SAFETY DATA SHEET

September 2018

TechPac, LLC.

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

GardenTech Over' n Out! Advanced Fire Ant Killer

Product Name

Other means of identification

EPA Registration No. 279-3344-71004

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

3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclopropanecarboxylate (CAS name);

2-methylbiphenyl-3-ylmethyl

(Z)-(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)- α

-cyano-3-phenoxybenzyl

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

Active Ingredient(s) Bifenthrin, Zeta-cypermethrin

Chemical Family Pyrethroid Pesticide

Recommended use of the chemical and restrictions on use

Recommended Use: Insecticide

Restrictions on Use: Use as recommended by the label

Manufacturer Address

TechPac, LLC. 1000 Parkwood Circle

Suite 700

Atlanta, GA 30339

Emergency telephone number

Emergency Telephone Number (24 hr/7days)

1-800-420-9347 Product Information: 1-866-945-5033

SDS Information or Request:

1-866-945-5033

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
Skin sensitization	Category 1B
Carcinogenicity	Category 1A

GHS Label elements, including precautionary statements

EMERGENCY OVERVIEW

Danger

Hazard Statements

H302 - Harmful if swallowed

H317 - May cause an allergic skin reaction

H332 - Harmful if inhaled

H350 - May cause 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

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

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

P363 - Wash contaminated clothing 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

P501 - Dispose of contents/ container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

No hazards not otherwise classified were identified.

Other Information

Very toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Family

Pyrethroid Pesticide.

Chemical name	CAS-No	Weight %

Version 1.01

Bifenthrin	82657-04-3	0.2
Zeta-cypermethrin (F2700)	52315-07-8	0.05
bentonite	1302-78-9	85-100
crystalline silica, quartz	14808-60-7	5-10
Hexylene Glycol	107-41-5	1-10

Synonyms are provided in Section 1.

		MFΔ	

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 ContactTake 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 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 give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Allergic skin reactions.

Indication of immediate medical attention and special treatment

needed, if necessary

Treat symptomatically. This product is 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 Foam. Carbon dioxide (CO₂). Dry chemical. Water spray or fog.

Specific Hazards Arising from the

Chemical

Powdered material may form explosive dust-air mixtures

Explosion data

Sensitivity to Mechanical Impact Sensitivity to Static Discharge 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 downwind.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Isolate and post spill area. 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 Sweep up and shovel into suitable containers for disposal.

Methods for cleaning up

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 Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.

Storage Keep in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces

and sources of ignition. Keep out of reach of children and animals. Keep/store only in

original container.

Incompatible products None known

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH	Mexico
bentonite 1302-78-9	TWA: 1 mg/m ³	-	-	-
crystalline silica, quartz 14808-60-7	TWA: 0.025 mg/m ³	See note	IDLH: 50 mg/m ³ TWA: 0.05 mg/m ³	Mexico: TWA 0.1 mg/m ³
Hexylene Glycol 107-41-5	Ceiling: 25 ppm	-	Ceiling: 25 ppm Ceiling: 125 mg/m ³	Mexico: Ceiling 25 ppm Mexico: Ceiling 125 mg/m³
Chemical name	British Columbia	Quebec	Ontario TWAEV	Alberta
bentonite 1302-78-9	TWA: 1.0 mg/m ³	-	TWA: 1 mg/m ³	-
crystalline silica, quartz 14808-60-7	TWA: 0.025 mg/m ³	TWA: 0.1 mg/m ³	TWA: 0.10 mg/m ³	TWA: 0.025 mg/m ³
Hexylene Glycol 107-41-5	Ceiling: 25 ppm	Ceiling: 25 ppm Ceiling: 121 mg/m ³	CEV: 25 ppm	Ceiling: 25 ppm Ceiling: 121 mg/m ³

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 If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

respiratory protection should be worn. Respiratory protection must be provided in

accordance with current local regulations.

