Black Vine Weevil Larvae infesting containerized plants, dilute this product at the rate of 10 to 40 fluid ounces (0.05 to 0.2 pound a.i.) per 100 gallons and apply as a drench at the rate of 8 to 16 fluid ounces of finished spray per 6 inch (diameter) container. Use a proportional volume of finished spray for containers less than or greater than 6 inches in diameter. Ideally, the media should be treated to the point of saturation, which generally requires 1/5 the volume of the container.

Bare root Treatment for Preventative Root Weevil Larval Control: To protect treated roots of field grown nursery stock from feeding by Root Weevil Larvae, dilute one gallon of this product in 100 gallons of water and treat the bard roots of plants that are being transplanted into the field either by dipping the roots into the insecticide solution for ten seconds or by spraying the insecticide solution onto the roots.

Diaprepes Weevil Larval Control - Curative Treatment - Tropical Drench: To control Diaprepes Weevil Larvae infesting containerized plants, dilute this product at the rate of 10 to 40 fluid ounces (0.05 to 0.2 pound a i.) per 100 gallons and apply as a drench at the rate of 8 to 16 fluid ounces of finished spray per 6 inch (diameter) container. Use a proportional volume of finished spray for containers less than or greater than 6 inches in diameter. Ideally, the media should be treated to the point of saturation, which generally requires 1/5 the volume of the container.

Fungus Gnat Larval Control - Preventative Treatment - Topical Drench: For preventative control of Fungus Gnat Larvae in containerized plants, dilute this product at the rate of 20 to 40 fluid ounces (0.1 to 0.2 pound a.i.) per 100 gallons and apply as a drench at the rate of 4 to 8 fluid ounces of finished spray per inch (diameter) container. Use a proportional volume of finished spray for containers less than or greater than 6 inches in diameter. Ideally the media

should be treated to the point of saturation, which generally requires 1/5 the volume of the container. Use the higher application rate for a longer period of control.

Fungus Gnat Larval Control - Curative Treatment -Topical Drench: To control Fungus Gnat Larvae infesting containerized plants, dilute this product at the rate of 10 to 40 fluid ounces (0.05 to 0.2 pound a.i.) per 100 gallons and apply as a drench at the rate of 8 to 16 fluid ounces of finished spray per 6 inch (diameter) container. Ideally the media should be treated to the point of saturation, which generally requires 1/5 the volume of the container.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Keep out of reach of children and animals. Store in original containers only. Store in a cool, dry place and avoid excess heat. Carefully open containers. After partial use, replace lids and close tightly. Do not put concentrate or dilute material into food or drink container.

In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills.

To Confine Spill: If liquid, dike surrounding area or absorb with sand, cat litter or commercial clay. If dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Do not contaminate water, food or feed by storage or disposal. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. Dispose of excess or waste pesticide by use according to label directions, or contact your State pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Plastic Container: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVEREDTOYOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULARTRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

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If you do not agree with or do not accept any of directions for use, the warranty disclaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.

(RV113009N)

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California Supplemental Label

RESTRICTED USE PESTICIDE

Toxic to fish and aquatic organisms.

For retail sale to and use only by certified applicators, or persons under their direct supervision and only for those uses covered by the certified applicator's certification.

MENACE® GC 7.9% FLOWABLE

ADDITIONAL PERSONAL PROTECTIVE EQUIPMENT AND EXTENDED REAPPLICATION INTERVALS REQUIREMENTS FOR GREENHOUSE USE IN CALIFORNIA

EPA REG. NO. 228-458

DIRECTIONS FOR USE RESTRICTED USE PESTICIDE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. This supplemental labeling must; be in possession of all users of the product in greenhouses in California.

CALIFORNIA SPECIFIC REQUIREMENTS FOR GREENHOUSE APPLICATORS AND HARVESTERS.

In addition, to following all applicable precautionary statements on the label on the product container, the following is required for greenhouse applicators and harvesters:

Greenhouse Applicator: Greenhouse applicators must wear a full body chemical-resistant protective suit (such as barrier laminate, butyl rubber, nitrile rubber, polyvinyl chloride, or equivalent).

Reapplication Interval: Reapplication to greenhouses must be at intervals of 30 days or longer.

Greenhouse Harvesters: Greenhouse harvesters must wear either regular-length gloves plus a long-sleeved shirt or elbow length (gauntlet type) gloves during the 30 days following application.

PLEASE REFER TO CONTAINER LABEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS. FOLLOW ALL APPLICABLE DIRECTIONS, RESTRICTIONS, AND PRECAUTIONS ON THE CONTAINER LABEL.

Nufarm Americas Inc. 150 Harvester Drive Burr Ridge, Illinois 60527