

2724-478

6/18/2002

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

JUN 18 2002

Mr. Gary R. Sandberg
Federal Regulatory Project Manager
Wellmark International
1100 East Woodfield Road, Suite 500
Schaumburg, IL 60173

Subject: Amendment - Add Pests to Label
Mavrik Aquaflow/Yardex Insecticide/Miticide
EPA Registration No. 2724-478
Your submission dated March 27, 2002

Dear Mr. Sandberg:

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

1. Under the "Precautionary Statements" section, please move the statement "Certain persons may be sensitive to MAVRIK AQUAFLOW's (YARDEX) fine spray particles" to the end of the second paragraph. Move the second paragraph to the end of the First Aid section.
2. Under the directions for "Ant Mound Treatment", add the following phrase to the end of the last sentence "but not to the point of runoff."
3. Under the heading "Treatments of Outside Surfaces and Around Buildings", delete the statement "Repeat treatment as necessary to maintain effectiveness" or indicate a time period for retreatment based on the residual efficacy of your product.

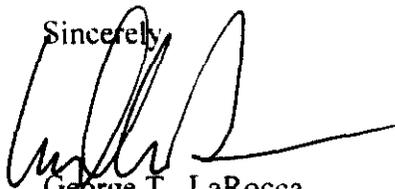
The Agency has reviewed the efficacy studies submitted in support of adding fire ants, mosquitoes, and glassy wing sharpshooters to the label (MRID No. 45640601 and 45640602) and found them to be acceptable.

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A stamped copy of the label has been enclosed for your records. If you have any questions, please call Dr. William Sproat of my team at 703-308-8587.

Sincerely,

A handwritten signature in black ink, appearing to read 'George T. LaRocca', with a long horizontal flourish extending to the right.

George T. LaRocca
Product Manager 13
Insecticide Branch
Registration Division (7505C)

Enclosure

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MAVRIK AQUAFLOW® INSECTICIDE/MITICIDE

For commercial use only on indoor plants in greenhouses and interior plantscapes, outdoor ornamental plantings and plantscapes, including trees, shrubs, and flower and foliage cuttings
Outside surfaces and around buildings (Perimeter Treatment)

ACTIVE INGREDIENT:

Tau-fluvalinate (CAS #102851-06-9)..... 22.3%

OTHER INGREDIENTS:..... 77.7%

TOTAL..... 100.0%

MAVRIK AQUAFLOW is a flowable formulation containing 2 pounds tau-fluvalinate per gallon (240 g/L).

EPA Registration No. 2724-478

EPA Est. No. 2724-TX-1

KEEP OUT OF REACH OF CHILDREN

CAUTION

See additional Precautionary Statements and Statements of Practical Treatment

SHAKE WELL BEFORE USING

Net Contents

ACCEPTED
with COMMENTS
in EPA Letter Dated

JUN 18 2002

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

2724-478

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

Harmful if swallowed, inhaled, or absorbed through skin. **Avoid Breathing Spray Mist.** Certain persons may be sensitive to MAVRIK AQUAFLOW®'s fine spray particles. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

Sensitive individuals may temporarily experience an itching, burning, or tingling sensation, with or without a rash, following exposure. These symptoms will usually subside without requiring medical treatment. Avoid hand or sleeve-to-face contact. Prior to exposure or after washing, an application of corn oil to exposed skin may reduce these symptoms.

FIRST AID	
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
If in eyes	<ul style="list-style-type: none"> • 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 eyes. • Call a poison control center for treatment advice.
If on skin or clothing	<ul style="list-style-type: none"> • 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 swallowed	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have a 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.
Have the product container or label with you when calling a poison control center or doctor or going for treatment. For 24 Hour Medical or Chemical Emergency Assistance, call Wellmark International [Phone Number]	

Personal Protective Equipment (PPE):

WPS USES:

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 who handle this pesticide for any use covered by the Worker Protection Standard (40 CFR Part 170) – in general, agricultural-plant uses are covered – must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate, butyl rubber (≥ 14 mils), nitrile rubber (≥ 14 mils), neoprene rubber (≥ 14 mils), polyvinyl chloride (PVC) (≥ 14 mils), or viton (≥ 14 mils)
- Shoes plus socks
- For exposures outdoors, dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C) or a NIOSH approved respirator with any R, P, or HE filter.
- For exposures in enclosed areas, a respirator with either an organic-vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G) or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any R, P, or HE prefilter.

