

**SOUTHERN AG. BIFENTHRIN PRO LAWN,
BIFENTHRIN NURSERY, AND BIFENTHRIN GC GRANULAR
MATERIAL SAFETY DATA SHEET**

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Manufacturer's Name & Address

Southern Agricultural Insecticides, Inc.
P.O. Box 218, Palmetto, Fla. 34220

Phone: 1-941-722-3285
Chemtrec: 1-800-424-9300

SECTION 1 CHEMICAL PRODUCT IDENTIFICATION

Product Name: Bifenthrin Granular
Bifenthrin Nursery Granular
Bifenthrin GC Granular

Product use: Insecticide

**FOR MEDICAL EMERGENCIES, CONTACT the National Pesticide Information Center at 1-800-858-7378
FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident, call CHEMTREC 1-800-424-9300**

SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

Component Name:	CAS No.	Weight %	PEL/TLV
Bifenthrin*	82657-04-3	0.2	None
Surfactant Blend	0000-00-0	<2	None

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

Ingredient values are not product specifications

SECTION 3 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

IMMEDIATE CONCERNS:

- Off-white, solid granules with a very little odor.
- Slightly combustible. May support combustion at elevated temperatures.
- Thermal decomposition and burning may form toxic by-products.
- For large exposures or fire, wear personal protective equipment.
- Extremely toxic to fish and aquatic organisms. Keep out of drains and water courses.
- Expected to have moderate oral toxicity.

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

SECTION 4 FIRST AID MEASURES

If a known exposure occurs or is suspected, immediately start the recommended procedures below. Simultaneously, contact a Poison Control Center and a physician.

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 IN EYES: Immediately flush with water for at least 15 minutes, lifting upper and lower eyelids intermittently. See a medical doctor immediately.

IF INHALED: Remove to fresh air. If breathing difficulty or discomfort occurs and persists, obtain medical attention.

NOTES TO PHYSICIAN: This product is a pyrethroid. If large amounts have been ingested, milk, cream and other digestible fats and oils may increase absorption and so should be avoided. This product is expected to have low oral toxicity and low dermal toxicity. It is expected to be irritating to the skin and eyes. The dust may be irritating to the nose, throat and respiratory tract. For ingestion exposure, gastric lavage using an endotracheal tube may be preferred to vomiting. Reversible skin sensation (paresthesia) may occur and ordinary skin salves have been found useful in reducing discomfort. Treatment is otherwise controlled by removal of exposure followed by symptomatic and supportive care.

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SECTION 5 FIRE FIGHTING MEASURES

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

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

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

HAZARDOUS COMBUSTION: Carbon monoxide, carbon dioxide, hydrogen chloride and hydrogen fluoride.

SECTION 6 ACCIDENTAL RELEASE MEASURES

FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident, call CHEMTREC 1-800 424-9300

RELEASE NOTES: Isolate and post spill area. Wear protective clothing and personal protective equipment as prescribed in Section 8, "Exposure Controls/Personal Protection". Keep unprotected persons and animals out of the area.

Keep material out of lakes, streams, ponds and sewer drains. 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 a suitable solution of caustic or soda ash, and an appropriate alcohol (i.e., methanol, ethanol, or isopropanol). Follow this by washing with a strong soap and water solution. Absorb, as above, any excess liquid and add to the drums of waste already collected. Repeat if necessary. Dispose of drummed waste according to the method outlined in Section 13, "Disposal Considerations".

SECTION 7 HANDLING AND STORAGE

GENERAL PROCEDURES: Store in a cool, dry, well-ventilated place. Do not use or store near heat, open flame or hot surfaces. Store in original containers only. Keep out of reach of children and animals. Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

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

PERSONAL PROTECTIVE EQUIPMENT (PPE):

EYES AND FACE: For dust exposure, wear chemical protective goggles or a face shield.

CLOTHING: Depending upon concentrations encountered, 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 a 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 from household laundry).

GLOVES: Wear chemical protective gloves made of materials such as rubber or neoprene. Thoroughly wash outside of gloves with soap and water prior to removal. Inspect regularly for leaks.

RESPIRATOR: For dust 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.

