

PM 13 55947-101

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United States Environmental Protection Agency  
Washington, D.C. 20460

Office of  
Prevention, Pesticides and  
Toxic Substances

OCT 15 1993

Jeff W Popp  
SANDOZ AGRO, INC.  
1300 EAST TOUHY AVENUE  
DES PLAINES IL 60018

Subject: Label Amendment Submission of 06/16/93  
in Compliance with WPS Labeling Requirements  
EPA Reg No. 55947-101  
MAVRIK AQUAFLOW INSECTICIDE

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is accepted subject to the comments listed below.

Based on your certification, the Agency has accepted only those changes to your labeling which are necessary to comply with PR Notices 93-7 and 93-11, which reflect the WPS labeling requirements of 40 CFR part 156, subpart K. Any other labeling changes submitted in connection with this amendment application and not directly related to compliance with PR Notice 93-7 or 93-11 have neither been reviewed nor accepted by the Agency. If you wish to make any such changes, you must submit a separate amendment application proposing them. If your product registration is currently suspended, acceptance of this labeling amendment does not affect the suspension in any way.

A copy of your proposed labeling stamped "Accepted with comments" is attached. Make any required changes described in the attached and send three copies of final labeling as soon as it is available to:

Document Processing Desk (FIN-LABEL)

2010  
Office of Pesticide Programs (H-7504C)  
U.S. Environmental Protection Agency  
401 M Street SW  
Washington, DC 20460-0001

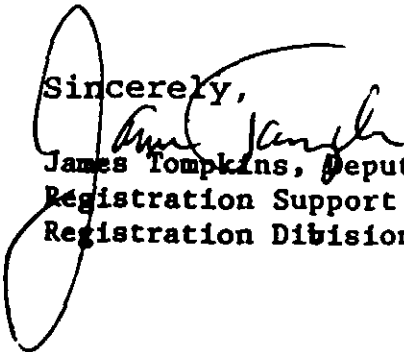
Hand or courier deliveries of final labels may be made to:

Document Processing Desk (FIN-LABEL)  
Room 266A Crystal Mall 2  
1921 Jefferson Davis Highway  
Arlington, VA 22202

Please correct the typographical errors circled on the draft before printing final labeling.

In your final labeling the "Agricultural Use Requirements" text must be contained in a clearly separate box. This box may be set apart by a line, by another graphical device, by a different color background, or in any other way that clearly distinguishes it from surrounding text.

Sincerely,



James Tompkins, Deputy Chief  
Registration Support Branch  
Registration Division (7505W)

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**MAVRIK AQUAFLOW®**

**INSECTICIDE**

Insecticide for use on indoor (including greenhouses) and outdoor ornamental plantings and plantscapes, turf, trees, shrubs and flower and foliage cuttings.

Recommended for Commercial Use

**ACTIVE INGREDIENT:**

( $\alpha$ RS,2R)-fluvalinate {(RS)- $\alpha$ -cyano-3-phenoxybenzyl  
(R)-2-[2-chloro-4-(trifluoromethyl)anilino]-3-methyl-  
butanoate}\* ..... 22.3%

**INERT INGREDIENTS:** ..... 77.7%

TOTAL ..... 100.0%

MAVRIK AQUAFLOW® is a flowable formulation containing 2 pounds ( $\alpha$ RS,2R)-fluvalinate per gallon (240 g/L).

\*U.S. Pat. 4,260,633 and 4,411,912.

MAVRIK AQUAFLOW® is a registered trademark of Sandoz, Ltd.

EPA Registration No. 55947-101

EPA Est. No. 2724-TX-1

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**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

See back panel for additional precautionary statements  
and first aid.

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**SHAKE WELL BEFORE USING**

SANDOZ AGRO, INC.  
1300 East Touhy Avenue  
Des Plaines, Illinois 60018

MADE IN U.S.A.

NET CONTENTS: 8 oz. (236.5 ml)  
1 qt. (946 ml)

IMAVAQUA.93A

ACCEPTED  
with COMMENTS  
by EPA Letter Dated

OCT 15 1993

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

55947-101

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS (AND DOMESTIC ANIMALS)

#### CAUTION

Avoid Breathing Spray Mist. Certain persons may be sensitive to MAVRIK AQUAFLOW fine spray particles. For indoor applications, persons other than applicator should not be present at time of application. Use a properly fitted NIOSH approved respirator for use with pesticides to avoid potential irritation to nose and throat from fine spray particles. For sensitive persons using Mavrik Aquaflo outdoors, use a NIOSH approved filter mask respirator for dusts and mists. Respiratory effects are temporary and will generally subside without medical treatment. Causes mild eye irritation. Harmful if absorbed through skin. Avoid contact with eyes, skin or clothing. Wear rubber gloves while handling. Wear protective clothing. Wash exposed skin with soap and water after handling and before eating. Wash contaminated clothing with soap and water 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 may reduce these symptoms. Workers in frequent contact with treated foliage should wear light barrier gloves to reduce excess exposure.

#### STATEMENT OF PRACTICAL TREATMENT

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

IF INHALED: Remove victim to fresh air. Apply artificial respiration if indicated.

