09/15/99

page 1 + 35



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

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

SEP | 5 | 1999

Ms. Nancy Huebl Wellmark International 1000 Tower Lane, Suite 245 Bensenville, IL 60106

Dear Ms. Huebl:

Subject:

Revised Labeling, Master Label and Sub-labels

Mavrik Aquaflow Insecticide EPA Reg. No. 2724-478

Your Submission Dated August 20, 1999

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable provided you make the changes indicated below before release for shipment of product bearing the amended labeling:

#### 1. On the master label:

- a. On pages 2 and 10, at the end of the first paragraph under PRECAUTIONARY STATEMENTS, add the following: "Remove contaminated clothing and wash clothing before reuse."
- b. On page 3, after the first paragraph under the heading "Engineering Controls Statements," insert the following paragraph: "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."

#### 2. On the Mayrik and Yardex sub-labels:

- a. On pages 2 and 10, revise the PRECAUTIONARY STATEMENTS per comment a above for the master label.
- b. On page 3 of the Mavrik sub-label, revise per comment b above for the master label.

Submit 2 copies of your final printed labeling before you release the product for shipment. A stamped copy of the labeling is enclosed for your records.

If you have any questions regarding this letter, please contact John Leahy of my team at (703) 305-6703.

Sincerely yours,

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

Enclosure

### **REGULATORY LABEL DATA SHEET**

File Name:

g:regulatory\labels\cahspec\ 02724478\pmavaqua 99a **Data Sheet Date:** 

August 1999

Product:

**MAVRIK AQUAFLOW** 

Insecticide/Miticide

EPA Reg #:

2724-478 (was 55947-101)

Approved:

Submitted

Supercedes:

1/31/95

OVERVIEW: Master label submitted as Wellmark, updated per PRN 97-5 & 6, new registration number, CLI, removed Pentac, added 2ee's (fire ant, psyllids) includes comments from EPA 6/24/98 letter, (MAVRIK AQUAFLOW label, pages 1-8; YARDEX label, pages 9-15)

Page #	Description of Major Changes				
MAVRIK A	QUAFLOW REVISIONS				
1	Revised to one header/use sites -per 6/24/98 EPA letter				
	Ingredient Statement - Tau-fluvalinate - removed chemical name, added CAS # -				
	PRN 97-5				
	Changed "Inert" to "Other" - PRN 97-6				
į	Patent reference removed				
	Changed EPA Reg. No. 55947-101 to Wellmark number 2724-478 (transfer)				
2	Revised Precautionary Statements/First Aid per EPA letter 6/24/98				
	Changed information/emergency reference/phone number from Sandoz to Wellmark				
	Added (PPE) - acronym for Personal Protective Equipment				
3 & 5	PPE section - gloves - removed "or" from between each type of glove listed				
	Revised per EPA letter 6/24/98 and PRN 98-9 (respirator)				
<u></u>	Engineering Controls Statements – deleted "or aircraft", aerial application prohibited				
4	Environmental Hazards — Revised per EPA letter 6/24/98				
	added text per EPA study (honey bee acute/foliar residue) review 4/26/96 Deleted "For terrestrial uses", PRN 93-8				
and and	Storage and Disposal - Added text to specify type of disposal (Pesticide, Container)				

SEP | 5 1999

Under the Federal Insecticide, Franciside, and Rodenthide Act as amended, for the positide registered under EPA Reg. No.

