

**FOR EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE, OR ACCIDENT, CALL:
CHEMTREC 1-800-424-9300**

Section 1—Chemical Product and Company Identification		
Product Name:	Grizzly Z	EPA Reg. No.: 1381-211
Common Name:	Pyrethroid insecticide	
Chemical Description:	[1a(S*),3a(Z)]-cyano(3-phenoxyphenyl)methyl-3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclopropanecarboxylate	
Manufactured For: WINFIELD SOLUTIONS, LLC P. O. Box 64589 St. Paul, MN 55164-0589	Medical Emergency Telephone Number: 1-877-424-7452 MSDS Revision Date: 12/10/2012 Supersedes document dated 01/08/2008	

Section 2—Hazards Identification
Emergency Overview: Blue opaque liquid (capsule suspension). Product may cause oxygen deficiency in confined spaces; follow all OSHA regulations pertaining to confined space entry. Harmful if swallowed or inhaled. See health effects below. WARNING: Keep out of reach of children. Route(s) of Entry: Eyes, Inhalation, Skin, and Ingestion.
Health Hazards (Acute and Chronic): Inhalation: Inhalation of mist may cause irritation of the upper respiratory tract. Vapors may cause drowsiness and dizziness. Eyes: Causes mild irritation of eyes. Skin: Contact causes skin irritation. May cause temporary itching, tingling, burning or numbness of exposed skin, called paresthesia. Ingestion: Harmful if swallowed.
Medical Conditions Generally Aggravated by Exposure: None known. Preexisting respiratory conditions may be aggravated by exposure to mists.

Section 3—Composition Information on Ingredients		
Ingredient	% (wt)	CAS reg. #
Lambda-Cyhalothrin	11.4%	91465-08-6
Naphthalene	< 1.5%	91-20-3
Propylene Glycol		57-55-6
Petroleum Solvent		

*Ingredients not specifically listed are non-hazardous and considered to be confidential business information.

NFPA HAZARD RATING:			
0	Least		
1	Slight	2	Health
2	Moderate	1	Flammability
3	High	0	Reactivity
4	Severe		

Section 4—First Aid Measures	
Inhalation:	Remove person to fresh air and assist breathing as needed. Call a doctor or poison control center for further treatment advice. If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible. Contains petroleum distillate – vomiting may cause aspiration pneumonia.
Ingestion:	Seek medical attention or call a poison control center immediately. Do not give any liquid to the person. Do not induce vomiting unless told to do so by a doctor or poison control center.
Eyes:	Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. If present, remove contact lenses after first 5 minutes, then continue rinsing eye. Seek medical attention if eye irritation persists.
Skin:	Remove contaminated clothing and wash before re-using. Flush skin with water for 15 – 20 minutes. Call a doctor or poison control center for further treatment advice.

After first aid, get appropriate in-plant, paramedic, or community medical support.

Section 5—Fire and Explosion Hazard Data

Extinguishing Media: Use dry chemical, foam or CO2 extinguishing media. If water is used must dike and contain run-off.
Special Fire Fighting Procedures: Wear self-contained breathing apparatus and full bunker gear. Smoke and fumes from fire may contain hazardous components. Evacuate non-essential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated.
Hazardous Combustion Products: Toxic gases may be formed in a fire situation. Carbon monoxide and other asphyxiates may form as well.
Unusual Fire and Explosion Hazards: Closed containers may explode from vapor expansion in high heat. Contain run-off by diking to prevent contamination of water supplies.

Section 6—Accidental Release Measures

Small Spills: Clean-up personnel should protect against mist inhalation and skin contact. Avoid generating mists. Spills should be cleaned up immediately to prevent spreading.
Large Spills: Clean-up personnel should protect against mist inhalation and skin contact. Avoid generating mists. Spills should be cleaned up immediately to prevent spreading.
Containment: Do not release into sewers or waterways. Dike spills to prevent contamination to water supplies. Contain spills and absorb liquids by covering with clay or other absorbent material. Vacuum, scoop, or sweep up waste and place in a container for disposal.

Section 7—Precautions for Safe Handling and Use

Precautions to Be Taken in Handling and Storage: Store in cool, dry areas away from children, feed and food products and sources of heat. Do not store food, beverages, or tobacco products in the same storage area. Immediately clean up spills that occur during handling or storage. Protect from freezing. Keep containers closed when not in use. Wash thoroughly with soap and water after handling.
Other Precautions: Consult Federal, state and local regulations pertaining to storage and disposal.

Section 8—Control Measures/Personal Protection

Exposure Limits: Naphthalene (CAS # 91-20-3) 10 ppm OSHA TWA;
Lambda-Cyhalothrin (CAS # 91465-08-6) 0.04 mg/m³ TWA (skin) – Syngenta Occupational Exposure Limit;
Propylene glycol (CAS # 57-55-6) 10 mg/m³ American Industrial Hygiene Association TWA
Petroleum solvent 100 mg/m³ (15-17 ppm) TWA – recommended by manufacturer

Respiratory Protection: Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a properly FIT TESTED MSHA/NIOSH-approved respirator with an organic vapor (OV) cartridge or canister with any R, P, or HE filter.

