GROUP 3 INSECTICIDE

SUSPENDTM POLYZONETM INSECTICIDE

INSECTICIDE

Suspension COMMERCIAL

ACTIVE INGREDIENT: DELTAMETHRIN.... 50g/L

CONTAINS 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE AT 0.0009% AND 2-METHYL-4-ISOTHIAZOLIN-3-ONE AT 0.0003% AS PRESERVATIVES.

REGISTRATION NO: 34599 PEST CONTROL PRODUCTS ACT

READ THE LABEL AND BOOKLET BEFORE USING

KEEP OUT OF REACH OF CHILDREN

CAUTION SKIN IRRITANT

2022 Environmental Science CA Inc. 137 Glasgow Street, Suite 210, Unit 111, Kitchener, Ontario, N2G 4X8

Product Information: 1-800-331-2867 https://www.ca.envu.com

In case of spills, poisoning or fire, telephone emergency response number 1-800-424-9300 (24 hours a day).

NET CONTENTS: 300 mL - Bulk

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GENERAL INFORMATION

Section 1: Notices

NOTICE TO USER: This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.

SAFETY AND HANDLING

Section 2: Precautions, Protective Clothing and Equipment

PRECAUTIONS:

KEEP OUT OF REACH OF CHILDREN. May irritate the skin. Avoid contact with skin or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash before reuse.

Ventilate treated areas after application either by opening windows and doors or through use of air exchange/ventilation systems confirmed to be operational. Use fans where required to aid in the circulation of air. Air exchange/ventilation systems confirmed to be operational may also be used.

DO NOT apply when a food/feed processing facility is in operation.

Cover or remove all food/feed. Cover all food/feed processing surfaces, equipment and utensils or thoroughly wash them following treatment.

DO NOT apply when people, pets or livestock are present.

Apply only when the potential for drift beyond the area to be treated is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment, and sprayer settings.

DO NOT allow spray to drip or allow drift onto non-target surfaces; any spray residue must be removed by the applicator.

PROTECTIVE CLOTHING AND EQUIPMENTWear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, application, clean-up and repair.

When treating areas directly over your head, wear eye protection (safety glasses, goggles or face shield) and dust/mist mask or respirator.

DO NOT apply using mechanically-pressurized handheld equipment for mists, aerosols, and fogs (droplet sizes $0.1-100 \mu m$).

<u>For sod farms</u>, **DO NOT** enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

For golf courses, **DO NOT** allow worker entry into treated areas to conduct tasks involving contact with treated turf (including mowing) during the restricted-entry interval (REI) of 12 hours. For all other activities (including golfing), **DO NOT** enter or allow entry until sprays have dried.

For all other sites, **DO NOT** enter or allow people, pets or livestock to enter treated areas until sprays have dried.

Section 3: First Aid and Toxicological Information

FIRST AID:

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

If swallowed	 Call a poison control centre 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 centre or doctor. Do not give anything by mouth to an unconscious person.
If in eyes	 Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.
If on skin or	Take off contaminated clothing.
clothing	Rinse skin immediately with plenty of water for 15 to 20 minutes.
	Call a poison control centre 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 centre or doctor for further treatment advice.

TOXICOLOGICAL INFORMATION:

Skin exposure may cause transient sensations (tingling, burning, itching, numbness). Treat symptomatically.

TOXIC to aquatic organisms. For turf applications, observe spray buffer zones specified under DIRECTIONS FOR USE.

Toxic to small wild mammals.

Toxic to bees. Minimize spray drift to reduce harmful effects on bees in habitats close to the application site. Avoid applications when bees are foraging in the treatment area in ground cover containing blooming weeds. Avoid application during the crop blooming period. If applications must be made during the crop blooming period, restrict applications to the evening when most bees are not foraging. To further minimize exposure to pollinators, refer to the complete guidance "Protecting Pollinators during Pesticide Spraying – Best Management Practices" on the Health Canada website (www.canada.ca/pollinators). May harm bees used in greenhouse production. Avoid application when bees are in the treatment area.

Toxic to certain beneficial arthropods (which may include predatory and parasitic insects, spiders, and mites). Minimize spray drift to reduce harmful effects on beneficial arthropods in habitats next to the application site such as hedgerows and woodland. Deltamethrin may impact predatory and parasitic arthropod species used in IPM programs within the treatment area. Unsprayed refugia for beneficial species of at least 1 m from the treatment area will help maintain beneficial arthropod populations. May harm beneficial arthropods used in greenhouse production. Avoid application when beneficial arthropods are in the treatment area.

To reduce runoff from treated areas into aquatic habitats avoid application to areas with a moderate to steep slope, compacted soil, or clay.