with COMMENTS in EPA Letter Dated

1

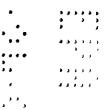
5	Text following Ag/Non-Ag Use boxes New text added per 6/24/98 EPA letter				
	Deleted last sentence in paragraph, no longer				
	valid, this information is contained on label				
6	General Directions - 4th paragraph - Pentac Miticide deleted as recommended acaricide (Novartis is canceling federal registration)				
	Last paragraph - Changed reference from Sandoz to Wellmark				
	Added last sentence regarding tank mixing per 6/24/98 EPA letter				
7	Use patterns revised per EPA 6/24/98 letter				
	Recommended Application Rates, Specific Directions — Foliage Flowering Plants section changed Pentac Aquaflow to generic "an acaricide" (Novartis canceling federal registration)				
	"For greenhouse applications" paragraph, "One hundred" (text) removed leaving the number 100; abbreviation for Electro Static Spraying System corrected (EES to ESS);				
	added "equipment" manufacturer's (per EPA 6/24/98 letter)				
	Deleted outdoor broadcast treatment				
	Commercial/Residential-Woody Ornamentals section - Including 2ee in federal label (psyllids/eugenia & pepper tree)				
8	Revised crop description to "Landscape and Recreational Turfgrass" per EPA 6/24/98 letter				
	Turf-section—including 2ce in federal label (imported fire ant)				
	Warranty - Sandoz warranty replaced by Wellmark warranty				
	Trademark sentence revised Sandoz to Wellmark and Pentac removed (canceled)				
	Name/address change Sandoz to Wellmark				
YARDEX	REVISIONS				
9	Added "For commercial use only" per EPA comment 6/24/98 letter				
	Per EPA 6/24/98 letter, moved statement to remove from WPS to front panel from Gener Directions and deleted "golf courses" from statement				
10	Revised Precautionary Statements/First Aid/PPE per EPA letter 6/24/98				
	PPE: Deleted PPE bullet for "indoor exposure" – this is outdoor product				
	Removed "Outdoor exposures" as that is the only use pattern for this fabel				
	Per PRN 98-9, added new respirator designations				
11	Environmental Hazards added "and aquatic invertebrates" – per EPA 6/24/98 letter,				

: :

12	Directions for Use: Per EPA 6/24/98 letter, removed Non-Ag Use box but kept statement "Keep children and petstreatment dries." and "Some sensitive pets respiratory distress."
	Per EPA 6/24/98 letter, added "by aerial application" to "Do not apply this product" statement
14	Rate Table: Revised headings per EPA 6/24/98 letter
	Removed outdoor broadcast use directions per EPA 6/24/98 letter
15	Removed fire ants (need to submit efficacy)

REGULATORY: S. Spaulding

MARKETING J. Neberz/T. Nahley EPA PRODUCT MANAGER G. LaRocca/J. Leahy



## MAVRIK AQUAFLOW® INSECTICIDE/MITICIDE

For commercial use only on indoor plants (including greenhouses) and interior plantscapes, outdoor ornamental plantings and plantscapes, including lawns, trees, shrubs, and flower and foliage cuttings

Recommended For Commercial Use Only

#### **ACTIVE INGREDIENT:**

Tau-fluvalinate (CAS #102851-06-9	9)	22.3%
OTHER INGREDIENTS:		<u>77.7%</u>
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** 

# 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® fine spray particles. Respiratory effects are temporary and will generally subside without medical treatment. Causes mild-moderate eye irritation. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling.

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:** Remove individual-victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

IF IN EYES: Flush eyes with plenty of water. Call a physician if irritation persists.

**IF ON SKIN:** Wash with plenty of soap and water. **Apply corn oil to affected area to relieve symptoms.** Get medical attention if irritation or symptoms develop persists.

**IF SWALLOWED:** Call a physician or poison control center immediately. Drink one or two glasses of water and induce vomiting by touching the back of throat with a finger. Do not induce vomiting or give anything by mouth to an unconscious person.

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.
- For Indoor applications 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 using MAVRIK AQUAFLOW outdoors, 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, or aircraft 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: [LRM P. 8-14]

### **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 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.

#### **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:

- Coveralis
- 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 children and pets off treated turf until treatment dries because some sensitive pets eating or coming in contact with freshly treated turf 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 application as needed. 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, repeated applications five to seven days apart may be necessary 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 honeybees. 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 mealy bugs.

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.

#### **Recommended Application Rates**

Crop	Pest
Foliage	Aphid
Flowering Plants	Thrips
Woody and Horbacoous Ornamentals	Mites White Leaf-F
Conitors	Cater
(including	(i.e.,
Christmas Trees,	Orlan
Shade Trees and	Moth
Non-Food	Cank
Bedding Plants)	Lygus
Landscape Ornamentals	Beetle
(including trees, shrubs,	Cucu
evergreens, flowers,	Leafh
foliage plants Greenhouse (non-food plants)	

	Amount	MAVRIK
Pest	In Water	r To Make
Aphid	100 Gal	<u>5 Gal</u>
Thrips	4.0-10.0	0.2-0.5
Mites	fi oz	fl oz
Whiteflies		(1.33-3.0)
Leaf-Feeding		teaspoons
Caterpillars		
(i.e., Tent,		
Orlando, Gypsy		
Moth, Bagworm,		
Canker Worm, e	tc.)	
Lygus Plant Bugs	3	
Beetles (Flea,		
Cucumber, Elm	Leaf)	
Leafhoppers		

## **Specific Directions**

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. For maximum effect tank mix with an acaricide.

