



MATERIAL SAFETY DATA SHEET



SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Tirade Nursery FAC
EPA REG. NUMBER: 192-220
PRODUCT NUMBER: 338420

MANUFACTURER: Value Garden Supply
ADDRESS: P.O. Box 585, St. Joseph, MO 64502

MANUFACTURER PHONE: (888) 603-1008
MANUFACTURER FAX PHONE: (952) 884-6149
EMERGENCY PHONE: (800) 858-7378

PRODUCT USE: For commercial use only. Use to control Ants, (including Imported Fire Ants), Mole Crickets and other insect pests on lawns in landscaped areas and perimeters around residential, institutional, public, commercial and industrial buildings, parks, recreational areas and athletic fields.

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS*:	CAS NO.	% WT	OSHA TWA	OSHA STEL	ACGIH TWA	ACGIH STEL
Bifenthrin	82657-04-03	0.20	N/A	N/A	N/A	N/A

* All ingredients in quantities > 1.0 % (0.1 % for carcinogens or teratogens) that are **potentially** hazardous per OSHA definitions

N/A = not applicable NE = not established

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Potential Health Hazards

POTENTIAL HEALTH EFFECTS: Effects from overexposure result from absorption through skin or may result from inhaling the dust. Overexposure to this product may cause diarrhea. Contact with bifenthrin may occasionally produce sensations such as rashes, numbing, burning or tingling. These skin sensations are reversible and usually subside within 12 hours.

CARCINOGENICITY: None Listed per OSHA, NTP, or IARC.

SECTION 4: FIRST AID MEASURES

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. Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact the Poison Control Center 800-222-1222.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: This product is a pyrethroid. If large amounts have been ingested, milk cream and other digestible fats and oils may increase absorption and should be avoided.

SECTION 5: FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: Foam, CO2 or dry chemical. Soft stream water fog only if necessary. Contain all runoff.

SPECIAL FIRE FIGHTING PROCEDURES: Isolate fire area. Evacuate downwind. Wear full protective clothing and self contained breathing apparatus. Do not breathe smoke, gases or vapors generated.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Slightly combustible. This material may support combustion at elevated temperatures.



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SECTION 6: ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Isolate and post spill area. Wear protective clothing and personal protective equipment as prescribed in Section 8. Keep unprotected persons and animals out of the area. Keep material out of lakes streams, ponds and sewer drains.

CONTAINMENT: Large Spills should be covered to prevent dispersal. For dry material, use a wet sweeping compound or water to prevent the formation of dust. If water is used, prevent runoff or dispersion of excess liquid by diking and absorbing with a non-combustible absorbent such as clay, sand or soil. Vacuum, shovel, or pump all waste material, including absorbent, into a drum and label contents for disposal. To clean and neutralize spill area, tools and equipment, wash with suitable solution of caustic or soda ash, and an appropriate alcohol (I.e., methanol, ethanol, isopropanol). Follow this by washing with a strong soap and water solution. Absorb, as above, any liquid and add to the drums of waste already collected.

REGULATORY REQUIREMENTS: Dispose of drummed waste according to the method outlined in Section 13.

SECTION 7: HANDLING AND STORAGE

KEEP OUT OF REACH OF CHILDREN

HANDLING AND STORAGE: In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Do not contaminate water, food, or feed by storage or disposal.

PESTICIDE STORAGE: Keep out of reach of children and animals. Store in original containers only. Store in a cool, dry place and avoid excess heat.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Completely empty bag application equipment. Then dispose of empty bag in a sanitary landfill or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Use local exhaust at all process locations where vapor or mist may be emitted. Ventilate all transport vehicles prior to unloading.

VENTILATION: Use local exhaust. Ventilate all transport vehicles prior to unloading.

RESPIRATORY PROTECTION: For splash, mist or spray exposure wear, as a minimum, a properly fitted half-face or full-face air-purifying respirator which is approved for pesticides (U>S> NIOSH/MSHA, EU CEN or comparable certification organization). Respirator use and selection must be based on airborne concentrations.

EYE PROTECTION: For dust exposure, wear chemical protective goggles or face shield.

SKIN PROTECTION: Wear coveralls or long-sleeved uniform and head covering. For larger exposures as in the case of spills, wear full body cover barrier suit, such as PVC suit. Leather items such as shoes, belts and watchbands – that become contaminated should be removed and destroyed. Launder all work clothing before reuse (separately for household laundry).

WORK HYGIENIC PRACTICES: Clean water should be available for washing in case of eye or skin contamination. Wash skin prior to eating, drinking, or using tobacco. Shower at the end of the workday.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Tan Granule

MOLECULAR WEIGHT): 422.88

ODOR: Slightly Musty

VAPOR DENSITY (AIR =):: N/A

PHYSICAL STATE: Solid

SPECIFIC GRAVITY: N/A

BOILING POINT: N/A

DENSITY: 1.39 g/mL (85-89 lb/cu ft.)



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SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable

INCOMPATIBILITY (MATERIAL TO AVOID): High temperatures and fire.

HAZARDOUS POLYMERIZATION: Will not occur

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE ORAL EFFECTS: Rat, Oral, LD50: >5000 mg/kg

ACUTE DERMAL EFFECTS: Rabbit, Dermal, LD50: > 2000 mg/kg

CARCINOGENICITY: None Listed per OSHA, NTP, or IARC.

EYE EFFECTS: Non-irritating to eyes

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY: Bifenthrin is highly toxic to fish and aquatic arthropods and LC50 values range from 0.0038 to 17.8 u/L. In general, the aquatic arthropods are most sensitive species. Care should be taken to avoid contamination of the aquatic environment. Bifenthrin has no effect on mollusks. Bifenthrin is slightly toxic to both waterfowl and upland game birds (LD50 values range from 1800 mg/kg to > 2150 mg/kg).

ENVIRONMENTAL FATE: In soil, Bifenthrin is stable over a wide pH range and degrades at a slow rate, which is governed by soil characteristics. Bifenthrin will also persist in aquatic sediments. Bifenthrin has a high Log Pow (>6.0), a high affinity for organic matter, and is not mobile in soil. Therefore, there is little potential for movement into ground water. There is the potential for bifenthrin to bioconcentrate (BCF = 11,750).

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: WASTE: Dispose of in accordance with applicable Federal, state and local laws and regulations. **CONTAINER DISPOSAL:** Completely empty bag into application equipment. Do not reuse container. Dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

SECTION 14: TRANSPORT INFORMATION

***DOT HAZARD DESCRIPTION:** Insecticides, NOI, other than poison. NMFC Item 102120.

MARINE POLLUTANT #1: Bifenthrin (Severe marine pollutant – see other shipping information below)

OTHER SHIPPING INFORMATION: Bifenthrin is a severe marine pollutant, but is not regulated in concentrations less than 1%. This material is not regulated for transport via any mode.

(*) U.S Department of Transportation

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS: All pesticides are governed under the Federal Insecticide, Fungicide, and Rodenticide Act. The regulatory information presented is pertinent only when this product is handled outside of the normal use and application as a pesticide

SARA TITLE III: SECTION 311 HAZARD CATEGORIES (40 CFR 370): Immediate, Delayed

OSHA REGULATIONS: Regulated

CERCLA: N/A



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SECTION 16: OTHER INFORMATION

This information is provided in good faith, but without express or implied warranty. For additional information, refer to the American Conference of Governmental Industrial Hygienists (ACGIH) documentation of TLV's (Threshold Limit Values) for individual components and the DOT Emergency Response Guidebook.