Avoid application when heavy rain is forecast.

Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative filter strip between the treated area and the edge of the water body. Additional guidance can be found on the Runoff Mitigation portion of the Canada.ca website.

DO NOT allow effluent or runoff from greenhouses containing this product to enter lakes, streams, ponds or other waste.

Section 5: STORAGE

Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides and fertilizers. Store in the original container and out of the reach of children, preferably in a locked storage area. Store this product away from food or feed.

Section 6: DISPOSAL

- 1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
- 2. Follow provincial or territorial instructions for any required additional cleaning of the container prior to its disposal.
- 3. Make the empty container unsuitable for further use.
- 4. Dispose of the container in accordance with provincial or territorial requirements.
- 5. For information on the disposal of the unused, unwanted products, contact the registrant or the provincial or territorial regulatory agency. Contact the registrant and the provincial or territorial regulatory agency in case of a spill, and for clean-up of spills.

DIRECTIONS FOR USE

Section 7: The Product and General Application Information

Suspend Polyzone is a suspension concentrate formulation containing 50 g of deltamethrin per litre. The product is designed for use both indoors and outdoors and will provide effective control of pests listed on this label. Suspend Polyzone can be used:

- 1) Indoors as spot or crack and crevice treatment.
- 2) Outdoors as a broadcast, perimeter, spot or crack and crevice treatment on the exterior surfaces of structures.

3) Outdoors as a broadcast or spot treatment to turf and surrounding vegetation.

Permitted areas of use include the structures, transport vessels, and turf areas:

Structures:

 apartment buildings bakeries cafeterias correctional facilities entries garbage rooms greenhouses (structures only) hospitals hotels 	 kitchens industrial buildings laboratories livestock housing pet kennels machine rooms manufacturing establishments mausoleums motels 	 nursing homes poultry houses food/feed and non-food/feed processing and packing plants restaurants schools including nurseries and daycares shelters storage sheds stores
• hotels • houses	• motels	• stores • warehouses
• industrial buildings		

Modes of Transport:

• inside transportation vessels such as buses, trucks, trailers, rail cars, marine vessels, cars, vans, mobile homes (excluding the passenger areas of aircraft)

Turfgrass Sites:

 athletic fields 	recreational areas	• sod farms
• golf courses	residential lawns	 turf areas in commercial sites

CAUTION: Do not use water-based sprays of Suspend PolyZone in conduits, motor housings, junction boxes, switch boxes, or other electrical equipment because of possible shock hazard.

MIXING INSTRUCTIONS:

This product is intended to be mixed with water.

Shake this product well before measuring concentrate for dilution in water.

Mix the appropriate amount of this product with water.

If applying with a hand pressurized or power operated sprayer, thoroughly shake, agitate or invert sprayer to ensure proper suspension. If spraying is interrupted when using a back-pack or hand-held sprayer, invert sprayer to re-suspend the dilution before starting to make applications. If spray screens are used, they should be 50 mesh or larger.

If applying to turf with a ground boom sprayer, ensure spray tank is thoroughly clean. Fill sprayer half-full with clean water. Add product while agitating. Add the remaining amount of water.

Section 8: PESTS, RATES AND APPLICATION METHODS

As this product is not registered for the control of pests in aquatic systems, DO NOT use to control aquatic pests.

DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section.

INDOOR PESTS Use this product to control pests inside structures and transport vessels by spot or crack and crevice application.

Pests	Application concentration	Application rate	Application method
Darkling beetles (lesser mealworms)	Dilute 2 mL product per 1 L of water (0.01% deltamethrin) for maintenance treatments or 6 mL of product per 1 L of water (0.03% deltamethrin)	410 mL of diluted product (0.8 – 2.5 mL concentrate) per 10 square metres.	Apply where pests are seen, may hide or may enter. Particular attention should be given to treating cracks and crevices.
Cockroaches, spiders, ants	for severe infestations and initial service or cleanout treatments.		Apply where pests have been found or can seek shelter.
Stable flies, mosquitoes, house flies, blue bottle flies, flesh flies, cluster flies			Apply directly to walls, ceilings, window screens and other resting areas.
Ticks			Apply where pests have been found or can seek shelter.
Bed bugs	Dilute 6 mL product per 1 L of water (0.03% deltamethrin) or 12 mL product per 1 L of water (0.06% deltamethrin) for severe infestations.	410 mL of diluted product (2.5 – 4.9 mL concentrate) per 10 square metres.	Apply as a surface or furniture treatment by spot and/or crack and crevice spray. Spray bed bugs and eggs directly wherever possible following site directions below. Remove bedding before treating mattresses. Treated mattress must be dry before replacing laundered bedding.