For greenhouse applications (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.

For outdoor broadcast treatment use the rate of 5fl oz of MAVRIK per acre.

Commercial and Residential Woody	Strawberry Root Weevils*	100 Gal	5 Gal	Apply spray on ground around base of tree
and Herbaceous Ornamentals	Obscure Root Weevils* Blackvine Root Weevils*	6.4-10.0 fl oz	0.32-0.5 fl oz 1.66-3.0 teaspoons)	or shrub and up main trunk or stem.
Eugenia and Pepper Tree	Psyllids	5.0-10.0		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 second application at 1 month interval under heavy reinfestation pressure and if new foliage is present.

<sup>\*</sup> Except in California

Crop Flower and Foliage Cuttings (for Dipping)	Pest  Mealybugs Aphids Two-Spotted Spider Mites	Amount MA 100 Gal 5.0 fl oz	VRIK Per 5 Gal 0.24 fl oz (1.5 teaspoons)	Specific Directions  Immerse basket of cuttings into a diluted solution of MAVRIK until thoroughly wet (usually 1 minute or less).
Crop Commorcial & -Residential	Pest Chinch Bug Earwig*	Amount MA 1000 Ft. <sup>2</sup> 0.11-0.23 fl oz	AVRIK Per Acre 5.0-10.0 fl oz	Specific Directions Use sufficient water to penetrate to pest.
Turf Landscape & Recreational Turfgrass (including home	Ticks Ants* Lawn Moths (Sod Webworms) Bermuda Mites*	(0.73-1.45 teaspoons)		Use lower rates for thatch inhabitors, such as, fleas, ticks, and chiggers. Repeat application in 10 days.
lawns, business & office complexes, shopping complexes, multifamily residential complexes, airports, cemeteries, parks, playgrounds & athletic fields, & other landscape turfgrass	Crickets* Armyworms Brown Dog Ticks Chiggers* Clover Mites Cutworms Fleas Leafhoppers Sowbugs*			Use medium rate for <u>grassfeeders</u> , such as sod webworms, Bermuda mites, chinch bugs, armyworms.
-	Millipedes* Springtails (Colle	mbola)*		Use maximum rate for cutworms.
* Except in California	Imported Fire Ant	*	2 toaspoons/ 5 gallons water	Gently sprinkle 1 gallen of solution on each mound taking care not to disturb the mound. Apply to new mounds as they appear. Do not apply to more than 150 mounds per acre at any one time.

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 Bensenville, IL 60106 Made in USA

# ZOECON® OUTDOOR FLEAVANT\* CONTROL YARDEX® INSECTICIDE

For commercial use only on outdoor ornamental plantings, plantscapes, turf, trees, shrubs

## **ACTIVE INGREDIENT:**

Tau-fluvalinate (CAS #102851-06-9)	22.3%
OTHER INGREDIENTS:	
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, or or golf courses, or lawns and grounds.

\* Except in California

**Net Contents** 

# 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® fine spray particles. Respiratory effects are temporary and will generally subside without medical treatment. Causes mild-moderate eye irritation. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling.

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:** Remove individual victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

IF IN EYES: Flush eyes with plenty of water. Call a physician if irritation persists.

**IF ON SKIN:** Wash with plenty of soap and water. **Apply corn oil to affected area to relieve symptoms. Get medical attention if irritation** or symptoms develop<del>persists</del>.

**IF SWALLOWED:** Call a physician or poison control center immediately. Drink one or two glasses of water and induce vomiting by touching the back of throat with a finger. Do not induce vomiting or give anything by mouth to an unconscious person.

For 24 Hour Medical or Chemical Emergency Assistance Call Wellmark International [Phone Number]

# Personal Protective Equipment (PPE): 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.
- For Indoor applications 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 using YARDEX outdoors, 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.

#### **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.

#### 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 posticides (40 CFR Part 170).

The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Keep children and pets off treated turf until treatment dries. -because-Some sensitive pets eating or coming in contact with freshly treated turf 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.

#### **GENERAL DIRECTIONS**

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, or on gelf courses, or lawns and grounds.

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 application as needed. 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, repeated applications five to seven days apart may be necessary 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 honeybees. 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 mealy bugs.

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.

