



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460**

**OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION**

July 1, 2022

James McFadden  
Director, Regulatory Affairs  
Wellmark International  
1501 E. Woodfield Rd  
Suite 200W  
Schaumburg, IL 60173

**Subject:** PRIA Label Amendment – Amend application rate to lawns and turf  
Product Name: Mavrik Aquaflo Insecticide/Miticide  
EPA Registration Number: 2724-478  
Application Date: September 14, 2021  
Decision Number: 578571

Dear James McFadden:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. “To distribute or sell” is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

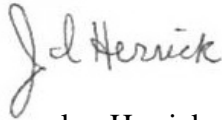
Should you wish to add/retain a reference to the company’s website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) lists examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product’s label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA’s Office of Enforcement and Compliance.

Page 2 of 2  
EPA Reg. No. 2724-478  
Decision No. 578571

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

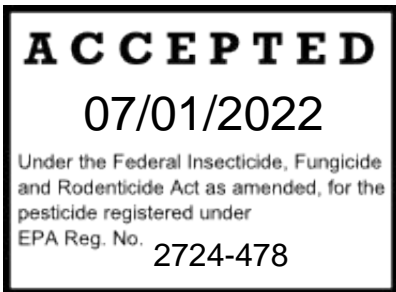
If you have any questions, please contact Elizabeth Andrews at 202-566-2467 or at [Andrews.Elizabeth@epa.gov](mailto:Andrews.Elizabeth@epa.gov).

Sincerely,

A handwritten signature in cursive script that reads "J. Herrick".

Jacquelyn Herrick, Product Manager 03  
Invertebrate & Vertebrate Branch 1  
Registration Division (7505T)  
Office of Pesticide Programs

Enclosure



<b>TAU-FLUVALINATE</b>	<b>GROUP</b>	<b>3A</b>	<b>INSECTICIDE</b>
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**MASTER LABEL**  
**Sublabel 1: WPS label**

**MAVRIK AQUAFLOW® INSECTICIDE/MITICIDE**

For commercial use on indoor plants in greenhouses, interior plantscapes, and flower and foliage cuttings and on outdoor plants in ornamental plantings, plantscapes (including trees, shrubs), and containerized nursery stock.

For applications to outdoor areas: containerized nursery stock, residential and non-residential areas where ornamentals are grown including shrubs, vines (woody), flowers, non-bearing fruit and nut trees, ornamental trees, woods, and vegetation areas.

**ACTIVE INGREDIENT:**

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

**OTHER INGREDIENTS:** ..... 77.7%

TOTAL 100.0%

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

EPA Registration No. 2724-478

EPA Est. No. 2724-TX-1

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

See additional Precautionary Statements and First Aid

**SHAKE WELL BEFORE USING**

Net Contents

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

Harmful if swallowed, absorbed through the skin, or inhaled. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Avoid breathing spray mist or vapor. Wear long-sleeved shirt, long pants, shoes, socks, and chemical resistant gloves made of barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, natural rubber ≥14 mils, polyethylene, PVC ≥14 mils, viton ≥14 mils.

<b>FIRST AID</b>	
If swallowed	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
If on skin or clothing	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
If inhaled	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
If in eyes	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes.</li> <li>• Call a poison control center for treatment advice.</li> </ul>
Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-248-7763 for emergency medical treatment information.	

**Personal Protective Equipment (PPE):**

All mixers, loaders, applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes and socks
- Chemical-resistant gloves made of barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, natural rubber ≥14 mils, polyethylene, PVC ≥14 mils, viton ≥14 mils

See Engineering Controls for additional requirements.

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

Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

**Engineering Controls Statements:**

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

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

**User Safety Recommendations:**

User should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

User should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

User should 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 toxic to fish and aquatic organisms. To protect the environment, do not allow pesticide to enter or runoff into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid runoff to water bodies or drainage systems. Use with care when applying in areas adjacent to any body of water. Drift and runoff from treated areas may be hazardous to fish and aquatic organisms in adjacent aquatic sites. Do not apply when weather conditions favor drift from the target area.

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.

**PHYSICAL/CHEMICAL HAZARDS**

Do not use or store near heat or open flame.

**DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift.

Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

### **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 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 made of barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, natural rubber ≥14 mils, polyethylene, PVC ≥14 mils, viton ≥14 mils Shoes plus socks

### **NON-AGRICULTURAL USE REQUIREMENTS**

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170).

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

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

For indoor and outdoor use. 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.