NON-WPS USES:

Applicators and other handlers who handle this pesticide for any use **NOT** covered by the Worker Protection Standard (40 CFR Part 170) – in general, agricultural-plant uses are covered by the WPS – must wear:

- Protective clothing
- Rubber gloves while handling; workers in frequent contact with treated foliage should wear light barrier gloves to reduce excess exposure.
- Indoor exposures: Use a properly fitted NIOSH approved respirator (number prefix TC-21C) or a NIOSH approved respirator with any R, P, or HE filter for use with pesticides to avoid potential irritation to nose and throat from fine spray particles. NOTE: Persons other than applicator should not be present at time of application.
- Outdoor exposures: For sensitive persons, use a NIOSH approved (number prefix TC-21C) filter mask respirator for dusts and mists or a NIOSH approved respirator with any R, P, or HE filter.

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.

Engineering Controls Statements:

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

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.

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ENVIRONMENTAL HAZARDS

This product is highly toxic to fish and aquatic invertebrates. This product is toxic to honey bees if bees are exposed to direct application. However, dried residues of this product are non-toxic to honey bees. Treat during non-foraging periods to minimize adverse effects. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Use with care when applying in areas adjacent to any body of water. Do not apply when weather conditions favor drift from the target area. Do not contaminate water when disposing of equipment washwaters.

PHYSICAL/CHEMICAL HAZARDS

Do not use or store near heat or open flame.

STORAGE AND DISPOSAL

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

Storage: Store away from direct sunlight or heat. Pesticides must be stored in a secured area away from other products, food, or feed. In case of spill or leak, soak up with soil or other absorbent material. Do not use caustic agents.

Pesticide Disposal: Wastes resulting from the use of MAVRIK AQUAFLOW may be disposed of on site or at any approved waste disposal facility.

Container Disposal: Triple rinse container (or equivalent). Puncture and dispose of in a sanitary landfill, by incineration or if allowed by state and local authorities by burning. 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.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

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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 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.

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:

- Coveralls
- Chemical-resistant gloves, such as barrier laminate, butyl rubber (≥ 14 mils), nitrile rubber (≥ 14 mils), neoprene rubber (≥ 14 mils), polyvinyl chloride (PVC) (≥ 14 mils), or viton (≥ 14 mils)
- 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, or greenhouses.

Keep unprotected people, children, and pets out of treated area until spray has dried. Some sensitive pets eating or coming in contact with freshly treated plants may demonstrate vomiting and respiratory distress.

For end use only. Do not repackage or reformulate without manufacturer's written approval. Do not apply this product through any type of irrigation system. Not for broadcast use in nurseries. Not for use on sod farms, on grass grown for seed, or on golf course turf. Do not apply this product by aerial application.

GENERAL DIRECTIONS

MAVRIK AQUAFLOW controls insects and controls or suppresses mite pests when used at recommended rates. MAVRIK AQUAFLOW works primarily through contact action, good spray coverage is necessary. Treat when pests are immature or at a susceptible stage and populations are manageable, before crop damage occurs. Repeat applications as needed, but not more than 4 times per month at 5-7 day intervals, unless otherwise noted in use directions. MAVRIK AQUAFLOW will appear to work more slowly on some species than some conventional products, but good evaluation of performance can generally be made three to four days after treatment. Where heavy populations are present, use repeated applications at 5-6 day intervals to bring pests under adequate control. Residues of MAVRIK AQUAFLOW can continue to control certain insect pests for a week or longer. Growth dilution, climatic variables, and pest habits determine retreatment needs.

Dilute MAVRIK AQUAFLOW in sufficient water to give thorough spray coverage based on local crop protection experience. Buffer spray water to pH 5-7, if necessary. When MAVRIK AQUAFLOW is tank mixed with wettable powders, add powders to the tank first using good agitation. Check for physical and biological compatibility prior to use.

Dried residues of MAVRIK AQUAFLOW are non-toxic and non-repellant to honey bees. Treat during non-foraging periods to minimize adverse effects.

For best results under varying conditions, a range of use rates is recommended. The higher rates must be selected when pest pressure or damage potential is severe. The lower rates often give acceptable economic results. For severe mite infestations, use the highest rate of MAVRIK AQUAFLOW and use an acaricide in an alternate treatment program.