	Remove all objects before treatment of furniture, luggage, closets or other areas where clothing, toys, towels, and other items are stored. Treated furniture must be dry before replacing stored items. Apply to tufts and/or seams of mattresses and furniture. Apply to bedsprings, box springs, and the interior of bed frames or headboards,			
How to apply	 Surface Treatment: Spot Applications: Spot application is localized to a surface area not more than 0.2 m². Spots are not to be adjoining. The combined area of spots is not to exceed 10% of the total surface area of a room. Use a coarse droplet size and low pressure spray not exceeding 345 kPa (50 psi) to avoid splashing onto non-target surfaces. Crack and Crevice: Crack and crevice is an application directly into narrow openings on the surface of the structure. It does not include the treatment of exposed surfaces. Narrow openings typically occur at expansion joints, utility entry points and along baseboards and mouldings. Spray directly into cracks and crevices where pests or their nests are present. Apply the volume of spray sufficient to cover the area. 			
	 Furniture Treatment (including but not limited to upholstered furniture, hard surface furniture, mattresses, box spring, pet bedding, bed frames, dressers, curtains, picture frames, wall coverings, hollow furniture legs, etc.): Spot: Spot application is up to 10% of the surface of the treated item. Crack and crevice: Crack and crevice treatments are applications to junction points on items. Tufts and/or seams (mattresses and upholstered furniture only): Tufts and/or seam treatment is to the junction of two or more pieces of fabric and any decorative trim (for example, buttons). 			
When to	When pests are seen or found.			
Apply	Treatments may be applied to maintain adequate control.			
Restrictions	For use ONLY in structures and modes of transport as described under Section 7. Treat where pests have been seen or found, or can find shelter. DO NOT apply in food preparation or feed mixing areas or on feed or to watering equipment. DO NOT apply to surfaces that may come into contact with food/feed. Cover or remove all food/feed. Cover all food/feed processing surfaces, equipment and utensils or thoroughly wash following treatment DO NOT apply as a space spray, broadcast or indoor perimeter treatment. DO NOT treat pets. Mattresses and furniture: DO NOT apply to the entire mattress or piece of furniture. DO NOT use on items which can be laundered (for example, pillows, bedding, toys, clothing etc.).			

OUTDOOR PESTS

Use this product to control pests on outdoor structural surfaces by broadcast, perimeter, spot or crack and crevice application.

Pests	Application concentration	Application rate	Application method
Darkling	Dilute 2 mL product per 1 L	410 mL of diluted	Apply where darkling beetles may seek entry.
beetles (lesser	of water (0.01%	product (0.8 – 2.5	
mealworms)	deltamethrin) for	mL concentrate)	

Cockroaches, spiders, ants Ticks	maintenance treatments or 6 mL of product per 1 L of water (0.03% deltamethrin) for severe infestations and initial service or cleanout treatments.	per 10 square metres.	Apply where the pests are found, may hide or may enter the structure. Such areas may include around windows and doors, under eavestroughs, on garages and trash containers. Apply where ticks have been found or may seek shelter.	
Stable flies,			Apply to siding, eaves, around windows and	
house flies,			doors, and window screens. To help reduce	
blue bottle			infestations, treat cracks and crevices and	
flies, flesh			other hiding places.	
flies, and				
cluster flies				
Mosquitoes	Dilute 6 mL of product per	410 mL of diluted	Apply to siding, eaves, around windows and	
	1 L of water (0.03%	product (2.5 mL	doors, and window screens. To help reduce	
	deltamethrin).	concentrate) per	infestations, treat cracks and crevices and	
		10 square metres.	other hiding places.	
How to apply	This product may be applied as an outdoor structural broadcast, outdoor perimeter, spot or crack and crevice treatment on outdoor structural surfaces. Outdoor Structural Broadcast: Outdoor broadcast application is to large outdoor structural surfaces (roofs, walls, doors, windows and foundations) Outdoor Perimeter: Outdoor perimeter application is 1m or less out from the building's foundation and to a maximum height of 1 m starting where the foundation meets the ground. Spot: Spot application is localized to a surface area not more than 0.2 m². Spots are not to be adjoining. Crack and Crevice: Crack and crevice is an application directly into narrow openings on the surface of the structure. It does not include the treatment of exposed surfaces. Narrow openings typically occur at			
	expansion joints, utility entry points and along baseboards and mouldings. Use a coarse droplet size and low pressure spray not exceeding 345 kPa (50 psi) to avoid splashing onto non-target surfaces.			
When to apply	When pests are seen or foun	d.		
	Treatments may be applied as necessary to maintain adequate control.			
	Cluster flies: Treat in late sum	nmer or fall, just befo	re cluster flies begin looking for winter shelter.	
Restrictions	DO NOT apply to the point of			
	DO NOT make applications during rain.			
			rains, or to any area like a gutter where drainage	
	to sewers, storm drains, water bodies, or aquatic habitat can occur. Do not allow the product to			
	enter any drain during or after	er application.		

