

SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Monterey Turf & Ornamental Insect Spray

EPA Reg. No.: 228-459-54705 **Product Type:** Insecticide

Company Name: Lawn and Garden Products, Inc.

PO Box 35000 Fresno, CA 93745 1-559-499-2100

Telephone Numbers: For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident,

Call CHEMTREC Day or Night: 1-800-424-9300 For Medical Emergencies Only, Call 1-877-325-1840

This product is an EPA FIFRA registered pesticide. Some classifications on this SDS are not the same as the FIFRA label. Certain sections of this SDS are superseded by federal law governed by EPA for a registered pesticide. Please see Section 15. REGULATORY INFORMATION for explanation.

2. HAZARDS IDENTIFICATION

PHYSICAL HAZARDS:

None

HEALTH HAZARDS:

Acute toxicity – OralCategory 4Acute toxicity – InhalationCategory 4Skin corrosion/irritationCategory 2Eye damage/irritationCategory 2B

ENVIRONMENTAL HAZARDS:

Hazardous to the aquatic environment, acute hazard Category 1

SIGNAL WORD: WARNING

HAZARD STATEMENTS

Harmful if swallowed. Harmful if inhaled. Causes skin irritation. Causes eye irritation. Very toxic to aquatic life.





PRECAUTIONARY STATEMENTS

Wash hands and exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves (such as Natural Rubber, Selection Category A). If swallowed: Rinse mouth.

If on skin: Wash with plenty of water. Specific treatment: see product label and Section 4 for First Aid instructions. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Avoid breathing mist/vapors/spray. Use only outdoors or in a well-ventilated area. If inhaled: Remove person to fresh air and keep comfortable for breathing.

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Call a poison center/doctor if you feel unwell. See product label and Section 4 for emergency medical advice/attention.

Dispose of contents/container in accordance with State and Federal Regulations. See product label for disposal instructions.

Avoid releases to the environment. Collect spillage.

3. COMPOSITION / INFORMATION ON INGREDIENTS

 COMPONENT
 CAS NO.
 % BY WEIGHT

 Bifenthrin
 82657-04-3
 2.28 – 2.50

 Propylene Glycol
 57-55-6
 9.5 – 10.50

 Other Ingredients
 Trade Secret
 Trade Secret

Synonyms: (2-methyl[1,1'-biphenyl]-3-yl)methyl 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-

dimethylcyclopropanecarboxylate

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product's specifications.

4. FIRST AID MEASURES

If Swallowed: Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give any liquid to the person. 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 to 20 minutes. Call a poison control center or doctor for treatment advice.

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

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage. May pose an aspiration pneumonia hazard.

Most Important Symptoms/Effects, Acute and Delayed: Brief skin exposure may cause moderate irritation. Prolonged exposure or overexposure may cause paresthesia (rash, tingling, numb, or burning sensation) which is characteristic of overexposure to the skin to pyrethroid insecticides. Dermal absorption is typically minimal. Systemic intoxication resulting from overexposure to the skin is not expected. Eye exposure may cause mild irritation.

Indication of immediate medical attention and special treatment if needed: Seek immediate medical attention for overexposure resulting in stupor, rapid breathing and heartbeat, profuse sweating and/or seizures.

5. FIRE FIGHTING MEASURES

Flash Point: >203°F (95°C) TAG Closed Cup Autoignition Temperature: Not determined. Flammability Limits: Not determined.

Extinguishing Media: Water fog or fine spray, carbon dioxide, dry chemical or foam.

Special Fire Fighting Procedures: Firefighters should wear NIOSH approved self-contained breathing apparatus and full fire-fighting turn out gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

Unusual Fire and Explosion Hazards: If water is used to fight fire, contain runoff, using dikes to prevent contamination of water sources. Dispose of fire control water later.

Hazardous Decomposition Materials (Under Fire Conditions): May produce gases such as hydrogen chloride, hydrogen fluoride, oxides of carbon and unidentified organic compounds.

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6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

Environmental Precautions: Prevent material from entering public sewer systems or any waterways. Do not flush to drain. Large spills to soil or similar surfaces may necessitate removal of topsoil. The affected area should be removed and placed in an appropriate container for disposal.

Methods for Containment: Dike spill using absorbent or impervious materials such as earth, sand or clay. Collect and contain contaminated absorbent and dike material for disposal.