The use of a spreader-sticker, insecticidal soaps, or piperonyl butoxide may improve control of mites and some insects, such as, whiteflies, aphids, thrips, and mealybugs.

Consult your local extension office, pest management consultant, or a Wellmark International specialist for guidance in selecting a rate and timing schedule or tank mix combination that has demonstrated good performance under specific conditions. Follow all use directions and precautions for products used in tank mixing.

Treatments of Outside Surfaces and Around Buildings

For control of aphids, thrips, mites, clover mites, whiteflies, leaf-feeding caterpillars (i.e., tent, orlando, gypsy moth, bagworm, canker worm, etc.), lygus plant bugs, beetles (flea, cucumber, elm leaf), leafhoppers, earwigs*, ticks, brown dog ticks, ants*, fire ants, crickets*, armyworms, cutworms, chiggers*, fleas, sowbugs*, millipedes*, springtails (Collembola)*, adelgids, mosquitoes, weevils* (strawberry root, obscure root, blackvine root), psyllids, mealybugs, two-spotted spider mites, glassy-wing sharpshooters.

*Except in California

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Mix 3 teaspoons per 5 gallons of water and apply MAVRIK AQUAFLOW using a low pressure coarse fan spray, applying the MAVRIK AQUAFLOW in even bands to surfaces where pests are a problem. Refrain from applying to the point of runoff. Crack and crevice applications may be made using a pinstream nozzle to pest harborage sites. Applications can be made to outside surfaces of buildings including, but not limited to, porches, window frames, eaves, foundations, patios, garages, refuse dumps, vegetation areas adjacent to or around private homes, duplexes, townhouses, condominiums, house trailers, apartment complexes, carports, garages, fence lines, storage sheds, barns, and other residential and non-commercial structures, soil, trunks of woody ornamentals, and other areas where pests congregate or have been seen.

Perimeter Treatments: Apply MAVRIK AQUAFLOW to a band of soil and/or vegetation 6 to 10 feet wide around and adjacent to the structure. Also treat the foundation of the structure to a height of 1 to 2 feet. Use a spray volume of 5 gallons per 1000 square feet. Mix MAVRIK AQUAFLOW at a rate of 3 teaspoons per 5 gallons of water. Higher volumes of water may be needed if mulch or leaf litter is present or foliage is dense.

Individual Ant Mound Treatments: To control mounding ant colonies including the fire ant, thoroughly mix 2/3 teaspoons (0.1 fl. oz) of MAVRIK AQUAFLOW with 1 gallon of water. Drench the mound using 1 gallon of dilution per mound. Apply the dilution starting on the perimeter of the mound and ending at the center of the mound until the entire mound is wet.

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Ornamental Treatments

Crop	Pest	Amount MAVRIK In Water To Make		Specific Directions
		100 Gal	5 Gal	
Landscape Ornamentals (including trees, shrubs, evergreens, flowers, foliage plants) Greenhouse (non-food plants) Containerized nursery stock	Aphids	4.0-10.0	0.2-0.5	<p><u>For outdoor applications</u>, use sufficient water to thoroughly cover the foliage. Use lower rates for light to moderate insect pressure. Use higher rates for green peach aphids, unexposed thrips, and heavy pressure of other insects.</p> <p>Mite suppression can be obtained using the lower rate. For more residual control use up to 10 fl oz/100 gal water. For maximum effect, tank mix with an acaricide.</p> <p><u>For greenhouse applications</u> (broadcast, fogger, or bench) use the rates "4.0-10.0 fl oz" recommended in the "amount MAVRIK in water to make: 100 gal" column. 100 gallons of spray will typically cover 20,000 sq ft of greenhouse space. When using Electro Static Spraying System (ESS®), Puls-fog®, or other ULV delivery systems, apply the recommended amount of MAVRIK over the square footage with the equipment manufacturer's requirement of water. Follow manufacturer's calibration procedures.</p> <p><u>Individual ant mound treatment:</u> To control mounding ant colonies including the fire ant, thoroughly mix 2/3 teaspoons (0.1 fl oz.) of MAVRIK with 1 gallon of water. Drench the mound using 1 gallon of dilution per mound. Apply the dilution starting on the perimeter of the mound and ending at the center of the mound until the entire mound is wet.</p> <p>Apply spray on ground around base of tree or shrub and up main trunk or stem.</p> <p>Apply 5-10 fl oz of MAVRIK per 100 gallons of water to protect new foliage, depending on pest pressure. If pruning is needed, prune the entire hedge then delay application until adults and new shoots are present. Apply 2 applications at 1 month intervals under heavy reinfestation pressure and if new foliage is present.</p>
	Thrips	fl oz	fl oz	
	Mites, Clover		(1.33-3.0)	
	Mites, Whiteflies		teaspoons	
	Leaf-Feeding			
	Caterpillars			
	(i.e., Tent,			
	Orlando, Gypsy			
	Moth, Bagworm,			
	Canker Worm, etc.)			
	Lygus Plant Bugs			
	Beetles (Flea,			
	Cucumber, Elm Leaf)			
	Leafhoppers			
	Earwigs*			
	Ticks, Brown Dog Ticks			
	Ants*			
	Crickets*			
	Amyworms, Cutworms			
	Chiggers*			
Fleas				
Sowbugs*				
Millipedes*				
Springtails (Collembola)*				
Adelgids				
Mosquitoes				
Glassy-wing sharpshooters				
Fire Ants	10.0 fl oz	0.5 fl oz (3 teaspoons)		
Woody and Herbaceous Ornamentals	Strawberry Root Weevils*			
	Obscure Root Weevils*	6.4-10.0	0.32-0.5	
	Blackvine	fl oz	fl oz	
	Root Weevils*		1.66-3.0 teaspoons)	
Eugenia and Pepper Tree	Psyllids	5.0-10.0		

