

Mavrik®

Perimeter

- FOR COMMERCIAL USE ONLY ON OUTDOOR PLANTS IN ORNAMENTAL PLANTINGS, PLANTSCAPES (INCLUDING TREES AND SHRUBS) AND FOR PERIMETER TREATMENT AROUND BUILDINGS AND OUTSIDE SURFACES
- PERIMETER TREATMENT AGAINST A WIDE RANGE OF INSECTS INCLUDING MOSQUITOES AND FIRE ANTS
- IDEAL FOR APPLICATIONS WITHOUT THE WORRY OF WATERING-IN
- CONTAINS TAU-FLUVALINATE
- SMALL, EASY TO USE 8 OZ. BOTTLE

SPECIMEN LABEL

ACTIVE INGREDIENT:

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

OTHER INGREDIENTS: 77.7%

Total 100.0%

MAVRİK® PERIMETER is a flowable formulation containing 2 pounds tau-fluvalinate per gallon (240 g/L).

EPA Reg. No. 2724-478 EPA Est. No. 2724-TX-1

KEEP OUT OF REACH OF CHILDREN

CAUTION

READ COMPLETE DIRECTIONS AND PRECAUTIONS INSIDE

SHAKE WELL BEFORE USING

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

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 (such as or made out of any waterproof material, selection category A).

FIRST AID

If swallowed • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.

If on skin or clothing • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.

If inhaled • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.

If in eyes • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. • Call a poison control center for treatment advice.

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)

Some materials that are chemical-resistant to this product are made of any waterproof material. If you want more options, follow the instructions for category A on an EPA chemical resistance category selection chart.

All mixers, loaders, applicators and other handlers must wear: • Long-sleeved shirt and long pants • Shoes and socks • Chemical-resistant gloves, and • A NIOSH approved respirator with dust/mist filter with MSHA/NIOSH approval number prefix TC-21C or R, P, or HE filter.

AMOUNT MAVRIK® PERIMETER
IN WATER TO MAKE

SITE	PEST	5 GALLONS	1 GALLON	SPECIFIC DIRECTIONS
<p>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. 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].</p>				
Perimeter Treatments to include Outside Surfaces	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, 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	0.2–0.5 fl oz (1 1/3–3 teaspoons) (6–15 ml)	.04–0.1 fl oz (1/3–2/3 teaspoon) (1.2–3 ml)	Apply MAVRIK® PERIMETER to perimeters and outside surfaces of residential, non-commercial, and commercial buildings such as industrial offices, institutional buildings, private homes, duplexes, townhouses, condominiums, house trailers, apartment complexes, carports, garages, storage sheds, patios.
				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 20 times per year. Typical re-treatment interval is 28 days.
				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.
				Perimeter applications are made to a band of soil and/or vegetation 6 to 10 feet wide <u>around and adjacent to the structure</u> . Higher volumes of water may be needed if mulch or leaf litter is present or foliage is dense. These sites may include 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.
				Surface applications can be made to all outside surfaces of structures listed above and includes 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.
	* Except in California			

Date Issued: 9 February 2009
Supersedes: November, 2004

MATERIAL SAFETY DATA SHEET
MAVRIK PERIMETER

Manufacturer: Wellmark International
Address: 1501 East Woodfield Road, Suite 200-West Schaumburg, IL 60173
Emergency Phone: 1-800-248-7763
Transportation Emergency Phone: CHEMTREC: 1-800-424-9300

1. CHEMICAL PRODUCT INFORMATION

Product Name: Mavrik Perimeter
Chemical Name/Synonym: tau-Fluvalinate: {(RS)-a-cyano-3-phenoxybenzyl N-(2-chloro-a,a,a-trifluoro-p-tolyl)-D-valinate
Chemical Family: Synthetic pyrethroid
Formula: C₂₆ H₂₂ Cl F₃ N₂ O₃
EPA Registration No.: 2724-478
RF Number:

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Component (chemical, common name)</u>	<u>CAS Number</u>	<u>Weight</u>	<u>Tolerance</u>
tau-Fluvalinate: {(RS)-a-cyano-3-phenoxybenzyl-N- (2-chloro-a,a,a,(trifluoro-p-tolyl)-D-valinate)	102851-06-9	22.3%	Not established
Inert ingredients (nonhazardous and/or trade secret):		77.7%	Not established
Ethylene glycol	107-21-1		OSHA, ACGIH (STEL) 50 ppm (vapor)

3. HAZARD INFORMATION

PRECAUTIONARY STATEMENTS
KEEP OUT OF THE REACH OF CHILDREN
HAZARDS TO HUMANS

CAUTION: Harmful if swallowed, inhaled, or absorbed through the skin. **Avoid breathing spray mist.** Certain persons may be sensitive to MAVRIK PERIMETER'S fine spray particles. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse. Sensitive individuals may 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.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Ingestion is unlikely due to physical state. Animal studies indicate a strong emetic response. Typical symptoms are likely to include salivation, nausea, vomiting and initial excitation followed by sedation. Irritation to skin. Sensitive individuals may temporarily experience an itching or burning sensation, with or without a rash, following exposure. Irritating to eyes.

Mavrik Perimeter

PRIMARY ROUTE OF ENTRY Dermal/Eye: Yes. Oral: No. Inhalation: Yes.