All outdoor spray applications, if permitted elsewhere on this label, must be limited to spot or crack-and-crevice treatments only, except for the following permitted uses, if allowed elsewhere on this label:

1. Applications to pervious surfaces such as soil, lawn, turf and other vegetation;
2. Perimeter band treatments of 7 feet wide or less from the base of a manmade structure to pervious surfaces (e.g., soil, mulch, or lawn);
3. Applications to underside of eaves, soffits, doors, or windows permanently protected from rainfall by a covering, overhang, awning, or other structure;
4. Applications around potential exterior pest entry points into manmade structures such as doorways and windows, when limited to a band not to exceed one inch in width;
5. Applications to vertical surfaces (such as the side of a manmade structure), directly above impervious surfaces (e.g., driveways, sidewalks, etc.) up to 2 feet above ground level;
6. Applications to vertical surfaces, directly above pervious surfaces, such as soil, lawn, turf, mulch or other vegetation) only if the pervious surface does not drain into ditches, storm drains, gutters, or surface waters.

Spot treatments must not exceed two square feet in size (for example, 2' x 1' or 4' x 0.5').

For soil or foliar applications, do not apply by ground within 25 feet (100 feet near marine/estuarine environments) of lakes, reservoirs, rivers, streams, marshes or natural ponds, estuaries and commercial fish farm ponds.

Do not spray the product into fish pools, ponds, streams or lakes. Do not apply directly to sewers or storm drains, or to any area like a drain or gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur.

Do not allow the product to enter any drain during or after application.

Do not apply directly to impervious horizontal surfaces such as sidewalks, driveways, and patios, except as a spot or crack-and-crevice treatment.

Do not apply to the point of runoff.

Do not make applications during rain. Avoid making applications when rainfall is expected before the product has sufficient time to dry (minimum 4 hours).

Rainfall within 24 hours after application may cause unintended runoff of pesticide application.

Do not apply when the wind speed is greater than 15 mph.

Treat surfaces to ensure thorough coverage but avoid runoff.

To treat insects harbored in voids and cracks-and-crevices, applications must be made in such a manner to limit dripping and avoid runoff onto untreated structural surfaces and plants.

### **SPRAY DRIFT ADVISORIES**

Take precautions to minimize spray drift.

### **VEGETATIVE FILTER STRIPS**

Construct and maintain a vegetative filter strip, according to the width specified below, of grass or other permanent vegetation between the field edge and nearby down gradient aquatic habitat (such as, but not limited to, lakes; reservoirs; rivers; streams; marshes or natural ponds; estuaries; and commercial fish farm ponds).

Only apply products containing tau-fluvalinate onto fields where a maintained vegetative filter strip of at least 25 feet exists (100 feet near marine/estuarine environments) between the field edge and where a down gradient aquatic habitat exists. This minimum required width of 25 feet (100 feet near marine/estuarine environments) may be reduced or removed under the following conditions:

- For Western irrigated agriculture, a maintained vegetative filter strip of at least 10 feet wide is required. Western irrigated agriculture is defined as irrigated farmland in the following states: WA, OR, CA, ID, NV, UT, AZ, MT, WY, CO, NM, and TX (west of I-35).

- For Western irrigated agriculture, if a sediment control basin is present, a vegetative filter strip is not required.
- In all other areas, a vegetative filter strip with a minimum width of 25 feet (100 feet near marine/estuarine environments) is required, unless the following conditions are met. The vegetative filter strip requirement may be reduced from 25 feet to 15 feet if at least one of the following applies:
  - The area of application is considered prime farmland (as defined in 7 CFR § 657.5).
  - Conservation tillage is being implemented on the area of application. Conservation tillage is defined as any system that leaves at least 30% of the soil surface covered by residue after planting. Conservation tillage practices can include mulch-till, no-till, or strip-till.
  - A functional terrace system is maintained on the area of application.
  - Water and sediment control basins for the area of application are functional and maintained.
  - The area of application is less than or equal to 10 acres.
- For further guidance on vegetated filter strips, refer to the following publication for information on constructing and maintaining effective buffers: Conservation Buffers to Reduce Pesticide Losses. Natural Resources Conservation Services.  
<https://www.regulations.gov/document?D=EPA-HQ-OPP-2008-0331-0175>

## **APPLICATION DIRECTIONS**

MAVRIK AQUAFLOW controls insects and controls or suppresses mite pests when used at labeled 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 plant damage occurs. Repeat applications as needed, according to the specific use directions given in this label. Residues of MAVRIK AQUAFLOW can continue to control certain insect pests for a week or longer. Growth dilution, climatic variables, and pest habits determine re-treatment needs.