* Except in California

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Ornamental Treatments

Crop	Pest	Amount MAVRIK In Water To Make		Specific Directions
Flower and Foliage Cuttings (for Dipping)	Mealybugs			Immerse basket of cuttings into a diluted solution of MAVRIK until thoroughly wet (usually 1 minute or less).
	Aphids	5.0	0.24	
	Two-Spotted	fl oz	fl oz	
	Spider Mites		(1.5 teaspoons)	

Seller makes no warranty, express or implied, concerning the use of this product other than indicated on the label. Buyer assumes all risk of use and handling of this material when such use and handling are contrary to label instructions.

ESS® is a registered trademark of Electrostatic Spraying Systems.
Puls-Fog® is a registered trademark of Dramm International.
MAVRIK AQUAFLOW® is a registered trademark of Wellmark International.

Wellmark International
Schaumburg, IL 60173
Made in USA

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ZOËCON®

**OUTDOOR FLEA/ANT* CONTROL
YARDEX® INSECTICIDE**

For commercial use only on outdoor ornamental plantings, plantscapes, trees, shrubs, outside surfaces and around buildings (Perimeter Treatment)

ACTIVE INGREDIENT:

Tau-fluvalinate (CAS #102851-06-9)..... 22.3%

OTHER INGREDIENTS:..... 77.7%

TOTAL 100.0%

YARDEX is a flowable formulation containing 2 pounds tau-fluvalinate per gallon (240 g/L)

EPA Registration No. 2724-478

EPA Est. No.

KEEP OUT OF REACH OF CHILDREN

CAUTION

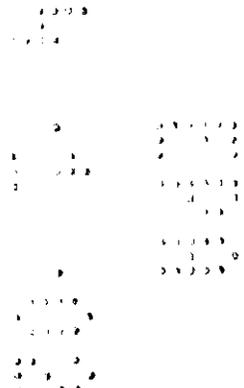
READ COMPLETE DIRECTIONS AND PRECAUTIONS INSIDE

SHAKE WELL BEFORE USING

Not use use on plants or trees being grown for sale or other commercial use, for commercial seed production, for the production of timber or wood products, or for research purposes. For use only on plants intended for aesthetic purposes or climatic modification and being grown in ornamental gardens or parks and grounds.

* Except in California

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

Harmful if swallowed, inhaled, or absorbed through skin. **Avoid Breathing Spray Mist.** Certain persons may be sensitive to YARDEX®'s fine spray particles. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

Sensitive individuals may temporarily experience an itching, burning, or tingling sensation, with or without a rash, following exposure. These symptoms will usually subside without requiring medical treatment. Avoid hand or sleeve-to-face contact. Prior to exposure or after washing, an application of corn oil to exposed skin may reduce these symptoms.