Hygiene measuresClean water should be available for washing in case of eye or skin contamination. Wash

skin prior to eating, drinking, chewing gum or using tobacco. Shower or bathe at the end of working. Remove and wash contaminated clothing before re-use. 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 These recommendations apply to the product as supplied

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance Granules
Physical State Solid
Color Gray

Odor Mild detergent odor
Odor threshold No information available

pH 7.33

Melting point/freezing point Not applicable

Boiling Point/Range No information available

Flash point Not applicable

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

Flammability Limit in Air

Upper flammability limit: No information available Lower flammability limit: No information available Vapor pressure No information available Vapor density No information available **Density** No information available Specific gravity No information available Water solubility Dispersible in water Solubility in other solvents No information available No information available Partition coefficient **Autoignition temperature** No information available **Decomposition temperature** No information available Viscosity, kinematic No information available No information available Viscosity, dynamic No information available **Explosive properties Oxidizing properties** No information available No information available Molecular weight 55.43 lb/cu ft **Bulk density**

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 Heat, flames and sparks

Incompatible materials None known.

Hazardous Decomposition Products None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Product Information

 LD50 Oral
 550 mg/kg (rat)

 LD50 Dermal
 > 5000 mg/kg (rabbit)

 LC50 Inhalation
 > 2.11 mg/L (rat) 4 hr

Serious eye damage/eye irritation Mildly irritating.

Skin corrosion/irritationMay cause slight irritation.

Sensitization Sensitizer.

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

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 and spleen 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 toxicityBifenthrin. Zeta-cypermethrin: No toxicity to reproduction in animal studies.

Developmental toxicityBifenthrin, Zeta-cypermethrin: Not teratogenic in animal studies.

STOT - single exposure Not classified. STOT - repeated exposure Not classified.

Target organ effects Bifenthrin: Central Nervous System (CNS), Zeta-cypermethrin: Central Nervous System,

blood.

Neurological effectsBifenthrin: 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
crystalline silica, quartz	A2	Group 1	Known	X
14808-60-7				

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	Units
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.

Version 1.01

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

substance does not have a potential for bioconcentration.

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

13. DISPOSAL CONSIDERATIONS

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

wastes cannot be disposed of by use according to label instructions, contact appropriate

disposal authorities for guidance.

Containers must be disposed of in accordance with local, state and federal regulations. Refer to the product label for container disposal instructions. **Contaminated Packaging**

14. TRANSPORT INFORMATION

	UN Number	UN Proper Shipping Name	Transport Hazard Class(es)	Packing Group	Environmental Hazards
DOT	N/A	Not regulated	N/A	N/A	N/A
IMO/IMDG	UN3077	Packaging 5 kg or greater: Environmentally hazardous substance, solid, n.o.s. (Zeta-cypermethrin, Bifenthrin)	9	III	Marine Pollutant
IATA/ICAO	UN3077	Packaging 5 kg or greater: Environmentally hazardous substance, solid, n.o.s. (Zeta-cypermethrin, Bifenthrin)	9	III	Acute Aquatic Toxicity

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 %
Bifenthrin - 82657-04-3	82657-04-3	0.8	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 contains the following Proposition 65 chemicals:.

Chemical name	California Prop. 65
crystalline silica, quartz - 14808-60-7	Carcinogen

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated by state right-to-know regulations

International Inventories

Component	TSCA (United States)	DSL (Canada)	EINECS/ELI NCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Bifenthrin				X	X	X		
82657-04-3 (0.2)								

Zeta-cypermethrin (F2700) 52315-07-8 (0.05)			Х		Х	Х	Х	Х
bentonite 1302-78-9 (80-90)	Х	Х	Х		Х	Х	Х	Х
crystalline silica, quartz 14808-60-7 (5-10)	Х	Х	Х	Х	Х	Х	Х	Х
Hexylene Glycol 107-41-5 (1-5)	Х	Х	Х	Х	Х	Х	Х	Х

Mexico - Grade

Moderate risk, Grade 2

WHMIS Hazard Class

D2A - Very toxic materials D2B - Toxic materials



16. OTHER INFORMATION							
NFPA	Health Hazards 2	Flammability 1	Instability 0	Special Hazards -			

NFPA Health Hazards 2 Flammability 1 Instability 0 Special Hazards HMIS Health Hazards 2* Flammability 1 Physical hazard 0 Personal Protection X

Disclaimer

TechPac, LLC. believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specified product designated and may not be applicable where such product is used in combination with any other materials or in any process. Use of this product is regulated by the U.S. Environmental Protection Agency (EPA). It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Further, since the conditions and methods of use are beyond the control of TechPac, LLC., TechPac, LLC. expressly disclaims any and all liability as to any results obtained or arising from any use of the products or reliance on such information.

^{*}Indicates a chronic health hazard.