# **Recommended Application Rates**

		Amount	TARDEA	
Crop	Pest	In Water	To Make	Specific Directions
<del>Foliage</del>	Aphids	100 Gal	<u>5 Gal</u>	Use sufficient water to thoroughly
Flowering Plants	Thrips	4.0-10.0	0.2-0.5	cover the foliage. Use lower rates
Woody and	Mites	fl oz	fl oz	for light to moderate insect
- Herbaceous	Whiteflies		(1.33-3.0)	pressure. Use higher rates for
-Ornamentals	Leaf-Feeding		teaspoons	green peach aphids, unexposed
Conifers-	Caterpillars			thrips, and heavy pressure of other
Shade Trees	(i.e., Tent,			insects.
Non-Food	Orlando, Gypsy	1		Mite suppression can be obtained using
Bedding Plants	Moth, Bagworm	ì,		the lower rate. For more residual
Landscape Ornamentals	Canker Worm,	,		control use up to 10 fl oz/100 gal
(including trees, shrubs,	Lygus Plant Bug	js		water.
evergreens, flowers,	Beetles (Flea,			
foliage plants	Cucumber, Eln	n Leaf)		
	Leafhoppers			
				For outdoor broadcast treatment use
				the rate of 5 fl oz of YARDEX per acre.

Woody and Herbaceous	Strawberry Root Weevils*	100 Gal	<u>5 Gal</u>	Apply spray on ground around base of tree
Omamentals	Obscure Root Weevils* Blackvine Root Weevils*	6.4-10.0 fl oz	0.32-0.5 fl oz 1.66-3.0 teaspoons)	or shrub and up main trunk or stem.
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 second application at 1 month interval under heavy reinfestation pressure and if new foliage is present.

<sup>\*</sup> Except in California

		Amount YA	RDEX Per	
Crop	Pest	1000 Ft.2	<u>Acre</u>	Specific Directions
TurfLandscape & Recreational Turfgrass (including	Chinch Bug Earwig* Ticks	0.11-0.23 fl oz (0.73-1.45	5.0-10.0 fl oz	Use sufficient water to penetrate to pest.
home lawns, business & office complexes, shopping complexes, multifamily residential complexes, airports, cemeteries, parks,	lawns, business be complexes, sing complexes, amily residential exes, airports,  Ants* Lawn Moths (Sod Webworms) Bermuda Mites* Crickets*	teaspoons)		Use lower rates for thatch inhabitors, such as, fleas, ticks, and chiggers. Repeat application in 10 days.
playgrounds, & athletic fields, & other landscape turfgrass)	Brown Dog Ticks Chiggers* Clover Mites Cutworms Fleas Leafhoppers Sowbugs* Millipedes*			Use medium rate for <u>grassfeeders</u> , such as sod webworms, Bermuda mites, chinch bugs, armyworms.
	Springtails (Collei	mbola)*		Use maximum rate for cutworms.
	Imported Fire Ant	*	2 toaspoons/ 5 gallons water	Gently sprinklo 1 gallon of solution on each mound taking care not to disturb the mound. Apply to new mounds as they appear. Do not apply to more than 150 mounds per acre at any one time.

\* Except in California

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.

YARDEX® Insecticide is a registered trademark of Wellmark International.

Wellmark International Bensenville, IL 60106

Made in USA

#### **REGULATORY LABEL DATA SHEET**

File Name:

g:regulatory\labels\cahspec\ 02724478\pmavaqua 99b

**Data Sheet Date:** 

August 1999

**Product:** 

MAVRIK

EPA Reg #:

2724-478 (was 55947-101)

AQUAFLOW/YARDEX

Insecticide/Miticide

Approved:

Submitted

Supercedes:

1/31/95

OVERVIEW: Subsets of master label deleting turf use pattern (MAVRIK AQUAFLOW label, pages 1-8; YARDEX label, pages 9-14

Page #	Description of Major Changes					
MAVRIK A	QUAFLOW REVISIONS					
1	Removed "lawns" from header (use sites)					
5	Non-Ag Use box – revised last sentence to reflect deletion of turf use pattern					
8	Deleted turf use pattern/pests/rates/directions					
YARDEX F	REVISIONS					
9	Removed "Outdoor flea/ant* Control", turf pests, turf use pattern being deleted Removed "*Except in California"  Statement to remove from WPS scope, removed golf courses and lawns					
11	Directions for Use: Revised 2 <sup>nd</sup> statement to reflect turf deletion					
14	Removed turf site/pests/rates/directions and *Except in California					