FIRST AID	
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
If in eyes	<ul style="list-style-type: none"> • 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 eyes. • Call a poison control center for treatment advice.
If on skin or clothing	<ul style="list-style-type: none"> • 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 swallowed	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have a 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.
Have the product container or label with you when calling a poison control center or doctor or going for treatment. For 24 Hour Medical or Chemical Emergency Assistance, call Wellmark International [Phone Number]	

Personal Protective Equipment (PPE):

Applicators and other handlers must wear:

- Protective clothing
- Rubber gloves while handling; workers in frequent contact with treated foliage should wear light barrier gloves to reduce excess exposure.
- For sensitive persons, use a NIOSH approved (number prefix TC-21C) filter mask respirator for dusts and mists or a NIOSH approved respirator with any R, P, or HE filter.

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.

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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 highly toxic to fish and aquatic invertebrates. This product is toxic to honey bees if bees are exposed to direct application. However, dried residues of this product are non-toxic to honey bees. Treat during non-foraging periods to minimize adverse effects. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Use with care when applying in areas adjacent to any body of water. Do not apply when weather conditions favor drift from the target area. Do not contaminate water when disposing of equipment washwaters.

PHYSICAL/CHEMICAL HAZARDS

Do not use or store near heat or open flame.

STORAGE AND DISPOSAL

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

Storage: Store away from direct sunlight or heat. Pesticides must be stored in a secured area away from other products, food, or feed. In case of spill or leak, soak up with soil or other absorbent material. Do not use caustic agents.

Pesticide Disposal: Wastes resulting from the use of YARDEX may be disposed of on site or at any approved waste disposal facility.

Container Disposal: Triple rinse container (or equivalent). Puncture and dispose of in a sanitary landfill, by incineration or if allowed by state and local authorities by burning. 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.

Keep unprotected people, children and pets out of treated area until spray has dried. Some sensitive pets eating or coming in contact with freshly treated plants may demonstrate vomiting and respiratory distress.

For end use only. Do not repackage or reformulate without manufacturer's written approval. Do not apply this product by aerial application or through any type of irrigation system.

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GENERAL DIRECTIONS

YARDEX controls insects and controls or suppresses mite pests when used at recommended rates. YARDEX works primarily through contact action, good spray coverage is necessary. Treat when pests are immature or at a susceptible stage and populations are manageable, before damage occurs. Repeat applications as needed, but not more than 4 times per month at 5-7 day intervals, unless otherwise noted in use directions. YARDEX will appear to work more slowly on some species than some conventional products, but good evaluation of performance can generally be made three to four days after treatment. Where heavy populations are present, use repeated applications at 5-6 day intervals to bring pests under adequate control. Residues of YARDEX can continue to control certain insect pests for a week or longer. Growth dilution, climatic variables, and pest habits determine retreatment needs.

Dilute YARDEX in sufficient water to give thorough spray coverage based on local experience. Buffer spray water to pH 5-7, if necessary. When YARDEX is mixed with wettable powders, add powders to the tank first using good agitation. Check for physical and biological compatibility prior to use.

Dried residues of YARDEX are non-toxic and non-repellant to honey bees. Treat during non-foraging periods to minimize adverse effects.

For best results under varying conditions, a range of use rates is recommended. The higher rates must be selected when pest pressure or damage potential is severe. The lower rates often give acceptable economic results. For severe mite infestations, use the highest rate of YARDEX and use an acaricide in an alternate treatment program.

The use of a spreader-sticker, insecticidal soaps, or piperonyl butoxide may improve control of mites and some insects, such as, whiteflies, aphids, thrips, and mealybugs.

Consult your local extension office, pest management consultant, or a Wellmark International specialist for guidance in selecting a rate and timing schedule or mixing combination that has demonstrated good performance under specific conditions.

Treatments of Outside Surfaces and Around Buildings

For control of aphids, thrips, mites, clover mites, whiteflies, leaf-feeding caterpillars (i.e., tent, orlando, gypsy moth, bagworm, canker worm, etc.), lygus plant bugs, beetles (flea, cucumber, elm leaf), leafhoppers, earwigs*, ticks, brown dog ticks, ants*, fire ants, crickets*, armyworms, cutworms, chiggers*, fleas, sowbugs*, millipedes*, springtails (Collembola)*, adelgids, mosquitoes, weevils* (strawberry root, obscure root, blackvine root), psyllids, mealybugs, two-spotted spider mites, glassy-wing sharpshooters.