Dilute MAVRIK AQUAFLOW in sufficient water to give thorough spray coverage [based on previous experience]. For best results under varying conditions, a range of use rates is recommended for most uses. Select the higher rates when pest pressure or damage potential is severe. The lower rates often give acceptable economic results. [ Buffer spray water to pH 5-7, if necessary.]

For severe mite infestations, use the highest labeled rate of MAVRIK AQUAFLOW and use an acaricide in an alternate treatment program. The use of a spreader-sticker, insecticidal soaps, or piperonyl butoxide may improve control of mites and some insects, such as, whiteflies, aphids, thrips, and mealybugs. MAVRIK AQUAFLOW may be used as a tank-mix. The more stringent product label will apply when tank-mixing two products. 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-repellent to honey bees. Treat during non-foraging periods to minimize adverse effects.

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 mix.



## **RESISTANCE-MANAGEMENT**

For resistance management, Mavrik Aquaflow® Insecticide/Miticide contains a Group 3A insecticide/acaricide. Any insect population may contain individuals naturally resistant to Mavrik Aquaflow® Insecticide/Miticide and other Group 3A insecticide/acaricides. The resistant individuals may dominate the insect/mite population if this group of insecticide/acaricides are used repeatedly. Appropriate resistance-management strategies should be followed. To delay insecticide/acaricide resistance, take the following steps:

- Rotate the use of Mavrik Aquaflow® Insecticide/Miticide or other Group 3A insecticides/acaricides with different groups that control the same pests.
- Adopt an integrated pest management program for insecticide/acaricide use that includes, scouting, uses historical information related to pesticide use, record keeping and which considers cultural, biological and other chemical control practices.
- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.
- Contact your local extension specialist for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance, contact Wellmark International at 1-800-XXX-XXXX.

**For Outdoor Applications:** Use lower labeled rates and greater re-treatment intervals for light to moderate insect pressures. Use higher labeled rates and shorter re-treatment intervals for green peach aphids, unexposed insects and heavy pressures of other insects. Mite suppression can be obtained using the lower rate; for more residual control of mites, use up to 10 fl oz/100 gal water. For maximum mite control, tank mix with an acaricide. Do not apply more than 0.34 lb ai/A and not more than once every 7 days.

SITE	PEST	AMOUNT MAVRIK AQUAFLOW IN WATER TO MAKE		SPECIFIC DIRECTIONS
		100 GALLONS	5 GALLONS	
Containerized Nursery Stock- Outdoors	Aphids, Thrips, Mites, Clover Mites, Whiteflies, Leaf-Feeding Caterpillars (i.e., Tent, Orlando, Gypsy Moth, Bagworm, Canker Worm, etc.) Lygus Plant Bugs Beetles (Flea, Cucumber, Elm Leaf) Leafhoppers, Earwigs, Ants, Crickets, Armyworms, Cutworms, Sowbugs, Chiggers*, Millipedes*, Springtails (Collembola) Adelgids, Mosquitoes, Glassy -Wing Sharpshooters, Stink Bugs, Bark Scorpions  * Except in California	4-10 fl oz	0.2-0.5 fl oz (1.3-3 teaspoons)	For outdoor applications to commercial nurseries: Do not apply when the wind speed is greater than 15 mph. Applicators are required to select the nozzle and pressure that deliver a medium or coarser droplet size (ASABE F572). For soil or foliar applications, do not apply by ground equipment within 25 feet (100 feet near marine/estuarine environments) of lakes, reservoirs, rivers, streams, marshes or natural ponds, estuaries and commercial fish farm ponds. For application to small, immature ornamental plants in containers up to 5 gallons in size: Mix 4–10 fl oz of MAVRIK AQUAFLOW in 100 gallons of water. Apply 0.135-0.34 lb ai per acre using a low pressure, coarse fan spray application. Spray interval is typically 14–28 days but not more than 4 applications per month. Do not exceed 12 applications per year. Use sufficient water to thoroughly cover the surfaces to be treated. Use lower rates for light to moderate insect pressure. Apply spray to foliage, around base of plant, and to the main trunk or stems.
Woody and Herbaceous Ornamentals- Outdoors	Aphids, Thrips, Mites, Clover Mites, Whiteflies, Leaf-Feeding Caterpillars (i.e., Tent, Orlando, Gypsy Moth, Bagworm, Canker Worm, etc.) Lygus Plant Bugs Beetles (Flea, Cucumber, Elm Leaf) Leafhoppers, Earwigs, Ants, Crickets, Armyworms, Cutworms, Sowbugs, Chiggers*, Millipedes*, Springtails (Collembola) Adelgids, Mosquitoes, Glassy -Wing	4-10 fl oz	0.2-0.5 fl oz (1.3-3 teaspoons)	Make applications to large, mature ornamental specimen plants or plants in containers larger than 5 gallons in size. Mix 4–10 fl oz of MAVRIK AQUAFLOW in 100 gallons of water (equivalent to 0.2–0.5 fl oz or 1.3–3 teaspoons per 5 gallons of water). Apply 100 gallons of spray solution per equivalent of 20,000 square feet of growing area using a low pressure, coarse fan spray applications. Spray interval is typically 14–28 days but not more than 4 applications per month. Do not exceed 12 applications per year. Use sufficient water to thoroughly cover the surfaces to be treated. Use lower rates for light to moderate insect pressure. Spray