Ventilation: **Local Exhaust:** Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs. Local exhaust ventilation is preferred.

NOTE TO END USERS: Follow instructions for Personal Protective Equipment (PPE) as found on the pesticide container label.

Protective Gloves: Wear chemically protective gloves (such as barrier laminate, nitrile rubber, neoprene rubber or Viton).
Eye Protection: Wear chemical splash goggles. Contact lenses are not eye protective devices.
Other Protective Clothing or Equipment: Wear chemically protective boots, socks and coveralls to prevent prolonged or repeated skin contact.
Work/Hygienic Practices: Never eat, drink, nor smoke in work areas. Practice good hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Section 9—Physical/Chemical Characteristics

Physical State:	Liquid	Specific Gravity (H₂O=1):	1.0682 g/ml @ 68°F (20°C)
Vapor Pressure (mm Hg):	Not Available	Freezing Point:	Not Available
Vapor Density (Air=1):	Not Available	Boiling Point:	Not Available
Solubility in Water (wt %):	Not Determined	pH:	5
Appearance and odor:	Blue opaque liquid (capsule suspension); odor not determined	Flash Point:	>200° F

Section 10—Reactivity Data

Stability: Product stable at room temperature in closed containers under normal storage and handling conditions.

Chemical Incompatibilities: None known

Conditions to Avoid: None known

Hazardous Decomposition Products: None known

Hazardous Polymerization: Will not occur.

Section 11—Toxicological Information

Eye Effects: Mildly irritating (rabbit)

Skin Effects: Slightly irritating (rabbit); LD50 >2000 mg/kg (rabbit); In humans, contact with exposed skin may result in temporary itching, tingling, burning or numbness, called paresthesia. The effect may result from splash, aerosol, or hot vapor contact, or transfer to the face from contaminated gloves and hands. The symptoms normally disappear within 24 hours. Face and genital areas are especially susceptible to this effect. Paresthesia involving the face is also known as “subjective facial sensation” or SFS.

Acute Inhalation Effects: LC50 > 2.5 mg/L air – 4 hours (rat)

Acute Oral Effects: LD50 = 351 mg/kg (rabbit)

Chronic Effects: Lambda-Cyhalothrin Technical: Reversible clinical signs of neurotoxicity in mammals. Reversible paresthesia (abnormal sin sensation).

Mutagenicity: Not determined

Teratogenicity: Not determined

Target Organs: Lambda-Cyhalothrin: Liver, nervous system
Naphthalene: Liver, kidney, respiratory tract, blood
Petroleum solvent: Respiratory tract, stomach, liver, thyroid, urinary bladder, CNS, skin
Propylene Glycol: CNS, kidney, liver

Carcinogenicity:	NTP: Naphthalene - Anticipated Carcinogen	IARC: Group 2B - Naphthalene	OSHA: Not Available
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Section 12—Ecological Information

Ecotoxicity Effects

Lambda-Cyhalothrin:

Fish (Rainbow Trout) 96-hour LC50 0.19 ppb

Bird (Mallard Duck) LD50 Oral >3950 mg/kg

Invertebrate (Water Flea) 48-hour EC50 0.04 ppb

Environmental Fate

Lambda-Cyhalothrin:

Not persistent in soil or water. Immobile in soil. Sinks in water (after 24 hours).

Section 13—Disposal Considerations

Waste: Dispose of in accordance with applicable Federal, state and local laws and regulations.

Container: Do not reuse the empty containers. Dispose of in accordance with applicable Federal, state and local laws and regulations. For full container disposal information, consult the product label.

RCRA characteristics: It is the responsibility of the individual disposing of this product to determine the RCRA classification and hazard status of the waste.

Section 14—Transport Information

Ground Transportation: UN 3352, Pyrethroid Pesticides, Liquid, Toxic, (contains Lambda-Cyhalothrin), 6.1, PG III

Section 15—Regulatory Information

TSCA Inventory: This product is exempt from TSCA inventory requirements as it is solely for FIFRA regulated use.

SARA Title III, Section 302: Not determined

SARA Title III, Section 311/312:	Immediate: Yes	Delayed: No
Sudden Release of Pressure: No	Fire: No	Reactive: No

SARA Title III, Section 313: Naphthalene < 1.5% (CAS # 91-20-3)

CERCLA: Report product spills greater than 800 gallons (based on naphthalene [RQ = 100 lbs.] content in the formulation)

PROPOSITION 65: WARNING: This product may contain chemicals known to the State of California to cause cancer and birth defects or reproductive harm.

Section 16—Other

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