# **SAFETY DATA SHEET**

#### GardenTech Sevin Insect Killer Lawn Granules





# 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier** 

Product Name GardenTech Sevin Insect Killer Lawn Granules

Other means of identification

**Product Code(s)** 279-3346-71004

Synonyms BIFENTHRIN: (2-methyl[1,1'-biphenyl]-3-yl)methyl

(1R,3R)-rel-3-[(1Z)-2-chloro-3,3,3-trifluoro-1-propenyl]-2,2-dimethylcyclopropanecarboxylat

e (CAS name); 2-methyl-3-phenylbenzyl

(1RS)-cis-3-(2-chloro-3,3,3-trifluoroprop-1-enyl)-2,2-dimethylcyclopropanecarboxylate

(IUPAC name)

ZETA-CYPERMETHRIN: (+/-)-α -cyano(3-phenoxyphenyl)methyl (+/-) cis,

trans-3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropanecarboxylate (CAS name); (RS)-  $\alpha$ 

-cyano-3-phenoxybenzyl

(1RS)-cis-trans-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate (IUPAC name)

Active Ingredient(s) Bifenthrin, Zeta-cypermethrin

Formula C23H22CIF3O2 (Bifenthrin)

C22H19Cl2NO3 (Zeta-cypermethrin)

Chemical Family Pyrethroid

Recommended use of the chemical and restrictions on use

Recommended Use: Insecticide

**Restrictions on Use:** Use as recommended by the label

**Supplier Address** 

TechPac, LLC.

1000 Parkwood Circle - Suite 700

Atlanta, GA 30339

General information: 866-945-5033

Emergency telephone number

For leak, fire, spill or accident emergencies, call:

1-800-424-9300

For medical emergencies (human or animal), call:

1-800-420-9347

## 2. HAZARDS IDENTIFICATION

## Classification

#### **OSHA Regulatory Status**

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Serious eye damage/eye irritation	Category 2B
Skin sensitization	Category 1B
Carcinogenicity	Category 2

## GHS Label elements, including precautionary statements

# **EMERGENCY OVERVIEW**

#### Warning

#### **Hazard Statements**

H302 - Harmful if swallowed

H317 - May cause an allergic skin reaction

H320 - Causes eye irritation

H332 - Harmful if inhaled

H351 - Suspected of causing cancer



## **Precautionary Statements - Prevention**

P202 - Do not handle until all safety precautions have been read and understood

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P264 - Wash face, hands and any exposed skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P272 - Contaminated work clothing should not be allowed out of the workplace

P280 - Wear protective gloves

P281 - Use personal protective equipment as required

# **Precautionary Statements - Response**

P308 + P313 - If exposed or concerned: Get medical advice/attention

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337 + P313 - If eye irritation persists: Get medical advice/ attention

P302 + P352 - IF ON SKIN: Wash with plenty of water and soap

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

P362 - Take off contaminated clothing and wash before reuse

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell

P330 - Rinse mouth

## **Precautionary Statements - Storage**

P405 - Store locked up

## **Precautionary Statements - Disposal**

Dispose of contents/container according to label directions

## Hazards not otherwise classified (HNOC)

No hazards not otherwise classified were identified.

#### Other Information

Very toxic to aquatic life with long lasting effects. May be harmful in contact with skin.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Family Pyrethroid.

Chemical name	CAS-No	Weight %
Bifenthrin	82657-04-3	0.115
Zeta-cypermethrin (F2700)	52315-07-8	0.029
Oxo-decyl alcohol acetate	108419-34-7	<1
Microcrystalline cellulose	9004-34-6	<1

Synonyms are provided in Section 1.

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4.						

Eye Contact Hold eyes 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 further treatment advice.

**Skin Contact**Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20

minutes. Call a poison control center or doctor for further treatment advice.

Inhalation Move to fresh air. If person is not breathing, call 911 (within the U.S. and Canada) or an

ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a

poison control center or doctor for further treatment advice.

**Ingestion** Call a poison control center or doctor immediately for treatment advice. Have person sip a

glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison

control center or doctor. Do not induce vomiting or give anything by mouth to an

unconscious person.

Most important symptoms and effects, both acute and delayed

Central nervous system effects.

Indication of immediate medical attention and special treatment needed, if necessary

This product contains a pyrethroid. If large amounts have been ingested, the stomach and intestines should be evacuated. Treatment is symptomatic and supportive. Digestible fats,

oils, or alcohol may increase absorption and so should be avoided.