	Sharpshooters, Stink Bugs, Bark Scorpions, Strawberry Root Weevils*, Obscure Root Weevils*, Blackvine Root Weevils* * Except in California			on ground around base of tree or shrub and/or up main trunk or stem and foliage.
Eugenia and Pepper Tree	Psyllids	5-10 fl oz	0.25-0.5 fl oz (1.5-3.0 teaspoons)	Apply 5-10 fl oz of MAVRIK AQUAFLOW per 100 gallons of water to protect new foliage, depending on pest pressure. Use the higher rate of MAVRIK AQUAFLOW for heavier infestations of psyllids. Apply 2 applications at 14-day intervals under heavy reinfestation pressure or if new foliage is present. If pruning is needed, prune the entire hedge, then delay application until adults and new shoots are present.
Ant Mound Treatment	Fire Ants and other mounding ant pests	10 fl oz	0.5 fl oz (3 teaspoons)	<u>Individual ant mound treatment:</u> Apply as drench using 1 gallon of spray solution per mound to control mounding ant colonies, including the fire ant. Thoroughly mix 2/3 teaspoons (0.1 fl oz.) of MAVRIK AQUAFLOW with 1 gallon of water. Drench the mound using 1 gallon of dilution per mound. Apply the dilution starting on the perimeter of the mound and ending at the center of the mound until the entire mound is wet but not to the point of runoff.
Greenhouse Applications	Aphids, Thrips, Mites, Whiteflies, Earwigs, Beetles (Flea, Cucumber, Elm Leaf), Leafhoppers, Springtails (Collembola), Adelgids, Leaf-Feeding Caterpillars (i.e. Tent, Orlando, Gypsy Moth, Bagworm, Canker Worm, etc.), Lygus Plant Bugs, Stink Bugs, Bark Scorpions	4–10 fl oz	0.2-0.5 fl oz (1.3-3 teaspoons)	<u>Broadcast, fogger, or bench applications.</u> Mix 4–10 fl oz of MAVRIK AQUAFLOW in 100 gallons of water (equivalent to 0.2–0.5 fl oz per 5 gallons of water). Use a higher rate of MAVRIK AQUAFLOW for more residual activity. Apply 100 gallons of spray solution which will typically cover 20,000 square feet of greenhouse space using a low pressure, coarse fan spray for bench or broadcast applications. Spray interval is typically 14–28 days but not more than 4 applications per month or 12 applications per crop. When using ElectroStatic Spraying Systems (ESS®), PulsFog®, cold foggers, or other ULV delivery systems, apply the labeled amount of MAVRIK AQUAFLOW over the square footage with the equipment manufacturer's requirement of water. Follow manufacturer's calibration procedures.
Indoor Ornamentals (Interior Plantscapes)	Aphids, Whiteflies, Thrips, Mites, Earwigs, Beetles (Flea, Cucumber, Elm Leaf),	4-10 fl oz	0.2-0.5 fl oz (1.3-3 teaspoons)	Mix 0.1–0.25 fl oz of MAVRIK AQUAFLOW in 2.5 gallons of water (equivalent to 0.2–0.5 fl oz per 5 gallons of water). Apply 5 gallons

	Leafhoppers, Springtails (Collembola), Adelgids, Leaf-Feeding Caterpillars (i.e. Tent, Orlando, Gypsy Moth, Bagworm, Canker Worm, etc.) Lygus Plant Bugs Stink Bugs, Bark Scorpions			of spray solution per 1,000 square feet using a low pressure, coarse fan spray for plantscape applications.
Flower and Foliage Cuttings (for Dipping)	Mealybugs, Aphids, Two-Spotted Spider Mites	5 fl oz	0.25 fl oz (1.5 teaspoons)	Immerse basket of cuttings into a diluted solution of MAVRIK AQUAFLOW until thoroughly wet (usually 1 minute or less).

### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. **Pesticide Storage:** Store in a cool, dry place. Pesticides must be stored in a secured area away from other products, food, or feed. Keep pesticide storage areas clean. Always store pesticides in the original container. If a leaky container must be contained within another, mark the outer container to identify the contents. In case of a spill or leak, soak up with soil or other absorbent material. Do not use caustic agents. **Pesticide Disposal:** To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry). **Container Handling:** Non-refillable container. Do not reuse or refill this container. Triple rinse as follows. Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture or dispose of in a sanitary landfill, or if allowed by state and local authorities by burning. If burned, stay out of smoke.

To the extent consistent with applicable law, Seller makes no warranty, expressed or implied, concerning the use of this product other than indicated on the label. To the extent consistent with applicable law, 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.  
PulsFog® is a registered trademark of Dramm International.  
MAVRIK AQUAFLOW® is a registered trademark of Wellmark International.

For more information or in case of emergency, call [phone number]  
[www.centralgrower.com](http://www.centralgrower.com)

Wellmark International  
1501 East Woodfield Road 200W  
Schaumburg, IL 60173  
Made in USA

[ ] optional text

**Sublabel 2: Non-WPS label (Out of WPS scope)**

**ZOËCON®** (name of PCO marketing group placed on label, not a part of alternate brand name)

**OUTDOOR FLEA/ANT CONTROL**

Alternate brand names: **YARDEX® INSECTICIDE**  
MAVRIK® Perimeter

For application to outdoor areas: perimeter treatment around buildings and outside surfaces, residential and non-residential areas where lawns, turf and ornamentals are grown, plants shrubs, vines (woody), flowers, non-bearing fruit and nut trees, ornamental trees, residential and non-residential landscaped areas around institutional, public, commercial, and industrial buildings, parks, recreational areas, schoolyards, athletic fields, kennels, runs, and other areas where pets may frequent, cemeteries, airports, woods, lots, roadsides, pathways, and vegetation areas.

Small, easy to use 8 oz. Bottle  
Contains tau-fluvalinate  
Ideal for applications without the worry of watering-in  
Perimeter treatment against a wide range of insects including mosquitoes, fire ants, and stink bugs

**ACTIVE INGREDIENT:**

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

**OTHER INGREDIENTS:** ..... 77.7%

TOTAL 100.0%

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

EPA Registration No. 2724-478

EPA Est. No.

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

READ COMPLETE DIRECTIONS AND PRECAUTIONS INSIDE

**SHAKE WELL BEFORE USING**

Not for use on plants, trees or sod being grown for sale or other commercial use, for commercial seed production, for the manufacture or processing of timber or wood products, or for research purposes. For use only on lawns, turf and plants intended for aesthetic purposes or climatic modification and being grown in outdoor areas.

Net Contents

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

Harmful if swallowed, absorbed through the skin, or inhaled. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Avoid breathing spray mist or vapor. Wear long-sleeved shirt, long pants, shoes, socks, and chemical resistant gloves made of barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, natural rubber ≥14 mils, polyethylene, PVC ≥14 mils, viton ≥14 mils.

<b>FIRST AID</b>	
If swallowed	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
If on skin or clothing	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
If inhaled	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
If in eyes	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes.</li> <li>• Call a poison control center for treatment advice.</li> </ul>
Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-248-7763 for emergency medical treatment information.	

**Personal Protective Equipment (PPE):**

All mixers, loaders, applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes and socks
- Chemical-resistant gloves made of barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, natural rubber ≥14 mils, polyethylene, PVC ≥14 mils, viton ≥14 mils

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

**User Safety Recommendations:**

Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users should 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 toxic to fish and aquatic organisms. To protect the environment, do not allow pesticide to enter or runoff into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid runoff to water bodies or drainage systems. Use with care when applying in areas adjacent to any body of water. Drift and runoff from treated areas may be hazardous to fish and aquatic organisms in adjacent aquatic sites. Do not apply when weather conditions favor drift from the target area.

This product is highly 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.

**PHYSICAL/CHEMICAL HAZARDS**

Do not use or store near heat or open flame.

**DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

**USE RESTRICTIONS**

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.

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

Do not apply this product by aerial application or through any type of irrigation system.