TURFGRASS AND SURROUNDING VEGETATION Use this product to control pests outdoors on turf and surrounding vegetation by broadcast or spot application. **Pests Application concentration Application rate Application method** 600-1500 mL Apply when insects are present. A second Chinch bugs, Dilute 0.8 mL product per 1 L sod of water (0.004% diluted product application may be necessary in 2-3 weeks deltamethrin) or 2 mL (0.5 - 3 mL)time, where heavy infestations occur. webworms, cutworms, product per 1 L of water concentrate) per For dense turfgrass canopies and/or turf ants (0.01% deltamethrin) for 10 square metres. maintained under high mowing heights, severe infestations. and/or turf with thatch, minimum water volumes of 10 L per 100m² or greater are recommended to ensure material moves through the thatch. **Ticks** Dilute 2 mL product per 1 L 600-1500 mL Apply as a 3 metre band to turf areas around of water (0.01% diluted product property lines or around structures such as deltamethrin). (1.2 - 3 mL)dog houses, kennels, sidewalks, pathways or concentrate) per patios or to surrounding vegetation where 10 square metres. ticks are a problem. Areas that are of particular importance to observe for ticks include those adjacent to forested areas, stonewalls, and other areas where there is overgrown vegetation. Reduce tick habitat through landscape management practices including but not limited to mowing the turf and removal of weeds, leaf litter and other debris where ticks are found. 600-1500 mL Mosquitoes Dilute 6 mL product per 1 L Apply as a spray around landscape plants, of water (0.03% diluted product turf and ground cover and other places deltamethrin). $(3.6 - 9 \, \text{mL})$ where mosquitoes may rest. concentrate) per 10 square metres. How to apply Apply in a sufficient volume of water to provide adequate coverage. For field sprayer application: DO NOT apply when wind speed is less than 1 km/h. Avoid application of this product when winds are gusty. DO NOT apply with sprays finer than the American Society of Agricultural and Biological Engineers (ASABE) (572.1 to 572.3) medium classification. Air-induction nozzles are recommended for the ground application of this product. Boom height must be 60 cm or less above the crop or ground. For handheld sprayer application: DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE S572.1) fine classification. When to apply Apply when insects are present. Restrictions DO NOT apply by air. AVOID APPLICATION WHEN TEMPERATURE INVERSIONS ARE PREVAILING OR DURING PERIODS OF EXCESS HEAT as control will be reduced. Best control will be achieved when Suspend Polyzone is applied during the cooler portions of the day (normally early morning or at dusk). DO NOT make applications during rain. Application is prohibited directly into sewers or drains, or to any area like a gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur. Do not allow the product to enter any drain during or after application. DO NOT apply more than 2 times per year. DO NOT allow people or pets to re-enter the treated area until product has dried.

Delay irrigation or mowing for 24 hours following application.

If the product is applied within 1 metre of a structure, the pressure should be reduced to 345 kPa (50 psi).

BOXWOOD (Outdoor grown)

NOTE TO USER: READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR THE INDICATED SPECIAL USE APPLICATIONS (BELOW): The DIRECTIONS FOR USE for the uses described in this section of the label were developed by persons other than [registrant name] under the User Requested Minor Use Label Expansion program. For these uses, [Registrant name] has not fully assessed performance (efficacy) and/or crop tolerance (phytotoxicity) under all environmental conditions or for all crop varieties when used in accordance with the label. The user should test the product on a small area first, under local conditions and using standard practices, to confirm the product is suitable for widespread application.

PEST CONTROLLED	RATE	RECOMMENDATIONS
Box tree (Boxwood) moth	250 – 300 mL/ha	Apply as a foliar spray in a water volume of 200 – 500 L/ha when egg masses begin to hatch or when first signs of insect feeding are evident. Ensure complete coverage. Repeat if necessary at 5-7 day intervals. Do not apply more than 3 applications per year.

TIMING: For maximum efficacy, it is necessary to:

- keep crop and pest under observation to be able to spray at the right moment;
- ensure that insects are contacted during spraying, especially if they are found on the underside of leaves or if the foliage is very dense.

Unless otherwise stated, apply Suspend Polyzone Insecticide when insects first appear and repeat as required to maintain control.

