



1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Vegetable Garden Soil Insecticide
EPA Reg. No.: 228-496-54705
Product Type: Insecticide

Company Name: Lawn and Garden Product, 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 on the FIFRA label. Certain sections are superseded by federal law governed by EPA for a registered pesticide.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, inhalation	Category 4
Eye irritation	Category 2B
Skin irritation	Category 2

ENVIRONMENTAL HAZARDS:

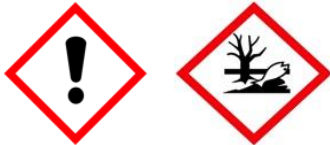
Hazardous to the aquatic environment, acute hazard	Category 1
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SIGNAL WORD:

DANGER

HAZARD STATEMENTS:

Harmful if inhaled. Causes skin irritation. Causes eye irritation.



PRECAUTIONARY STATEMENTS

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection.

If exposed or concerned: Get medical advice/attention.

Wash hands and exposed skin thoroughly after handling. If on skin: Wash with plenty of water. Specific treatment: See First Aid instructions on product label. 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 so. Continue rinsing. If eye irritation persists: Get medical advice/attention.

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Avoid breathing dust. Use only outdoors or in a well-ventilated area. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor/ if you feel unwell.

Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations (see Section 13).

3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS NO.	% BY WEIGHT
Bifenthrin Technical	82657-04-3	0.10 – 0.13
Proprietary Granule carrier	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 specifications.

4. FIRST AID MEASURES

If on Skin: 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.

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

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.

Most Important symptoms/effects: Eye exposure may cause slight irritation. Skin exposure may cause slight irritation.

Indication of Immediate medical attention and special treatment if needed: None expected.

5. FIRE FIGHTING MEASURES

Extinguishing Media: Use extinguishing media suitable for surrounding materials. Dry chemical, carbon dioxide, foam, water spray or fog.

Special Fire Fighting Procedures: Firefighters should wear NIOSH/MSHA 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 supplies. Dispose of fire control water later

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

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 Clean-Up and Disposal: Wash entire spill area with a detergent slurry, absorb and sweep into container 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:

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Do not get in eyes or on clothing. Avoid contact with skin. Users should 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 Personal Protective Equipment (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:

Store in original containers only. Store in a dry place and avoid excess heat. Carefully open containers. After partial use, replace lids and close tightly. Do not put concentrate or dilute material into food or drink containers. Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal.

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, goggles or safety glasses with front, brow and temple protection. An emergency eyewash or water supply should be readily accessible to the work area.

Skin Protection: To avoid contact with skin, wear coveralls over short-sleeved shirt and short pants, socks, shoes 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 air-purifying 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		Unit
	TWA	STEL	TWA	STEL	
Bifenthrin	NE	NE	NE	NE	
Other Ingredients	NE	NE	NE	NE	

NE = Not Established

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Brown, gray, or tan speckled colored granule (depending on carrier)
Odor:	Musty, woody, or sour odor (depending on carrier)
Odor threshold:	No data available
pH:	No data available
Melting point/freezing point:	No data available
Initial boiling point and boiling range	No data available
Flash point:	No data available
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:	0.0319 - 0.793 g/ml @ 24° C (loose) 0.354– 0.830 g/ml @24° C (packed) (depending on carrier)
Solubility(ies):	No data available
Partition coefficient: n-octanol/water:	No data available
Autoignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity:	No data available

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Note: Physical data are typical values, but may vary from sample to sample. A typical value should not be construed as a guaranteed 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: Hazardous polymerization will not occur.

Conditions to Avoid: Excessive heat. Do not store near heat or flame.

Incompatible Materials: Not known.

Hazardous Decomposition Products: Under fire conditions may produce gases such as hydrogen chloride, hydrogen fluoride, oxides of carbon and unidentified organic compounds.

11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Inhalation, Eye and Skin contact.

Symptoms of Exposure:

Eye Contact: Minimally irritating based on toxicity studies.

Skin Contact: Minimally irritating based on toxicity studies.

Ingestion: Slightly toxic if ingested based on toxicity studies.

Inhalation: Low inhalation toxicity based on toxicity studies.

Delayed, immediate and chronic effects of exposure: None expected.

Toxicological Data:

Data from laboratory studies conducted on this formulation:

Oral: Rat LD₅₀: >5,000 mg/kg (females)

Dermal: Rat LD₅₀: >2,000 mg/kg

Inhalation: Rat 4-hr LC₅₀: >2.00 mg/l

Eye Irritation: Rabbit: Minimally irritating

Skin Irritation: Rabbit: Minimally irritating

Skin Sensitization: Not a contact sensitizer in guinea pigs following repeated skin exposure

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). May contain kaolin, see assessment of carcinogenicity below.

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

Developmental Toxicity: Animal tests with bifenthrin have not demonstrated developmental effects.

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

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

12. ECOLOGICAL INFORMATION

Ecotoxicity:

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 :	0.0146 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. 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 the nearest EPA Regional Office for guidance.

Container Handling and Disposal:

Nonrefillable container. Do not reuse or refill this container. 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.

14. TRANSPORTATION INFORMATION

Follow the precautions indicated in Section 7: HANDLING AND STORAGE of this MSDS.

DOT

< 882 pounds: not regulated

≥ 882 pounds: UN 3077, Environmentally hazardous substance, solid, n.o.s., 9, PG III, (bifenthrin), Marine Pollutant

IMDG

UN 3077, Environmentally hazardous substance, solid, n.o.s., 9, PG III, (bifenthrin), Marine Pollutant

IATA

UN 3077, Environmentally hazardous substance, solid, n.o.s., 9, PG 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.

WARNING. Causes substantial but temporary eye injury. Harmful if absorbed through skin, inhaled, or swallowed. **DO NOT** get in eyes or on clothing. Avoid contact with skin. Wear protective eyewear (goggles, face shield or safety glasses). Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Wear coveralls over short-sleeved shirt and short pants, socks, shoes, and chemical resistant gloves. Remove and wash contaminated clothing before reuse.

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):**

Immediate and Delayed

Section 313 Toxic Chemical(s):

Bifenthrin (CAS No. 82657-04-3) 0.1 – 0.3% by weight in product

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

None

RCRA Waste Code:

Under RCRA, 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: 1 Flammability: 0 Reactivity: 0

Hazards Scale: 0 = Minimal 1 = Slight 2 = Moderate 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

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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 REFERS AND ALL SUCH WARRANTIES ARE HEREBY SPECIFICALLY DISCLAIMED.

Date of Issue: July 7, 2015 Nufarm-May 18, 2015

Supersedes: June 2010