All outdoor spray applications, if permitted elsewhere on this label, must be limited to spot or crack-and-crevice treatments only, except for the following permitted uses, if allowed elsewhere on this label:

1. Applications to pervious surfaces such as soil, lawn, turf and other vegetation;
2. Perimeter band treatments of 7 feet wide or less from the base of a manmade structure to pervious surfaces (e.g., soil, mulch, or lawn);
3. Applications to underside of eaves, soffits, doors, or windows permanently protected from rainfall by a covering, overhang, awning, or other structure;
4. Applications around potential exterior pest entry points into manmade structures such as doorways and windows, when limited to a band not to exceed one inch in width;
5. Applications to vertical surfaces (such as the side of a manmade structure) directly above impervious surfaces (e.g., driveways, sidewalks, etc.), up to 2 feet above ground level;
6. Applications to vertical surfaces directly above pervious surfaces, such as soil, lawn, turf, mulch or other vegetation) only if the pervious surface does not drain into ditches, storm drains, gutters, or surface waters.

Spot treatments must not exceed two square feet in size (for example, 2' x 1' or 4' x 0.5').

For soil or foliar applications, do not apply by ground within 25 feet (100 feet for marine/estuarine environments of freshwater lakes, reservoirs, rivers, streams, marshes or natural ponds, estuaries and commercial fish farm ponds).

Do not spray the product into fish pools, ponds, streams or lakes. Do not apply directly to sewers or storm drains, or to any area like a drain or gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur.

Do not allow the product to enter any drain during or after application.

Do not apply directly to impervious horizontal surfaces such as sidewalks, driveways, and patios, except as a spot or crack-and-crevice treatment.

Do not apply to the point of runoff.

Do not make applications during rain. Avoid making applications when rainfall is expected before the product has sufficient time to dry (minimum 4 hours).

Rainfall within 24 hours after application may cause unintended runoff of pesticide application.

Do not apply when the wind speed is greater than 15 mph.

Treat surfaces to ensure thorough coverage but avoid runoff.

To treat insects harbored in voids and cracks-and-crevices, applications must be made in such a manner to limit dripping and avoid runoff onto untreated structural surfaces and plants.

### **SPRAY DRIFT ADVISORIES**

Take precautions to minimize spray drift.



## **APPLICATION DIRECTIONS**

MAVRIK Perimeter controls insects and controls or suppresses mite pests when used at labeled rates. MAVRIK Perimeter works primarily through contact action, good spray coverage is necessary. Treat when pests are immature or at a susceptible stage and populations are manageable, before damage occurs. Repeat applications as needed, according to the specific use directions given in this label. Residues of MAVRIK Perimeter can continue to control certain insect pests for a week or longer. Growth dilution, climatic variables, and pest habits determine retreatment needs.

Dilute MAVRIK Perimeter in sufficient water to give thorough spray coverage [based on previous experience]. For best results under varying conditions, a range of use rates is recommended for most uses. Select the higher rates when pest pressure or damage potential is severe. The lower rates often give acceptable economic results. [Buffer spray water to pH 5-7, if necessary.]

For severe mite infestations, use the highest rate of MAVRIK Perimeter and use an acaricide in an alternate treatment program. [The use of a spreader-sticker, insecticidal soaps, or piperonyl butoxide may improve control of mites and some insects, such as, whiteflies, aphids, thrips, and mealybugs.] When MAVRIK Perimeter 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 MAVRIK Perimeter are non-toxic and non-repellent to honey bees. Treat during non-foraging periods to minimize adverse effects.

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.

**For Outdoor Applications:** Use lower rates and greater re-treatment intervals for light to moderate insect pressures. Use higher rates and shorter re-treatment intervals for green peach aphids, unexposed insects and heavy pressures of other insects. Directly spray at the rate of 0.1 fl oz/gallon to kill lone star ticks and deer ticks and bark scorpions. Mite suppression can be obtained using the lower rate; for more residual control of mites, use up to 0.5 fl oz/5 gallons water [0.1 fl oz/1 gallon of water]. Do not apply more than once every 7 days and do not apply more than 0.34 lb ai/A. For Turf applications, do not apply more than 0.135 lb ai/A.