REGULATORY: S. Spaulding

MARKETING J. Neberz/T. Nahley

EPA PRODUCT MANAGER G. LaRocca/J. Leahy

ACCEPTED
with COMMENTS
in EPA Letter Dated

SEP 1 5 1999

Under the Federal Insecticide, Fungiside, and Rodenfulde for as amended, for the property registered under EPA free

1

3734-478

### MAVRIK AQUAFLOW® INSECTICIDE/MITICIDE

For commercial use only on indoor plants in greenhouses and interior plantscapes, outdoor ornamental plantings and plantscapes, including lawns, trees, shrubs, and flower and foliage cuttings

#### **ACTIVE INGREDIENT:**

Tau-fluvalinate (CAS #102851-06-9)	22.3%
OTHER INGREDIENTS:	<u>77.7%</u>
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** 

1

# 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.

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**

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**IF INHALED:** Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

IF IN EYES: Flush eyes with plenty of water. Call a physician if irritation persists.

IF ON SKIN: Wash with plenty of soap and water. Apply corn oil to affected area to relieve symptoms. Get medical attention if irritation or symptoms develop.

IF SWALLOWED: Call a physician or poison control center immediately. Drink one or two glasses of water and induce vomiting by touching the back of throat with a finger. Do not induce vomiting or give anything by mouth to an unconscious person.

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), nitrite 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: (Paragraph from \$ 8-14 of LRM)

## **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 clething.

#### **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.

#### 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:

- Coveralis
- 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 eff out of treated turf-area until spray has treatment drieds. because some sensitive pets eating or coming in contact with freshly treated turf-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 application as needed. 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, repeated applications five to seven days apart may be necessary 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 honeybees. 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 mealy bugs.

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.

### **Recommended Application Rates**

		Amount	MAVRIK
Crop	Pest	In Water	To Make
Landscape Ornamentals	Aphid	100 Gal	<u> 5 Gal</u>
(including trees,	Thrips	4.0-10.0	0.2-0.5
shrubs, evergreens,	Mites	floz	fl oz
flowers, foliage plants	Whiteflies		(1.33-3.0)
Greenhouse	Leaf-Feeding		teaspoons
(non-food plants)	Caterpillars		
	(i.e., Tent,		
	Orlando, Gypsy	1	
	Moth, Bagworm	١,	
	Canker Worm,	etc.)	
	Lygus Plant Bug	js –	
	Beetles (Flea,		
	Cucumber, Eln	n Leaf)	
	Leafhoppers		

## **Specific Directions**

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. For maximum effect tank mix with an acaricide.

For greenhouse applications (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®), Pulsfog®, 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.

Woody	Strawberry Root Weevils*	100 Gal	<u>5 Gal</u>
and Herbaceous Ornamentals	Obscure Root Weevils* Blackvine Root Weevils*	6.4-10.0 fl oz	0.32-0.5 fl oz 1.66-3.0 teaspoons)
Eugenia and Pepper Tree	Psyllids	5.0-10.0	

Apply spray on ground around base of tree or shrub and up main trunk or stem.

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 second application at 1 month interval under heavy reinfestation pressure and if new foliage is present.

<sup>\*</sup> Except in California

		WILL THE	/ A L fill 7 L OF	
Crop	Pest	100	5	Specific Directions
		<u>Gal</u>	<u>Gal</u>	
Flower and	Mealybugs			Immerse basket of cuttings into a diluted
Foliage Cuttings	Aphids	5.0	0.24	solution of MAVRIK until thoroughly wet
(for Dipping)	Two-Spotted	fi oz	fl oz	(usually 1 minute or less).
	Spider Mites		(1.5 teaspoons)	
		Amount M/	VRIK Per	
Crop ———	Pest	1000 Ft. <sup>2</sup>	Acre	Specific Directions
Landscape &	Chinch Bug	0.11-0.23	5.0-10.0	Use sufficient water to penetrate to pest.
Recreational — ——	Earwig*	- <del>   02</del> -	<del>   OZ</del>	
Turfgrass —	Ticks	<del>-(0.73-1.45</del>	02	
(including home	-Ants*	teaspoons)		Use lower rates for thatch inhabitors.
lawns, business &	Lawn Moths			such as, fleas, ticks, and chiggers.
office complexes,	- (Sod Webworms)			Repeat application in 10 days:
shopping complexes,	Bermuda Mites*			
multifamily residential -	Crickets*			
complexes, airports,	-Armyworms			
cemeteries, parks,	Brown Dog Ticks			
playgrounds & athletic -	- Chiggers*			Use medium rate for grassfeeders, such
fields, & other landscape	Clover Mites			as sod webworms, Bermuda mites,
turfgrass)	Cutworms			-chinch bugs, armyworms.
	Fleas			,,
	- Leafhoppers			
	- Sowbugs*			
	Millipedes*			
	Springtails (Colle	mbola)*		Use maximum rate for outworms.