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COMMENTS: Personal protective recommendations for mixing or applying this product are prescribed on the product label. Information stated above provides useful, additional guidance for individuals whose use or handling of this product is not guided by the product label.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Off-white solid granule
ODOR: Practically odorless
DENSITY: Pour: 49.317 lb/ft³ (0.790 g/mL)
 Tap: 54.624 lb/ft³ (0.875 g/mL)
pH: 6.68
MOLECULARWEIGHT: 422.88 (bifenthrin)

SECTION 10 STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable
CONDITIONS TO AVOID: Excessive heat and fire
**HAZARDOUS
DECOMPOSITION PRODUCTS:** None known
HAZARDOUS POLYMERIZATIONS: Will not occur

SECTION 11 TOXICOLOGICAL INFORMATION

Oral: LD₅₀ >5,000 mg/kg (rat) (similar formulation)
Dermal: LD₅₀ >2000 mg/kg (rabbit) (bifenthrin)
Eye Irritation: Expected to be irritating to the eyes
Skin Irritation: Expected to be irritating to the skin
Sensitization: This product is not expected to produce skin sensitization

ACUTE EFFECTS FROM OVEREXPOSURE: This product is expected to have low oral toxicity and low dermal toxicity. It is expected to be irritating to the skin and eyes. The dust may be irritating to the nose, throat, and respiratory tract. Bifenthrin does not cause acute delayed neurotoxicity. Experience to date indicates that contact with bifenthrin may occasionally produce skin sensations such as rashes, numbing, burning or tingling. These sensations are reversible and usually subside with 12 hours.

CHRONIC EFFECTS FROM OVEREXPOSURE: No data available for the formulation. In studies with laboratory animals, bifenthrin did not cause reproductive toxicity or teratogenicity. Tremors were associated with repeated exposure of laboratory animals to bifenthrin. In lifetime feeding studies conducted with rodents, a slight increase in the incidence of urinary bladder tumors at the highest dose in male mice was considered to be an equivocal response, not evidence of a clear compound-related effect. The overall absence of genotoxicity has been demonstrated in mutagenicity tests with bifenthrin.

CARCINOGENICITY:

IARC: See 'Note' below
NTP: Not listed
OSHA: Not listed
OTHER: Not listed (ACGIH)

COMMENTS:

Note: None of the ingredients in this product are known/listed carcinogens; however, this product may contain trace amounts of wood dust and crystalline silica, both of which are listed by IARC as potential human carcinogens.

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SECTION 12 ECOLOGICAL INFORMATION

Unless otherwise indicated, the data presented below are for the active ingredient.

ENVIRONMENTAL DATA: 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).

ECOTOXICOLOGICAL INFORMATION: Bifenthrin is highly toxic to fish and aquatic arthropods and LC₅₀ values range from 0.0038 to 17.8 µg/L. In general, the aquatic arthropods are the most sensitive species. Care should be taken to avoid contamination of the aquatic environment. Befenthrin had no effect on mollusks at its limit of water solubility. Bifenthrin is only slightly toxic to both water fowl and upland game birds (LD₅₀ values range from 1,800 mg/kg to >2,150 mg/kg).

SECTION 13 DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Open dumping or burning of this material or its packaging is prohibited. If spilled material cannot be disposed of by use according to instructions, an acceptable method of disposal is to incinerate in accordance with local, state and national environmental laws, rules, standards and regulations. However, because acceptable methods of disposal may vary by location and regulatory requirements may change, the appropriate agencies should be contacted prior to disposal.

EMPTY CONTAINER: Completely empty package into application equipment then dispose of empty package in accordance with all Federal, State and local registrations.

SECTION 14 TRANSPORT INFORMATION

Not regulated by DOT.

SECTION 15 REGULATORY INFORMATION

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355): Not listed

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

SECTION 312 THRESHOLD PLANNING QUANTITY (40 CFR 370): The threshold planning quantity (TPQ) for this product, if treated as a mixture, is 10,000 lbs. This product contains the following ingredients with a TPQ of less than 10,000 lbs: None

SECTION 313 REPORTABLE INGREDIENTS (40 CFR 372): There are no ingredients in this product which are subject to Section 313 reporting requirements.

CERCLA (COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT)

CERCLA REGULATORY (40 CFR 302.4): Not listed

STATE REGULATIONS

PROPOSITION 65 STATEMENT: There are no ingredients in this product which are subject to the reporting requirements of California Proposition 65.

SECTION 16 OTHER INFORMATION

REVISION SUMMARY: New MSDS 5/30/06

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This Material Safety Data Sheet (MSDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-APPROVED PRODUCT LABELING (attached to and accompanying the product container). This MSDS 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.