SITE	PEST	AMOUNT MAVRIK PERIMETER IN WATER TO MAKE		SPECIFIC DIRECTIONS
		5 GALLONS	1 GALLON	
Outdoor Area Treatments including Perimeter Use	Aphids, Thrips, Mites, Clover Mites, Two-Spotted Spider Mites, Whiteflies, Mealybugs, Leaf-Feeding Caterpillars (i.e., Tent, Orlando, Gypsy Moth, Bagworm, Canker Worm, etc.), Ticks, Brown Dog Ticks, American Dog Ticks, Lone Star Ticks, Deer Ticks, Fleas, Ants, Fire Ants, Crickets, Armyworms, Cutworms, Springtails (Collembola), Adelgids, Mosquitoes, Chiggers*, Earwigs, Lygus Plant Bugs, Beetles, (Flea, Cucumber, Elm Leaf) Leafhoppers, Weevils,* (Strawberry Root, Obscure Root, Blackvine Root) Psyllids, Millipedes,* American Cockroaches, Smoky Brown Cockroaches, Oriental Cockroaches, Boxelder Bugs, Spiders, Silverfish, Firebrats, Chinch Bugs, Asian Lady Beetles*, Sowbugs, Glassy-Wing Sharpshooters, Stink Bugs, Bark Scorpions  * Except in California	0.2-0.5 fl oz (1 1/3-3 teaspoons) (6-15 ml)	.04-0.1 fl oz (1/3-2/3 teaspoons) (1.2-3 ml)	<p>Apply MAVRIK Perimeter to outdoor areas including perimeters and outside surfaces of residential, non-commercial, and commercial buildings: industrial offices, institutional buildings, private homes, multifamily dwellings house trailers, carports, garages, storage sheds, patios (spot treatment only), kennels, runs, and other areas pets may frequent, walls, yards, lawns, trees, ornamental landscaping, along paths, rural fields, woods, lots, roadsides, and vegetation areas.</p> <p>Apply MAVRIK Perimeter using a low pressure, coarse fan spray, applied in even bands to surfaces and perimeters where pests are a problem. Apply the spray mixture at a volume equivalent to 5 gallons per 1,000 square feet. Depending on the severity of pest infestations, a re-treatment may be necessary at 7–14 days. Apply no more than 4 times per month or no more than 12 times per year. Typical re-treatment interval is 28 days.</p> <p>For ticks, treat likely harborage areas including along paths, tall grass and other vegetation. For best results, treat the entire area where ticks could be present and begin treating in the spring. Ticks may be re-introduced from surrounding areas by host animals. Continue treating until frost to control adult ticks.</p> <p>To control nuisance fleas and ticks (e.g., dog ticks), apply to kennels, yards, runs, and other areas where pets may frequent.</p> <p>For best coverage to control ticks, apply using a coarse fan spray to vegetation brush, branches, walls, and other areas near habitation where ticks may harbor or frequent. Treat entire area rather than making spot treatments and retreat as necessary to maintain control.</p> <p>When using cold foggers or other ULV delivery systems for perimeter applications, apply the labeled amount of MAVRIK Perimeter over the square footage with the equipment manufacturer's requirement of water. Follow manufacturer's calibration procedures.</p> <p>Perimeter applications are made to a band of soil and/or vegetation 7 feet wide around and adjacent to the structure. Higher volumes of water may be needed if mulch or leaf litter is present or foliage is dense. These sites are refuse dumps, vegetation areas, soil, trunks of woody ornamentals, and fence lines adjacent to or around the structure, and other areas near a structure where pests congregate or have been seen.</p> <p>Surface applications can be made to all outside surfaces of structures listed above: porches, window and door frames, eaves, and foundations. Apply as a crack and crevice treatment using a pinstream nozzle to pest harborage sites. Refrain from applying to the point of runoff.</p>
Woody and Herbaceous Ornamentals-Outdoors	Aphids, Thrips, Mites, Clover Mites, Whiteflies, Leaf-Feeding	0.2-0.5 fl oz (1 1/3-3 teaspoons) (6-15 ml)	.04-0.1 fl oz (1/3-2/3 teaspoons) (1.2-3 ml)	<p>Make applications to large, mature ornamental specimen plants or plants in containers larger than 5 gallons in size. Mix 0.2–0.5 fl oz or 1 1/3–3 teaspoons of MAVRIK Perimeter in 5 gallons of water. Apply 5 gallons of spray solution per equivalent of 1,000 square feet of growing area using a low pressure, coarse fan spray</p>