IF ON SKIN: Remove contaminated clothing and wash affected areas with soap and water. Apply corn oil to affected area to relieve symptoms. Get medical attention if irritation 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 Sandoz Agro, Inc.  
Phone Number (Collect) (708) 699-1616

**Additional Protective Equipment:**

For information, full EPA pesticide label instructions for use are provided. For more information on instructions or calibration, please refer to EPA document OSHA-3090, Calibration.

**Application and mist handlers must wear:**

Long sleeved shirt and long pants

Chemical-resistant gloves, such as Barrier Laminate or Butyl Rubber (≥ 14 mils) or Nitrile Rubber (≥ 14 mils) or Neoprene Rubber (≥ 14 mils) or Polyvinyl Chloride (PVC) (≥ 14 mils) or Viton (≥ 14 mils)

Shoes plus socks

Dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C)

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, 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.

**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. For terrestrial uses, do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. 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 HAZARD

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 absorbant material. Do not use caustic agents.

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

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**

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 or Butyl Rubber ( $\geq 14$  mils) or Nitrile Rubber ( $\geq 14$  mils) or Neoprene Rubber ( $\geq 14$  mils) or Polyvinyl Chloride (PVC) ( $\geq 14$  mils) or Viton ( $\geq 14$  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 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 stress.

For end use only. Do not repackage or reformulate without manufacturer's written approval. See accompanying product information brochure for pests, rates and use directions.

## GENERAL DIRECTIONS

MAVRIK AQUAFLOW® INSECTICIDE 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-furaging 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 a specific acaricide such as PENTAC® Miticide 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, white flies, aphids, thrips and mealy bugs.

Consult your local Extension office, Pest management consultant or a Sandoz specialist for guidance in selecting a rate and timing schedule or tank mix combination that has demonstrated good performance under specific conditions.



# RECOMMENDED APPLICATION RATES

CROP	PEST	AMOUNT MAVRIK IN WATER TO MAKE		SPECIFIC DIRECTIONS
Foliage, flowering plants, woody and herbaceous ornamentals, conifers (including Christmas Trees, shade trees and non-food bedding plants)	Aphid	100	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 gals. water. For maximum effect tankmix with Pentac Aquaflow.  For broadcast treatment use the rate of 5 fl.oz. MAVRIK per acre.
	Thrips	<u>Gals.</u>	<u>Gals.</u>	
	Mites			
	Whiteflies	4.0-10.0	0.2-0.5	
	Leaf-Feeding	Fl.Oz.	Fl.Oz.	
	Caterpillars		(1.33-3.0	
	(i.e., tent,		teaspoons)	
	orlando, gypsy			
	moth, bagworm,			
	canker worm, etc.)			
Commercial and residential woody and herbaceous ornamentals	Lygus plant bugs			Apply spray on ground around base of tree or shrub and up main trunk or stem.
	Beetles-flea,			
	cucumber elm leaf			
	Leafhoppers			
Commercial and residential woody and herbaceous ornamentals	Strawberry root weevils	100	5	Apply spray on ground around base of tree or shrub and up main trunk or stem.
	Obscure root weevils	<u>Gals.</u>	<u>Gals.</u>	
	Blackvine	6.4-10.0	0.32-0.5	
	root weevils	Fl.Oz.	Fl.Oz.	
Flower and foliage cuttings (for dipping)	Mealybugs	100	5	Immerse basket of cuttings into a diluted solution of MAVRIK until thoroughly wet (usually 1 minute or less).
	Aphids	<u>Gals.</u>	<u>Gals.</u>	
	Two-spotted	5.0	0.24	
	spider mites	Fl.Oz.	Fl.Oz.	

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MAVRIK AQUAFLOW® LABEL - RECOMMENDATION FOR USE

CROP	PEST	AMOUNT MAVRIK		SPECIFIC DIRECTIONS
		1,000 Ft. <sup>2</sup>	PER Acre	
Commercial & residential Turf	Chinch Bug	0.11-0.23	5.0-10.0	Use sufficient water to penetrate to pest.
	Earwig	Fl.Oz.	Fl.Oz.	
	Ticks	(0.73-1.45		
	Ants	teaspoons)		Use lower rates for <u>thatch inhabitants</u> , such as, fleas, ticks and chiggers. Repeat application in 10 days.
	Lawn Moths (Sod Webworms)			
	Bermuda Mites			
	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, army worms. Use maximum rate for cutworms.
	Millipedes			
	Springtails (Collembola)			

LIMITED WARRANTY AND LIABILITY

Notice: Read this limited Warranty and Liability before buying or using this product. If terms are not acceptable, return it at once, unopened.

It is critical that this product be used and mixed only as specified on the label. The laws of a State may make some or all of this paragraph inapplicable or may give you rights in addition to your rights hereunder. Except to the extent prohibited by applicable law, the exclusive remedy of the user or buyer and the limit of liability of this Company or any other Seller for any and all losses, personal injuries or damages resulting from the use of this product, shall be the purchase price paid by the user or buyer for the quantity of product involved. Except to the extent prohibited by State Law, there is no warranty and this Company and other Sellers disclaim all liability for losses, personal injury or damages; (i) arising from any use of this product in a manner or for a purpose not recommended on its label directions, or from mixing this product before use with any substance except as recommended by the product's label; (ii) arising from handling or storage in violation of label instructions; (iii) for all indirect, special or consequential damages; and (iv) when not reported to this Company within one year of discovery. There are no implied warranties and no warranties of merchant-ability or fitness.