# 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media** Dry chemical, CO2, water spray or regular foam. Avoid heavy hose streams.

Specific Hazards Arising from the

Chemical

**Explosion data** 

Sensitivity to Mechanical Impact Sensitivity to Static Discharge None known

Not sensitive. Not sensitive.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus and full protective gear. Isolate fire area. Evaluate upwind.

# 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Isolate and post spill area. Remove all sources of ignition. Wear suitable protective clothing,

gloves and eye/face protection. For personal protection see section 8.

Other For further clean-up instructions, call FMC Emergency Hotline number listed in Section 1

"Product and Company Identification" above.

Environmental Precautions Keep people and animals away from and upwind of spill/leak. Keep material out of lakes,

streams, ponds, and sewer drains.

**Methods for Containment**Use a wet sweeping compound or water to prevent dust formation. Prevent further leakage

or spillage if safe to do so.

**Methods for cleaning up**Sweep up and shovel into suitable containers for disposal. Clean and neutralize spill area,

tools and equipment by washing with bleach water and soap. Absorb rinsate and add to the collected waste. Waste must be classified and labeled prior to recycling or disposal.

Dispose of waste as indicated in Section 13.

# 7. HANDLING AND STORAGE

Handling Handle in accordance with good industrial hygiene and safety practice. Do not contaminate

other pesticides, fertilizers, water, food, or feed by storage or disposal.

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep/store only in

original container. Keep away from food, drink and animal feedingstuffs.

Incompatible products Strong oxidizing agents, Fluorine, Chlorine trifluorine, Oxygen difluoride

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH	Mexico
Microcrystalline cellulose	TWA: 10 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	Mexico: TWA 10 mg/m <sup>3</sup>
(9004-34-6)		TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	Mexico: STEL 20 mg/m <sup>3</sup>
Chemical name	British Columbia	Quebec	Ontario TWAEV	Alberta
Microcrystalline cellulose	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> TWA: 5	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> TWA: 5
(9004-34-6)	TWA: 3 mg/m <sup>3</sup>	mg/m³	-	mg/m³
·	-	-		-

## **Appropriate engineering controls**

**Engineering measures** Apply technical measures to comply with the occupational exposure limits. Ensure

adequate ventilation, especially in confined areas. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the

recommended equipment.

## Individual protection measures, such as personal protective equipment

Eye/Face Protection If there is a potential for exposure to particles which could cause eye discomfort, wear

chemical goggles.

**Skin and Body Protection** Wear long-sleeved shirt, long pants, socks, and shoes.

Hand Protection Protective gloves

**Respiratory Protection** For dust, splash, mist or spray exposures wear a filtering mask.

**Hygiene measures** Clean water should be available for washing in case of eye or skin contamination. Remove

and wash contaminated clothing before re-use. Wash skin prior to eating, drinking, chewing gum or using tobacco. Shower or bathe at the end of working. Launder work clothing

separately from regular household laundry.

General information If the product is used in mixtures, it is recommended that you contact the appropriate

protective equipment suppliers.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Information on basic physical and chemical properties

Appearance Granules
Physical State Solid

ColorNo information availableOdorNo information availableOdor thresholdNo information available

pH 7.15 @ 22.1°C (1 suspension in water)

Melting point/freezing point Not applicable

Boiling Point/Range No information available

Flash point Not applicable

**Evaporation Rate**Flammability (solid, gas)
No information available
No information available

Flammability Limit in Air

Upper flammability limit:
Lower flammability limit:
Vapor pressure
Vapor density

No information available
No information available
No information available

**Density** 46.78 lb/cu ft (loose); 54.40 lb/cu ft (tapped)

No information available Specific gravity Water solubility No information available Solubility in other solvents No information available Partition coefficient No information available No information available **Autoignition temperature Decomposition temperature** No information available Viscosity, kinematic No information available Viscosity, dynamic No information available No information available **Explosive properties** 

Oxidizing properties Based on known chemistry, neither the active ingredients nor the inert ingredients are

considered to be either strong oxidizing or reducing agents.

Molecular weight No information available Bulk density No information available

# 10. STABILITY AND REACTIVITY

Reactivity Not applicable

Chemical Stability Stable under recommended storage conditions.

Possibility of Hazardous Reactions None under normal processing.

Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid None known

Incompatible materials Strong oxidizing agents, Fluorine, Chlorine trifluoride, Oxygen difluoride.

Hazardous Decomposition Products See Section 5 for more information.

