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# 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-phenoxybenzl 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

| Component (chemical, common name) | CAS Number | Weight | Tolerance |
|---|---|---|---|
| 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.

**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 ambulence, 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 neurotoxocity 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.*