Methods for Cleanup and Disposal: Pump any free liquid into an appropriate closed container. Collect washings for disposal. Decontaminate tools and equipment following cleanup. See Section 13: DISPOSAL CONSIDERATIONS for more information.

Other Information: Large spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

7. HANDLING AND STORAGE

HANDLING:

Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing.

STORAGE:

Residential: Keep out of reach of children and animals. Store in original containers only. Protect from freezing. Store in a cool, dry place, preferably in a locked storage area and avoid excess heat. Carefully open containers. After partial use, replace lids and close tightly. Do not put concentrate or dilute material into drink containers/

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

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls:

Where engineering controls are indicated by specific use conditions or a potential for excessive exposure, use local exhaust ventilation at the point of generation.

Personal Protective Equipment:

Eye/Face Protection: To avoid contact with eyes, wear face shield or goggles. An emergency eyewash or water supply should be readily accessible to the work area.

Skin Protection: To avoid contact with skin, wear coveralls over long-sleeved shirt and long pants, socks, chemical resistant shoes and socks, and chemical-resistant gloves. An emergency shower or water supply should be readily accessible to the work area.

Respiratory Protection: Not normally required. If vapors or mists exceed acceptable levels, wear NIOSH approved airpurifying respirator with cartridges/canisters approved for use against pesticides.

General Hygiene Considerations: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: 1) do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored; 2) wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet.

Exposure Guidelines:

Component	OSHA		ACGIH		
	TWA	STEL	TWA	STEL	Unit
Bifenthrin	NE	NE	NE	NE	
Propylene Glycol	10 (WEEL)	NE	NE	NE	mg/m ³
Other Ingredients	NE	NE	NE	NE	

NE = Not Established

WEEL = AIHA Workplace Environmental Exposure level

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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear to whiter or yellow liquid

Odor: Mild ether like odor
Odor threshold: No data available
pH: 5-7 @ 25° C

Melting point/freezing point: No data available Initial boiling point and boiling range: No data available Flash point: >203° F (>95° C) **Evaporation rate:** No data available Flammability (solid, gas): No data available Upper/lower flammability or explosive limits: No data available **Vapor Pressure:** No data available Vapor Density: No data available Relative density: 1.02 g/ml @ 22° C

Solubility(ies): Insoluble

Partition coefficient: n-octanol/water:No data availableAutoignition temperature:No data availableDecomposition temperature:No data availableViscosity:116 cps (30 rpm)

VOC Emission Potential (%): 18.28

Note: Physical data are typical values, but may vary from sample to sample. A typical value should not be construed as a quaranteed analysis or as a specification.

10. STABILITY AND REACTIVITY

Reactivity: Stable under normal conditions of use.

Chemical Stability: This material is stable under normal handling and storage conditions.

Possibility of Hazardous Reactions: Will not occur.

Conditions to Avoid: Excessive heat. Do not store near heat or flame. **Incompatible Materials:** Strong oxidizing agents: bases and acids.

Hazardous Decomposition Products: Under fire conditions may produce gases such as hydrogen chloride, hydrogen

fluoride, oxides of carbon and unidentified organic compounds.

11. TOXICOLOGICAL INFORMAITON

Likely Routes of Exposure: Inhalation, eye and skin contact.

Symptoms of Exposure: Skin contact with bifenthrin causes slight irritation, Overexposure to the skin may product skin sensations such as rash, numbness, burning or tingling. These skin sensations are reversible and usually subside within 12 hours. Causes mild eye irritation. Systemic effects are not expected from skin exposure. Overexposure (inhalation or ingestion) may result in tremors, convulsions, incoordination, decreased locomotion and nasal discharge, including bleeding.

Delayed, immediate and chronic effects of exposure: Not presently known.

Toxicological Data:

Data from laboratory studies conducted on this formulation:

Oral: Rat LD₅₀: 903 mg/kg

Dermal: Rat LD_{50} : >5,000 mg/kg **Inhalation:** Rat 4-hr LC_{50} : >2.02 mg/l **Eye Irritation:** Rabbit: Mildly irritating

Skin Irritation: Rabbit: Moderately irritating (PDHII = 2.1 - 5.0)

Skin Sensitization: Guinea Pigs: Not a sensitizer

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Subchronic (Target Organ) Effects: Overexposure to propylene glycol has been associated with kidney toxicity, liver toxicity (animals) and lactic acidosis. Very high dose acute exposure may result in CNS and cardiac effects.