## 11. TOXICOLOGICAL INFORMATION

Acute toxicological data presented below is based on testing of the active ingredient [Zeta-cypermethrin (F2700)/Bifenthrin 1:4 16.25% SFR MUP] only.

#### Product Information

**LD50 Oral** 727.3 mg/kg **LD50 Dermal** 727.0 mg/kg

LC50 Inhalation > 2.11 mg/L 4 hr (Rat, male and female)

Serious eye damage/eye irritation
Skin corrosion/irritation
Sensitization
Mildly irritating.
Slightly irritating.
Sensitizer

#### Information on toxicological effects

Symptoms Large doses of bifenthrin ingested by laboratory animals produced signs of toxicity including

convulsions, tremors and bloody nasal discharge.

Large doses of zeta-cypermethrin, ingested by laboratory animals, may produce signs of toxicity including tremors, incoordination, convulsions, staggered gait, and oral discharge.

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic toxicity Bifenthrin: Long-term exposure caused neurotoxicity (tremors and impaired gait) in the early

exposure in animal studies, but tremors disappeared with continued exposure

Zeta-cypermethrin: Long-term exposure caused neurotoxicity (body tremors, decreased

motor activity), decreased body weight and increased liver weight.

Mutagenicity Bifenthrin, Zeta-cypermethrin: Not genotoxic in animal studies.

Carcinogenicity Bifenthrin: Weak treatment-related response for liver adenocarcinomas and benign bladder

tumors (lesion) in male mice.

Cypermethrin caused an increase in benign lung tumors in mice, but not in rats. EPA has classified cypermethrin as a possible human carcinogen based on this information, but

does not regulate based on its low cancer risk.

Neurological effects Bifenthrin: Causes clinical signs of neurotoxicity (tremors, impaired gait, excessive

salivation) following acute or subchronic exposure. Tremors disappeared with continued

exposure.

Zeta-cypermethrin: Causes neurotoxicity (tremors and decreased motor activity) following

acute, subchronic or chronic exposure.

**Reproductive toxicity**Bifenthrin, Zeta-cypermethrin: No toxicity to reproduction in animal studies. **Developmental toxicity**Bifenthrin, Zeta-cypermethrin: Not teratogenic in animal studies.

STOT - single exposure Causes damage to organs. See listed target organs below.

STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure. See listed target

organs below.

Target organ effects Central Nervous System (CNS), blood Thyroid, liver

**Neurological effects**Bifenthrin: Causes clinical signs of neurotoxicity (tremors, impaired gait, excessive

salivation) following acute or subchronic exposure. Tremors disappeared with continued

exposure

Zeta-cypermethrin: Causes neurotoxicity (tremors and decreased motor activity) following

acute, subchronic or chronic exposure.

Aspiration hazard

No information available.

Chemical name	ACGIH	IARC	NTP	OSHA
Zeta-cypermethrin (F2700)		Group 2A		
52315-07-8				

## Legend:

IARC (International Agency for Research on Cancer) Group 2A - Probably Carcinogenic to Humans

# 12. ECOLOGICAL INFORMATION

#### **Ecotoxicity**

Bifenthrin (82657-04-3)				
Active Ingredient(s)	Duration	Species	Value	Units
Bifenthrin	96 h LC50	Fish	0.1	μg/L
	72 h EC50	Algae	0.822	mg/L
	48 h EC50	Crustacea	0.11	μg/L
	21 d NOEC	Fish	0.012	μg/L
	21 d NOEC	Crustacea	0.0013	μg/L

Zeta-cypermethrin (F2700) (52315-07-8)							
Active Ingredient(s) Duration Species Value							
Zeta-cypermethrin	48 h EC50	Crustacea	0.14	μg/L			
	96 h LC50	Fish	0.69	μg/L			

72 h EC50	Algae	>1	mg/L
21 d NOEC	Crustacea	0.01	μg/L
21 d NOEC	Fish	0.015	μg/L

**Persistence and degradability**Bifenthrin: Moderately persistent. Does not readily hydrolyze. Not readily biodegradable.

Zeta-cypermethrin: Non-persistent, Readily hydrolyzed, Not readily biodegradable.

**Bioaccumulation** Bifenthrin: The substance has a potential for bioconcentration.

Zeta-cypermethrin: The substance does not have a potential for bioconcentration.