Amount MAVRIK Per

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 Bensenville, IL 60106 Made in USA



<sup>\*</sup> Except in California

#### **ZOECON®**

# OUTDOOR FLEWANT\* CONTROL YARDEX® INSECTICIDE

For commercial use only on outdoor ornamental plantings, plantscapes, turf, trees, shrubs

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Tau-fluvalinate (CAS #102851-06-9)	22.3%
OTHER INGREDIENTS:	<u>77.7%</u>
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, or on golf courses, or lawns and grounds.

\* Except in California

**Net Contents** 

ACCEPTED with COMMENT in EPA Letter De

Under the Federal Insectivities, Fungioide, and Radeshide out as amonded, for the productive registered under EPA Rog. No.

2724-478

# 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.

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:** Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

IF IN EYES: Flush eyes with plenty of water. Call a physician if irritation persists.

**IF ON SKIN:** Wash with plenty of soap and water. Apply corn oil to affected area to relieve symptoms. Get medical attention if irritation or symptoms develop.

**IF SWALLOWED:** Call a physician or poison control center immediately. Drink one or two glasses of water and induce vomiting by touching the back of throat with a finger. Do not induce vomiting or give anything by mouth to an unconscious person.

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.

#### **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 off-out of treated area turf until treatmentspray has drieds. Some sensitive pets eating or coming in contact with freshly treated turf-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.

#### **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 application as needed. 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, repeated applications five to seven days apart may be necessary 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 honeybees. 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 mealy bugs.

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.

# **Recommended Application Rates**

		Amount `	YARDEX	
Crop	Pest	In Water	To Make	Specific Directions
Landscape Ornamentals (including trees, shrubs, evergreens, flowers, foliage plants	Aphids Thrips Mites Whiteflies Leaf-Feeding Caterpillars (i.e., Tent, Orlando, Gypsy Moth, Bagworm, Canker Worm, e Lygus Plant Bugs Beetles (Flea, Cucumber, Elm Leafhoppers	100 Gal 4.0-10.0 fl oz	5 Gal 0.2-0.5 fl oz (1.33-3.0) teaspoons	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.

Woody and Herbaceous	Strawberry Root Weevils*	100 Gal	5 Gal	Apply spray on ground around base of tree
Ornamentals	Obscure Root Weevils* Blackvine Root Weevils*	6.4-10.0 fl oz	0.32-0.5 fl oz 1.66-3.0 teaspoons)	or shrub and up main trunk or stem.
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 second application at 1 month interval under heavy reinfestation pressure and if new foliage is present.

<sup>\*</sup> Except in California

		Amount YA	RDEX Per	
Crop -	Pest	1000 Ft.2	-Acre-	Specific Directions
Landscape	Chinch Bug	0.11-0.23	5.0-10.0	Use sufficient water to penetrate to pest.
& Recreational	-Earwig* -	fl oz	floz	
Turfgrass (including	Ticks	(0.73-1.45		
home lawns, business	-Ants*	teaspoons)		Use lower rates for thatch inhabitors.
& office complexes,	Lawn Moths			such as, fleas, ticks, and chiggers.
shopping complexes,	-(Sod Webworms)			Repeat application in 10 days.
multifamily residential	Bermuda Mites*			
complexes, airports,	Crickets*			
cemeteries, parks,	Armyworms			
playgrounds, & athletic	- Brown Dog Ticks			
fields, & other landscape	Chiggers*	<del></del>	- <del></del>	Use medium rate for grassfeeders, such
turfgrass)	Clover Mites —			as sod webworms, Bermuda mites,
	Cutworms			— chinch bugs, armyworms.
	<del>Fleas</del>			
	-Leafhoppers			
	Sowbugs*			
	—Millipedes*			
	Springtails (Colle	mbola)* ——		Use maximum rate for cutworms.

<sup>\*</sup> Except in California

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.

YARDEX® Insecticide is a registered trademark of Wellmark International.

Wellmark International Bensenville, IL 60106

Made in USA