ACUTE TOXICITY Oral: LD50 (rat): 2020 mg/kg.
 Dermal: LD50 (rabbit): >2100 mg/kg (highest dose level tested).
 Inhalation: LD50: >.52 mg/L (highest dose level tested).

OTHER TOXICOLOGICAL INFORMATION

Skin Irritation: Slightly irritating.
Eye Irritation: Mild irritant.
Sensitizer: Sensitizer in some individuals.

4. FIRST AID MEASURES

Eye: Hold eyes open and rinse slowly with water for 15-20 minutes. Remove contact lenses, if present, after the first five minutes, and then continue rinsing eyes. Call a poison control center for treatment advice.
Skin: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
Ingestion: Call a poison control center or doctor immediately for treatment advice. Have a person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by poison control center or doctor.
Inhalation: Move person to fresh air. If person not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth to mouth, if indicated. Call a poison control center or doctor for further treatment advice.
Note to Physician: Treat symptomatically.

5. FIRE FIGHTING MEASURES

NFPA Rating: Health: 3 Fire: 0 Reactivity: 0
Flammability Class: Non-flammable liquid.
Flash Point: (TCC) Greater than 100C.
Explosive Limits (% of Volume): Not established.
Extinguishing Media: Water, foam, CO2, dry chemical.
Special Protective Equipment: Firefighters should wear protective clothing and self contained breathing apparatus.
Fire Fighting Procedures: Normal procedures. Do not allow fire fighting water to escape into waterways or sewers.
Combustion Products: Hydrogen cyanide, hydrogen chloride and hydrogen fluoride may result from combustion.
Unusual Fire/Explosion Hazards: None known.

6. ACCIDENTAL RELEASE MEASURES

Steps to be taken: Ventilate area well; then soak up with soil or other absorbent material. Collect into a container for disposal.
Absorbents: Clay granules, sawdust, dirt or equivalent.
Incompatibles: Strong acids or bases.

7. HANDLING AND STORAGE

Handling: 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.

Storage: Do not contaminate water or food by storage. Store away from direct sunlight or heat. Pesticides must be stored in a secured area away from other products, and food.

8. EXPOSURE CONTROL / PERSONAL MEASURES

Exposure Limits: Ethylene Glycol - OSHA and ACGIH short term exposure limit (STEL) 50 ppm (vapor).

Ventilation: Use with adequate ventilation.

Personal Protective Equipment: Applicators and handlers must wear: long-sleeved shirt and long pants, chemical resistant gloves, shoes plus socks and dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C).

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Milky white liquid; distinctive odor.

Boiling Point: N/A.

Melting Point: N/A.

Vapor Pressure (mm Hg): N/A.

Vapor Density (Air = 1): N/A.

Specific Gravity: 1.12 (water=1).

Bulk Density: 9.3 lb/gal.

Solubility: Miscible in water.

Evaporation Rate: Not determined.

pH: 5 - 6.

10. STABILITY AND REACTIVITY

Stability: Stable.

Reactivity: Not reactive.

Incompatibility w/ Other Materials: Strong acids or bases.

Decomposition Products: None.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

CHRONIC TOXICITY [Specific to Active Ingredient(s)]

Rats received tau-fluvalinate via lavage. No oncogenic potential was shown. The NOEL was 1 mg/kg/day.

DEVELOPMENTAL/REPRODUCTIVE TOXICITY [Specific to Active Ingredient(s)]

Rabbits were administered tau-fluvalinate during presumed gestation. Signs of maternal toxicity were anorexia, depression, and decreased body weights at 125 mg/kg/day. The NOEL was 25 mg/kg/day.

MUTAGENICITY [Specific to Active Ingredient(s)]

The weight of evidence suggests tau-fluvalinate is not a mutagen.

OTHER

In rats, oral administration of 60 mg/kg daily for 7 consecutive days resulted in histopathological evidence of neurotoxicity in the peripheral nervous system. However, the changes were not persistent and were no longer evident following 2 weeks without treatment.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE [Active Ingredients Only]

Hydrolysis: Not available.

Photolysis: Not available.

Soil half life: 14.9 days.

Water solubility: Readily disperses in water.

ECOTOXICITY [Active Ingredients Only]

Acute Toxicity: fish:LC50 (bluegill): 11 ug/L, (trout): 4.2 ug/L; aquatic invertebrates:LC50 (daphnia): 11 ug/L.

13. DISPOSAL CONSIDERATIONS

Wastes resulting from use of this product should be disposed of in accordance with all federal, state and local requirements. For additional regulatory information, see section 15 of this document.

14. TRANSPORT INFORMATION

DOT49CFR Description: Not applicable.

Freight Classification: Insecticides NOI other than poison NMFC item 102120, Class 60.

15. REGULATORY INFORMATION

CERCLA (Superfund): Not regulated.

RCRA: Not regulated as hazardous.

SARA 311/312 HAZARD CATEGORIES

Immediate Health: Yes (irritation, possible sensitization).

Delayed Health: No.

Fire: No.

Sudden Pressure: No.

Reactivity: No.

The information presented herein, while not guaranteed, was prepared by technically knowledgeable personnel and to the best of our knowledge is true and accurate. It is not intended to be all inclusive and the manner and conditions of use and handling may involve other or additional considerations.