**Mobility** Bifenthrin, Zeta-cypermethrin: Immobile, Not expected to reach groundwater.

# 13. DISPOSAL CONSIDERATIONS

Waste disposal methods Improper disposal of excess pesticide, spray mixture, or rinsate is prohibited. If these

wastes cannot be disposed of by use according to label instructions, contact appropriate disposal authorities for guidance. Proper personal protective equipment, as described in

Sections 7 and 8, must be worn while handling materials for waste disposal.

**Contaminated Packaging**Containers must be disposed of in accordance with local, state and federal regulations.

Refer to the product label for container disposal instructions.

# 14. TRANSPORT INFORMATION

**DOT**Not regulated for transportation if shipped in Non Bulk packaging. The classification below

pertains to the shipment in Bulk packaging.

UN/ID no UN3077

**Proper Shipping Name** Environmentally hazardous substance, solid, n.o.s.

Hazard class 9
Packing Group III

Marine Pollutant Bifenthrin, Zeta-cypermethrin.

**Description** UN3077, Environmentally hazardous substances, solid, n.o.s. (Bifenthrin,

Zeta-cypermethrin), 9, III

TDG

UN/ID no UN3077

**Proper Shipping Name** Environmentally hazardous substance, solid, n.o.s.

Hazard class 9
Packing Group III

Marine Pollutant Bifenthrin, Zeta-cypermethrin.

**Description** UN3077, Environmentally hazardous substances, solid, n.o.s. (Bifenthrin,

Zeta-cypermethrin), 9, III

ICAO/IATA

UN/ID no UN3077

**Proper Shipping Name** Environmentally hazardous substance, solid, n.o.s.

Hazard class 9
Packing Group III

**Description** UN3077, Environmentally hazardous substances, solid, n.o.s. (Bifenthrin,

Zeta-cypermethrin), 9, III

Limited quantity 30 kg G

IMDG/IMO

UN/ID no UN3077

Proper Shipping Name Environmentally hazardous substance, solid, n.o.s.

Hazard class 9
Packing Group III
EmS No. F-A, S-F

Marine Pollutant Bifenthrin, Zeta-cypermethrin

Description

UN3077, Environmentally hazardous substances, solid, n.o.s. (Bifenthrin, Zeta-cypermethrin), 9, III

# 15. REGULATORY INFORMATION

# U.S. Federal Regulations

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

	Chemical name	CAS-No	Weight %	SARA 313 - Threshold Values %
Γ	Bifenthrin - 82657-04-3	82657-04-3	0.115	1.0

## SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic health hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

## **Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

#### **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

#### FIFRA Information

This chemical is a pesticide product registered by the 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, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

#### CAUTION

Harmful if swallowed. Causes moderate eye irritation. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. This pesticide is extremely toxic to fish, aquatic invertebrates, oysters and shrimp.

# **US State Regulations**

# **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

# U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Bifenthrin 82657-04-3	X		
Zeta-cypermethrin (F2700) 52315-07-8		X	
Microcrystalline cellulose 9004-34-6	X	X	Х

# **International Inventories**

Chemical name	TSCA (United States)	DSL (Canada)	EINECS/ELINC S (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Bifenthrin 82657-04-3				Χ	X	X		
Zeta-cypermethrin (F2700) 52315-07-8			X		Х	X	Х	Х
Oxo-decyl alcohol acetate 108419-34-7	Х	Х			Х		Х	Х
Microcrystalline cellulose 9004-34-6	Х	Х	Х	Х	Х	Х	Х	Х

#### **Mexico - Grade**

Moderate risk, Grade 2

Chemical name	Carcinogen Status	Mexico	
Microcrystalline cellulose	cellulose Mexico: TWA 10 mg/m <sup>3</sup>		
		Mexico: STEL 20 mg/m <sup>3</sup>	

Chemical name	Chemical name  Mexico - Pollutant Release and Transfer Register - Reporting Emissions for Fabrication, Process or Use -Threshold Quantities	
Bifenthrin	100	100 kg/yr
	2500 kg/yr	

**WHMIS Hazard Class** 

D2A - Very toxic materials D2B - Toxic materials



	16. OTHER INFORMATION			
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NFPA	Health Hazards 2	Flammability 1	Instability 0	Special Hazards -
HMIS	Health Hazards 2*	Flammability 0	Physical hazard 0	Personal Protection X

<sup>\*</sup>Indicates a chronic health hazard.

NFPA/HMIS Ratings Legend Severe = 4; Serious = 3; Moderate = 2; Slight = 1; Minimal = 0

Revision date: 2016-08-24
Reason for revision: Initial Release

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