Follow provincial recommendations.

RATE RANGE: Where a rate range is given in the Directions For Use, the higher rate should be used when:

- the crop canopy is dense and foliage is inhibiting spray penetration;
- insect populations are very high.

Section 9: Mixing Instructions

The volumes of water may vary greatly, depending on the equipment, the crop, and cultural conditions. The volumes of water to be used will vary between 200 and 500 litres per hectare. Ensure spray tank is thoroughly clean. Fill sprayer half-full with clean water. Add product while agitating. Add the remaining amount of water.

Spray Buffer zones:

A spray buffer zone is NOT required for:

- uses with hand-held application equipment permitted on this label,
- low-clearance hooded or shielded sprayers that prevent spray contact with crop, fruit or foliage,
- soil drench or soil incorporation.

<u>Field sprayer application</u>: DO NOT apply when wind speed is less than 1 km/h. Avoid application of this product when winds are gusty. DO NOT apply with sprays finer than the American Society of Agricultural and Biological Engineers (ASABE) S572 (572.1 to 572.3) medium classification. Boom height must be 60 cm or less above the crop or ground.

<u>Airblast application</u>: DO NOT apply when wind speed is less than 1 km/h. Avoid application of this product when winds are gusty. DO NOT direct spray above plants to be treated. Turn off outward pointing nozzles at row ends and outer rows. DO NOT apply when wind speed is greater than 16 km/h at the application site as measured outside of the treatment area on the upwind side.

DO NOT apply by air.

The spray buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive terrestrial habitats (such as grasslands, forested areas, shelter belts, woodlots, hedgerows, riparian areas and shrublands), sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands) and estuarine/marine habitats.

	Cron		Spray Buffer Zones (metres) Required for the Protection of:				
Method of application			Freshwater Habitat of Depths:		Estuarine/ Marine Habitats of Depths:		Terrestrial habitat
			< 1 m	> 1 m	< 1 m	>1 m	
Field sprayer	Boxwood		1	1	45	20	1
		Early growth stage	45	35	85	75	3
Airblast	Boxwood	Late growth stage	35	25	75	65	2
Field Sprayer	Turf (golf courses, residenti al lawns, sod farms)		3	2	120	65	1

When tank mixes are permitted, consult the labels of the tank-mix partners and observe the largest (most restrictive) spray buffer zone of the products involved in the tank mixture and apply using the coarsest spray

(ASABE) category indicated on the labels for those tank mix partners.

The spray buffer zones for airblast application of this product can be modified based on weather conditions and spray equipment configuration by accessing the Spray Buffer Zone Calculator on the Pesticides portion of the Canada.ca website.

This product may be tank mixed with a fertilizer, a supplement, or with registered pest control products, whose labels also allow tank mixing, provided the entirety of both labels, including Directions For Use, Precautions, Restrictions, Environmental Precautions, and Spray Buffer Zones are followed for each product. In cases where these requirements differ between the tank mix partner labels, the most restrictive label must be followed. Do not tank mix products containing the same active ingredient unless specifically listed on this label.

In some cases, tank mixing pest control products can result in reduced pesticide efficacy or increased host crop injury. The user should contact 2022 Environmental Science CA Inc. at 1-800-331-2867 or visit www.ca.envu.com for information before applying any tank mix that is not specifically recommended on this label.

2022 Environmental Science CA Inc. has not fully assessed performance (efficacy) and/or crop tolerance (phytotoxicity) of all potential tank mixes under all environmental conditions or for all crop varieties. Tank mixes that are not specifically listed on this label should be tested on a small area first, under local conditions and using standard practices, to confirm the tank mix is suitable for widespread application.

To determine the physical compatibility of this product with other products, use a jar test.

Section 9: Resistance Management Recommendations

For resistance management, please note that Suspend PolyZone contains a Group 3 insecticide. Any insect population may contain individuals naturally resistant to Suspend PolyZone and other Group 3 insecticides. The resistant individuals may dominate the insect population if this group of insecticides is used repeatedly in the same location. Other resistance mechanisms that are not linked to site of action, but specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance management strategies should be followed.

To delay insecticide resistance:

- Where possible, rotate the use of Suspend PolyZone or other Group 3 insecticides with different groups that control the same pests.
- Insecticide use should be based on an Integrated Pest Management (IPM) program that includes scouting and record keeping, and considers cultural, biological and other chemical control practices.
- Monitor treated pest populations for resistance development.
- Contact your local extension specialist for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area. For further information or to report suspected resistance, contact 2022 Environmental Science CA

at 1-800-331-2867 or at https://www.ca.envu.com.