Carcinogenicity / Chronic Health Effects: Bifenthrin has produced an increased incidence of urinary bladder tumors in male mice at the highest dose level tested. This response, however, was considered equivocal and not evidence of a clear compound related effect. The U.S. EPA has classified bifenthrin as a Class C carcinogen (a possible human carcinogen). Overexposure to propylene glycol has been associated with kidney toxicity liver toxicity (animals) and lactic acidosis.

Reproductive Toxicity: In studies with animals, bifenthrin did not cause reproductive toxicity.

Developmental Toxicity: Animal tests with bifenthrin did not cause reproductive toxicity.

Genotoxicity: Tests with bifenthrin have shown an absence of genotoxicity.

Assessment Carcinogenicity: None listed with ACGIH, IARC, NTP or OSHA.

12. ECOLOGICAL INFORMATION

Environmental Hazards:

This product is extremely toxic to fish and aquatic invertebrates.

Excotoxicity:

Data from EPA ECOTOX website for Bifenthrin Technical:

Bluegill 96-hour LC_{50} : 0.344 ug/l Bobwhite Quail Oral LD_{50} : 4450 ppm Rainbow Trout 96-hour LC_{50} : 0.15 ug/l Mallard Duck 8-day Dietary LC_{50} : 1280 ppm Daphnia 48-hour EC_{50} : 1.6 ug/l Honey Bee Oral LD_{50} : 0.01465 ug/bee

Environmental Fate:

In the soil, bifenthrin is stable over a wide pH range and degrades at a slow rate that 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).

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law and may contaminate ground water. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Handling and Disposal:

Residential: Nonrefillable container. Do not reuse or refill this container. If empty: Place in trash or offer for recycling if available. If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor (including toilet) or outdoor (Including sewer) drain.

Nonrefillable Containers 5 Gallons or Less: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. 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 or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Nonrefillable Containers Larger Than 5 Gallons: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse or pressure rinse container (equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water.

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Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Refillable containers larger than 5 gallons: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full of water and, if possible, spray all sides while adding water. Agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

14. TRANSPORTATION INFORMATION

Follow the precautions indicated in Section 7: HANDLING AND STORAGE OF THIS SDS.

DOT:

< 119 gallons per completed package

Non Regulated

≥ 119 gallons per completed package

UN 3082, Environmentally hazardous substance, liquid, n.o.s., 9, III (bifenthrin), Marine Pollutant

IMDG:

UN 3082, Environmentally hazardous substance, liquid, n.o.s., 9, III (bifenthrin), Marine Pollutant

IATA:

UN 3082, Environmentally hazardous substance, liquid, n.o.s., 9, III (bifenthrin), Marine Pollutant

15. REGULATORY INFORMATION

EPA FIFRA INFORMATION

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

CAUTION. Wash thoroughly with soap and water after handling and before eating drinking, chewing gum, using tobacco or using the toilet.

U.S. FEDERAL REGULATIONS

TSCA Inventory: This product is exempted from TSCA because it is solely for FIFRA regulated use.

SARA Hazard Notification/Reporting:

Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370.66):

Immediate and Delayed

Section 313 Toxic Chemical(s):

Bifenthrin (CAS No. 82657-04-3) 13.02.28 – 2.40% by weight in product

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Reportable Quantity (RQ) under U.S, CERCLA:

None specified

RCRA Waste Code:

Under RICRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

State Information:

Other state regulations may apply. Check individual state requirements.

California Proposition 65:

Not listed.

16. OTHER INFORMATION

National Fire Protection Association (NFPA) Hazard Rating:

Rating for this product: Health: 2 Flammability: 1 Reactivity: 0 Hazards Scale: 0 = Minimal 1 = Slight 3 = Serious 4 = Severe

This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-ACCEPTED PRODUCT LABELING (attached to and accompanying the product container). This SDS provides important health, safety and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of Federal law to use a pesticide product in any manner not prescribed on the EPA-accepted label.

Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof, Lawn and Garden Products, Inc. makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will Lawn and Garden Products, Inc. be responsible for damages of any nature whatsoever resulting from the use of or reliance upon information. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFER AND ALL SUCH WARRNATIES ARE HEREBY SPECIFICALLY DISCLAIMED.

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