*Except in California

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Mix 3 teaspoons per 5 gallons of water and apply YARDEX using a low pressure coarse fan spray, applying the YARDEX in even bands to surfaces where pests are a problem. Refrain from applying to the point of runoff. Crack and crevice applications may be made using a pinstream nozzle to pest harborage sites. Applications can be made to outside surfaces of buildings including, but not limited to, porches, window frames, eaves, foundations, patios, garages, refuse dumps, vegetation areas adjacent to or around private homes, duplexes, townhouses, condominiums, house trailers, apartment complexes, carports, garages, fence lines, storage sheds, barns, and other residential and non-commercial structures, soil, trunks of woody ornamentals, and other areas where pests congregate or have been seen. Repeat treatment as necessary to maintain effectiveness.

Perimeter Treatments: Apply YARDEX to a band of soil and/or vegetation 6 to 10 feet wide around and adjacent to the structure. Also treat the foundation of the structure to a height of 1 to 2 feet. Use a spray volume of 5 gallons per 1000 square feet. Mix YARDEX at a rate of 3 teaspoons per 5 gallons of water. Higher volumes of water may be needed if mulch or leaf litter is present or foliage is dense.

Individual Ant Mound Treatments: To control mounding ant colonies including the fire ant, thoroughly mix 2/3 teaspoons (0.1 fl. oz) of MAVRIK AQUAFLOW with 1 gallon of water. Drench the mound using 1 gallon of dilution per mound. Apply the dilution starting on the perimeter of the mound and ending at the center of the mound until the entire mound is wet.

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Ornamental Treatments

Crop	Pest	Amount YARDEX In Water To Make		Specific Directions
		100 Gal	5 Gal	
Landscape Ornamentals (including trees, shrubs, evergreens, flowers, foliage plants)	Aphids	4.0-10.0	0.2-0.5	Use sufficient water to thoroughly cover the foliage. Use lower rates for light to moderate insect pressure. Use higher rates for green peach aphids, unexposed thrips, and heavy pressure of other insects. Mite suppression can be obtained using the lower rate. For more residual control use up to 10 fl oz/100 gal water.
	Thrips	fl oz	fl oz	
	Mites, Clover			
	Mites, Whiteflies		(1.33-3.0)	
	Leaf-Feeding		teaspoons	
	Caterpillars			
	(i.e., Tent,			
	Orlando, Gypsy			
	Moth, Bagworm,			
	Canker Worm, etc.)			
	Lygus Plant Bugs			
	Beetles (Flea,			
	Cucumber, Elm Leaf)			
	Leafhoppers			
	Earwigs*			
	Ticks, Brown Dog Ticks			
	Adelgids			
	Crickets*			
	Amyworms, Cutworms			
	Chiggers*			
	Fleas			
	Sowbugs*			
	Millipedes*			
Springtails (Collembola)*				
Ants*				
Mosquitoes				
Glassy-wing Sharpshooters				
	Fire Ants	10 fl oz	0.5 fl oz (3 teaspoons)	<u>Individual ant mound treatment:</u> To control mounding ant colonies including the fire ant, thoroughly mix 2/3 teaspoons (0.1 fl oz.) of MAVRIK with 1 gallon of water. Drench the mound using 1 gallon of dilution per mound. Apply the dilution starting on the perimeter of the mound and ending at the center of the mound until the entire mound is wet.
Woody and Herbaceous Ornamentals	Strawberry Root			Apply spray on ground around base of tree or shrub and up main trunk or stem.
	Weevils*			
	Obscure Root	6.4-10.0	0.32-0.5	
	Weevils*	fl oz	fl oz	
	Blackvine		1.66-3.0	
	Root Weevils*		teaspoons)	
Eugenia and Pepper Tree	Psyllids	5.0-10.0		Apply 5-10 fl oz of YARDEX per 100 gallons of water to protect new foliage, depending on pest pressure. If pruning is needed, prune the entire hedge then delay application until adults and new shoots are present. Apply 2 applications at 1 month intervals under heavy reinfestation pressure and if new foliage is present.

* Except in California

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Seller makes no warranty, express or implied, concerning the use of this product other than indicated on the label. Buyer assumes all risk of use and handling of this material when such use and handling are contrary to label instructions.

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