	<p>Caterpillars (i.e., Tent, Orlando, Gypsy Moth, Bagworm, Canker Worm, etc.)  Lygus Plant Bugs  Beetles (Flea, Cucumber, Elm Leaf)  Leafhoppers,  Earwigs,  Ants, Crickets,  Armyworms,  Cutworms, Sowbugs,  Chiggers*,  Millipedes*,  Springtails (Collembola)  Adelgids,  Mosquitoes,  Glassy -Wing Sharpshooters,  Stink Bugs, Bark Scorpions,  Strawberry Root Weevils*, Obscure Root Weevils*,  Blackvine Root Weevils*  * Except in California</p>			<p>applications. Spray interval is typically 14–28 days but not more than 4 applications per month. Do not exceed 12 applications per year. Use sufficient water to thoroughly cover the surfaces to be treated. Use lower rates for light to moderate insect pressure. Spray on ground around base of tree or shrub and/or up main trunk or stem and foliage.</p>
Eugenia and Pepper Tree	Psyllids	0.25-0.5 fl oz (1 1/2-3. teaspoons) (6-15 ml)	0.05-0.1 fl oz (1/3-2/3 teaspoons) (1.2-3 ml)	<p>Apply 0.25-0.5 fl oz (1 1/2-3 teaspoons) of MAVRIK Perimeter per 5 gallons of water to protect new foliage, depending on pest pressure. Use the higher labeled rate of MAVRIK Perimeter for heavier infestations of psyllids. Apply 2 applications at 14-day intervals under heavy reinfestation pressure or if new foliage is present. If pruning is needed, prune the entire hedge, then delay application until adults and new shoots are present.</p>
Residential and Non-Residential Turf Landscape and Recreational Turfgrass (home lawns, business and office complexes, shopping complexes, multifamily residential complexes, airports, cemeteries, parks, schoolyards, playgrounds, athletic fields and recreational areas, kennels, runs, and other	<p>Chinch Bugs,  Earwigs, Ants, Lawn Moths (Sod Webworms),  Bermuda Mites*,  Crickets,  Armyworms, Brown Chiggers*, Clover Mites, Cutworms,  Fleas, Leafhoppers,  Sowbugs,  Millipedes*,  Springtails (Collembola),  Adelgids,  Mosquitoes,  Glassy -Wing Sharpshooters  Deer ticks  Brown Dog ticks  American Dog ticks,  Lonestar ticks</p>	0.2 fl oz (1 1/3 teaspoons) (6 mL)	0.04 fl oz (1/3 teaspoons) (1.2 mL)	<p>Apply MAVRIK Perimeter using a low pressure, coarse fan spray, applied in even bands to surfaces and perimeters where pests are a problem. Apply the spray mixture at a volume equivalent to 5 gallons per 1,000 square feet. Thoroughly wet hills and runways.</p> <p>Use sufficient water to penetrate to pests. . Repeat application in 10 days but not more than 4 applications per month. Do not exceed 12 applications per year. Use sufficient water to thoroughly cover the area to be treated.</p> <p>For ticks, treat likely harborage areas: along paths, tall grass and other vegetation. For best results, treat the entire area where ticks could be present and begin treating in the spring. Ticks may be re-introduced from surrounding areas by host animals. Continue treating until frost to control adult ticks.</p> <p>To control nuisance fleas and ticks (e.g., dog ticks), apply to kennels, yards, runs, and other areas where pets may frequent.</p> <p>For best coverage to control ticks, apply using a coarse fan spray to vegetation brush, branches, rock walls, and other areas near habitation where ticks may harbor or frequent. Treat entire area rather than making spot treatments and retreat as necessary to maintain control.</p>

areas pets may frequent, yards, lawns, along paths, rural fields, woods, lots, roadsides, and other landscape turfgrass,)				
Ant Mound Treatment	Fire Ants and other mounding ant pests	0.5 fl oz (15 ml) (3 teaspoons)	0.1 fl oz (3 ml) (2/3 teaspoons)	<u>Individual ant mound treatment:</u> Apply as drench using 1 gallon of spray solution per mound to control mounding ant colonies, including the fire ant. Thoroughly mix 2/3 teaspoons (0.1 fl oz/3 ml) of MAVRIK Perimeter with 1 gallon of water. Drench the mound using 1 gallon of dilution per mound. Apply the dilution starting on the perimeter of the mound and ending at the center of the mound until the entire mound is wet but not to the point of runoff.

### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. **Pesticide Storage:** Store in a cool, dry place. Pesticides must be stored in a secured area away from other products, food, or feed. Keep pesticide storage areas clean. Always store pesticides in the original container. If a leaky container must be contained within another, mark the outer container to identify the contents. In case of a spill or leak, soak up with soil or other absorbent material. Do not use caustic agents. **Pesticide Disposal:** To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or disposal program (often such programs are run by state or local governments or by industry). **Container Handling:** Non-refillable container. Do not reuse or refill this container. Triple rinse as follows. Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling, if available or puncture or dispose of in a sanitary landfill, or if allowed by state and local authorities by burning. If burned, stay out of smoke.

For more information or in case of emergency, call [phone number]  
[www.zoecon.com](http://www.zoecon.com)

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

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