# 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:**

(aRS,2R)-fluvalinate {(RS)-a-cloro-4-(trifluoromethyl)anilino}-3-methyl-butanoateyano-3-phenoxybenzyl
( <u>R</u> )-2-{2-ch}*
INERT INGREDIENTS:
TOTAL 100.0%
MAVRIK AQUAFLOW <sup>®</sup> is a flowable formulation containing 2 pounds ( $aRS$ ,2 $R$ )-fluvalinate per gallon (240 g/L).
*U.S. Pat. 4,260,633 and 4,411,912.
MAVRIK AQUAFLOW® and PENTAC AQUAFLOW® are registered trademarks of Sandoz, Ltd.
EPA Registration No. 55947-101
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

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

MADE IN U.S.A.

NET CONTENTS: 8 oz. (236.5 ml)

1 gt. (946 ml)

m, ,

in BPA Letter Dated

APR 21 1994

finder the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the posicide registered under EPA leg. No.

**ACCEPTED** 

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as ununded, for the positicide
registered under
EPA Reg. No. 55047-101

#### PRECAUTIONARY STATEMENTS

# HAZARDS TO HUMANS (AND DUMESTIC ANIMALS)

#### CAUTION

<u>Avoid Breathing Spray Mist</u>. Certain persons may be sensitive to MAVRIK AQUAFLOW fine spray particles. 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.

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.

# STATEMENT OF PRACTICAL TREATMENT

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

<u>IF INHALED:</u> Remove victim to fresh air. Apply artificial respiration if indicated.

IF ON SKIN: 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

# **Personal Protective Equipment:**

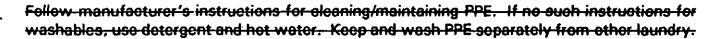
## WPS USES:

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 section chart.

# Applicators and other-handlers must wear.

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 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.
- For exposures outdoors, dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C).
- 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).



#### **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, persons other than applicator should not be present at time of application. Use a properly fitted NIOSH approved respirator (number prefix TC-21C) for use with pesticides to avoid potential irritation to nose and throat from fine spray particles.
- For sensitive persons using MAVRIK AQUAFLOW outdoors, use a NIOSH approved (number prefix TC-21C) filter mask respirator for dusts and mists.

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.

\* devised from pre-WPS label

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# 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 terrestial 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.

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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

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- 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.

# 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 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. 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 suseptable 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 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.

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# **Recommended Application Rates**

		Amount	MAVRIK
Crop	Pest	In Water	To Make
Foliage	Aphid	100 Gais	. <u>5 Gals.</u>
Flowering Plants	Thrips	4.0-10.0	0.2-0.5
Woody and	Mites	Fl. Oz.	FI. Oz.
Herbaceous	Whiteflies		(1.33-3.0)
Ornamentals	Leaf-Feeding		teaspoons
Conifers	Caterpiliars		
(including	(i.e. Tent,		
Christmas Trees,	Orlando, Gyp	sy	
Shade Trees and	Moth, Bagwo	~	
Non-Food	Canker Worm	i, etc.)	
Bedding Plants)	Lygus plant be	ugs	
-	Beetles (Flea,	•	
	Cucumber, E	lm leaf	

Leathoppers

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 gals. water. For maximum effect tank mix with PENTAC AOJAFLOW<sup>®</sup>.

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 gals." column. One hundred (100) gallons of spray will typically cover 20,000 sq. ft. of greenhouse space. When using Electro Static Spraying System (EES®), Puls-fog® or other ULV delivery systems, apply the recommended amount of MAVRIK over the square footage with the manufacturer's requirement of water. Follow manufacturer's calibration procedures.

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

Commercial and residential woody and herbaceous ornamentals

Strawberry root 100 5
weevils\* Gals. Gals.

Obscure root weevils\*

Blackvine

6.4-10.0 0.32-0.5 Fl.Oz. Fl.Oz.

root weevils\*

(1.66-3.0 teaspoons)

\* Except in California

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

# MAVRIK AQUAFLOW® LABEL - RECOMMENDATION FOR USE

CROP	PEST	AMOUN <u>PE</u> 100	NT MAVRIK R 5	SPECIFIC DIRECTIONS
Flower and foliage cuttings	Mealybugs Aphids	<u>Gals.</u> 5.0	<u>Gals.</u> 0.24	Immerse basket of cuttings into a
(for dipping)	Two-spotted spider mites		Fl. Oz. (1.5 teaspoons)	diluted solution of MAVRIK until thoroughly wet (usually 1 minute or less).
CROP	<u>PEST</u>	AMOUNT PER	Γ MA∨RIK	SPECIFIC DIRECTIONS
	<del></del>	1,000 Ft. <sup>2</sup>	<u>Acre</u>	
Commercial & residential Turf	Chinch Bug Earwig* Ticks* Ants* Lawn Moths (Sod Webwo	FI.Oz. (0.73-1.45 teaspoons) orms)	5.0-10.0 Fl.Oz.	Use sufficient water to penetrate to pest.  Use lower rates for thatch inhabitors, such as, fleas, ticks
	Bermuda Mit Crickets* Armyworms			and chiggers. Repeat application in 10 days.
	Brown Dog Tohiggers* Clover Mites Cutworms Fleas Leafhoppers Sowbugs* Millipedes*	<b>i</b> -		Use medium rate for grassfeeders, such as sod webworms, Bermuda mites, chinch bugs, armyworms.
	Springtails (	Collembola) *		Use maximum rate for cutworms.

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

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No.:	55947-101						-

Certification when Supplement Three is followed exactly:

I certify that the revised labeling being submitted for this product is in complete accordance with the labeling requirements of PR Notice 93-7, which reflects the requirements of EPA's labeling regulations for worker protection statements (40 CFR part 156, subpart K). Where exact language is specified in the PR Notice I have used that language exactly, in the location specified. I further certify that no revisions are being submitted other than those directed by PR Notice 93-7. I understand that it would be a violation of FIFRA if I or my supplemental registrants were to sell or distribute this product after April 21, 1994, without amended labeling complying with the requirements of 40 CFR part 156, subpart K.

The acute toxicity categories (I, II, III, or IV) for this product as entered in blocks 3-7 on Part I of the Product Worksheet are:

_IV	Acute oral toxicity
_111	Acute dermal toxicity
_IV	Skin irritation potential
_!!!	Eye irritation potential
III	Acute inhalation toxicity